



## Social Networks to Improve Education: Empirical Analysis

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### Abstract

*The use of digital tools to improve education is a relatively recent but active study object. In the Research Group about Digital Journalism and Broadband, in the Universitat Abat Oliba CEU, in Barcelona (Spain), we analyse, among other items, the use of social network in the classroom, taking advantage of the online activities. In this paper, we study the theoretical framework of social networks and links with education. After it, we will develop a qualitative methodology. We will select a universe of college used to include digital tools in the classroom (Moodle, online exercises, online exams, hypertext inclusion, streaming to document in the class), and, departing of these skills, we will ask them for aspects of social networks (focused on Facebook and Twitter) in a qualitative way. Observing the practical and social problems and the advantages and disadvantages associated to the digitization of education, and with critical approach to the subject (relations of power professor-student, or even student-student, preserving the individual factor), we conclude the inclusion of social networks as a tool in the class time is positive, although we will find the dangers and diverse possibilities.*

### 1. Theoretical framework

The use of social network in the classroom, taking advantage of the online activities, is a topic which deserves an increasing interest in the scientific community. In the framework of the Broadband Society [1], the Internet and the Information and Communication Technologies (ICT) have involved a new stage in the classroom activities, in all the stages.

From a pedagogical perspective, the changes in organisation are a lot. It affects the implementation of the traditional class and the relationship between professor and student. The educational role of digital technology generates antagonist interpretations, the positive from the techno-enthusiasts, and the critic point of view, from the techno-cynics, especially focused on social media and the misuse of social networks like Facebook or Twitter in the classroom. In this sense, we consider a key method to receive the opinion of the students: how do they use in the classroom? Is it possible to introduce these social networks in a constructive perspective in the live classes? Can professors and students agree how to use social networks? Is it possible to separate the funny and the professional or academic use? A lot of questions treated in a qualitative way.

It is clear that the incorporation of technological tools like the Internet has allowed a transformation in the pedagogical methods. The University is a favourable context to the Internet and technological applications. Furthermore, the extension of the broadband networks and the Internet phenomenon has fostered the expansion of the access to the educational system [2]. The student became more audio-visual, more multimedia. In this framework, it is necessary to include online information in the class, to use in a right way hypertext [3], interactivity and multimedia in the sessions, to have bandwidth streaming or to create a virtual campus to enhance the quality of education, to establish more asynchronous contact than the traditional.

The benefits of a right Internet strategy, analysed from a constructivist position (the Internet is a semiotic mediation tool which generates the mobility of the structures of thought and the assimilation of knowledge) and from a behavioural-instrumental position (the Internet as a tool to facilitate the



practical of contents, but would not allow the building of knowledge) has to benefit in some ways: development of personality, consolidation of values, cultural and intellect enrichment.

Other point to analyse is the difference between the Internet bandwidth and application in the public or in the private university, and its impact in the election of university. In general, in the Catalan and in the Spanish case, the broadband access is similar in public and private field. About the debate between the traditional and the virtual model, the trend is to a mix model (the blended-learning model), with the inclusion of virtual campus and solutions in the traditional universities. In Catalonia, i.e., Anella Científica tries to assure a guaranteed and fluent bandwidth in all the universities and to promote the interactivity and the participation in the classroom. It could generate projects to materialize projects in the university and to choose university [4].

## 2. Methodology

To analyse social networks to improve education in the University, the Research Group about Digital Journalism and Broadband, in the Universitat Abat Oliba CEU, in Barcelona (Spain), have done a survey, in February of 2013, about the use of both social network in the classroom, obtaining advantage of the online activities.

We have developed a qualitative methodology. The sample of college students ( $n = 73$ ) included students of the first year in the subjects Computing and Communication Techniques and Marketing in the Escola Universitària Mediterrani (Universitat de Girona). We required a group of students with skills and acknowledgements about the Internet and, in general, social networks, and with the aim to use them in the future. This sample is used to include digital tools in the classroom (Moodle, online exercises, online exams, hypertext inclusion, streaming to document in the class). Considering these skills, we asked them for aspects of social networks (focused on Facebook and Twitter) in a qualitative perspective (in deep interviews).

## 3. Results

In qualitative terms (open-ended question about advantages and disadvantages of using social networks) Facebook and Twitter are observed with different positions when being introduced in the classroom. In Table 1 we have grouped the advantages into two categories: operational (operation of the course and class) and documentarian (structurally add value beyond the academia). For the benefit of the class they have started to inform them of news about the topic at hand. This means we are at the crossroads between the two different categories.

The advantages of using both social networks are these: the continuance of questions (which can be done online or asynchronously), internal communication, horizontal (between students) and vertical (teacher-student), which democratizes an academic event; tracking news related to the subject taught (which links to digital media, blogs or web pages interesting); dissemination of academic content (an extension of Moodle) tracking and communication over profiles of interesting characters which is relevant the subject taught; analysing the function of these social networks and their future professional orientation (practical applications in an enterprise); opening online debates on a class topic operational publications (exam dates, additional information); the publication of job offers, information about events for the benefit of students. Classes also begin with current news that relates to each subject.

