

# SERBIAN INSTRUCTORS AND DISTANCE EDUCATION

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## Abstract

Distance education has been gaining a lot of attention during the last years. Many academic institutions have invested in distance education programs, and they have been offering both undergraduate and postgraduate programs. Core participants within the framework of distance education are the instructors. In this context, the present study examines all the aspects of the instructors that facilitate the knowledge transfer. Therefore, the current research investigated the instructors' views on distance education, their teaching styles, and their preferred learning styles as far as their students are concerned. A questionnaire survey was used to collect responses from faculty members in Serbian educational institutions. Most of the participants were female, and also married. Almost 62% of the faculty members are professors and all of them work in state government universities. Almost 38% of the survey participants consider distance learning of average efficiency as a method of education. It is very interesting to note that almost 97% of the respondents prefer face-to-face educational methods. Survey highlighted a number of interesting aspects regarding teaching preferences and more specifically the results identified that educators very much prefer to teach in new ways and try new teaching techniques. Faculty members responded about the preferred learning styles of their students and almost 45% of the instructors suggested that they moderately prefer students that like tasks, projects and situations which allow working with competing approaches with multiple aspects or goals that are equally important. The analysis provided also a number of interesting correlations.

Keywords: Instructors, Distance Education, Teaching Styles, Learning Styles.

## 1 INTRODUCTION

One of the most stable trends in modern society is computerization. The educational system, as one of the institutional pillars of modern society, is also subject to this phenomenon. The informatization of the educational system involves the introduction of digital technologies into the educational process, resulting in a shift from traditional classroom-based education to distance learning systems. The rise of the Internet, coupled with the global development and availability of digital communication services, has drawn the attention of educational institutions to distance learning technologies. In the constant battle for learners, educational institutions seek better and more efficient ways to reach students and deliver educational content [1]. Years ago, educational institutions began developing distance learning models, primarily through organizing online classes for pupils and students [2]. Therefore, online learning was developed not only as a response to crises but also with the aim of enabling students to learn regardless of their location [3] and is now a blended online learning methodology [4]. Distance education offers educational opportunities at various levels for students who, due to work, social, or family obligations, find it difficult to attend regular classroom-based classes [5]. One model of online learning, video-based distance learning, has been in widespread use since the 1990s, with this form of distance learning having the most similarities to traditional face-to-face instruction [6]. Distance education is characterized by temporal and/or spatial separation between students and learning resources [7] and is currently experiencing rapid expansion as a modality for both local and global learning. Once viewed as a novel educational method employing unconventional distribution mechanisms, it is now emerging as a prominent paradigm within traditional academic spheres. In an increasingly connected world, distance education is becoming more important as it overcomes the physical barrier of location and enables the integration of ideas from diverse perspectives and cultures [8]. Distance learning is defined as the creation of a virtual learning environment that facilitates better educational implementation. It combines online tools to create an enriched, effective process of collaboration and interaction between lecturers and students. Technological advancements have significantly improved accessibility to distance education for individuals unable to attend conventional classes due to professional commitments, family obligations, and geographical constraints. Higher education institutions are exploring ways to increase

enrolment rates and deliver high-quality education to remote learners—typically mature students with time and location limitations. Distance education is particularly well-suited for these individuals, thereby broadening educational opportunities for a diverse demographic. Distance education has become essential during COVID-19 crisis. Since early 2020, the advent of COVID-19 has disrupted numerous productive activities and traditional in-person instruction across primary and secondary schools, as well as universities. In the educational sector, a multitude of challenges have arisen, affecting all institutions. These challenges include the essential transition from traditional face-to-face teaching to virtual instruction, the development of effective methods for assessing academic progress—particularly through written assessments—and the resolution of issues related to internships and vocational engagements [9]. Although many learners have joined and successfully completed courses provided through various forms of distance learning, certain factors reduce the effectiveness of these platforms, limiting their reach. The lack of physical presence can disrupt cooperation and lead to reduced communication between lecturers and students. Therefore, it is necessary to assess the effectiveness of distance learning practices.

In the Republic of Serbia, there is a limited number of studies that deal with the effects of distance learning, with a particularly limited number of studies that analyse teachers' preferences. Neglecting the needs of educators and the challenges they encounter could conceivably undermine the effectiveness of their instructional methodologies, as well as the learning outcomes and subsequent professional accomplishments of their students. Considering this perspective, the research in this paper is aimed to evaluate the implications of distance education on teachers and examine their preferences.

The rest of the paper is structured as follows. After introduction, advantages and disadvantages of distance education are offered followed by methodology and study design. Next section deals with results and at the end conclusion is presented.

