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Facebook: a potentially valuable educational tool?

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ABSTRACT

This paper is concerned with the educational value of Facebook and specifically how it can be used in formal educational settings. As such, it provides a review of existing literature of how Facebook is used in higher education paying emphasis on the scope of its use and the outcomes achieved. As evident in existing literature, Facebook has been used mainly for social networking purposes through the establishment and collaboration of social groups in educational settings. However, a set of recent studies has exemplified how Facebook can provide an empowering means for achieving educational goals and supporting students develop crucial skills (e.g., writing, networking, collaborating) by serving as members in various learning communities. Concluding, we argue that Facebook can provide a valuable pedagogical tool that enhances student learning. Hence, future research towards further exploring Facebook's use in educational settings is warranted for the purpose of producing scientific evidence about the ways in which Facebook could be utilized to enhance learning.

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Introduction

Facebook is an online social networking site with more than 2 billion users where people can share personal information and photographs as well as to connect and communicate. Started by Mark Zuckerberg, in early 2004, it was originally an *online social networking site only for Harvard* (Hew, 2011, p. 663) which spread to other higher education institutions and opened to the public two years later.

It is perhaps the most popular social networking site given that approximately half of the online population of the earth today has a Facebook account (Dragogiannis, Lala, & Papadopoulos, 2013; Mpratitsis, Karaspyrou, & Kyridis, 2010; Nikolopoulou & Gialamas, 2011). The number of the popular social network users approaching 1.5 billion, while the “networked” world population is estimated at 6 billion, placing it as one of the largest and most famous SNSs on the Internet (Federation of Hellenic Information Technology & Communications Enterprises,

2015; Utilization of Social Networks in Education, 2012). The “moto” of the creators, *Facebook, helps you connect and share with the people in your life*, highlights the basic properties of the interface and content sharing that govern. Facebook has been criticized and blamed on issues relating to privacy and the political views of its founders. However, this website remains the most popular social networking site in several English-speaking countries and beyond. This paper is concerned with the educational value of Facebook and specifically how it can be used in teaching and learning. In what follows, we offer a discussion about Facebook’s use in educational settings through analysis of related literature findings.

Educational value of Facebook

The educational value of Facebook according to Wu (2012) lies on its three important qualities as an educational tool. First, it provides social support for students but also for teachers through interaction it offers, but it also promotes the guidance for the operation of the relationship between those involved, enhancing their self-image. Additionally, it provides emotional support to students even allowing for the existence of negative emotions to work as a form of a “decompressor”. Moreover, it promotes cooperation as students can easily follow announcements related materials, courses, departments, or schools, involving students in deeper discussions thus helping them to develop higher level thinking, but also can bring together old graduates research needs. Lastly, Facebook provides students with the opportunity to build their own profile, helping to reveal all their personality and student characteristics and the teachers in a more comprehensive way (Baek, Holton, Harp, & Yaschur, 2011), and complements the profile of both teachers and learners (Pempek, Yermolayeva, & Calvert, 2009) in a traditional frontal learning environment. Finally, the credibility of the teacher increases as sharing more personal information and activities with students in Facebook (Hew, 2011).

The disadvantages are related to the fact that Facebook is primarily a technological tool for social rather than academic work. So, even if students participate in discussions about their assignments, lectures and studying notes or share information about their research resources, they still mainly use Facebook as a means of staying in contact with friends and family (Davies, 2012; Grosseck, Bran, & Tiru, 2011). However, as we argue in this paper, Facebook’s social characteristics of which might provide an important infrastructure for productive collaboration between learners. The entertainment provided through Facebook’s applications may act as facilitator or motivation for learning with a moderate control by teachers, who with an update on the positives and negatives characteristics, to learn to accept, but mainly to understand all parties that bullying is nothing more than an extension of the real world and that if not stopped there, it is actually impossible to stop in the virtual world (Wu, 2012).

