Learning From Students. Uses of Non-Formal Digital Spaces in Distance Higher Education

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Abstract. Self-managed learning through non-formal uses of social networks and virtual spaces by university students is a fact of life today. Recognising this and assessing its possibilities is the starting point for this research, which aims to obtain keys that will facilitate the adaptation of our teaching to current scenarios. To this end, we have carried out this research in two successive phases: the first, based on the information gathered in an extensive questionnaire, offers a general description of the uses that students make of virtual spaces, both institutional and non-formal; in the second, we work with focus groups to deepen the experience of communication and learning in these spaces. The results offer guidelines for the improvement of our teaching platforms by indicating key aspects of the substance and form of the interactions, as well as technological considerations.

Keywords: self-managed learning, social networks, university teaching.

1 Introduction

Distance higher education has incorporated successive methodological and structural changes as technological innovations have appeared that can be used as pedagogical and communicative resources. Thus, the appearance of the Internet has already meant a significant turn towards digital connectivity, and the rapid and incessant increase in the possibilities offered by the Network continues to pose a challenge to distance universities in order to ensure their institutional sustainability in the medium and long term in such a changing and uncertain scenario [1].

In this sense, the emergence of COVID19 and its consequences in the education systems has accelerated this link between education and the Internet, increasing dependence on virtual connectivity and, therefore, providing an almost forced opportunity to rethink and recalibrate the multiple nuances inserted in this new situation of almost generalised blended learning [2]. Taking this into account, in the framework of distance higher education -which is our field of study- it will be necessary to make an extra effort to offer communication possibilities between the different educational agents, trying to incorporate among the institutional virtual resources the necessary improvements to

facilitate dynamic, accessible and efficient interactive processes, which can also facilitate teaching.

The way in which the Internet has been incorporated globally into many people's daily lives suggests new links between distance education methods -and not only that- and online tools such as virtual social networks, among others, without ceasing to present complexities to be considered [3]. Some studies have shown how the integration of the use of virtual social networks in well-defined instructional designs can improve the students' experience during the course, especially in terms of social presence [4]; this being one of the dimensions to be improved in distance higher education, as we have observed in previous studies by our teaching innovation group [5].

Other studies have also provided evidence of the positive influence on learning of the use of instant messaging in dialogic tasks such as journaling, dialogic, transmissive, constructionist with peer feedback, helpline and assessment [6]. Furthermore, in tasks related to the debate within the framework of subjects, we have clues that while the use of the usual forums of institutional platforms may lead to communications that are more directed towards the construction of knowledge, the use of mobile instant messaging applications may lead to greater social interactions [7], although they also present certain limitations to be taken into account in communication between peers for educational purposes [8]. On the other hand, the characteristics of this type of instant messaging can also contribute to improve communication between teachers and students, modifying certain traditional practices and forms of relationship [9].

With all this we wanted to briefly explain the need to explore new forms of communication and educational use of digital tools and spaces in distance higher education in order to adapt teaching to current scenarios. This is the basic premise on which this study is based. As we shall see, a questionnaire was applied and five triangular focus groups were developed with students from the UNED (National University of Distance Education) to find out the reasons why they use other non-formal virtual platforms in the context of organising their learning in Bachelor's and Master's courses, thus trying to understand what benefits their use could bring to official virtual spaces to improve the teaching-learning processes at the distance university; understanding, furthermore, that the current context of blended and virtualized teaching due to COVID19 may also make this subject interesting for higher education institutions as a whole.

2 Context

UNED is a public semi-attendance university that combines virtual learning scenarios (videoconferences, forums, chats, teaching material in various formats, continuous

assessment activities...) with optional face-to-face learning moments (weekly or fortnightly tutorials for reinforcement in Associated Centres -spaces linked to UNED where tests and tutorials are carried out- throughout Spain and abroad) and other compulsory moments (external practices and exams, although this has been temporarily modified within the framework of COVID19). In this context, the UNED has the aLF platform as its main virtual e-Learning space designed to create and develop training courses and other pedagogical research projects. Although it has been developed specifically for UNED teaching staff and students.

The work presented here arises from a teaching innovation project on learning practices in open digital spaces and their impact on teaching at the UNED. The project has been developed from "*CO-Lab UNED. Open and collaborative laboratory for teaching innovation*" and financed by the Vice-rectorate for Digitalisation and Innovation of the University Institute for Distance Education (IUED) in the call for teaching innovation projects for the 2019/2020 academic year.

