# COVID-19 HERITAGE: ARE SPANISH PROFESSORS TREASURING THEIR ONLINE TEACHING EXPERIENCE?

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#### Abstract

During the COVID-19 pandemic, all institutions in Spain shifted their lessons to digital environments, and all possible interactions between professors and students. Although all teachers accepted the new situation due to the Covid-19 related emergency, their reactions were mixed for various reasons, both psychological as pragmatic. The post-COVID situation has been quite ambiguous, especially for traditional-style teaching institutions although they adopted educational policies aimed at online teaching. Professors' attitude was very similar: most of them declared a strong desire to go back to the pre-COVID situation, but they did not feel completely uncomfortable meeting their colleagues or teaching online. In the present post-COVID reality Universities' authorities decided to cancel the online option to shift again to face to face classes. Currently, there are universities adopting a blended approach in their teaching as an alternative of a completely face to face style. What is the attitude of professors in Spain on this aspect? To answer this question the Erasmus+ SOULSS project partnership distributed a survey in the academic year 2022-23 to explore how professors are conducting their lessons or plan to do so. The total number of answers allow us to provide an overview of the legacy of the COVID-19 emergency in the field of digital learning in Hispanic HEI.

Keywords: Spanish HEI, Online learning, Post-Covid world.

### **1 INTRODUCTION**

Online education has been an important research topic for several Spanish universities well before the Covid-19 emergency in terms of good practices in teaching while using ICT (Alonso-García et al., 2019) or in offering completely online courses (Marciniak, 2018). In specific aspects as the use of virtual learning environments several realities were quite important (Fuentes et al., 2011). However, although academic interest was high and several universities were offering their degrees exclusively online, the academic landscape in Spain before the pandemic was still dominated by a traditional face-to-face teaching style. The emergence of Covid-19 forced all Spanish institutions to move their teaching to digital environments, as was the case all over the world. Spanish professors accepted the new situation due to the Covid-19 related emergency but the way they reacted was mixed for several reasons, psychological as well as pragmatic (Verde & Valero, 2021). The stress among some teachers (Gómez-Domínguez et al., 2022) and students (Morales-Rodríguez, 2021).

The post Covid situation has been quite ambiguous especially for traditional-style institutions. In terms of teachers' attitudes, most expressed a desire to return to the pre-Covid situation, although they took advantage of the opportunity to meet with colleagues or to manage lessons and tutorials with their students directly online. On the 5th of May 2023 the WHO declared that the Covid-19 emergency is officially ended, although most of the Spanish public universities had already cancelled online courses, to continue with classroom-based classes, though, professors teaching in some of the Spanish universities can still adopt a blended approach in their teaching as an alternative of a completely face to face style to do lessons.

The implementation of online learning in higher education institutions through Information and Communication Technologies (ICT) is a crucial element of the education process (Biasi et al., 2021). It is essential to consider students' perceptions and expectations, given the crucial role of teaching staff in the effective implementation of integrated learning with the use of ICT. Although today's students are digital natives, they may still have limitations in their use of technology. Additionally, it is crucial to take into account the accessibility to the internet and necessary tools, the preparation of teaching staff, and the times and environments of online learning. In conclusion, the global acceptance and experience of online learning in emergency situations will lead to greater familiarity with technology and tools for teaching and learning.

Several studies have shown similar results to our research (Nirchi et al., 2021). Teachers appreciated the opportunity to experiment with a new teaching style and received help from their institutions with technology and organization. However, they largely struggled to reorganize their teaching activities for remote learning and felt burdened by an excessive workload (Nirchi, 2020). Our research aims to innovate pedagogical and technological models to improve teaching in the current context. This will optimize the legacy of the problems faced during the pandemic and lead to the development of more useful protocols in anticipation of future critical situations. This paper research question is about the attitude of professors in Spain on this aspect: how do they consider the experience done during the Covid-19 emergency? Will they treasure what they did during the forced online experience or not?

The results of such research will be part of the implementation of the ErasmusPlus project "Scaffolding Online University Learning: Support Systems" (SOULSS) that aims to help European HEI faculty to continue to adopt new technologies in their teaching (Montanari et al., 2022).

## 2 METHODOLOGY

To study the impact on the way of teaching/learning in the universities in Europe during and after COVID-19, the Erasmus+ SOULSS project partnership designed a survey to explore the way professors are doing lessons or plan to do. Although this study is part of a larger study involving people of different European nationalities (Greek, Italian, Polish, Lithuanian, Portuguese, and Spanish), only the data collected from the Spanish participants will be presented in this contribution.

