Human and Artificial Intelligence for the Society of the Future European Distance and E-Learning Network (EDEN) Proceedings 2020 Annual Conference | Timisoara, 22-24 June, 2020 ISSN 2707-2819

doi: 10.38069/edenconf-2020-ac0018



# WHERE ARE THE STUDENTS? SOCIAL AND LEARNING PRACTICES IN DIGITAL SETTINGS

Daniel Domínguez, Inés Gil-Jaurena, Javier Morentin, Belén Ballesteros, Alberto Izquierdo, Adriana Kiczkowski, Universidad Nacional de Educación a Distancia (UNED), Spain

#### **Abstract**

The aim of the study is to understand the role of social presence in digitally mediated learning processes and, consequently, to improve the design of the courses we teach at UNED. The spaces of greatest interaction between students are social networks and mobile instant messaging services, not only for social purposes but also for learning. That is why we are researching about students' practices in those spaces while they are studying. In this paper, we present preliminary findings identifying if those social interactions happen within the online courses or in other digital spaces.

#### Introduction

UNED Bachelor and Master students increasingly use social networks and mobile instant messaging services to manage most processes related to their presence in the university. Considering this, a group of professors and researchers are working in a project that aims to analyse the use of these digital services by the students and its relation to the UNED distance learning methodology. The purpose is to take advantage of the dynamics that take place outside the virtual campus to improve the quality of distance teaching in Bachelor and Master courses.

The one-year long project (from November 2019 to October 2020) aims to explore the reasons that lead students to increasingly use social networks and digital applications instead of or besides the UNED virtual campus tools. Also, it aims to explore the current practices that take place in those "non-official" digital settings, in order to identify possible gaps or aspects to improve in the UNED distance methodology.

As a hypothesis, it is proposed that UNED students have a series of needs that are related to a set of deficits existing in the cycle of learning of the Bachelor and Master's courses; this makes it more interesting for them to participate in informal social networks that in the formal training spaces enabled by the university as the main learning resource. Thus, the

gap between the students' interests and the learning resources offered by the university, would be one of the main reasons for the lack of student engagement in the settings and activities designed by the teachers in the online courses.

# **Background**

A previous study carried out by the same group of teachers led to this new project. That study (Gil-Jaurena, Domínguez, Izquierdo, & Morentin, 2018; Ballesteros, Gil-Jaurena, & Morentin, 2019) explored the coherence of the distance learning methodology at some UNED courses according to the Community of Inquiry (CoI) model. Among the conclusions of that study we identified the existence of a gap regarding "social presence", the social dimension of the CoI. It seems that the UNED teaching and learning methodology presents limitations in the way of interaction between the members of the community, which makes it difficult to consolidate learning communities in a distance environment. So in the current project we want to delve into the social dimension of the CoI model, to know in which spaces social interaction really happens and to identify the reasons that lead students to underutilize or even leave communication spaces and consultation of learning resources in the virtual course of the UNED.

Besides our research group previous work (Domínguez & Álvarez, 2019; Gil-Jaurena, Domínguez, & Ballesteros, 2020; Gil-Jaurena & Domínguez, 2018; Gil-Jaurena, Domínguez, Theeraroungchaisri, & Yamada, 2018), our background are the different studies focused on the analysis of social interaction in MOOCs, as well as in the field of open education and data-driven digital education (Domínguez, 2020; Kazanidis, Pellas, Fotaris, & Tsinakos, 2018). In addition, for this research we incorporated the evidence from studies on the learning influence of mobile messaging applications (Carpenter & Green, 2017; Kim, Lee, & Kim, 2014; Ogara, Koh, & Prybutok, 2014; So, 2016; Sun, Lin, Wu, Zhou, & Luo, 2018; Tang & Hew, 2017; Tang & Hew, 2020).

# Methodology

The research methodology includes the review of scientific literature, benchmarking of digital social spaces, and mixed methodology for the analysis of use of these spaces by the UNED students. The data collection techniques include an online survey and discussion groups with current Bachelor and Master students from the Faculties of Education, Philosophy and Language Studies. The students are registered in courses that the members of the research group teach, and these courses have a diverse number of learners: from less than 25 in Master courses to more than 750 in Bachelor courses.

In this paper, we report on the preliminary results from the online survey – by Google forms –, which collected 320 replies for two and a half months – late January to mid-April 2020. The survey was presented to students using two channels: notification by teachers in

the online course forum; and through social networks and para-academic messaging apps used by students, where student representatives posted the survey. Half of the students in the sample had reached the survey via each way. 80% of the respondents are studying a Bachelor's degree, and 20% a Master Programme. 84% are female learners and the ages are very diverse, ranging from 18 to 79 years old.

The survey asked about the use of different applications and digital resources (Facebook, WhatsApp, Twitter, YouTube, online campus, etc.) both before registering and during the course. Using a Likert scale, the students could state of they had used those tools, ranging from 1 – *no used* to 5 – *highly used*. They were asked, as well, for which purposes they had used each tool in their academic and learning process: get access to course readings, get access to assignments, ask the teachers, ask other students, etc.

