

FACEBOOK AS A LEARNING MANAGEMENT SYSTEM (LMS) IN HIGHER EDUCATION

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Abstract

The integration of digital technologies (DTs) and the growing use of social networks play a leading role in society, consequently affecting education and schools. In this sense, it is very important to include DTs in higher education, namely the Learning Management Systems (LMS) and Platforms, in order to boost their use and integration in the educational context, both by teachers and, through a formative process of isomorphism, by students.

This study is being developed within the initial teacher's training in a class of 22 students in the second year of the Masters in Teaching Economics and Accounting, at the Education Institute of the University of Lisbon.

The main objective of this study is to evaluate a way of integrating DTs in the initial teacher's training, with the specific aim of testing the use of a learning management platform (LMP), which is simultaneously a social network – Facebook – as an e-learning tool for online support and communication.

We submitted an initial questionnaire to the class for primary data collection, which included a brief characterization of the habits and use of Facebook and e-learning. In the Facebook platform a closed group was created, having been provided with general information on the subject and related events, as well as news and articles on educational issues. We have also created common files, and synchronous sessions are also taking place, via chat and video call, for online clarifications and support.

Thus, this study intends to check the applicability of a learning management platform, i.e. Facebook, as an innovative teaching tool in the e-learning process in the initial teacher's training, seeking to ascertain its advantages and disadvantages and strengths and weaknesses, in order to face the challenge of integrating digital technologies in teaching.

Keywords: E-learning – Facebook – Initial Teacher Education – Learning Management System (LMS) – Teaching Economics and Accounting

1. Introduction

The wide spread of digital technologies and social networks in society, especially among youngsters, is echoed in education and schools, at all education levels, particularly higher education.

From a knowledge economy point of view, the integration of DTs in teaching allows the emphasis to no longer be on the accumulation of knowledge, but rather transferred onto the ability to select, transform and reuse knowledge in new situations (Carvalho, 2007:28), in that technology has instruments and tools that streamline this process of knowledge construction.

In the process of selection and evaluation, when a student enters higher education through examinations, their transversal capabilities are evaluated, not their potential skills. Only their learnings in a specific area are evaluated, according to Cabrito (2009). Thus, in teachers' initial training we will find

very heterogeneous classes in terms of degree of proficiency and level of use and integration of DTs, just as later on we see, as a consequence, the lack of their use with students in schools (Paiva, 2002).

Hence the increased importance of promoting the use and integration of DTs in higher education, and specifically in the initial teacher's training, so that they (now students; then, future teachers) may develop digital skills, so that, through a process of isomorphism, they will integrate them with their students in schools. This transfer process of isomorphism, called Mialaret (1990), will allow these teachers, who are trained through this strategy, to use it or a similar one with their students in the future.

The adoption and promotion of communication technologies in higher education takes place worldwide, given their growing importance and the expansion of Internet access that enables the availability of software, tools and participatory contexts (Pinto, Souza, Nogueira, Balula, Pedro, Pombo, Ramos, Moreira & Coelho; 2013:9), which supports the relevance of carrying out empirical studies on ways to integrate DTs, in this case, by using a Learning Management Systems (LMSs) as an e-learning tool.

E-learning can be a complement to the teaching-learning process, available through the "use of new multimedia technologies and the Internet, to improve the quality of learning, by facilitating access to resources and services, and to exchanges and collaboration at a distance" (European Commission, 2001:2), whereby in Portugal the most used communication technologies are the platforms for learning management and interpersonal communication, according to Pinto *et al* (2013).

At the same time, the emergence of multimedia technologies and environments leads to change in the teaching methods, where the student is increasingly encouraged to create knowledge and manage information in different ways, allowing access to new ways of organizing learning (Patrocínio, 2004:238), also observed by Rodrigues (2012). The Bologna Process also recommends an increase in autonomous and collaborative student work, as mentioned by Moreira & Balula (2010), which may be facilitated by the integration of DTs and the LMS, given its usefulness in terms of interaction and promotion of learning communities.

According to Carvalho (2007), the LMSs will contribute to this objective by facilitating the provision of digital resources in different formats and allowing student-teacher interaction through communication tools for supporting collaborative learning and the recording of activities and work carried out by students. It is expected that in the least they will combine communication and collaboration tools that enable teachers to manage and tailor content to their needs and track the progress of students in a safe and accessible online workplace (BECTA, 2009).