The use Facebook in higher education

Facebook continues to grow in popularity on college campuses across the world making interaction with the academic policy inevitable, enjoying its integration in today's society in most age groups (Gosling, Gaddis, & Vazire, 2007). Research from the center EDUCAUSE Center for Applied Research (ECAR), Facebook has been used with 36.950 American students from 127 University Institutions representing 90% of students use SSNs and of these 97% use the Facebook (as cited in Dahlstrom, 2012). In a study carried out by Bugeja (2006) it became evident that 78.66% of the student population of Iowa State University have accounts on Facebook. The high rate and also the frequency of college students using it have been documented in other studies as well (Bart, 2009; Kolek & Saunders, 2008; Smith & Caruso, 2010).

Although Facebook is widely considered as a social networking tool, some students have used Facebook for academic purposes in various ways. Salaway and Caruso (2008) found that 49.7% of American university students use Facebook to communicate with their peers on issues related to their courses. Even after many years of its debut, the popularity of Facebook remains a key element of student life and research of educational technology, and Higher Education has addressed various aspects of the impact of undergraduate students and the academic community as a whole.

However, several issues may arise when teachers use SSNs like Facebook for educational purposes. Although most students have an account with SSNs, a student minority intentionally avoids Facebook (Bugeja, 2006; Kolek & Saunders, 2008). While these students may not have trouble creating an account on Facebook, they usually prefer to use other SSNs or avoid them all together. Students using social networks all have different intentions and comfort levels on how they, as mediators, would like to use Facebook (Hewitt & Forte, 2006; Madge, Meek, Wellens, & Hooley, 2009; Mazer, Murphy, & Simonds, 2007, 2009). According to Hewitt and Forte (2006), one-third of the students surveyed said they feel uncomfortable with the presence of the School on Facebook. Some students even view social networks, like Facebook, as a space student terrain, having a social refuge character, as they believe that any interaction between faculty and students violating the sanctity of this on connection line. The findings of a related study showed that the participants viewed Facebook as a social environment, where the administration can communicate with them but not used for teaching purposes (Mazer et al., 2007). Similar findings were produced by Madge et al. study (2009) which showed that students use Facebook primarily for social purposes and not for educational purposes. Instead, students indicated their preference in being educated by teachers in the classroom instead of through Facebook. Madge et al. (2009) in a study with undergraduate students at a university in the UK, found that over 95% of them regularly use Facebook. As they pointed out, Facebook is an important social tool used by the majority of respondents to strengthen their evolving place at a university. The students thought that is part of the *social glue* that "helps students settle

into University life, keeps the student body together as a community and aims at strengthening communication especially for social events among them” (p. 153).

An interesting finding is that while Facebook connects students in group discussions, provides opportunities for interaction with remote members, facilitates communication among fellow students, and takes notice of upcoming assignments (Mendez, Le, & De La Cruz, 2014), most students do not find all this very beneficial (Parry & Young, 2010). Furthermore, the time spent on Facebook for social purposes is sometimes at the expense of time available for academic study. While Facebook is sometimes used informally for learning from students to collaborate on group projects or for individual administrative arrangements, most students are not too keen on the idea of being informed by their teachers through Facebook (Madge et al., 2009).

Social interaction

Grosseck et al. (2011) found that Facebook is used equally by younger and older people, and it has occupied an important part of the lives of students. As they described, most people believe that university teachers have embraced the idea that Facebook can also be used in academic level, not only socially, but use it for many purposes and goals linked to formal education. However, similarly with other researchers, they concluded that the majority of people use Facebook more for social reasons rather than for academic, even if they take part in discussions about their assignments, lectures, study notes or share information about their research resources.

Studies have shown how young students use Facebook for social networking and for developing virtual relationships (Madge et al., 2009). However, the involvement of students with Facebook does not guarantee that they will become more social (Hodgkinson, 2008). Many times, the limits for many of the current generation of undergraduates, between the two worlds, online and off line have become blurred and many students utilize a multitude of combinations of different relationships and networks to integrate into the university community. A few studies have suggested that the interaction of student and teachers have a significant impact on students’ performance, both at the intellectual level and socially (Endo & Harpel, 1982).

