

# Facebook as an Informal Tool for Learning: Exploring Perceptions of Greek LIS Undergraduate Students

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## Abstract

**Purpose:** Facebook use in higher education has been explored from different perspectives (i.e. academic institutions, teachers, students). This research aimed to investigate Greek Library and Information Science undergraduate students' perceptions of Facebook use for educational purposes.

**Design/methodology/approach:** A questionnaire was distributed online during the first two weeks of June 2015 to 278 undergraduate students studying Library and Information Science in Greece. 135 questionnaires were collected with an overall response rate 48.6%.

**Findings:** It was found that students employ Facebook mainly for social interaction and communicate though they do recognise the educational potential of social networking sites.

**Research limitations/implications:** Academic institutions and teachers need to stay up-to-dated with the emergence of new Web 2.0 tools and use them when appropriate to meet their goals.

**Originality/value:** This research contributes in providing a further insight into the way students employ social networking sites and thus, assist academic institutions in formulating their strategy and teachers in incorporating Facebook in delivering their courses.

**Keywords:** Facebook, Users Information Needs, Information Seeking Behaviour, Undergraduate Students, Social Networking Sites

## Introduction

In recent years, Higher Education (HE) has been experiencing some radical changes. The development of Virtual Learning Environments (VLEs) and Learning Management Systems (LMS) namely Moodle and the

offering of Massive Online Open Courses (MOOCs) have transformed the way information is delivered. These developments affected greatly the way communication and interaction in higher education is currently performed (Kirschner & Karpinski, 2010; Secker, 2008). Existing ways of communication among students and teachers are further complimented whereas new ones are introduced. Interaction among students and teachers was also further promoted by the use of new means, namely the blackboard, the online discussion forum, the podcasts, and the social networking sites among others.

Social networking sites, especially, come to further change the way students communicate with each other, with their lecturers but also with the academic institution. Moreover, these Web 2.0 tools have influenced the way students search, retrieve, evaluate and share information to meet their everyday needs but, most importantly, their educational related needs namely completing their essays, preparing for final exams. Use of social networking sites in higher education, involves a further blending of formal and informal learning (Bateman & Willems, 2012). Traditional ways and channels of teaching and learning are now challenged by the use of tools (i.e. Facebook, Twitter, Instagram) that promote informal ways of learning.

More and more academic institutions around the world build profiles on different social networking sites (i.e. Facebook, Twitter, Instagram) for a variety of reasons, namely to identify prospective students, to market their offered courses and to promote their image to the wide community. Some academics have also employed social networking sites as a means to promote learning and enhance students' learning experience both inside and

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outside the classroom. However, there are still some academics that share the belief that social networking sites have no place in academia and/or have nothing new to offer in order to advance the learning process. A few academics even claim that social networking sites contribute to raising extra barriers in the teaching and learning process (Roblyer, McDaniel, Webb, Herman, & Witty, 2010) consequently, have the potential to become a valuable resource to support their educational communications and collaborations with faculty. However, faculty members have a track record of prohibiting classroom uses of technologies that are frequently used by students. To determine how likely higher education faculty are to use Facebook for either personal or educational purposes, higher education faculty (n = 62).

No matter the challenges that these Web 2.0 tools pose for higher education, their wide adoption and use cannot be disregarded. This study aims to investigate Library and Information Science (LIS) undergraduate students' perceptions of Facebook use for educational purposes. Specifically, it has the following objectives:

- To explore students use habits of Facebook namely hours spent, means employed, features used etc.
- To explore students' perceptions of educational related activities performed on Facebook.
- To explore students' perceptions of Facebook use in higher education as an informal tool of learning.

This study contributes in providing a further insight into the different ways and reasons for which LIS undergraduate students employ Facebook in higher education. This, in turn, informs teachers' understanding of how social networking sites could be incorporated in academia in order to meet the purposes of the course, enhance the course development and delivery, and increase impact on students formulating and expressing their information needs.

The remainder of this paper is structured as follows. Firstly, relevant literature on Facebook use, in higher education, is critically presented, followed by a detailed presentation of the methodology employed. Findings are illustrated with the use of detailed figures. Finally, the findings are critically discussed in relation to the relevant literature, whereas limitations and implications of the research are identified and future work is proposed.

## Literature Review

The use of Facebook has been explored in different contexts (i.e. politics, health sector) and from different perspectives (i.e. politicians, physicians, patients) (Aparaschivei, 2011; Chirp & Keckley, 2010; Effing, Hillegersberg, & Huibers, 2011; Morris, Consolvo, Munson, Kramer, Patrick, & Tsai, 2011). In terms of Facebook use in higher education (HE), the relevant literature is vast and is growing rapidly due to an ongoing interest in ever-evolving social networking sites.