According to the investigation by the Communication Observatory (Paisana, Lima, Cardoso & Espanha, 2012), in Portugal the data on the use of social networks reveals an overwhelming percentage of 93.7% of Facebook users, a network that has increasingly gained a prominent position around the world, with almost 700 million users (Socialbakers Social Media Statistics)¹, having focused on innovation in terms of structure and appearance, as well as applications that operate on that structure.

Therefore, Facebook being the most representative social network, in addition to its original function, could possibly be used as a learning platform, since it allows for providing a personalized learning space with the features of an LMS. On this platform, individuals can be producers and consumers, content builders and managers, share new meanings, rebuild knowledge and define new ways of working and learning (Lucas & Moreira, 2010).

So, before looking for specific platforms and applications and creating new digital educational resources, it may be advantageous to check existing resources, widely disseminated among students and teachers, as is the case with Facebook, which can be used as an e-learning tool from an educational standpoint.

As for this tool, Phillips, Baird & Fogg (2011) suggest some ways it can be used by educators and teachers, namely: to encourage students to follow the guidelines and stay updated on the security and privacy settings of Facebook; promote good citizenship in the digital world; use the Facebook pages and group resources to communicate with students and parents; adopt digital, social and mobile learning styles, enabling students to "always be connected"; and use Facebook as a resource for professional development.

¹ <http://www.socialbakers.com/blog/171-facebook-is-globally-closing-in-to-700-million-users/>

In this sense, a case study was developed, aimed at analysing a way to use Facebook as a pedagogical tool in higher education, seeking to describe and analyse the phenomenon and its interactions (Yin, 1994), in an interpretive manner (Myers 1997; Walsham, 1995) with a focus on process analysis (Bogdan & Bilken, 1994).

2. Empirical Research

This study is being developed within the initial teacher's training for the subjects of Introduction to Professional Practice (IPP III and IV), in a class of 22 students in the second year of the Masters Degree in Teaching Economics and Accounting, unique in Portugal, at the Education Institute of the University of Lisbon.

The study cycle for the Masters Degree in Teaching Economics and Accounting aims to provide general training and professional certification in secondary education in the areas of Teaching Economics and Accounting, through the development of specific scientific and didactic skills and supervised teacher training.

The main objective of this study is to evaluate a way of integrating DTs in the initial teacher training, with the specific aim of testing the use of a learning management platform, which is simultaneously a social network – Facebook – as an e-learning tool, for online support and communication throughout the academic year of 2013/14.

The choice for Facebook over another learning platform was mainly due to its free access and user-friendly feature, and mostly because it is widely used as a social network, namely among youngsters, who will be the future students of these masters' students.

We submitted an initial online questionnaire to the class for primary data collection using the SurveyMonkey software, which included a brief characterization of the habits of use of Facebook and e-learning. The results showed that 86% of the masters' students have a Facebook account, though the majority uses it only occasionally. However, 63% of the masters' students have already added or accepted invitations from students. Only 29% use Facebook as an educational tool.

Most masters' students (79%) believe it would be helpful to have greater online support in the IPP III/IV subjects, but only 47% would use Facebook as a tool. Regarding the usefulness of online support, the following were mentioned as enhancer factors: the speed of response to questions and clarifications and the increase in teachers' availability. The main causes mentioned for not using Facebook as a tool were: the playful and unprofessional nature of the tool in question and the lack of privacy and electronic security.

However, 68% of respondents consider the promotion of a synchronous session in the IPP III/IV subjects as advantageous, the majority suggesting it be biweekly. The arguments 'for' were: no need to travel to the university; the opportunity to timely clarify doubts, with both teachers and students at the same time; learning how to promote a synchronous session and how to share opinions, experiences and resources. The factors 'against' were: face-to-face classes are sufficient (referring to the IPP III subject) and the preference for face-to-face classes; the use of platforms other than Facebook and the class being too big for a *chat*.