Despite the reluctance of some students, social networking sites can still serve important educational purposes and increase the participation of students in learning communities (Junco, 2011). Studies have found a relationship between time spent on these sites and active student participation. For example, studies showed that students who use Facebook are more likely to develop relationships with other students as well as their teachers, than students who do not use Facebook or other social networking tools (Cotten, 2008; Ellison, Steinfield, & Lampe, 2011; Gordon, Juang, & Syed, 2007; Morgan & Cotten, 2003). Outweigh the positive effects of use of Facebook on the psychology of the students against the use of Twitter (Junco,

2012; Junco, Heiberger, & Loken, 2011). Greater knowledge of Facebook features and other technologies to teaching interventions can be designed aiming to *students meetings where they are to lead them where they want to go* (Caldwell, 2015; Junco, 2012: 170). Stevens, O'Donnell, and Williams (2015) used the constructs of *belonging* and *sharing* through social networking in order to examine how these can be converted into *learning platforms* and communication channels through the possibility offered to *listen* and *share* the problems (p. 165).

Vikneswaran and Krish (2016) recommended the implementation of online writing, via Facebook, as a means for enhancing a group of Malaysian students' skills of English as a second language. Through an ethnographic study at the University of Cape Town, Bosch (2009) argued that there are potential positive benefits from the use of Facebook in teaching and learning, particularly for the development of educational micro-communities. In an exploratory study carried out by Wyche and Baumer (2016) in rural areas of Zambia, it was found that the majority of participants were aware or had "imagined" Facebook, although they had not seen or used any of the participants in the survey the site, suggesting that they were interested in the possibilities of communication and the lucrative benefits that can provide access to it, but were visible obstacles that impede this access.

An ethnographic study of Kumar (2014) comes to reinforce the view that underprivileged young people from urban areas in developing countries, like India, will be the leaders that adopt these new technologies. By examining the direct and indirect benefits of Facebook highlights how quickly negotiate this generation social limits, technological barriers, and their transition as legitimate members of a global community. Essentially, Facebook can potentially provide the technology, which being economical, it will potentially reduce the digital divide and inequality of access in developing countries.

Other researchers have suggested that Facebook can also support students even at the postgraduate level to develop language skills, providing an easy and familiar technological tool to share and create a tacit knowledge together in small group environment (Ractham & Firpo, 2011). English and Duncan-Howell (2008) used Facebook during an internship training of a student's group in business administration and found that the digital behaviors and habits of those enrolled in tertiary education could be used for the development of supporting tools and their use during exercise periods while pointing out that the positive results in favor of Facebook may be due to the earlier relationship had develop between them at an earlier time.

The ongoing debate in the literature regarding the impact of the use of Facebook on students' learning also considers the role of the teacher and how that is perceived by the students who use Facebook. Mazer et al. (2007) examined the effects of the use of Facebook on the teacher-student relationship, on the motivation of students, and on the classroom climate improves. The results of the study revealed higher levels of motivation, emotional learning and a positive climate in

the classroom. On the other hand, participants pointed out the potential negative associations between the use of Facebook by the teacher and his credibility.

On boundaries

Facebook is worth considering as a shared space, but it requires discretion. As argued by Schwartz (2009), the issue of boundaries is considered crucial as people of different age groups seem to have different perceptions of privacy, with younger people to have a more relaxed approach. New technologies create alternative connection points. Given that Facebook, is part of a larger community, it can provide a place where people and here the students stay connected, removing the barriers from student–teacher relationship *keeping the door open for any student who needs it* (p. 42), increasing the potential for real-time conversations, as well as accountability. Although SNSs can be a valuable resource for the support of educational communication and cooperation with teachers, however, many members of the university, have a historic ban use of technologies commonly used by students. On the other hand, while students' responses show that they use Facebook and are more open to the possibility of its use and similar technologies to support the work in the classroom, the university members or faculty use more "traditional" technologies such as e-mail (Roblyer, McDaniel, Webb, Herman, & Witty, 2010).

