

Emergency Remote Teaching and The Adoption of Digital Technologies in Higher Education - The Case of a Portuguese Tourism Faculty

Ana Pires¹, Sónia Pais², Laura Chagas³

- 1-CiTUR Centre for Tourism Research, Development and Innovation, Polytechnic Institute of Leiria, Portugal
- 2- CiTUR Centre for Tourism Research, Development and Innovation, Polytechnic Institute of Leiria, Portugal
- 3- CiTUR Centre for Tourism Research, Development and Innovation, Polytechnic Institute of Leiria, Portugal

Abstract

The global spread of COVID-19 affected all areas, including education, with teaching and learning having to take place online and on digital platforms. With very little to no time to prepare for this change, most higher education institutions resorted to emergency remote teaching (ERT) as the response to maintain instructional continuity in the face of the global health crisis. This sudden transition to online education brought new challenges for higher education lecturers, who were forced to adjust from face-to-face to online learning and to explore a plethora of digital tools to keep teaching and assessing remotely. By means of a survey conducted among the tourism faculty of a higher education institution in Portugal, the purpose of this study is to identify which digital tools and resources were adopted during the transition from traditional classroom teaching to ERT, and explore the main difficulties experienced by faculty in this challenging period.

Keywords: COVID-19; emergency remote teaching; higher education; digital tools; tourism faculty experiences.

1.Introduction

In March 2020, the World Health Organization (WHO) declared the coronavirus outbreak a pandemic, forcing governments all over the world to impose lockdowns in an attempt to prevent the virus from spreading further [1]. Different sectors of activity were affected by the restrictions imposed, and higher education was no exception, with regular face-to-face classes suspended and lecturers having to switch to a new teaching model almost overnight [2]. This need to adapt abruptly to online teaching methods that required the use of new tools and skills posed a series of challenges to higher education lecturers who were already struggling to find a balance between teaching, research and other obligations, and who, for the most part, had no previous pedagogical preparation for teaching online [3].

It should be noted that even though supported by online tools and activities, the teaching method put into practice in most institutions was that of Emergency Remote Teaching (ERT), as it lacked the proper planning required from online courses and was meant to be temporary [4].

With faculty members and students forced to change so rapidly to online classes, studies have been carried out in order to understand how both have reacted to this unprecedented situation. Research studies that have focused on this transition signal a number of difficulties experienced by students such as technological readiness and literacy, facilities (Internet access and computer access), financial and emotional difficulties, as well as specific domestic contexts were signaled as posing more difficulties in their adaptation to online learning [5]. Among educators, issues related to poor online teaching infrastructure, lack of experience and appropriate digital skills, lack of mentoring and support were highlighted [6]. Correia and Silva [7] who looked at the specific context of higher education institutions in Portugal, reported that most of the factors pointed out by students as constraints to on-line learning had to do with teachers' attitudes and skills (limited digital skills and consequently very little confidence in the use of digital tools, conservative mentality and teaching methodologies). Respondents also referred to positive aspects such as flexibility, centralization of resources on one platform, proximity between teacher and student and interactive resources, among others.



In January 2021, following a new wave of coronavirus infections, Portuguese authorities declared the second national lockdown and the restrictive measures affected all levels of education once again, so a new stage of ERT had to be put into practice. This study aims to examine the experiences of the Tourism faculty of a Portuguese Higher Education Institution regarding digital tools and resources as they transitioned to ERT during the two lockdowns.

2. Methodology

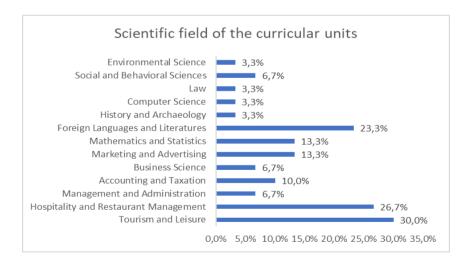
The purpose of this study is to identify which digital tools and resources were adopted during the transition from traditional classroom teaching to ERT, resulting from the COVID-19 pandemic in Portugal, and explore the main difficulties experienced by the Tourism faculty in this challenging period. Taking that into consideration, the authors developed a questionnaire and the participants were lecturers from a Portuguese higher education institution teaching curricular units (CUs) in the field of Tourism.

