Experience Reports

Use of Facebook as a Teaching-Learning Tool in Higher Education Courses

Uso de la Red Social Facebook como Herramienta de Enseñanza-aprendizaje en Cursos de Enseñanza Superior

Uso da Rede Social Facebook como Ferramenta de Ensino-aprendizagem em Cursos de Ensino Superior

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Abstract

Facebook has been directing several issues to education in its Learning Management Systems since it was created. Currently, several studies have suggested their use as a collaborative tool in the teaching learning processes. In this sense, this work intends to analyze theoretical references to identify the use of Facebook as a collaborative tool, and mark management actions and planning in higher education institutions for proper operation and use by teachers and students. Due to the ubiquity of social networks, and the widespread penetration of Facebook among young and undergraduate students, this tool allows their greater communication, interaction and flexibility in the university. Thus, in addition to promising the extension of learning beyond the class time, it promotes the autonomy of learning. In this way, universities play an important role in properly planning the use of information and communication technologies, and

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to take management actions with teachers and students to successfully use Facebook as a collaborative learning tool.

Keywords: Virtual learning environment. Collaborative learning. Distance Learning.

Resumen

Desde la creación de *Facebook* varias utilidades de su plataforma se fueron dirigidos a la educación. Actualmente, varios estudios han sugerido su uso como una herramienta para la construcción colaborativa en la enseñanza del proceso de aprendizaje. En este sentido, este trabajo pretende analizar referenciales teóricos para identificar el uso de *Facebook* como herramienta colaborativa, e identificar acciones de gestión y planificación en las instituciones de educación superior para el correcto funcionamiento y uso por profesores y estudiantes. Por las revisiones realizadas, se puede observar que debido a la ubicuidad de las redes sociales, y la amplia penetración de *Facebook* entre los jóvenes y universitarios, esta herramienta posibilita una mayor comunicación, interacción y flexibilidad en el ambiente universitario, así como es prometedora al extender el aprendizaje más allá del tiempo de la clase, promoviendo la autonomía del aprendizaje. De esta manera, se asume que las universidades tienen un importante papel al planificar adecuadamente el uso de tecnologías de información y comunicación, y tomar medidas con los profesores y estudiantes para el éxito del uso de *Facebook* como una herramienta de aprendizaje colaborativo.

Palabras clave: Entorno virtual de aprendizaje. Aprendizaje colaborativo. Educación a distancia.

Resumo

Desde a criação do *Facebook*, diversas utilidades da sua plataforma foram direcionadas à educação. Atualmente, vários estudos têm sugerido o seu uso como ferramenta de construção colaborativa no processo de ensino-aprendizagem. Neste sentido, o presente trabalho pretende analisar referenciais teóricos para identificar o uso do *Facebook* como

ferramenta colaborativa e assinalar ações de gestão e planejamento nas instituições de ensino superior para o adequado funcionamento e uso deste pelos docentes e discentes para tal uso. Pelas revisões realizadas, pode-se observar que, devido à ubiquidade das redes sociais e à ampla penetração do *Facebook* entre os jovens e universitários, essa ferramenta possibilita maior comunicação, interação e flexibilidade no ambiente universitário, bem como é promissora ao estender a aprendizagem para além do tempo da aula, promovendo a autonomia do aprender. Dessa forma, as universidades têm um importante papel ao planejar adequadamente o uso das tecnologias de comunicação e informação, além de tomar medidas junto aos professores e alunos para o êxito do uso do *Facebook* como ferramenta de apoio ao ensino dentro do contexto geral de aprendizagem colaborativa.

Palavras-chave: Ambiente virtual de aprendizagem. Aprendizagem colaborativa. Ensino EaD.

Introduction

Facebook has synchronous communication tools (e.g. Messenger) and asynchronous (e.g. Forums or Discussion Groups) that make it an innovative space, allowing the occurrence of interactions, socialization and collaborative learning in a network through dialogue and the collective construction of knowledge among the subjects. This idea and practice of protagonism in relation to the use of technologies creates a different subject from that passive subject of content transmission, in which the learner mainly listens, assimilates and reproduces (SILVA, 2010). Because they are present in everyday life and interfere in the classroom and didactic activities, we must consider the possibility of these tools being explored by education professionals, in order to contribute to the teaching and learning process in presential and distance education (ASSIS, 2014). For DILLENBOURG (1999), collaborative learning is a learning situation in which two or more people learn or tend to learn together. However, collaboration does not aim at standardization, but at heterogeneity, which makes possible new forms of relationships between them. In this sense, collaborative learning presupposes an

open learning environment in which subjects engage in doing things and reflect on what they do, promoting critical thinking.

