

# STUDENTS AND UNIVERSITY TEACHERS' ATTITUDE TOWARDS ONLINE LEARNING. A STUDY ON ROMANIA

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## ATITUDINEA STUDENȚILOR ȘI A PROFESORILOR FAȚĂ DE ÎNVĂȚĂMÂNTUL ONLINE. UN STUDIU PE ROMÂNIA

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**Rezumat.** Pandemia COVID-19 a afectat grav economiile mondiale, de la un declin industrial la problemele de sănătate și transformările educaționale. Perioadele de carantină și toate măsurile ulterioare care au fost luate pentru a evita răspândirea virusului au provocat o schimbare majoră și involuntară a condițiilor de muncă și de învățare. Prin urmare, pentru a continua anul universitar 2019-2020, instituțiile de învățământ superior au fost nevoite să se adapteze brusc de la sistemul de învățământ în clasă la sistemul online. Având în vedere toate aceste aspecte, scopul acestei lucrări este de a identifica atitudinea și percepția studenților și profesorilor din România față de educația online, în perioada actualei pandemii. Pentru a atinge acest scop, în iunie 2022 a fost realizat un chestionar online, la două luni după reînceperea cursurilor în clasă și la aproape doi ani de cursuri online. Eșantionul final a inclus 427 de studenți și 67 de profesori. Rezultatele noastre sunt ușor diferite în funcție de cele două tipuri de respondenți. Astfel, atât profesorii, cât și studenții au fost de acord că izolarea socială a reprezentat problema majoră cu care s-au confruntat în timpul orelor online. Cu toate acestea, o altă problemă majoră identificată doar de studenți a fost aceea că aceștia erau mai puțin eficienți atunci când studiau de acasă din cauza lipsei de motivație și a mediului de lucru mai puțin prielnic. În același timp, atât studenții, cât și profesorii au susținut că printre avantajele muncii/studiului de acasă s-au numărat și îmbunătățirea obiceiurilor alimentare și economisirea timpului prin eliminarea navetei zilnice către universitate. Totuși, profesorii au observat și că au avut mai mult timp să petreacă cu familia.

**Cuvinte-cheie:** Pandemia COVID-19, sistemul de învățământ online, studenți români, profesori români, izolare socială, eficiența învățământului online.

### Introduction

According to the statistics, before the COVID-19 pandemic, a very small part of the European Union working population fully developed their jobs from home [1]. In 2019, around 5% of the European Union population worked from home [2], with higher percentages in countries such as Germany (12%) or Slovenia (18.1%). However, some estimation showed that 37% of the jobs in USA and 40% of the jobs in Germany could be done as telework [3]. In the context of the COVID-19 pandemic, the ratios of those working from home or teleworking has greatly changed because the lock-downs and all the subsequent measures that were taken in order to avoid the spread of the virus caused a large and involuntary shift in the working and learning conditions. Thus, the percentage of those working from home increased in the EU states from 5%, in 2019, to 37%, in 2020 [1].

Meanwhile, in order to continue the 2019-2020 academic year, the higher educational institutions had to suddenly adjust from in-class learning to the online system. As indicated by the International Association of Universities, by April 2020, 185 countries had closed on-

campus operations and moved to the online classes, fact that had an impact on 89.4% of the total enrolled learners [4]. While some institutions had only to extend their existing online education system, for others this was a significant shift since they start offering classes online without much preparation. Several studies pointed out the drawbacks of the shift to the online classes. For example, some surveys revealed that poor planning led to online courses with lower quality compared to the on-campus classes [5]. Another study conducted by Cengage showed that faculties not only struggled to teach classes online, but they also diminished the assignments' expectations [6].

According to Swerdloff (2016), the online learning is a method of education through which students learn in a fully virtual environment, by using software programs [7]. The concept was firstly introduced in the 1990s, being brought up to light by the spread of the internet. Initially, it was largely used for the distance learning especially for the higher education programs, being known as e-learning. In this way, students from different geographical areas could have enrolled in the courses offered by an academic institution without being forced to commute.

Considering all these aspects, the purpose of this paper is to identify the attitude and the perception of the Romanian students and university teachers towards the online education, during the current pandemic. In order to achieve this purpose, a web-based questionnaire survey was conducted in June 2022, two months after the in-class courses have started again and after almost two years of online lectures. The next parts of the study are structured as following: a literature review that presents, from a theoretical point of view, the context of the online education, the methodology used to achieve our purpose, the results and the conclusions.