The questionnaire aimed to assess faculty perceptions and experiences regarding ERT, namely the need for training in digital tools, the (lack of) ability to learn autonomously and available resources. After data collection, qualitative analyses were carried out, quantified whenever necessary and possible. Statistical analyses were performed with Excel and Statistical Package for the Social Sciences (SPSS), version 28.

2.1. Respondents

The respondents of the study were college teachers from a Portuguese Higher Education institution. A quantitative survey was distributed online to the 65 teachers lecturing CUs of undergraduate degrees in the field of Tourism, and a total of 30 responded. The survey was conducted after the ERT period had ended and face-to-face classes resumed. This was a convenience sample, as participants were easily accessible to researchers.

Regarding the profile of faculty members, questionnaire results show that the majority of respondents (53,3%) were in the 45-54 age group and 40,0% were in the 35-44 age group. Only 6.7% were older than 54. Most respondents were female (80,0%) and only 20.0% were male. The majority of respondents had a full-time contract (60,0%), although there is a high percentage of faculty members who had a part-time contract (40,0%). With reference to the different lecturing levels, 96,7% respondents have undergraduate students and 40,0% have graduate students; 46,7% of respondents teach other higher education technical courses. The majority of respondents (46,7%) had taught for 11-20 years, 30,0% had taught for 10 years or less and 23,3% had over 20 years of experience. The curricular units taught are from different scientific areas, as shown in the graph below.

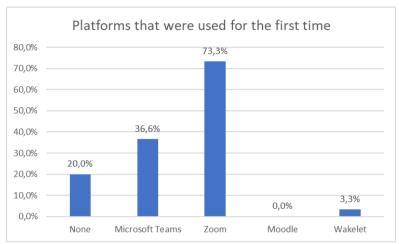


3. Results and Discussion

The vast majority of respondents (60%) did not have any training in the area of Distance Learning / use of digital tools before switching to ERT. Of the 11 lecturers who stated to have some type of training, 10 indicated having attended the preparation course that the institution involved in this study provides to lecturers who teach/taught in b-learning formats and 1 lecturer mentioned having a

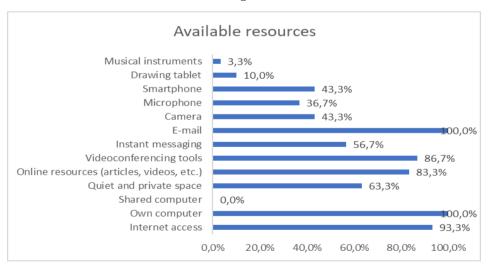


professional certificate as an E-Tutor. As for whether they had previous experience in the area of Distance Learning / use of digital tools before ERT, 50% responded affirmatively and 50% responded negatively. We verify, then, that there is a 10% difference between teachers with training and teachers with experience. Oliveira et al. [8] refer to the importance of this factor and conclude that the lack of training can hinder the ERT experience. When asked about the digital tools they had already experienced using, several were mentioned, including Kahoot!, Zoom, and Moodle.



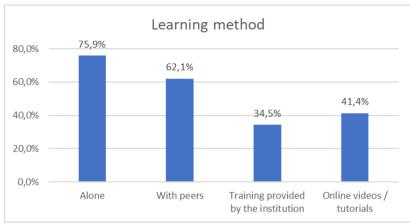
Regarding the use of digital resources for teaching, none of the respondents said they had difficulty learning and using them. 80% of respondents say they are easy to learn and use. However, it is important to mention that 20% say they find them easy to learn but difficult to use. 26.7% of respondents state they did not have all the resources and conditions necessary to continue teaching and working remotely.

As we can see in the following graph, the only resources that all respondents had at their disposal were their own computer and email. Not all of them had access to the internet (of the 30 respondents, 2 did not have access to the internet); only 63.3% of respondents had access to a quiet and private space, and 86.7% had access to videoconferencing tools.



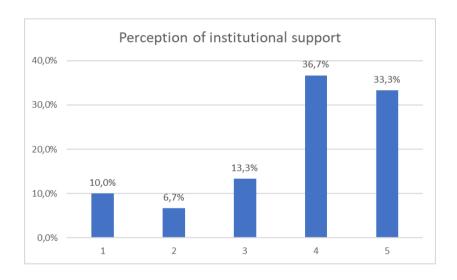
The most used platforms during ERT were Zoom (100%), Moodle (96.7%) and Teams (56.7%). It is also important to mention that for 20% of the respondents none of the platforms was used for the first time during ERT. 73.3% used Zoom for the first time.