With the advent of new information and communication technologies (ICTs), there have been significant changes in the methodological processes of teaching in contemporary society, especially in the modality of distance education (EAD) and higher education (HEI). These technologies allow an agile and shared access to knowledge and increasingly contribute to the interaction between different actors, especially in their personal, interpersonal and social relationships. Web 4.0 technologies, such as wikis, social networks and virtual worlds, are part of the everyday life of students and teachers, who can use them as a tool for collaborative construction in the teaching-learning process (GARCIA; FERREIRA, 2011; FERREIRA et al., 2013). The dissemination of these technologies through the Internet with mobility and ubiquity makes it possible to access them through cell phones, smartphones and tablets, which allowed the popularization, used as tools of work and entertainment. In this context, the Facebook is currently considered a worldwide phenomenon by its visibility, being preferred by millions of users who visit it daily.

The social network Facebook was launched in 2004 and, since its creation, several utilities of its platform were directed to the education. However, according to ARAÚJO (2010), there is a need to effectively use social networks in education, considering that they have become reality and, even if unwanted by many, are present in the daily lives of young people and adults. In this sense, according to Moran (2012), universities must be connected and prepared for a new student profile, so that they are technologically updated and offer innovative learning that motivates students. The innovation of higher education is not necessarily achieved through the use of Facebook, since there are other tools capable of promoting collaborative learning. However, due to the ubiquity of social networks and the widespread penetration among young people and university students, it is feasible to take advantage of their potential to do so. Due to the wide scope of the theme, we will delimit our approach in identifying Facebook applications that can be used by teachers as a collaborative knowledge building tool. Thus, through the review of the scientific literature, it is intended

to identify the positive and negative aspects of the use of Facebook as an auxiliary tool in higher education and to contextualize actions that the manager and the pedagogical team can take to an adequate planning of the HEI, aiming at minimizing the negative points and its complete success as a teaching tool.

1. University motivation for the creation of the Facebook

The Facebook was developed by Harvard University students in 2004, with the initial goal of networking the profile of students at that university. However, due to the quick success in 2006, everyone over 18 years old or who were enrolled in higher education were able to connect to the network, in order to connect students and promote socialization. Currently, Facebook is considered the largest social network in the world, surpassing more than one billion users. According to comScore's 2015 annual report (BANKS, 2015; WWW.FACEBOOK. COM, 2016), this network has more than 102 million unique monthly visitors in Brazil, with photos and videos accounting for 68% of all publications. The country is still the world leader in time spent visiting social networks, with 21.2 minutes/visit, which is 60% above the global average. Also, the number of people who access exclusively by mobile devices has an average annual growth of approximately 14%, which creates perspectives for increasing the use of this interaction and communication tool.

The conveniences of Facebook and its friendly way of navigation lead students to greater motivation and added value in carrying out their activities. In this sense, it can be explored as a pedagogical tool in collaborative activities in the educational process and, in this way, allow the critical and reflexive construction of information and knowledge (FERNANDES, 2011; FRANCO, 2012; BEZERRA; BRITO, 2013; VAGULA, 2014).

2. The Facebook in higher education

Facebook has become not only a communication channel and a destination for people interested in looking for, sharing or learning about a certain subject, but also a means of opportunities for higher education. It is a popular tool, easy to use, and that does not need internal development or software acquisition. It is useful for students, teachers and employees. Also, it allows the integration of various features in Facebook (RSS feeds, blogs, twitter, Instagram, etc.), and provides access alternatives to different services, allowing a privacy control (we can control the information we want others to see about us); definitely, we cannot ignore it (KELLY, 2007). The planning for its use as a support to education in higher education institutions requires understanding the organizational structure and culture of the educational institution, aiming to adapt it to the technical aspects of existing educational tools, as well as questions of privacy, ethics and policies of steering support that should be considered (JULIANI et al., 2012). Even today, there are universities attached to traditional teaching models, with the use of exact, non--flexible, repetitive and monotonous methods. On the contrary, most of their students are involved in a world of new ICTs with which they are familiar, and are part of the daily life of their relationships and social interactions (LEKA; GRINKRAUT, 2014).