The advantages of Facebook are to post information related to the subject, to allow more extension of Facebook and Twitter, business analysis, the creation of a class contact group where information on topics, assignments or tests is shared; the proposal of subject practices, and information about the university being shared online, is considered a potential survey.

Twitter is considered a more advantageous option, in sharing opinions with brevity and speed, with the option of following news and content on current. The disadvantages of social networks are considered to be that they are too personal to be appropriate for academic use, since it is a mixture.



Thus, communication in an environment of a leisure also being used for study can generate multiple dysfunctions. One of these would be the usurpation of other Moodle functions or of the virtual classroom.

Table 10: Advantages and disadvantages of introducing Facebook and Twitter into the classroom

Social Network	Advantages	Disadvantages
Facebook	<p>Operational:</p> <ul style="list-style-type: none"> <li>- Continuance of questions</li> <li>- Internal communication, horizontal (between students) y vertical (teacher- student)</li> <li>- Posting academic information</li> <li>- Open debates online related to class topics</li> <li>- Operational publications</li> <li>- Creation of a class group</li> <li>- Proposal of practices</li> <li>- Start a class with relevant current affairs</li> </ul> <p>Documentarian:</p> <ul style="list-style-type: none"> <li>- Following news related to shared documents</li> <li>- answering questions</li> <li>- Following profiles and communicating with interesting individuals</li> <li>- Analyse the functions of social networks and its future of professional orientation</li> <li>- Analysing business cases</li> <li>- Publishing job adverts</li> <li>- Information about events</li> <li>- Information about the university</li> <li>- To make yourself known as a student</li> </ul>	<ul style="list-style-type: none"> <li>- A mixture of personal and academic use</li> <li>- It could replace Moodle</li> <li>- A mixture of leisure and academic use</li> </ul>
Twitter	<p>Operational</p> <ul style="list-style-type: none"> <li>- Continuance of questions</li> <li>- Internal communication, horizontal (between students) y vertical (teacher- student)</li> <li>- Posting academic content</li> <li>- Opening of debates online related to a class topic</li> <li>- Operational publications</li> <li>- Starting class with current affairs</li> </ul> <p>Documentarian:</p>	<ul style="list-style-type: none"> <li>- A mixture of personal and academic use</li> <li>- It could replace Moodle</li> <li>- A mixture of leisure and academic use.</li> </ul>



	<ul style="list-style-type: none"> <li>- Following news related to documents shared</li> <li>- Following profiles and communicating with interesting individuals</li> <li>- Analysing the function of social networks and its future of professional orientation</li> <li>- Comparing opinions with brevity and speed</li> <li>- Following current news and contents</li> <li>- Publishing job adverts</li> <li>- Information about events</li> <li>- To make yourself known as a student</li> </ul>	
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Own source

Communication is more frequent within the faculty, which was considered unimaginable in the pre-internet era and which means longer working hours for teachers. One of the main arguments is that some teachers don't check their emails and social networks would make this issue less severe. In some cases, it is considered that Facebook and Twitter should not be used systematically but for a specific reason. This shows that email (or SMS or MMS messaging) may represent a communication formula that is more effective than social networks.

#### 4. Conclusion

Facebook and Twitter are right to improve education. The qualitative data of the survey conducted by university students reflect this. A similar phenomenon to business could be given to the university environment.

Resources are invested in social media however the strength and power of social media to build community, share knowledge, inform and generate debate is unknown. Our research shows an apparent awareness of the advantages and disadvantages (especially the mixture of leisure and study, similar that of business and leisure) of the introduction of such networks in the academic field.

A large number of advantages have been considered by respondents, both operational (operation of the course, class, improving communication with teachers and peers, providing content, performing practices or resolving doubts) and documentarian (which add value, such as follow news, interesting profiles, enterprise applications, information on job vacancies, events or the university).

A study such as this requires further investigation for the evolution of the perception on the use of these social networks. Most likely, if a further study of a formative stage of the use of social networks was inserted and created in which applications that could be added to social networks are explained a further survey would yield different results. Social networks, used for operational and in moderation, can provide a good opportunity to the educational environment, allowing the exploitation of hypertext, the media and especially Facebook and Twitter, for interactivity.

Social networks evolve. From a university's point of view, a tool for engagement with the business, further analyse is obligatory so that they can anticipate as far ahead as is possible.

#### References

[1] Fondevila Gascón, Joan Francesc (2012). The Broadband Society in the World. Terrassa (Spain): CECABLE.



- [2] World Bank (2002). Information and Communication Technologies. A World Bank group strategy. Washington DC: The World Bank Group.
- [3] Fondevila Gascón, Joan Francesc (2011). “Aplicación semántica de la hipertextualidad en la prensa digital en España” (pp. 169-180). In Verón, José Juan; Sabés, Fernando (eds.). La investigación en periodismo digital. Algunos trabajos desde el ámbito universitario. XII Congreso de Periodismo Digital de Huesca-2011. Huesca: Asociación de la Prensa de Aragón.
- [4] Fondevila Gascón, Joan Francesc; Beriain Bañares, Ana and Del Olmo Arriaga, Josep Lluís (2013). “Tecnología y educación: impacto en la elección de universidad”. Vancouver: 9º Congreso Internacional sobre Tecnología, Conocimiento y Sociedad.