## **2 ADVANTAGES AND DISADVANTAGES OF DISTANCE EDUCATION**

The evolution of distance education has shifted the traditional approach of in-person instruction, becoming the leading pedagogical method. Distance education involves a structured learning process for individuals in different locations, who communicate and interact through technological means. The rapid and widespread adoption of these technologies, driven by the need for social distancing during the COVID-19 pandemic, required significant adaptability from both students and university instructors [9]. In a short period, despite challenges in resource acquisition, instructors had to drastically transform their teaching methods to incorporate IT tools and digital platforms. The use of information and communication technology (ICT) in educational contexts has always sparked debates and contradictions. As higher education gradually digitalizes, ICT offers clear benefits for the professional activities of university educators. Technologies like mobile computing, collaborative software, and educational management systems enable instructors to work from anywhere at any time, providing convenient access to information and updates [10]. However, ICT also brings challenges related to physical and psychological well-being and occupational efficiency [9]. For instance, ICT can lead to excessive workloads (technological overload) and intrude on personal lives (technological invasion). Frequent changes and updates in software and hardware can make university instructors feel inadequate (technological complexity and technological uncertainty), leading to a common sense of insecurity about the systems they use [9]. Analysing the advantages and disadvantages of distance education involves considering several perspectives [11]. From the learners' perspective, the benefits of distance education include fostering independence in educational activities, enhancing self-assessment skills, reflecting on outcomes, and developing self-regulation. Online tools provide comfort for introverted students, who often perform better compared to traditional learning methods. However, the downsides include the need for high motivation and eagerness to learn; lacking these can lead to falling behind and poor performance. Additionally, the lack of physical interaction can make students feel isolated from peers and teachers, which can hinder important social integration for adolescents. From a social standpoint, remote learning offers students the flexibility to choose when and where they study, allowing them to select the most favourable conditions and a pleasant environment for their learning. This adaptability helps students save time and balance their studies with work and other activities. However, the lack of routine and the absence of direct verbal and non-verbal communication can be drawbacks. From a technological and educational perspective, the advantages include the ability for students to choose the order in which they learn the material, easy access to instructional materials online, and the use of advanced hardware and software for monitoring and managing educational activities. Distance education also allows for greater customization of the learning process. However, a significant drawback is the insufficient development of digital infrastructure, which can limit the full potential of remote learning opportunities.

### 3 METHODOLOGY AND STUDY DESIGN

Cross-sectional online anonymous survey design utilizing a convenience sampling method in July 2023 was employed. The questionnaire was constructed using Google Forms and disseminated through various social media platforms. Engagement in the study was optional and conducted anonymously. Participants were not provided with any form of compensation for their involvement in this study. Data collection was exclusively for research purposes and anonymized to ensure confidentiality. Upon consenting, educators filled out a questionnaire encompassing demographic inquiries, questions related to distance education experience, their teaching preferences, and their preferences regarding students' learning style.

### 4 RESULTS

The main characteristics of the participants are presented in Table 1. The questionnaire was completed by 29 teachers with a mean age of 46.28 years (SD = 9.98). Female teachers were more represented than male teachers. The most represented age groups were 41-50 years (30.8%) and 51-60 years (30.8%). Teachers with the academic title of full professor comprised 62.1% of the sample. The majority of respondents were teachers from the Faculty of Economics, University of Niš.

Table 1. Socio-academic characteristics of participants.

| <i>Characteristics</i>                               | <i>Total (%)</i> |
|--|------------------|
| <b><i>Age range</i></b>                              |                  |
| <30  | 6.9              |
| 31-40  | 24.1             |
| 41-50  | 30.8             |
| 51-60  | 30.8             |
| >60  | 6.9              |
| <b><i>Academic role</i></b>                          |                  |
| Full professor                                       | 62.1             |
| Associate professor                                  | 6.9              |
| Assistant professor                                  | 3.45             |
| Teaching assistant                                   | 27.5             |
| <b><i>Institution</i></b>                            |                  |
| Faculty of Economics University of Niš               | 84.46            |
| Faculty of electronic engineering University of Niš  | 6.9              |
| Faculty of Agriculture, Kosovska Mitrovica, Lesak    | 3.45             |
| Faculty of Medicine University of Niš                | 6.9              |
| Faculty of Technical Sciences University of Novi Sad | 3.45             |

Regarding technical readiness for distance education, most respondents have average to good computer skills (Figure 1).