Universities must be connected and prepared for this new student profile, in order to keep pace with the advancement of technology and the needs of students and society as a whole. According to Moran (2012), we can learn by being together physically and connected, and we can also learn in the same time and rhythm, or in different rhythms and times. In this context, the social network Facebook allows the representation of the affective or professional relationships of the members among themselves, in the form of a network or community, through the sharing of ideas, information and interests (LORENZO, 2013; PACHECO et al., 2015). Higher education institutions have used Facebook in the learning process, resulting in an important support tool in the teaching and learning process of their students. GRAY et al. (2010) found in the University of Melbourne medical school that 25.5% of students use Facebook for educational issues, and another 50.0% said

they were open to doing so. The students are receptive to the incorporation of Facebook in their academic life and perceive the benefits through greater communication, interaction, flexibility and motivation in the delivery of course content (LAMPE et al., 2011, IRWIN et al., 2012; Zancanaro et al. al. 2012).

The work of JULIANI et al. (2012), which describes the steps that have been followed to make Facebook tool usefully, discussing technical and administrative aspects related to the alignment of the use of the tool with institutional objectives and policies, defining the roles and responsibilities of each agent involved different steps. According to LEKA and GRINKRAUT (2014), there are positive and negative implications during the process of implementation of these new technologies in education; therefore, it is necessary to verify and know all the possibilities, so that teachers and students use them in an appropriate way. According to Caria (2012), Facebook can still be used as a tool for proposing pedagogical activities of environmental education. On the other hand, Hew (2011) and Sánchez, et al. (2014) suggest that students do not frequently use Facebook for educational purposes, using it primarily for social relationships with known people, to disclose personal information. In a study conducted by Patrício and Gonçalves (2010a), approximately 70% of respondents agreed that Facebook's educational potential is an important pedagogical resource to promote greater participation, interaction and collaboration in the educational process, as well as boosting shared, critical and reflective of information and knowledge distributed in favor of collective intelligence. It should be noted that the wide presence of technologies in daily and school life leads us to think about its potential for transforming teaching-learning processes. However, the mere use of ICT alone is not capable of doing so. These can lead to protagonism and potentiate the collaborative learning, even if they are used within traditional pedagogical proposals.

3. The role of higher education institutions

The use of social networks in higher education institutions requires adequate planning, which should be part of the Institutional Development Plan (IDP), in which they define the mission and strategies

of incorporating new technologies into higher education. It is worth noting that the use of new ICTs is supported by the National Education and Guidelines Law (LDB), which proposes an educational practice appropriate to the world's reality, the labor market and knowledge integration. Thus, the effective use of information and communication technologies in the school is an essential condition for the most complete insertion of the citizen in the technology-based society (SILVA, 2013).

The use of Facebook as a support for education requires higher education institutions to have a clear understanding of their organizational structure and culture and the need to adapt it to the technical aspects of the existing educational tools as well as privacy, ethics and steering support policies to be considered (JULIANI et al., 2012). In this sense, the use of technologies should have broad institutional support, contemplated in the pedagogical projects of the courses, creating a culture of teaching with the use of new technologies in all the educational levels of the university, being able to extend it, besides the graduation, to courses of research and extension. In the following topics, we present the main interaction tools, positive and negative aspects of its use, and planning and management actions to be adopted by the manager, pedagogical team and students, for the full success of the use of this support tool.

4. Interaction tools and applications

Facebook is characterized by its new way of establishing relationships, accomplishing countless tasks, such as the dissemination of products, news, facts, video sharing, texts, ideas, pictures, images and fun through its applications (FREDRIC, 2009). It adds resources to its platform that enable interactive web actions, such as joining groups, displaying photos, creating documents with everyone's input in building a collective text, creating events with scheduling of activities on and off the platform, creating polls as a resource for research, chat, comments, among others (JULIANI et al., 2012; FERREIRA et al., 2013). In addition, it has several applications that can be used pedagogically, such as Guizzes, FlashCards, PodClass, SlideShare, divShare, Docs, Picnick (online image editor), and Edutu Teach (together with Udutu Learn, these are tools that the teacher can use to work with students and distribute learning

objects), which can be used as didactic resources to facilitate the teaching and learning process (FERREIRA et al., 2013). It also has applications for sharing learning objects packaged according to the SCORM specification (LAICHT; VAHLDICK, 2013). Recently, the "hoot.me" application was made available, which, when installed on Facebook, allows to use all the resources of this social network in "study mode" (FERNANDES, 2011). In this sense, according to PATRÍCIO and GONÇALVES (2010b, p.1), Facebook offers several opportunities for creating an effective and engaging learning environment. Innovation, collaboration, interaction, sharing, proactivity, participation, critical thinking and reflexive are some of the key words in the use of this tool in an educational context.