Research has also explored Facebook use from a variety of perspectives. A significant number of studies investigated institutional use of Facebook (Aydin, 2012; Bai & Yao, 2015; Bowman & Akcaoglu, 2014; Sánchez, Cortijo, & Javed, 2014). Specifically, universities have only recently realised the potential and implications of this new technology in academia, mainly due to its wide acceptance and use by the public (Reuben, 2008). Academic institutions have employed social networking sites and more specifically Facebook for a variety of reasons namely for marketing purposes (Reuben, 2008); for reaching their audiences (Reuben, 2008); for engaging with students during and after their studies (Barnes & Lescault, 2011); and for promoting communication and collaboration among faculty and students (Roblyer *et al.*, 2010) consequently, have the potential to become a valuable resource to support their educational communications and collaborations with faculty. However, faculty members have a track record of prohibiting classroom uses of technologies that are frequently used by students. To determine how likely higher education faculty are to use Facebook for either personal or educational purposes, higher education faculty (n = 62). Moreover, Facebook was used as a means for researching and recruiting prospective students (Barnes & Lescault, 2011); for promoting the university online and reinforcing its presence among the academic community (Forkosh-Baruch & Hershkovitz, 2012); and for allowing students to stay in touch with the university after completing their studies (Coughlan, 2009). Overall, academic institutions used Facebook in different ways exploiting all the possibilities that this new Web 2.0 tool had to offer for meeting the institutions' purposes.

Academic staff also explored the potential educational use of Facebook. Teachers have promoted a professional Facebook profile (Moran, Seaman, Tinti-kane & Tinti-

kane, 2011; Munoz & Towner, 2009; Towner & Muñoz, 2011) in order to incorporate student generated content into the learning and teaching process (Rodriguez, 2011), as well as to better manage the class time (Bosch, 2009). Overall, teachers' self-disclosure on Facebook proved to have a positive effect on students' participation, learning and interaction in the classroom (Mazer, Murphy, & Simonds, 2007, 2009). Moreover, Facebook assisted in increasing the constructive interaction among teachers and students (Bosch, 2009; Munoz & Towner, 2009). On the whole, academics realised the importance and the benefits of this informal tool for learning and thus, tried to successfully incorporate into the different aspects of the teaching and learning process.

However, not all teachers share the same views on the benefits of Facebook for Higher Education. Specifically, academics who built a private profile on Facebook, tend to reject students' friend requests (Bosch, 2009; Roblyer *et al.*, 2010) mainly because they see Facebook as a social rather than as an instructional tool (Roblyer *et al.*, 2010). The students also express doubts regarding teacher's credibility depending on their use of Facebook (Mazer *et al.*, 2007, 2009). There is an obvious dispute regarding the social and/or educational aspect and usage of Facebook among academics. In the end, it comes down to academics' personal views and understanding of the prospects of Facebook as to whether they would adopt it or not for educational purposes. This problem could easily be resolved if academic institutions provided guidelines and relevant policy regarding the use of Facebook and extended its incorporation in the teaching and learning process.

In terms of students, a variety of studies explored students' use of the different types of social networking sites (Al-Daihani, 2010; Connell, 2008; Cuesta, Eklund, Rydin, & Witt, 2015; Duncan & Barczyk, 2015; Garoufallou & Charitopoulou, 2011; Junco, 2015; Morris, Teevan, & Panovich, 2010; OCLC, 2006; Pempek, Yermolayeva, & Calvert, 2009). Others explored the social networking sites' benefits for promoting social interaction (Ellison, Steinfield, & Lampe, 2007; Lampe, Ellison, & Steinfield, 2008). However, these studies focused on exploring students' (i.e. college students, undergraduate, postgraduates) awareness of the new Web 2.0 tools, students' use of specific social networking sites and the possible effect social networking sites might have on social capital.

A significant number of studies explored students' use of Facebook for educational purposes (Barczyk & Duncan, 2013; Mazman & Usluel, 2010; Teo, 2014; Wohn & LaRose, 2014). Specifically, Robert and Boogart (2006) found that college students employ Facebook in order to stay connected with people they already know (i.e. from high school) and with the college campus. In addition, students use mainly the "wall" feature in order to read their own wall, their friends' wall and write on it. In addition, Bicen and Cavus (2011) found that students preferred to use messages, chat, friends, links, news and photos Facebook features. These students considered Facebook an important mean to maintain and strengthen their social ties in a social and academic environment. Moreover, Grosbeck, Bran, and Tiru (2011) found that students employed Facebook mainly for social purposes (i.e. stay in touch with friends and family, to engage in social events and volunteering, to share and tag photos) than educational which is further confirmed by Wise, Skues, and Williams (2011). However, students tended to use Facebook to accommodate discussion on assignments, lectures, notes and sharing information resources.