Socialization

Using social networking technologies in education practices should not be regarded as a complete replacement for traditional learning systems (Dalsgaard, 2008). Instead, this should be regarded as optional, complementary tool that hopefully will enhance their classroom experience (Towner & Muñoz, 2012). The ability to get to know someone quickly via a Facebook profile that perhaps engage her/him online or offline, is very important to students of higher education, which they often placed in a room that do not know any of their peers and opportunities to make social relationships are hampered. The traditional university experience shows, especially in courses with many students, that those are often not suitable for the creation of a true collaborative learning community. Facebook can help to bridge this gap.

Higher education institutions have embraced the popularity of Facebook and seized the interaction with students in most cases student enrollment (Fagerstrøm & Ghinea, 2013; Joly, 2007). Fagerstrøm and Ghinea (2013), examining the use of Facebook for student recruitment strategies found that the campaign resulted in a large increase, concerning the percentage conversion of applicants to records at the University, as Mars Hill College and the University of Florida achieved most entries.

Dabbagh and Kitsantas (2012) investigating how a Personal Learning Environment is controlled entirely or adopted by a student in accordance with the

formal and informal education, arguing, however, that all students do not possess the skills to manage knowledge and self-regulation to make effective use of social media in order to adapt by providing the learning experience they desire. They argued that by teaching them how to become effective self-regulating students can help them acquire basic and complex personal knowledge, managerial skills necessary to create, control and maintain personal learning environment using a variety of SNSs. They concluded that by providing a pedagogical framework to be used as a scaffold by students participating in a self-directed feedback system with the help of the teacher and their peers, as a stimulus for creating an effective and sustainable personal learning environment achieving the desired learning outcomes and enriching their learning experiences.

The importance of student self-regulation emerged in a study carried out by Junco (2015) which revealed that the time spent on Facebook by graduate students is less than younger students but this does not affect their performance in the courses. On the other hand, it seems that students of other years, especially freshmen, first spend more time on it, using simultaneously with other activities, on the other hand, shows a clear negative correlation between involvement with it in degrees and their academic performance. The more time spent on Facebook mainly by first-year students, appear to be related to their need to join the college or university, not only academically but also socially in order to be successful students (Pascarella & Terenzini, 2005; Tinto, 1993), make friends or keep in touch with previous (Ellison, Steinfield, & Lampe, 2007; Ellison et al., 2011), as if this is not done they are at risk to give up. Considers finally (Junco, 2015), that it is interesting to examine further the fact that it does not affect seniors adversely, even if used concurrently with other activities, proposing decision-makers responsible for Higher Education to consider the importance of regulating its use by students.

Teclehaيمانot and Hickman (2011) on the other hand, argued that students usually adopt a more passive than active role on Facebook. Similar findings were produced in recent survey carried out by Skiera, Hinz, and Spann (2015) in Germany. The results of this study showed that both males and females correlated Facebook negatively with respect to their academic presence. Most students answered that "their ability to study suffers when using Facebook" (p. 69). Regarding their professional development presented differences in the reaction of the two sexes. Men, adopting a more stereotypical role model seem to use Facebook more effectively for their work, unlike women who develop through it a more social and emotional behavior and not use it to improve and develop their work, which based mainly on the difference in their social roles (Eagly, 1987). The different orientation to the use of Facebook between men and women also emerged in a recent survey of Brandtzaeg (2015), which showed that gender differences in terms of political attitudes or engagement that exists in real life, represented, reproduced and greatly enhanced on Facebook. Thus, men's practices are more oriented towards political and information gathering, as opposed to females (aged 13–28 years) who are more likely than men to support humanitarian efforts and environmental issues.