The reason for the study starts from a basic question: where are the students? This question responds to an observation shared in conversations between UNED teachers about the marked absence of students in the university's official virtual spaces (aLF platform). This situation is highlighted in the answers to the questionnaire applied in the framework of this research, as we will see later. Consequently, the objective is to find out where students are, what other non-official virtual spaces they mainly use, how and for what purpose in terms of self-organising the learning required in the Bachelor's and Master's subjects. The aim of finding out about these motivations, as well as the practices that take place in these informal spaces, is to be able to incorporate a series of improvements in the teaching practice at the UNED in order to offer more satisfactory educational scenarios, based on discussion with other researchers along similar lines [10,11].

This pedagogical adaptation of the official platforms and teaching methodologies is conceived, in any case, as an end in itself, independently of the decision corresponding to each student on the type of space in which to be most present; in other words, we do not intend for students to stop using non-formal virtual resources for their educational achievements, but rather to be able to incorporate some of the most valued characteristics of their use into the official learning spaces of the UNED.

3 Methodology

The research was carried out in two complementary phases: the first, extensive, aimed at establishing a exploratory map of the uses that students make of virtual spaces, both institutional and non-formal; the second phase looked in depth at the communication

and learning experience in these spaces. For the information gathering, a questionnaire composed of 31 items was initially used, where the informants indicated on a Likert type scale (1-5) the level of use of the different virtual spaces and what functionality they had for the study. In the next phase, small-scale discussion groups were proposed; this format is suitable for online development because it facilitates the participation of all components.

The questionnaire, which was applied online, has been completed by students of Bachelor's and Master's degrees in the Faculties of Education, Philology and Philosophy. It was disseminated through the communication tools of the official teaching platforms and through the mediation of student representatives, who reported on the questionnaire in non-official virtual spaces. The time frame for accessing the questionnaire was established between 12 June and 15 July 2018 and, in the end, 320 responses were collected, which allows us to justify their sufficiency in relation to the total number of students in these studies, accepting equality of variance, an estimation error of 5.3 and a confidence level of 95%. The unofficial virtual spaces asked about in the questionnaire were Facebook, WhatsApp, Twitter and YouTube.

The focus groups were developed based on a flexible script that allowed teaching to be rethought in terms of the role played by unofficial virtual spaces in students' learning processes. There were 5 focus groups, combining students from different studies, different academic courses and different degrees of participation in the official spaces: 1) 1st and 2nd year students who regularly attend the Associate Centre; 2) 1st and 2nd year students who do not regularly attend the Associate Centre; 3) Final year students, doing the Final Degree Project; 4) Master's students; 5) student representatives. A total of 17 students and 5 facilitators participated. The thematic analysis of the information has been supported by Atlas.ti, following a mixed categorisation process. The initially agreed categories (motivation, teaching aspects, cognitive aspects and social aspects) enabled the 4 participating analysts to organise their work.
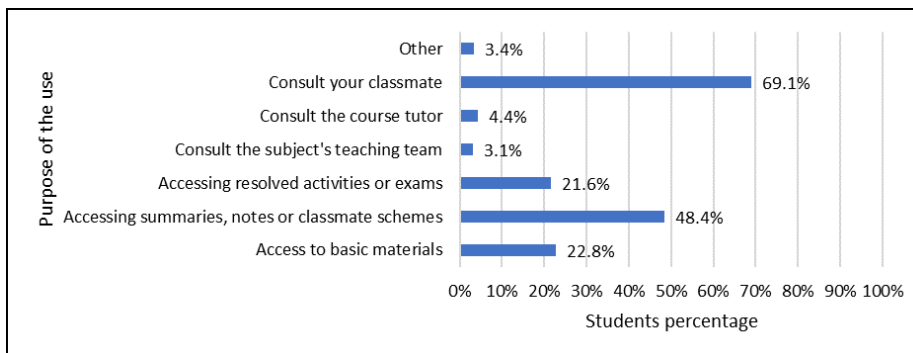
4 Results

Firstly, results are shown on the use that UNED students make of unofficial virtual spaces during the course (Fig. 1.). The use of these networks is self-managed by the students themselves without the participation of the teaching staff.
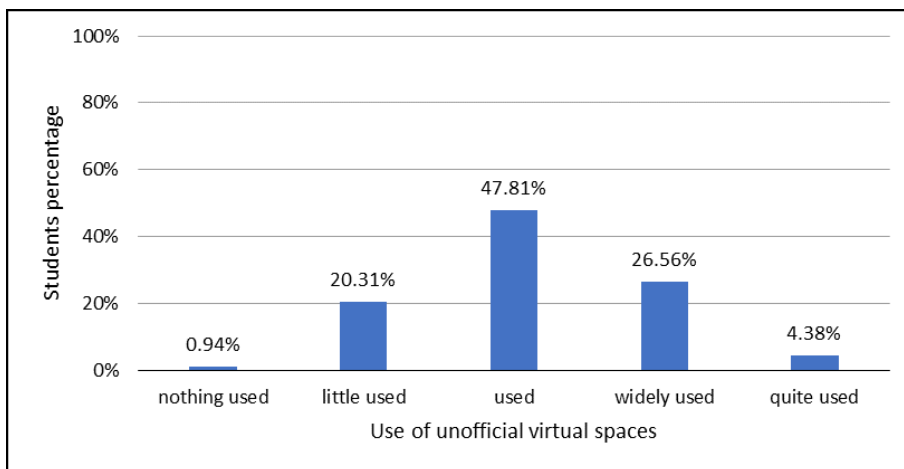
Fig. 1. Percentage of use of unofficial virtual spaces during the course.