5. Positive and negative aspects of the use of facebook in higher education

The use of social networks, such as Facebook, provides an important resource in the teaching-learning process in higher education institutions. However, positive and negative implications may occur during the process of its use by teachers and students, and caution is needed to avoid potential frustration. According to Lorenzo (2013), a positive point of its use is the possibility of greater communication between teachers and students. It is possible to be connected even at a distance and on many occasions, allowing a greater approximation between the teacher and the students, so that there is interaction without needing to be together, at the same time, in a classroom. According to Moran (2012), the use of social networks in universities offers teachers and students a change in the dynamics of classes, including the accomplishment of complementary activities. Another positive aspect is the possibility to extend learning beyond the time of the class itself, as well as broaden your research to topics of your interest. In addition, teachers can obtain feedback from their classes, or continue their classes through forums and chats (JULIANI et al., 2012). However, there should be clear limits to this connection between teachers and students, in view of the privacy of both, as well as the possible overload of teacher work outside working hours. In this way, the focus of learning should be centered on

the ability of students to continue learning, even outside the physical space of the classroom, promoting their autonomy without generating overload to the teacher.

Teachers can also make materials available to students on the social network, in advance or during classes, using different media, such as texts, images, videos and links, allowing students to make comments and critiques on their own page (LEKA; GRINKRAUT, 2014). It is also an effective tool in the organization of classes, through agendas in which important dates and events can be shared, such as evaluations, assignments, lectures, among others (LORENZO, 2013). In the professional context, the use of Facebook allows the promotion of professional connections between university students and companies, contributing to their insertion in the labor market (JULIANI et al., 2012).

On the other hand, there are factors that can be considered negative points to be overcome when using Facebook as an auxiliary tool in the teaching-learning process. Proper planning is essential before the start of Facebook use in higher education institutions. We can point out as the main negative aspects the lack of preparation of the teachers to use the new tool, the lack of preparation of students for the appropriate use, the lack of infrastructure of the institutions for the use of technology, the lack of time availability outside the institution by the teacher, the absent-mindedness of students and the use of inappropriate language at the academic level by them, the dissemination of inappropriate publications by students and people outside the class, difficulty or low utilization as an evaluation tool, and also the opposition of teachers and students to use of the tool (LEKA; GRINKRAUT, 2014; THALHEIMER et al., 2014). In this sense, the adequate planning by the manager, together with the pedagogical coordinator and the teachers, acquires a primordial role for the use and success of the tool as support to the process of teaching and learning.

6. Planning and managing the successful use of the Facebook

There are countless aspects to be observed for the proper functioning of Facebook as a teaching and learning tool. In order to do this, adequate planning and management is necessary for its use, so that the numerous negative points can be overcome or their effects minimized. In this sense, it will be up to the pedagogical coordinator and/or a specialist consultant, supported by the manager in the educational institutions, to prepare their teachers continuously, so that they have technical and pedagogical mastery of the tool to use and feel safe to use it (MORAN, 2012; HOBOLD; MATOS, 2010; CORREIA; COSTA, 2013; MATOS; FERRREIRA, 2014). Lack of teacher preparation and safety can make the process poor and further discourage future uses of new technologies. This attention should also be given to students who may not be familiar with the use of social networks. Another important aspect to be observed by the IES manager is the provision of a good internet connection in all accommodation, preferably with wireless access (WiFi), for the smooth running of the work of students and teachers. The lack of infrastructure of HEIs with computers and access to quality internet is pointed out as the main problem for teachers not using technology (LORENZO, 2013, THALHEIMER et al., 2014).

By adopting the social network as a tool to support teaching, it is also necessary that teachers have time, outside the educational institution, to attend work and also publish new posts and verify the participation of their students. Course managers and coordinators should take into account these specificities when planning their teachers' workload, so as not to discourage them from using Facebook. The labor market with the advent of new technologies, in general, requires a greater participation of its employees, who remain connected to the company network, in tasks outside their normal working hours. It is, therefore, not only an exclusivity of the teacher, who once had to manage the students within the classroom and, currently, needs to attend them in different spaces and times (MORAN, 2012).