### **Preliminary results**

In this paper we present preliminary results regarding the use of four different online tools by our students: two of them – Facebook (Figure 1) and WhatsApp (Figure 2) – are external tools managed by the students themselves without the presence of the teachers; the other two – online campus (Figure 3) and Intecca-videoconference (Figure 4) – are institutional tools, the first being the LMS of each course and the second being the video repository where the students can find the live and recorded video-lessons made by the tutors in the regional centres. We include a last figure (Figure 5) related to an off-line support structure: the UNED regional centres spread all over Spain.

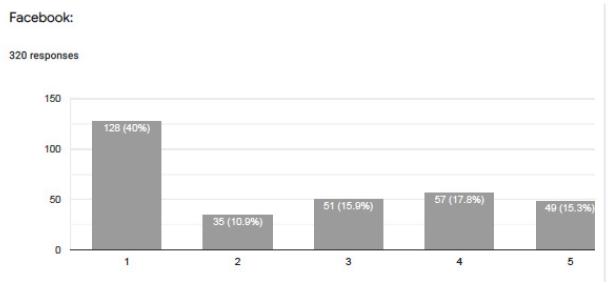


Figure 1. Use of Facebook during the course

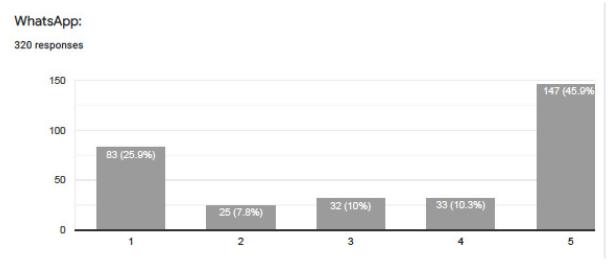


Figure 2. Use of WhatsApp during the course

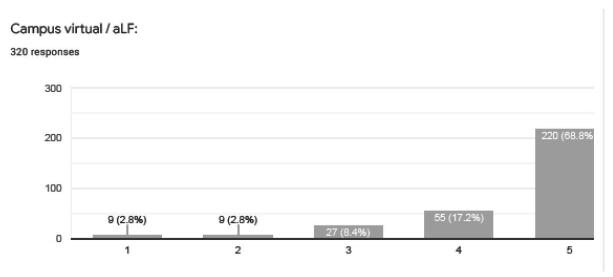


Figure 3. Use of the online campus during the course

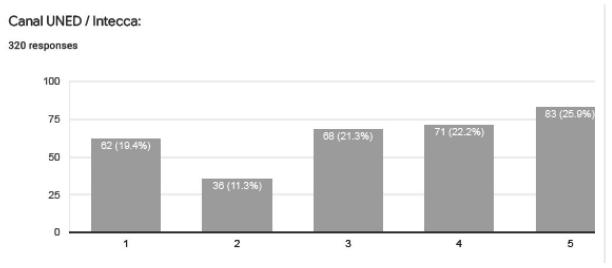


Figure 4. Use of Intecca-videoconference during the course

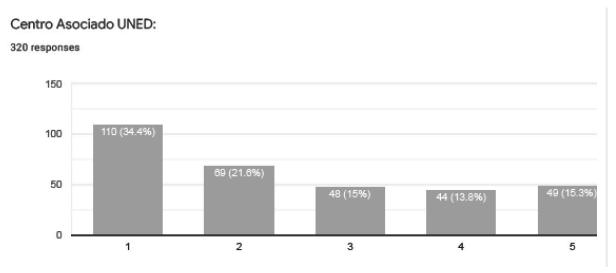


Figure 5. Use of UNED Regional Centres during the course

The figures show that the most used online tool is the UNED online course, used by 97% of the students who completed the survey (Figure 3). It is followed by WhatsApp (Figure 2), despite 25% don't use it at all for academic purposes. The use of Facebook is not so extended (Figure 1): 40% say they don't use it.

A significant number of students (34%) state that they never use the regional centre, which is a relevant on-site resource UNED has. On the other hand, almost 50% of the respondents (Figure 4) say they use a lot the UNED online video repository, where tutors from those same regional centres broadcast live or record the video-lessons.

# Next steps

Once we have got this overview of the students' online social practices in relation to the courses they study, we have planned a series of discussion groups with different students. The purpose is to deepen in the uses of different tools by the students, and their motivations to do so. We expect to complete the discussion groups in May and June, and analyse the results before we start the next semester on October, so we can consider the findings in the design and development of the courses we teach.

The two dimensions that will be explored in this further process will be the following:

- Relationships between the socio-learning practices of students who do not frequently use the online campus (aggregated 31.2%) and those practices of students who use WhatsApp extensively (aggregated 66.2%). Exploring whether students use WhatsApp in any way as a substitute for the online campus.
- Relationships between the learning method in the courses active and teachersupported in master versus self-study and with little teacher support in undergraduate – and the channels used to interact and share learning resources

#### Where are the Students? Social and Learning Practices in Digital Settings

among students. Exploring whether students compensate in any way for the reduced teaching support with the presence of social networks and messaging apps.