In the same context, Sánchez *et al.* (2014) found that social influence was the main factor for which students were adopting Facebook. Students found Facebook to be an important tool for establishing and maintaining a contact with people they share the same interests. In addition, students would employ Facebook for educational purposes in order to promote communication, collaboration and resource and material sharing. Overall, students recognise the social aspect of Facebook, even in the context of higher education and use a wide number of Facebook features for this purpose.

In the same line, Selwyn (2007) argued that Facebook is a "multi-modal, ad-hoc web of communication" for students. Students employed it to communicate with friends and classmates of the same course or practical sessions and to maintain a strong connection with people they already know. Specifically, Selwyn (2007) identified five educational related uses of Facebook by students: 1) recounting and reflecting on university experience, especially, reporting on personal experiences in a classroom, the library on his/her wall or on classmate's wall; 2) exchanging practical information about being a students, consisting of information regarding the time and class number of where a lecture was to be held; 3) exchanging academic information regarding the required

reading for a course or an examination, or the needs of an essay; 4) displaying supplication and or disengagement in terms of meeting the requirements of a course and/or exam in order to provoke students sympathy and comfort; and finally, 5) exchanging humor and nonsense regarding fellow classmates, the lecturers and the overall academic life. Blankenship (2011) focused on the specific literacies social networking sites inform in academia namely attention, participation, collaboration, network awareness and critical consumption.

In the same line, Barczyk and Duncan (2013) & Bowman and Akcaoglu (2014) explored students perceptions and attitudes towards Facebook use in academic courses. Barczyk and Duncan (2013) found that students were positive towards use of Facebook in courses and felt that Facebook enhanced their sense of connectedness, social learning and interaction with older students. Finally, Bowman and Akcaoglu (2014) argued that students were in favor of being part of a Facebook group concerning a specific course in order to discuss exam-related matters. These academic uses come to further support the claims that Facebook can be used in the teaching process and can enhance students' learning experience.

Roblyer *et al.* (2010) consequently, have the potential to become a valuable resource to support their educational communications and collaborations with faculty. However, faculty members have a track record of prohibiting classroom uses of technologies that are frequently used by students. To determine how likely higher education faculty are to use Facebook for either personal or educational purposes, higher education faculty (n = 62) looked into students and academics' views of Facebook. They argued that students are more likely to adopt Facebook than academics but neither would express any privacy concerns. Specifically, students tended to check emails and Facebook profile with the same frequency. However, adopting Facebook for educational purposes was the least reported reason for using this new technology. Overall, students thought Facebook would be convenient if used in higher education but did not express any specific educational use of it. It is evident that students and teachers adopt different perspectives regarding Facebook that could be attributed to age, degree of Facebook use or even the way they see the goals of higher education.

The effects of Facebook use on students' learning experience were also explored. Specifically, Kirschner

and Karpinski (2010) found a negative correlation between hours of spending on Facebook and low Grade Point Average (GPA) for undergraduate and graduate students which were further confirmed by Junco (2012a, 2012b). In addition, Facebook users tended to have more extracurricular activities and thus have more social interaction. These students employed Facebook to maintain or expand their social network and also to organise these extracurricular activities. Finally, some students reported being influenced negatively by the use of Facebook during their studies. These students were found to have poor management skills and thus, Facebook use provided them with an excuse to put off study but not feel, at the same time, that they were not doing anything. On the whole, the landscape regarding Facebook use in higher education is still under exploration and there are no conclusive remarks in terms of its educational use.

## Methodology

### Questionnaire design

This research employed the method of online questionnaire to enable speedy dissemination and response cycles, as well as automatic verification and response record in databases. Lime survey was used to upload and disseminate the questionnaire. Relevant literature was also considered when designing the questionnaire (Acquisti & Gross, 2006; Karagiorgou & Vassilakaki, 2012). Specifically, the questionnaire consisted of three sections. The first section aimed to gather demographic data and therefore age, gender, year of studies were enquired. The second section enquired on students' general use of Facebook. Specifically, questions focused on whether or not students have a Facebook account; in what age they started using it; how often they use it and which hours of the day; which devices they employ to log in (i.e. desktop, laptop, smartphone) and from where (i.e. home, leisure places, university); and finally, how often they use Facebook's features (i.e. chat, photos, groups). These questions aimed to determine students' overall patterns of Facebook use as well as the means they employ to access their Facebook profile. Finally, the third section involved questions concerning Facebook use in higher education. Specifically, it explored the reasons as to why students use Facebook and then it tried to determine how often students perform a series of activities on Facebook. The

questions aimed to determine to what extent students employ Facebook for educational purposes. Finally, students were asked to state their level of agreement in terms of a series of statements regarding Facebook use in higher education in an attempt to further explore students' perspectives.