During the academic year 2022-23 the survey was sent to professors working at different Spanish universities to anonymously collect the opinions about their experiences and digital skills.

The purpose of this preliminary survey was, on the one hand, to get general information about participants' sociological aspects, such as, age, the university where they work and the faculty where they teach or learn (in this case the students); on the other hand, it was an attempt to know their opinion on certain statements related to their digital skills and their training in these skills due to the pandemic.

The survey consisted in 14 questions (Table 1). It was sent to different participants from different Spanish universities using already existing mail lists. A total of 111 answers were obtained.

1) In which country do you work?
2) What is the name of your university?
3) In which faculty do you work?
4) What is your academic role?
5) What age group do you belong to?
6) From 1 to 5, how much do you agree with this sentence: "In my opinion the online lessons during the Corona 19 emergency represented a catastrophe and the online courses were a curse"?
7) Did you attend any special teaching training course during the Covid-19 emergency (A.Y. 2019-2020)?
8) Since the end of the Covid-19 emergency, have you taken training courses to improve your digital skills?
9) From 1 to 5, how much do you agree with the sentence "my digital skills for teaching are more than enough concerning my academic duties"?
10) What is your usual type of teaching?
11) In case your teaching is mainly synchronous face to face, do you combine (or do you want to do) F2F teaching with digital resources after the lockdown?
12) From your perception, do you think students need emotional support during online classes?
13) Do you know what Universal Design for Learning (UDL) is?
14) From 1 to 5, how much do you agree with this sentence?: "In my opinion the Covid-19 emergency represented an important opportunity to improve my teaching methodologies ".

Tab. 1 List of the questions of the survey

## 3 **RESULTS**

The results of the sociological data are the following:

With respect to universities:

Responses were gathered from 23 different universities, of which 4 were private and the rest public (N=19). 11 participants did not register their university.

A total of 6 answers were obtained from private universities. From public universities, 104 responses were collected. Of these latter, 4 answers were sent from the UNED (Distance Learning National University) and 3 from Spanish professors teaching at an Italian public university.

From the spectrum of universities, it can be seen that 5 out of the 17 communities of the Spanish territory were represented.

In relation to the areas of knowledge, responses were obtained from the following: Arts and Humanities (N=38); Social Sciences (N=30); Teacher Training and Education (N=20); Health Sciences (N=13); Engineering and architecture (N=6); Natural Sciences (N=3).

Regarding the academic role (professor, teaching assistant, other), 107 were professors; two of them were teaching assistants, and the two left were others.

In relation to age range the distribution is as follows: 25-35 N=11; 36-45 N=34; 46-55 N=36; 56+ N=30.

The respondents' opinions in relation to their teaching and digital skills was also assessed. Responses were answered on a scale of 1 to 5, where 1 always was a negative rating, while 5 was a positive rating (questions 6, 9, 10, 14) and questions 7, 8, 11, 12 and 13, which allowed only three answers: yes/no/other).

Question 6 deals with the perception of professors regarding the difficulty of approaching online classes during the pandemic. The responses yielded the following results: 1 N=23 (20.7%); 2 N=29 (26.1%); 3 N=36 (32.4%); 4 N=14 (12.6%); 5 N=9 (8.1%), showing that 79.2% (N=87) was located between full solvency, relative comfort and the average term, while the remaining 21.6% (N=24) exercised their teaching responsibilities in less favorable conditions to this respect.

Question 7 showed that almost half of the professors, 46.3% (N=51) did not take courses related to teaching, while 54.9% (N=61) did. Those in the first group were in the 25-35 age ranges. N=8 (7.3% of the sample); 36-45 N=14 (12.7% of the sample); 46-55 N=13 (11.8% of the sample); 56-(+) N=15 (13.6% of the sample). The professors' answers who opted for complementary training were according to age ranges: 25-35 N=3 (2.7% of the sample), 36-45 N=20 (18% of the sample), 46-55 N=22 (19.8% of the sample); 56-(+) N=15 (13.5% of the sample).

When asked whether they received training courses to improve their digital skills (question 8), 20.7% (N=23) of the professors did not, 21.6% (N=24) of them did receive a course in the last three months, while 58.5% (N=64) have not received any training courses of this nature for more than three months.

Regarding professors' digital skills, question 9, the answers for this item were the following: 1 N=3 (2.7%); 2 N=7 (6,31%); 3 N=27 (24.32%); 4 N=45 (40.54%); 5 N=29 (26.13%).

Concerning question 10, the majority of responses tended to point to face to face – synchronous teaching N=87 (78.38%); other choices were: remote synchronous N=2 (1.80%); asynchronous N=1 (0.90%); hybrid N=1 (0.90%).