Almost 80% (47.81, 26.56, 4.38) of students normally use these spaces to study at the UNED. According to the results, the most used is Whatsapp (66.3%), followed by Facebook (49.1%), and the least used is Twitter (9.4%).

About the purpose of the use that students make of the non-formal virtual spaces, we can see (Fig. 2 and 3)) that the vast majority use these spaces mainly as a means of communication and transmission of knowledge among classmates.

Fig. 2. Purpose of the use of the unofficial WhatsApp virtual space .
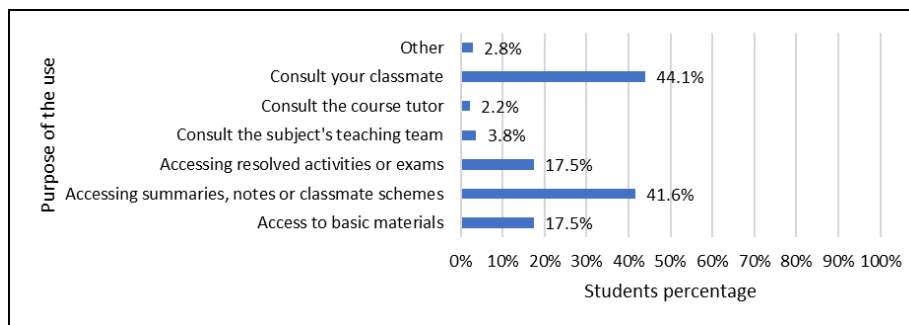
Fig. 3. Purpose of the use of the unofficial Facebook virtual space

These results show that communication and knowledge transmission between peers takes place in unofficial virtual spaces. Moreover, there is a small part of the students (approximately 20%) who use the non-official spaces to access basic materials of the subjects and exams and activities already solved, so, apart from the need for communication between peers, they also find in these spaces the possibility of sharing different resources and materials.

The analysis of the responses of focus groups reveals the contribution of the Social Networks and non-formal virtual spaces as facilitators of fundamental learning of the subjects. Among others, mainly Whatsapp and Facebook offer the opportunity to create and join groups of students who share studies. When investigating the valued aspects of these networks that support their use in front of/alongside official platforms, we found reasons related to content and form of communication.

These non-formal spaces are used for the purpose of *sharing resources and materials*, offering the possibility of finding almost all the information needed for the study and implementation of practical and evaluative activities:

> 5:46 the fact that you don't know well what the guidelines are for doing a job, that a colleague says to you: "oh look, if you want I'll give you mine so that you can see how it's done or how I've done it, or look they've given me a job from last year you can get an idea" [...], I've often done a job that I thought had to be done in a certain way and then I've seen the work of my colleagues and I've said: "...they're much better off", then I've taken mine, erased it and started again. That in the end makes you better, it makes you end up with a better grade

In addition to these materials and resources, the possibility of *raising questions and sharing answers* reinforces the use of these networks as learning spaces and, at the same time, fosters a sense of *fellowship*, including moral support.

1:150 a question from a PEC [practice of continuous evaluation], I don't know how to approach it, you put it in and it helps you a lot. It seems to me that UNED, if there is one thing I am getting out of it that is positive, above all, for me, it is fellowship.

Regarding the form that communication takes, three essential features are highlighted: *the immediacy of responses, closeness and spontaneity of expression.*

1:153 On social networks you ask a question and it is answered immediately, you get a notice on Facebook that such a person has answered you, it is much faster.

5:38 I think there are two aspects, one of having instant information and, two, having information without being moderated by the teacher, because it's true that sometimes there are people who are more shy and don't dare or you think that maybe asking a slightly silly question like that, between quotes, is going to influence the teacher to look at you differently and not evaluate you the same way.

1:151 It's like writing a letter [referring to official platforms] or talking [referring to non-official spaces].

In this way, social networks are valued as scenarios of freedom, forming an alternative to the hierarchical organisation that characterises official spaces:

5:37 …and thinking about an alternative, it occurs to me that if there were a group moderated by the teacher, then it would be easier for all the students to be in that group, but I think that even so, the rest of the students would look for another way where the teacher is not, without moderating (they laugh). So, I think it's something universal.