## Participants

The online questionnaire was distributed to the undergraduate students in the Departments of Library Science and Information Systems in Athens and Thessaloniki during the academic year 2014-2015.

## Data collection

Moodle was used to email the online questionnaire to students of both departments personal email accounts. The online questionnaire was distributed on the first two weeks of June 2015. Specifically, the questionnaire was sent to 145 students from the Department in Athens and to 133 students from the Department in Thessaloniki.

## Data analysis

In total, 135 questionnaires were collected, from which 16 were not completed. Specifically, 41 (30.37%) questionnaires were answered by the students of the Department in Athens and 78 (57.78%) by the students of the Department in Thessaloniki. The overall response rate was 48.6%. Lime survey was also used to analyse the data. The questionnaires were analysed collectively when it came to demographic data, whereas for the second section (use of Facebook) the focus was placed on the students who currently have a Facebook account.

## Findings

### Demographics & General Use of Facebook

The majority of the participants were women (73.33%), aged between 18 to 20 years old (45.19%) attending the fourth semester of studies (40.74%) (Table 1).

**Table 1: Participants' Demographic Characteristics**

Characteristics	N (%)
Gender	
Female	99 (73.33%)
Male	19 (14.07%)
Age	
18-20	61 (45.19%)
21-25	48 (35.56%)
26-30	3 (2.22%)
31-40	1 (0.74%)
41-50	2 (1.48%)
>51	3 (2.22%)
Semester	
1 <sup>st</sup>	4 (2.96%)
2 <sup>nd</sup>	22 (16.30%)
3 <sup>rd</sup>	5 (3.70%)
4 <sup>th</sup>	55 (40.74%)
5 <sup>th</sup>	3 (2.22%)
6 <sup>th</sup>	20 (14.81%)
7 <sup>th</sup>	1 (0.74%)
>8 <sup>th</sup>	19 (14.07%)

The 68.89% currently maintains a Facebook profile, an 8.89% have never had a Facebook profile whereas a 5.19% had deleted it. The last reported spending too much time on it (2.94%), protecting personal information (1.48%), not finding it interesting (0.74%) or useful for their studies (0.74%) as the main reasons for deleting it (Table 2).

**Table 2: Reasons for Deleting Facebook Profile (multiple choices)**

Ranking	Reasons for deleting Facebook profile	N (%)
1	Spending too much time on Facebook	4 (2.96%)
2	Protecting personal information	2 (1.48%)
3	Not finding Facebook interesting	1 (0.74%)
4	Not useful for their studies	1 (0.74%)

The majority of the participants who currently have a Facebook profile have created it sometime when they were 15 to 17 years old (34.81%), followed by those who created it when they were 18 to 22 years old (18.52%). 16.30% created their profile in the age of 12 to 14 years old (Table 3).

**Table 3: Age group of when students created a Facebook profile**

Ranking	Facebook profile: age created	N (%)
1	15-17	47 (34.81%)
2	18-22	25 (18.52%)
3	12-14	22 (16.30%)
4	>31	3 (2.22%)
5	23-25	2 (1.48%)
6	26-30	1 (0.74%)
7	<12	0 (0%)

In terms of how many hours participants spend on Facebook, the replies ranged from 2 hours (16.30%) to 4 hours (17.78%) whereas 11.85% reported being on Facebook all day long (Table 4). Participants prefer to use Facebook from 12.00 till 24.00. Specifically, the time spans with the most usage are 15.00 to 17.59 (22.96%) and 21.00 to 23.59 (25.93%)(Table 5).