Lu and Churchill (2012), in a related study, showed that social interaction provided by a social networking environment is short-lived, related to the individual and have informal form as well, appeared to strengthen more social engagement, without demonstrating a high level of cognitive engagement respectively. On the other hand, Arquero and Romero-Frías (2013) showed that students' engagement with Facebook led to a deeper collaboration with their peers and with faculty. A comparative evaluation between two groups of students with more and less use of profiles showed more intensive use and performs better in the courses. Likewise, Megele (2014) who used social media as a learning strategy for supporting students' collaboration found increasing student's involvement from one side, and to strengthen their self-esteem from the other. Finally, Musibau, Eyinnaya, Edward, Wantrudis, and Nojeem (2011), through their research in Nigeria, confirmed that the majority of students agreed that social media have a positive impact on their academic performance and use them for a variety of activities, both academic and non-academic. In agreement with this view, Dhir, Chen, and Chen (2015) argued that even the photo tagging on Facebook support the development of the following: sympathy, social influence or pressure from peers, popularity, entertainment, feeling that you do something correctly, social sharing, love, and ease.

In a study exploring students' attitudes about the use of Facebook in education, Barczyk and Duncan (2013) found that students were in favor for the use of it in the class. Likewise, in a study with 106 students from two large public universities in the US, it was found that the use of Facebook supported students in developing a sense of belongingness in a community and facilitated students who are usually isolated involvement in activities (Junco, 2012; Rovai, 2002). As the researchers argued, Facebook has the potential to complement the classroom activities because it provides opportunities for students to interact within and beyond the classroom setting.

Facebook as a social or educational tool?

As evident in the above, although a large number of college students use Facebook, it remains a social and not an academic median, so they can communicate with their friends, relatives and other students. Social media like Facebook does not show any indication of descent of their popularity. Given this dynamic, it would be reasonable for a university to meet students at their own turf. Despite the fact that some scholars have argued that higher education institutions can use Facebook to enhance the academic experience of undergraduate students, there are still integrating restrictions in the classroom environment (Junco & Mastrodicasa, 2007; Selwyn, 2009). For colleges associated with students on Facebook, there is the issue of the comfort of both, the academic member, and the student (Connell, 2009; Hewitt & Forte, 2006; Mazer et al., 2007, 2009), but if used properly, technology integration in the classroom can have positive results (Li & Pitts, 2009).

Research has provided evidence of positive outcomes in the learning process when the interaction of the administration and the student appears to have the same characteristics both outside and within, as in face-to-face class format (Astin, 1993; Colwell & Lifka, 1983; Cox & Orehovec, 2007; Tinto, 1993). In a related study, Astin (1993) found that the amount of time students spend talking with their teachers outside the classroom environment is positively correlated not only with satisfaction on quality of teaching, but also with their degrees, qualifications, registration in graduate programs, and even to their future employment. Cox and Orehovec (2007) encourage interaction between students and academic members' out-of-class to get rid of the professional distance was often felt in the classroom. Also, they suggested that student interactions – university outside the classroom helps students to feel and valued as members of the School. In his work, Tinto (1993) confirmed that when students and faculty often interact with each other outside the formal setting, students seem not only less likely not to pass successfully their courses, but also are more likely to develop both spiritually and socially.

Fenwick (2016) shifts the debate from the person as a liability factor of social media in the network of interactions between students who are connected: with peers, professionals, students/patients/customers, other interested parties, and with material objects, devices and arrangements, reformulating it as a collective rather than individual responsibility of everyone for their proper operation, stressing that there are *bad* and a myriad of *good* resulting from their use (p. 12). Academic freedom of each member remains a long-standing right in academia, protected by the rule of law (Kaplin & Lee, 2007) and adds another level of complexity. If the institution uses a policy that prevents the use of Facebook for academic use, it may affect the academic freedom of the School (Mendez et al., 2014).

In a research study with 200 university students, Papanis and Papani (2009) found that the main reasons students engaging with Facebook, is the pleasure of using it, running away from reading, especially for high school students who had just graduated from school. The main feature of it, which attracted the outset, was the ease of use, simple functionality and choice of applications with which they framed their profiles. There are few cases in which participants identified some positive elements in relation to the development of their personality. For example, many said they are getting in touch with people who share the same interests, especially young provincial towns that do not have many opportunities to get to know those who would like, becoming for them a means of communication, while offering the possibility for either private conversation, or for mass debate. Moreover, the participants acknowledged that they have access to information of interest to them, and even that form study groups for the exam. Many students felt that online social networking is the most convenient way of communication, which will replace the e-mail and the more conventional forms of interaction. An analysis of the results, for teenagers and young participants, revealed that the reasons of use have to do with communication search, some perceive as fashion, others as an area of freedom or a place to pleasantly pass time. Overall, the participants

appeared to realize new capabilities for educational use. However, given their online behavior, it could be argued that they already use some of the practices of collaborative learning and applying some basic “community” rules when it comes to issues that concern them.