In short, the analysis of the questionnaire showed that this is a group of masters' students with some work experience now, but where the majority of respondents doesn't make much use of the Facebook platform. Although some masters' students perceived the potentials of the tool in pedagogical terms, some even revealed a negative perception towards this platform because they do not consider it a tool as such, rather associating it with lack of security and privacy, stressing its component of social interaction.

However, despite the resistance found towards using the Facebook Platform, which is natural when one seeks to introduce innovation, we chose to pursue the initial objective of the study on how to use Facebook as a pedagogic tool to support the teaching-learning process and online communication.

This decision was supported by the fact that we think teachers need to be aware of innovation and change in their traditional educational practices and realize the potential of a new teaching tool that is

distance education, particularly in b-learning - the Higher Education Institutions being partly responsible for this (Faria & Silva, 2007).

Thus, at the beginning, the masters' students were informed of the objectives of the study and a closed group was created, where students without a Facebook account were asked to create one.

This closed group has been provided with general information on the subject and related events, as well as news and articles on educational, security and privacy issues. We have also created a common file to schedule presentations to be carried out in the project 'Report on the Practice of Supervised Teaching' and another to list Economics Videos for use in lessons. masters' students were then asked to complete the list with links they knew and share other digital educational resources and blogs of interest to all. The objective of this initiative was to promote a more collaborative work between the masters' students.

Synchronous sessions and video calls are also taking place for online clarification and support - which are not face-to-face - while the masters' students prepare their IPP IV Reports. Synchronous sessions in chat and videoconferencing are different from e-mails, which were also used throughout this study, because they are synchronous instead of asynchronous (as are emails), i.e. the fact that we may be talking together in real-time, intending to simulate a conversation/live class. In the latter case, participants communicate and actively participate in the debate at the same time (García, 2005:98).

At the end of each session, teachers published their recording in a Word file for future reference by the masters' students. The sessions were not mandatory.

The first two synchronous sessions had no set topic and were intended for clarifying doubts and offering online pedagogic support. The first session was attended by eight masters' students and there was some difficulty in responding rapidly to all the questions that were being asked. However, in the following sections, this did not occur, for the participation of the masters' students decreased to about four to five master students per session.

However, after the second synchronous session, we felt the need to pre-select a topic and create a script in order to structure the sessions and increase its fluidity and theoretical consistency. The topics that were covered included: "Structure of the Report on Supervised Teaching Practice (STP)", "Research and literature review", "Analysis of interviews and questionnaires" and "Selecting and preparing the public presentation of the STP report".

3. Results and Discussion

Throughout the school year, most masters' students did not have a very active participation on the Facebook platform, but merely responded or interacted, especially when teachers published something or requested their participation.

However, some masters' students published, within the closed group, some news relating to education, and the masters' students who actually participated assiduously, showed great ease and a high perception of perceived usefulness.

In the second half, two masters' students, on their own initiative, began talking with the teacher in a *chat* to clarify personal doubts about their teacher training and their report. With another student, a videoconference session on Facebook was held, having been booked by e-mail, for analysing and clarifying her STP report.

Overall, the masters' students who participated most were always the same ones, thus evidencing greater participation and awareness of the usefulness of the platform by those masters' students who already had the habit of using digital technology.

These masters' students, when asked informally about the poor use and interaction of most class members in this e-learning format, mentioned as determining factors: colleagues' lack of time, the fact that not all masters' students were still working on the report and the question of lack of privacy - some masters' students didn't want to expose themselves and their work to other colleagues.

This last reference is probably specific to this group of participants which, even when face-to-face and over the course of the Masters Degree, showed some competitiveness among themselves, with some difficulty in working cooperatively. Although this aspect influenced the study results in terms of participation, it arises as an externality not directly related to the use of technology or the Learning Management platform.

4. Conclusions

This study allowed us to implement and check the applicability of Facebook as an innovative teaching tool in the e-learning process of the initial teacher training, with this LMS's major strength being the fact that it is both a social network widely used by teachers and mainly by students. We also found that users of digital technologies found it easy to use the teaching tool and had a high perception of its usefulness. One must however take into account any existing prejudices about Facebook, providing the necessary information in terms of privacy and network security.

In short, Facebook is a user-friendly platform of free access with no costs, which with the necessary precautions in terms of privacy and security can contribute and become an asset to face the challenge of integrating digital technologies in teaching.

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