As we can see from the graph below, most lecturers mentioned having learned how to use the platforms either autonomously or with their peers.



After returning to face-to-face teaching, 70% of respondents kept resorting to web tools in their classes, as indicated in the graph below. A study by Beardsley et al. [9] showed similar results and the authors state that not only teacher frequency of using digital technologies increased but also their confidence in using those tools.

The vast majority of respondents stated that they felt supported by the institution in this process of transitioning from face-to-face teaching to ERT, referring that the support of the distance learning unit and the webinars provided by this unit were fundamental. This is revealed in the graph below, in which, according to the Likert scale used, 1 corresponds to the lowest level of experienced institutional support and 5 to the highest. According to Lee & Deale [10], institutional support for faculty training and development is paramount to initiatives such as orientation and training regarding online course methodologies and technology. The authors also mention the importance of collaboration between faculty members and the potential of online learning for building a sense of community.



4. Conclusions

This study examined the perception of Tourism faculty members regarding the period of ERT, particularly their previous level of training, experience with digital tools and conditions to teach remotely. As far as the use of digital technologies is concerned, it is important to note that most respondents felt supported by the institution and kept resorting to web tools in their classes after the ERT period ended, which suggests there was a positive attitude towards the use of technology in this particular period. However, there are still a few obstacles that need to be overcome, namely the access to the internet, which was a problem for 6.6% of respondents.

Future research would be important to assess the implications of online learning in the Tourism industry. According to several authors, the use of technology can be essential in hospitality and tourism education and is even a new trend for the future [10,11]. A few examples are the need for continuous professional development, the use of virtual reality for simulations or the use of discussion



International Conference NEW PERSPECTIVES In SCIENCE EDUCATION



forums which can connect the different academic agents (students, faculty and staff), thus creating a greater sense of community.

References

- [1] World Health Organization. (2020, March 11). WHO Director-General's opening remarks at the media briefing on COVID-19 11 March 2020. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020
- [2] Iglesias-Pradas, S.,Hernández-García, Á.,Chaparro-Peláez. J. and Prieto, J.L. "Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study," Computers in Human Behavior, vol. 119, 2021, pp.1–18,doi: https://doi.org/10.1016/j.chb.2021.106713
- [3]Rapanta, C., Botturi, L. Goodyear, P. Guàrdia, L. and Koole, M. "Online university teaching during and after the covid-19 crisis: refocusing teacher presence and learning activity", Postdigital Science and Education, Vol. 2 No. 3, 2020,1-23.
- [4] Hodges, C., Moore, S., Lockee, B., Trust, T. and Bond, A. "The difference between emergency remote teaching and online learning," Educause review, 2020. Retrieved from: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning. Accessed 20 April 2021.
- [5] Ahmadon, F., Ghazalli,H.I.M and Rusli,H.M. "Studying during Pandemic: A Review of Issues from Online Learning in the Middle of COVID-19," 2020 6th International Conference on Interactive Digital Media (ICIDM), 2020, pp.1–4, doi:10.1109/ICIDM51048.2020.9339644
- [6] Carrillo, C. and Flores, M.A. "COVID-19 and teacher education: a literature review of online teaching and learning practices," European Journal of Teacher Education, vol. 43, no. 4, 2020, 466-487, doi:10.1080/02619768.2020.1821184
- [7]Correia, M. and Silva, P.S. "Higher Education Polytechnic Students' Perspectives on the Transition to Emergency Remote Teaching," SIIE 2020-22nd International Symposium on Computers in Education, vol. 2733, 2020.doi: 0074-2733-7.
- [8] Oliveira, G., Grenha Teixeira, J., Torres, A., and Morais, C. "An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID- 19 pandemic", British Journal of Educational Technology, 2021.
- [9] Beardsley, M., Albó, L., Aragón, P., and Hernández- Leo, D. "Emergency education effects on teacher abilities and motivation to use digital technologies", British Journal of Educational Technology, 2021.
- [10] Lee, S. H., and Deale, C. S.. "Moving to Online Education Virtually Overnight Due to a Pandemic: Perceptions of Hospitality and Tourism Students and Faculty Members" Journal of Hospitality & Tourism Education, 33(4),2021, 223-241.
- [11] Lei, S. I., and So, A. S. I.. "Online teaching and learning experiences during the COVID-19 pandemic–A comparison of teacher and student perceptions". *Journal of Hospitality & Tourism Education*, 2021, 1-15.