#### References

- Ballesteros Velázquez, B., Gil-Jaurena, I., & Morentin, J. (2019). Validación de la versión en castellano del cuestionario 'Community of Inquiry'. *RED-Revista de Educación a Distancia*, 59, 1–26. Art, 4. http://dx.doi.org/10.6018/red/59/04
- Domínguez, D. (2020). Data-driven educational algorithms pedagogical framing. *RIED. Revista Iberoamericana de Educación a Distancia*, *23*(2). https://doi.org/10.5944/ried.23.2.26470
- Domínguez, D., & Álvarez, J. F. (2019). Structural changes in the landscape of Spanish distance universities. *Open Praxis*, *11*(2), 119–128. https://doi.org/10.5944/openpraxis.11.2.958
- Carpenter, J. P., & Green, T. D. (2017). Mobile instant messaging for professional learning: Educators' perspectives on and uses of Voxer. *Teaching and Teacher Education*, *68*, 53–67. https://doi.org/10.1016/j.tate.2017.08.008
- Gil-Jaurena, I., & Domínguez, D. (2018). Teachers' roles in light of massive open online courses (MOOCs): Evolution and challenges in higher distance education. International Review of Education, 64(2), 197–219. https://doi.org/10.1007/s11159-018-9715-0
- Gil-Jaurena, I., Domínguez, D., & Ballesteros, B. (2020). Learning outcomes based assessment in higher distance education. A case study. *Open Learning: The Journal of Open and Distance Learning*. https://doi.org/10.1080/02680513.2020.1757419
- Gil-Jaurena, I., Domínguez, D., Izquierdo, A., & Morentin, J. (2018). Análisis de cursos online y a distancia desde el modelo "Community of Inquiry". In J. Valverde Berrocoso (ed.), *Campus Digitales en la Educación Superior. Experiencias e investigaciones* (pp. 346–356), Cáceres, Spain: Servicio de Publicaciones de la Universidad de Extremadura. Retrieved from https://www.eweb.unex.es/eweb/publicacionesuex/LibroCampusDigitalescompresse d.pdf
- Gil-Jaurena, I., Domínguez, D., Theeraroungchaisri, A., & Yamada, T. (2018). "EdX Insights" Metrics from a Socio-Constructivist Pedagogical Perspective. In A. Volungeviciene & A. Szűcs (Eds.), *EDEN 2018 Annual Conference: Exploring the micro, meso and macro Navigating between dimensions in the digital learning landscape* (pp. 53–60). Budapest, Hungary: EDEN. Retrieved from

- https://proceedings.eden-online.org/wp-content/uploads/2018/06/Annual\_2018\_Genova\_Proceedings\_ISSN.pdf
- Kazanidis, I., Pellas, N., Fotaris P., & Tsinakos A. (2018) Facebook and Moodle Integration into Instructional Media Design Courses: A Comparative Analysis of Students' Learning Experiences using the Community of Inquiry (CoI) Model. International Journal of Human–Computer Interaction, 34(10), 932-942. https://doi.org/10.1080/10447318.2018.1471574
- Kim, H., Lee, M. Y., & Kim, M. (2014). Effects of mobile instant messaging on collaborative learning processes and outcomes: The case of South Korea. *Educational Technology & Society*, *17*(2), 3–42. Retrieved from https://drive.google.com/file/d/1zJwfvIBHHq0hAgrafF-v4od\_VeZAjakN/view
- Ogara, S. O., Koh, C. E., & Prybutok, V. R. (2014). Investigating factors affecting social presence and user satisfaction with mobile instant messaging. *Computers in Human Behavior*, *36*, 453–459. https://doi.org/10.1016/j.chb.2014.03.064
- So, S. (2016). Mobile instant messaging support for teaching and learning in higher education. *The Internet and Higher Education*, *31*, 32–42. https://doi.org/10.1016/j.iheduc.2016.06.001
- Sun, Z., Lin, C. H., Wu, M., Zhou, J., & Luo, L. (2018). A tale of two communication tools: Discussion-forum and mobile instant-messaging apps in collaborative learning. *British Journal of Educational Technology*, 49(2), 248–261. https://doi.org/10.1111/bjet.12571
- Tang, Y., & Hew, K. F. (2017). Is mobile instant messaging (MIM) useful in education? Examining its technological, pedagogical, and social affordances. *Educational Research Review*, *21*, 85–104. https://doi.org/10.1016/j.edurev.2017.05.001
- Tang, Y. & Hew, K. (2020). Does mobile instant messaging facilitate social presence in online communication? A two-stage study of higher education students. *International Journal of Educational Technology in Higher Education, 17*. https://doi.org/10.1186/s41239-020-00188-0