In attempting to examine students’ attitudes towards social media, Palaigeorgiou, Triantafyllakos, and Tsinakos (2011) carried out a study with Greek students about designing an ideal Web 2.0 learning environment. 117 students from two Greek IT universities responded to a survey about how they perceive an ideal online learning environment in the light of their needs and how it could be integrated smoothly into their daily lives. The analysis of the data showed the following: students would prefer to create a social network in order to come in contact with teachers and students of similar courses from different departments or with students who had attended the course in the past or with the object professionals of the lesson. Last to their liking was the need for networking with colleagues and could be interpreted in various ways. On the one hand, the likelihood of emerge signs of intense competition and the need for personal development or visibility through the dating cycle enlargement leaving collaborative learning experience perhaps comes second. On the other hand, one could argue that there is a perceived need for contact with people related to their field of study, beyond the limits of the institution and that social networking is a great way to overcome these limits given the freedom provided in online communication.

Concluding remarks

Selwyn (2012) stated that there are clear differences between the educational rhetoric and educational reality for the use of technology and should not be surprised at this. There has been a long-term trend in education for technologies remaining excessive expectations surrounding at first (Gouseti, 2010). Hence, as Selwyn (2012) argued, “it needs to define clear lines between direct practical development objectives of the use of social media matching *the grammar* of formal higher education and more targeted to the most difficult, far-reaching overhaul and redesign of it” (p. 7). Regarding this last point, there is a clear need to examine thoroughly and to discuss what education through social media can mean, and how can social media be used for educational purposes the digital age of the twenty-first century. Indeed, many of the conflicts and tensions on the use of social media in higher education have very little to do with the technology itself. Instead, as Standish (2008) argued, conflicts are mostly related to what is regarded as a valuable learning and worthwhile training.

Therefore, as many researchers have argued, universities must clearly continue to consider, for example, the practical challenges relating to the assessment of students or the best way to design mixed courses (Buckley, Pitt, Norton, & Owens, 2010; Gray, Thompson, Sheard, Clerehan, & Hamilton, 2010). What is also important is an examination of how to best support the staff and students for the continuous

and effective utilization of these technologies. Thus, universities have an important role to play in supporting self-guided activities for students and providing them with the skills needed to use social media effectively (Crook, 2008).

Concluding, as societies move forward with the rise of social network applications, and Facebook especially, educational institutions must assume a greater say in shaping the evolution of social media and explore ways of incorporating those effectively into teaching and learning. As a review of the literature indicates, Facebook impacts all levels of academia and academic settings by providing an empowering educational environment that promotes collaboration and communication (Aydin, 2012). However, the question remains: How can Facebook be utilized in educational contexts? More research towards this direction is warranted for the purpose of producing scientific evidence about the ways in which Facebook could be utilized to enhance learning. Research in this area should also address how teachers are trained in using Facebook as well as how curriculum developers are trained to integrate Facebook applications into curriculum materials. Shaltry, Henriksen, Wu, and Dickson (2013) proposed that teacher training is done through the following: (a) engaging in inquiry-based learning, (b) providing opportunities to try a wide variety of innovative technologies through exploration of their choice; and, (c) increasing use of online learning communities by exploiting, ubiquity and ease tools, such as Facebook. These three basic pillars, as the researchers suggested, should pave the way into enabling teachers to integrate new technologies into their teaching, benefiting students, colleagues and the entire educational community. A comprehensive understanding of how teachers are trained to use social media, and specifically how Facebook can be utilized in educational settings as well as how Facebook can serve as a place of professional learning and development is still lacking.

Disclosure statement

No potential conflict of interest was reported by the authors.

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