When using virtual space, some students may use inappropriate written language at the academic level, make offensive or inappropriate

comments, and disperse with personal matters unrelated to the purpose of the class. In this way, the teacher acquires a fundamental role in guiding the students to select, compare and synthesize what is more relevant, allowing a greater deepening and a significant knowledge (LEKA; GRINKRAUT, 2014). The teacher should still remove inappropriate publications (comments, videos, photos, etc.) and apply some kind of warning to the student, depending on the severity of the situation. In this respect, institutional support, with clear rules established in the teaching program, which must be fully understood by the teachers and formalized with the students, is extremely important. The teacher should also be aware of safety issues, using the privacy features available in the social network, restricting the viewing of publications to class members, as well as guide students not to add people outside the group or educational process (LEKA; GRINKRAUT, 2014).

The evaluation process should be considered when using Facebook, since there is a predominance of presential grades, in order to comply with current higher education legislation. However, the teacher needs to find ways to evaluate his students in a virtual way; otherwise, there may be divergences in the process, generating demotivation and diminishing participation in the proposed activities (LEKA; GRINKRAUT, 2014). Where possible, the teacher can substitute part of the presential evaluations for an online evaluation instrument, which will contribute to the improvement of the teaching-learning process, with better grades presential evaluations and other evaluation activities. According to Lorenzo (2013), education is planning to use well, according with the criteria, ethics and responsibility. Thus, for the full success of the use of new technologies, it is of paramount importance to the institutional support to the teacher for the adequate planning and management of these tools for use in higher education.

In general, Juliani et al. (2012) propose six steps to be contemplated for the educational use of Facebook: 1) the structure and initial configuration for the use, in which are indicated those responsible for managing social networks, secretarial functions, configuration of online assessment tools, configuration of accounts on Facebook, strategy to solve difficulties with the use of technology, support of administrative

technicians, forms of disclosure of relevant contents of the group and/ or its page, strategy of insertion in the labor market by Facebook; 2) the survey of the actors and their attributions in the social network, in which groups are created with the addition of members and the functioning of that group, delimitation of the role and activities of teachers, students, former students, community, and insertion of the group in companies aiming at the company/school interaction; 3) what and how each tool can be explored with the indication and activities to be carried out using chat, photos, videos, shares, events, comments, polls, content, images tagging, videos and debates; 4) the guidelines on ethics, security and privacy, in view of the unwanted exposure of information, students and teachers. These define what to do to avoid discomfort in inappropriate publication of photos, videos, offenses, compliments and tagging, as well as the sanction to be applied to the offender; 5) suggestions on how to integrate Facebook with other electronic media used in the IES, establishing criteria and strategies to use technological resources and content published on Facebook in other IES tools, such as website, twitter, etc.; and 6) Evaluation and performance of how all content published by students can be evaluated through social network monitoring tools. It is of high importance to evaluate the contribution of each student and to assign a concept for their participation in the social network as a form of incentive for students to use. In this sense, Seekr and Scup are indicated as the two social network monitoring tools for educational purposes, because both have a very efficient search system, generate complete reports and graphs, with the possibility to evaluate the results and, from these, extract new graphics.

Final considerations

Facebook is a collaborative support tool for viable use in higher education, due to the ubiquity of social networks and the wide penetration of the tool among young people and university students, enabling greater communication, interaction and flexibility in the university environment and, especially, learning beyond the time of class, promoting the autonomy of learning. However, adequate planning is necessary before the start of its use in higher education institutions, so that the ICTs are programmed and meet the expectations of teachers and students. This

social network has several applications that can be used pedagogically as teaching resources to facilitate the process of teaching and learning.

The tool contributes positively to the greater communication between teachers and students, to carry out complementary activities, to extend the students' learning beyond the time of the class itself, stimulating and expanding the researches to topics of interest or, still, to give continuity to those in network communications. Teachers can also make available to the social network, in advance or during classes, materials to students with different media and allowing students to position themselves critically on the subject, as well as organize the classes, through schedules of evaluation events, delivery of work, lectures, and contribute to the insertion of university students in the labor market.

On the other hand, actions should be planned in order to minimize and/or avoid negative aspects, such as unprepared teachers to use Facebook, unprepared students for proper use, lack of infrastructure in institutions, lack of time availability outside the institution by the teacher, the absent-mindedness and use of inappropriate language at the academic level by students, the dissemination of inappropriate publications by students and people outside the classroom, the difficulty of using it in the evaluation process, and also the opposition of some teachers and students to its use. In this sense, the manager, the pedagogical coordinator and especially the teachers should be aware of these important implications that may occur during the students' use of Facebook, and work with institutional support to avoid possible frustrations when using it as a tool to support the teaching and learning process.

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