### **Literature review**

Although the online education has been adopted since the beginning of 2000's by certain higher education institutions, at different degrees, the COVID-19 pandemic introduced an unprecedented global need to explore the online teaching/learning opportunities within all the educational levels. In the context of the lockdowns and social distancing measures imposed to limit the spread of the COVID-19 virus, the major debate regarding the online teaching was related to the ability of delivering and receiving quality information. Therefore, a substantial challenge was represented by the possibility of implementing very quickly the e-communication technologies, in order to properly send, receive and use the information.

It was argued that the performance of the students in the online education is largely influenced by the quality of the platforms used in the educational process [8]. Electronic platforms allow the storage and management not only of an unlimited number of courses, but also of an unlimited volume of content within a course [9]. However, the COVID-19 pandemic has brought to light digital inequalities among students, which is a major risk factor for social vulnerability. Not all of the students have the same social conditions or lifestyle, not all have access to the internet or to high-performance digital equipment and not all of them have the necessary skills [10].

Despite all these aspects, only a limited number of studies analyzed the effectiveness of the online courses during the COVID-19 pandemic, from the perspective of both students and educators. From teachers' perspective, the online education requires time to identify and build the platforms and the needed materials [11]. Moreover, it was noticed that teachers still lack confidence in the online assessment techniques [12]. Polly et al. (2021), investigating the barriers while using the digital technologies and the necessary support for academic staff, found that the major problems were the time required to learn the new technologies and the conflict between the focus on teaching and other family/service responsibilities [13]. Another

challenge faced by instructors in higher education when adapting certain activities to the online environment is the risk of losing content knowledge and interactions between peers and/or instructors [14].

From students' perspective, recent studies showed that the online education has fostered depression and anxiety in the pandemic period [15]. Other surveys revealed that many students suffered from social isolation and stress while learning from home [16], issues that prevented them from adapting to the online education [17]. Therefore, Cao et al. (2020) suggested that the mental health of students should be closely watched during epidemics because of the psychological pressure and stress [18]. Moreover, it was noticed that in the context of COVID-19 pandemic, students confronted with various learning challenges that negatively influenced their assessments and graduation exams. For instance, a group of investigators that conducted a U.S. nationwide survey in June 2020 found out that 35.5% of the PhD. students, 18.0% of the master's students and 7.6% of the undergraduate students had delayed exams or even graduation due to pandemic [19]. It has been argued that these failures were determined by the fact that students taking online courses are less likely to participate in collaborative learning activities and discussions with others [20] and, thus, they are not able to develop high retention rates [21].

### Research methodology

In order to achieve our established purpose, a web-based questionnaire survey was conducted in June 2022, after two months the in-class courses have started again and after almost two years of online lectures.

The final sample included 427 students and 67 professors from Alexandru Ioan Cuza University of Iasi, Romania. All the students that responded to the questionnaire did not have experience with the online classes before the pandemic. However, in the case of professors, 33 of them had conducted online courses before the pandemic, but only for the distance learning students.

Regarding the students, almost a third of them (131 students) were in the master courses, while the others were in the undergraduate studies.

The questionnaire was conducted online, through Google Docs platform, and included 17 questions organized in two parts. The first part referred to the socio-demographic status of respondents, such as gender, the faculty where they study/work, status at the faculty, daily commute, time to study/work, marital status, number of the family members etc. The second section included questions regarding the online education, about organizational, efficiency, social and personal aspects of working/studying.

### Results and discussions

Our findings are slightly different, depending on the two types of respondents. However, most of the professors (88%) and students (97%) agreed that the social isolation was the major problem that they were facing during the online classes (see Table 1). Looking at the gender of the respondents, we did not notice significant differences among men and women, either in the case of students or in the case of teachers.

**Table 1: Social isolation – a major problem during working/learning from home**

5-point Likert scale	Percentage of the students	Percentage of the professors
Strongly disagree	0.22%	1.53%
Disagree	0.22%	1.53%

Neither agree nor disagree	0.22%	4.47%
Agree	2.34%	4.47%
Strongly agree	97%	88%

From the point of view of the advantages of working/studying from home, most of the students and also of professors mentioned that the improved eating habits and the time saved due to the lack of daily commuting to/from university were the major benefits brought by the online courses. Yet, the teachers also noticed that they had more time for spending with their families (see Table 2).