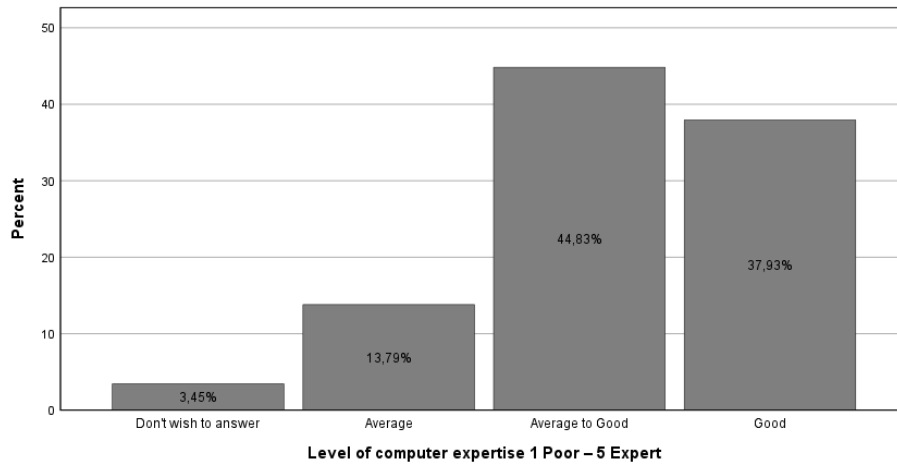


Figure 1. Level of computer expertise.

When it comes to the experience of delivery of courses through distance education most of the teachers consider distance education to be of average efficiency (Figure 2) and they prefer face-to-face educational methods (Figure 3).

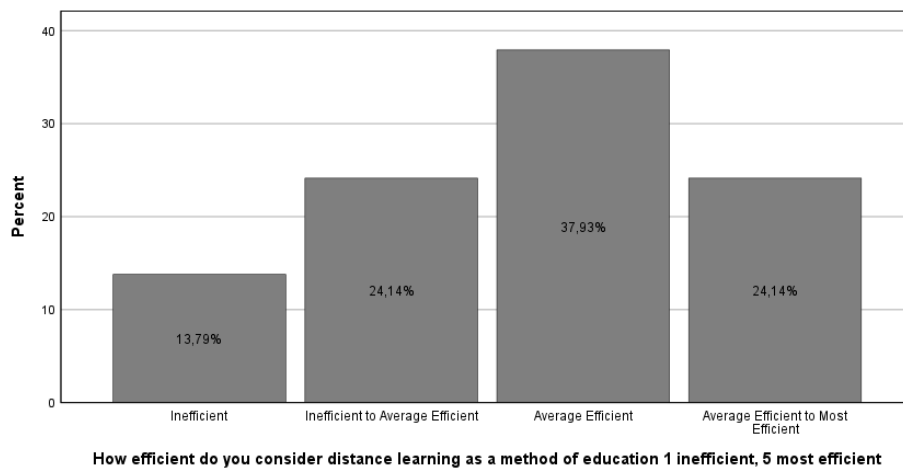


Figure 2. Efficiency of distance learning.

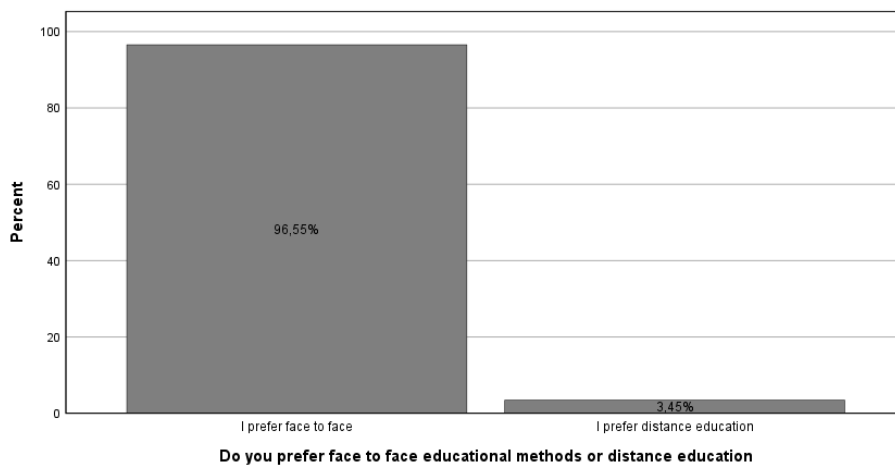


Figure 3. Preferred teaching method.

Regarding their teaching style, the results indicated that educators have a strong preference for innovative teaching methods and techniques (Figure 4). Faculty members also provided insights into their students' preferred learning styles. Nearly 45% of the instructors suggested a moderate preference

for students who favor tasks, projects, and situations that involve working with competing approaches and multiple equally important goals (Figure 5).