The feeling of comfort comes from the use of these networks; they are configured as a safer and friendlier space where relationships between "acquaintances" are interwoven against the anonymity of the official platforms:

1:169 [in] Facebook is a person, however... aLF is very... I sometimes look at it, if someone says a comment very out of place, I look at it to understand where the comment comes from

In addition to these questions of content and form of communication, technological aspects are also relevant in the choice of networks versus official platforms, which are often considered obsolete, complexly organised and not very intuitive.

1:155 the forums are not functional; it is not easy to search for things because even the search tool does not work.

The communication articulated in forums is static in front of the dynamism of the networks. Although its use is extensive for the reasons we have explained, it is also

interesting to note certain risks and limitations that students identify: over-saturation and the possibility of finding incorrect information:

> 2:77 ...a teacher told us the other day that she had found some nonsense in an exam and it was because someone had put it in some notes. We all studied with the same notes, sometimes there are people who don't even look at their books.

> 2:37 Awful. I am in three groups of Whatsapp of statistics, all three are full, 257 people in each […], they don't even read the three messages above. You answer one question and after ten minutes they answer the same thing again.

5 Discussion

The use of non-formal virtual spaces by UNED students seems to be fulfilling various functions, as we have seen in the previous section. Our initial question (where are the students), which emerged when we did not find the expected activity on the official virtual platform, is answered by the contributions to the questionnaire and the focus groups: they are self-organising their learning in virtual social networks, such as Facebook, and instant messaging applications, such as Whatsapp. This self-organisation of learning involves the use of these other spaces, which are mainly focused on consulting colleagues and exchanging materials, coinciding with similar research [11].

In addition, it seems that the lack of a social dimension in the official UNED courses [5] is compensated for by the creation of and participation in spaces where the feeling of "companionship" and "belonging" is reinforced by increasing the number of social interactions and doing so in a more fluid, close and relaxed tone, coinciding with other researchs on the instructional incorporation of Facebook [4] and on the educational use of instant messaging applications [6 and 7]. Moreover, immediacy, intuitive use and dynamism are characteristics of these non-formal spaces that we should consider to make the teaching-learning processes in university teaching more flexible [10].

On the other hand, the absence of teachers generates a more relaxed communicative use of these spaces, although sometimes they end up becoming -especially in the case of instant messaging applications- overloaded exchanges in which the same questions and answers are constantly repeated, presenting limitations that could be solved -for example- with student moderation, thus also mitigating other communicative problems that seem to occur in extensive and complex conversations, linked to collaborative tasks, through Whatsapp and similar [8].

6 Conclusions and recommendations

The results of this exploratory research on non-formal virtual spaces used by students at UNED, and their reasons for doing so, invite us to reflect on a series of aspects to take into account to improve teaching-learning processes in contexts of distance higher education. Results and reflections have been communicated to the Vice-rectorate for Digitalisation and Innovation as a starting point for redesigning policies and guidelines that can improve our teaching practice in the current context.

Among other issues, it will be important to recognize the potential of learning that occurred in non-formal virtual spaces and, in addition, to assess the introduction of some of its characteristics into official didactic models. We are not talking about necessarily incorporating the use of virtual social networks to teaching, but about partially replicating the advantages of these tools for distance education. To do this, it will be useful to ask how to generate more accessible and intuitive and dynamic virtual platforms, compatible with various devices (not just computers) to facilitate their use at different times and scenarios of the students' daily lives. It will also be interesting that students can create profiles in which they will include the information they consider offering, as occurs in certain social networks.

Furthermore, it could be important to make an effort to avoid the image of a "chat box" teacher, betting on more fluid and close styles that generate the confidence and climate necessary for interactions and pedagogical debates to emerge with fewer corsets (certain unnecessary formalities inherited from the academic authority) in official spaces. In this sense, it may also be useful to diversify the communication channels and formats as much as possible by combining text and audio-visual interaction.

On the other hand, since it is not our objective that students stop using non-formal virtual spaces, and taking into account that *there* they continue to encounter certain conditions that we cannot incorporate into institutional virtual platforms (e.g., absence of teachers in the chats), we consider that it will be appropriate to offer some guidance from the teaching teams to the students to prevent some of the problems and limitations that seem to occur in instant messaging applications and social networks. Among others: Incorporating the figure of the mediator in unofficial spaces to avoid oversaturation of messages; Clearly report what plagiarism is and what it means academically; The need to contrast the notes of other colleagues with the book or material provided from the tutorials, or even choose to collectively prepare notes.

Non-formal virtual spaces have clearly made the self-management capacity of students visible in the teaching-learning process. Recognizing the interest of learning in non-formal contexts and incorporating the voice of the student in the design of the subjects

makes it easier for us to rethink the teaching methodology beyond the limits of academic praxis in higher education.

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