Some participants chose several options: face to face – synchronous and hybrid (N=3 [2.70%]); face to face – synchronous and remote synchronous (N=5 [4.50%]); face to face – synchronous, hybrid and remote synchronous (N=2 [1.80%]); face to face – synchronous, remote synchronous and asynchronous (N=2 [1.80%]). Moreover, other participants added alternative options: face to face synchronous with support from digital resources (N=1 [0.90%]); face to face and individualised teaching (N=1 [0.90%]); all modes of teaching (N=1 [0.90%]); online teaching (N=1 [0.90%]).

Question 11, inquiring about the preferred method of teaching, elicited the following responses: *yes* N = 58 (52.25%); *no* N=26 (23.42%), and *sometimes* N=27 (24.32%).

Answers to question 12, about the professors' perception of students' emotional support were: *yes* N=58 (52.25%); *some of them* N=34 (30.63%); *don't need help* N=19 (17.11%).

About the knowledge of Universal Design Learning (UDL), question 13, very few were familiar with this concept N=28 (25.22%), while a large majority were not familiar with-it N=68 (61.26%) or weren't sure they did (N=22 [19.81%]).

Question 14, related to improving teaching methodologies after Covid-19 the replies were N=6 (5.50%) did not feel that emergency represented an important opportunity to improve teaching methodologies); while N=25 (22.52%) thought emergency represented an important opportunity to improve their teaching methodologies. The rest of the answers are distributed among the following scores: 2 (N=14 [12.61%]; 3 (N=28 [25.22%]); N=38 (34,23%).

## 4 CONCLUSIONS

This report is the result of a preliminary study to determine the extent to which the health crisis resulting from COVID-19 has changed the way of teaching in Spanish universities. To this end, a brief questionnaire was administered and is currently being developed. The total number of answers allow us to provide an overview of the COVID-19 emergency legacy in the field of digital learning in the Spanish university context.

Based on the responses the main conclusions we can reach are, firstly, most of the professors seemed to have faced online teaching in the context of the Covid-19 emergency with reasonable comfort, a fact that may be due to the continuous voluntary trainings offered to professors by most of the universities.

Secondly, although the results of the survey are not determinative regarding the interest of the professors in courses related to teaching, it is the age range groups of 36-45 and 46-55 the ones being more prone to do this type of training.

Thirdly, with respect to the interest in promoting or maintaining digital skills related to teaching, most of the respondents were interested in undertaking courses focused on digital education although not all maintained the same assiduity after the lockdown.

Fourthly, a large number of participants (almost 80%) indicated that face to face – synchronous was their usual type of teaching, though most of them expressed that they had enough digital skills for teaching. Furthermore, more than half of the respondents asserted that they combined F2F teaching with digital resources after the lockdown.

Fifthly, about students' emotional support in remote classes, half of the participants indicated that some of their students had such a need. Also, a very high percentage of teachers indicated that they were unfamiliar with the concept of Universal Design Learning (UDL).

The crisis due to COVID-19 has allowed professors, on the one hand, to become conscious of the need to implement their knowledge in new didactic approaches and technologies, and has provided an opportunity for teachers to learn new methodologies; secondly, it has allowed them to understand that this knowledge is necessary given that a good part of their students were emotionally stressed by the pandemic situation and that the contents that were traditionally presented face to face needed to be introduced in a different way; it has also helped all of us to realize that the application of different teaching methods is very useful to eliminate any boundaries to learning and give all students same opportunities to achieve learning, which in itself is one of the principles of UDL.

According to the results, although many of the respondents were not aware of knowing what the UDL was, in a way they have adequately answered to the needs arising from online teaching. The fact that some professors do not continue with the implementation of new digital teachings in face to face teaching may be due to several factors, such as the training effort required and the lack of time, the assumption that it is only useful in extreme teaching circumstances, or the feeling that they already know what they have to know, but all this looks towards the professor and not towards the student and the needs that may demand even in a situation of face to face teaching. This is one of the main areas for further work and research to implement effective teaching and learning to break down the barriers of unequal access to learning, as promoted by the Universal Design for Learning approach.

The results of this analysis underline the importance of European projects such as the ErasmusPlus Project Scaffolding Online University Learning: Support Systems (SOULSS) or the ErasmusPlus Project Supporting success for all – Universal Design Principles in Digital Learning for students with disabilities (SUCCESS4ALL) in helping professors to continue to improve their digital abilities in treasuring their experience during the Covid-19 emergency.

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