**Table 2: Advantages of working/studying from home**

Items	Percentage of the students	Percentage of the professors
Improved eating habits	92.5%	76.11%
Time saved due to the lack of daily commuting	97.66%	85.07%
Spending more time with family	43.32%	59.7%
Spending more time with friends	20.84%	22.38%
Other advantages	17.79%	19.4%

As it can be seen from table 2, spending more time with friends while working from home did not represent an advantage because, during the pandemic, the restrictions imposed by authorities have limited the social interactions. Among other advantages mentioned by students can be mentioned the fact that they could sleep more and better and they could save money since they did not spend it on eating out and on means of transportation. Some professors have also pointed out as an advantage of working from home the fact that they could spend more time outside the house, in their yards.

Another major issue identified only by students during the online classes was that they were less efficient when studying from home (see Table 3), due to the lack of motivation and poorer working environment. This could easily be explained through the fact that many students were from villages or small cities and did not have either good internet access or devices to properly attend their classes and do their homework. Therefore, students devoted significantly more time to study in the online environment compared to the face-to-face classes (on average, with 2.5 hours more per day). The higher students' workload is consistent with the findings of previous studies which noticed that students perceived the online courses as being more self-directed and believed that they must be more willing to study on their own compared to face-to-face courses [22].

**Table 3: Working/learning from home is more efficient than the face-to-face classes**

5-point Likert scale	Percentage of the students	Percentage of the professors
Strongly disagree	87.05%	4.48%
Disagree	8.03%	14.93%

Neither agree nor disagree	1.41%	62.67%
Agree	1.87%	13.44%
Strongly agree	1.64%	4.48%

As it can be seen from Table 3, most of the professors (62.67%) neither agreed nor disagreed with the fact that they were more efficient while working from home compared to the situation in which the classes were face-to-face. This could be explained through the fact that their working environment from home is at least as suitable as it is the workspace at the university or, maybe in other cases, some professors prepared their classes from home even during the pre-pandemic period.

In the case of professors, another challenge of working from home was the high level of stress (see Table 4), due to the conflict between the work and the family demands. This issue was noticed especially in the case of women that were married and had at least one child. 89% of the women professors mentioned that their interaction with the family members intensified, fact that involved more responsibilities for them.

**Table 4: Working/learning from home increases the level of stress**

5-point Likert scale	Percentage of the students	Percentage of the professors
Strongly disagree	31.15%	4.48%
Disagree	61.59%	8.96%
Neither agree nor disagree	1.17%	4.48%
Agree	3.51%	53.73%
Strongly agree	2.58%	28.35%

We can notice the fact that most of the students (92.74%) did not feel much stressed while working from home, maybe because they were in a more familiar context than in a campus and they did not have other family responsibilities, as it happened in the case of professors. However, we notice that, among those students that agreed or strongly agreed with the fact that learning from home increased their stress, a large majority (93%) was composed by women. This can be explained through the fact that they might have been asked to look for their younger brothers or to help their parents with some of the household activities.

### Conclusions

According to the statistics, almost 200 countries all around the world have implemented lockdowns and various other restriction measures in order to avoid the spread of COVID-19 virus. From this perspective, it was argued that the education sector was largely affected by the pandemic, since it faced a shift from face-to-face classes to online learning system. This transition involved the usage of eLearning tools and platforms, which had limitations in terms of accessibility and efficiency. According to the results of our survey, some important conclusions can be depicted. First of all, in case of both professors and students, the most noticeable advantages of working/studying from home are the improved eating habits and saving time due to the lack of daily commuting. Meanwhile, the major disadvantage both for professors and students was the social isolation during the online classes. Moreover, the students felt

less efficient when studying from home due to the lack of motivation and poorer working environment and considered that they had a higher workload that involved more individual study compared to the traditional courses. Professors mentioned that they had more time for spending with their family during the online classes but this increased their level of stress, due to the raise of a conflict between work and family demands.

Despite the fact that both students and professor considered that during the online courses there was an inadequate social interaction while teaching/learning and the knowledge assessment are the biggest drawbacks, students argued that a greater proportion of the educational activities should also be maintained online in the future. Meanwhile, the professors said that only some evaluation tests should be maintained online, in order not to experience a decrease in the quality of the higher education.

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