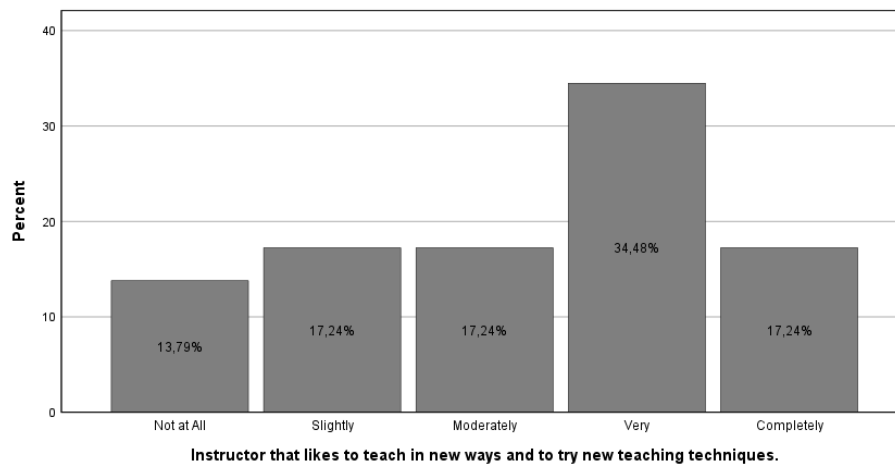


Figure 4. Distribution of instructor concerning preferences towards teaching in new ways and trying new teaching techniques.

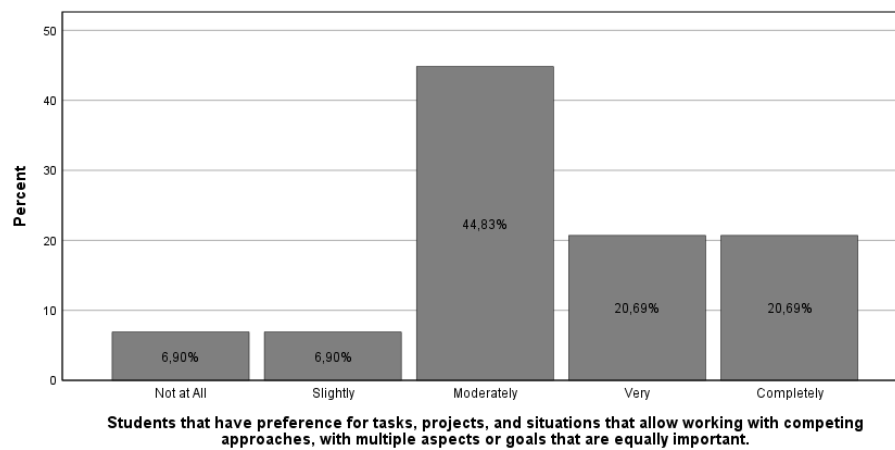


Figure 5. Preferences of teachers concerning students learning style

Furthermore, correlations between teaching style and their students' preferred learning styles indicate that instructors like to teach in new ways and to try new teaching techniques prefer students that have preference for tasks, projects, and situations that allow creation of a hierarchy of goals to fulfill (correlation coefficient 0.2) and students that have a preference for tasks, projects, and situations that involve unfamiliarity, going beyond existing rules or procedures, and maximization of change (correlation coefficient 0.19).

## 5 CONCLUSIONS

With the rapid advancement of technology, educational courses are being delivered through various mediums to learners in different regions, aiming to meet the educational needs of growing populations. Technological advancements often enable distance education programs to offer specialized curricula to students in remote areas, enhancing interaction between instructors and learners. While the methods of distance education vary significantly from one country to another, most distance learning programs rely on technologies that are either currently in use or being considered for their cost-effectiveness. These programs are especially beneficial for individuals who lack the financial means, physical proximity, or geographical access to traditional educational opportunities. The current study provided a comprehensive examination of the perspectives of instructors involved in distance education within Serbian educational institutions. The findings reveal several important insights into the attitudes and preferences of these educators. Despite the growing prominence of distance education and the substantial investment by academic institutions in both undergraduate and postgraduate programs, nearly 97% of the respondents still prefer traditional face-to-face teaching methods. This preference

underscores the challenges that distance education faces in achieving widespread acceptance among educators. Interestingly, the study also highlights that instructors are open to innovative teaching methods and techniques, suggesting a potential for integrating new approaches within both traditional and distance learning contexts. Moreover, the faculty members' responses indicate a moderate preference for students who engage in tasks and projects involving multiple, equally important goals. This insight into learning styles can inform the development of more effective distance education curricula. Despite their openness to new teaching methods, 38% of the respondents view distance learning as only moderately efficient. This highlights the need for continued efforts to improve the quality and perception of distance education. By understanding instructors' views and preferences, educational institutions can better support faculty and enhance the effectiveness of distance learning programs.

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