**Table 4: Time Spent on Facebook**

Hours spend on Facebook	N (%)
1 hour	12 (8.89%)
2 hours	22 (16.30%)
3 hours	19 (14.07%)
> 4 hours	24 (17.78%)
All day	16 (11.85%)

**Table 5: Time Spans of Facebook use (multiple choices)**

Facebook use: times span	N (%)
06:00-08:59	3 (2.22%)
09:00-11:59	7 (5.19%)
12:00-14:59	17 (12.59%)
15:00-17:59	31 (22.96%)
18:00-20:59	22 (16.30%)
21:00-23:59	35 (25.93%)
24:00-05:59	10 (22.22%)
All hours	30 (22.22%)

Participants rated the different uses of their Facebook profile. Stay connected with friends (79.57%), spend free time (54.84%), and entertainment (53.76%) were ranked as the top three reasons for using their profile whereas education was assigned to the fourth place (see Table 6).

**Table 6: Students' General Uses of Facebook (multiple choices)**

Ranking	Facebook general uses	N (%)
1	Stay connected with friends	74 (79.57%)
2	Spend their free time	51 (54.84%)
3	Entertainment	50 (53.76%)
4	Education purposes	29 (31.18%)
5	Find new friends	12 (12.90%)
6	Promote myself	7 (7.53%)
7	Become popular	2 (2.15%)

In terms of the devices employed, smartphones (51.11%) and laptops (41.48%) were the first two most used devices to connect to Facebook (Table 7). Their homes (64.44%) and universities (40%) were ranked as the first two venues for connecting to Facebook followed by restaurant (31.11%), mass transportation (25.19%), and public places (21.48%). Library (15.56%) and classroom (14.81%) were ranked amongst the three least used venues (Table 8).

**Table 7: Devices Used to Connect to Facebook (multiple choices)**

Ranking	Devices	N (%)
1	Smartphone	69 (51.11%)
2	Laptop	56 (41.48%)
3	Desktop	31 (22.96%)
4	Tablet	10 (7.41%)
5	Netbook	7 (5.19%)

**Table 8: Venues from Which Students Choose to Connect to Internet (Multiple Choices)**

Ranking	Venues	N (%)
1	Home	87 (64.44%)
2	University	54 (40%)
3	Restaurant	42 (31.11%)
4	Transportation	34 (25.19%)
5	Public places (squares)	29 (21.48%)
6	Computer labs	25 (18.52%)
7	Library	21 (15.56%)
8	Classroom	20 (14.81%)
9	Work place	11 (8.15%)

Participants also reported on the Facebook features that they use most often. Messages (mean score= 4.84), chat (mean score= 4.44) and photos (mean score= 4.04) were ranked as the three most frequently used features. In contrast, events (mean score= 2.95), notes (mean score= 2.67), games (mean score= 2.40) and questions (mean score= 2.25) were judged as the least frequently used Facebook features (Table 9).

**Table 9: Facebook Features Most Often Employed**

Ranking	Facebook features	Frequency (mean score*)
1	messages	4.84
2	chat	4.44
3	photos	4.04
4	news	3.97
5	links	3.87
6	friends	3.80
7	pages	3.46
8	videos	3.22
9	groups	3.15
10	events	2.95
11	notes	2.67
12	games	2.40
13	questions	2.25

\*based on a 6 points scale; 1= never and 6: always

### Facebook use in Higher Education

Participants were also asked to report on how often they use Facebook for specific activities. Specifically, “I watch department’s updates” (mean score= 4.18), “I discuss course material related issues with classmates” (mean score= 4.17), “I become friends with classmates” (mean score= 4.09), “I watch my groups updates” (mean score= 4.02) and “I discuss essays related issues with classmates” (mean score= 4.01) were the top five activities most often performed on Facebook. The least frequently Facebook activities students performed, which were placed on the bottom four places in the ranking were “I search information for essays” (mean score= 2.94), “I comment on Department’s updates” (mean score= 2.63), “I find members for my group assignment” (mean score=2.59) and “I comment on my teachers’ updates” (mean score= 2.10) (Table 10).

**Table 10: Students’ Activities Performed Most Often on Facebook**

Ranking	Activities on Facebook	Frequency (mean score)*
1	I watch Department’s updates	4.18
2	I discuss course material related issues with classmates	4.17
3	I become friends with classmates	4.09
4	I watch my groups updates	4.02
5	I discuss essays related issues with classmates	4.01
6	I keep updated of new course material uploaded on the groups	3.94
7	I watch my classmates’ updates	3.91
8	I search information for the Department	3.78
9	I stay informed about the course material	3.74
10	I keep updated on the announced events	3.58
11	I watch my teachers’ updates	3.56
12	I share photos and videos with classmates	3.36
13	I comment on my classmates updates	3.16
14	I comment on my groups updates	3.03
15	I search information for essays	2.94
16	I comment on Department’s updates	2.63
17	I find members for my group assignment	2.59
18	I comment on my teachers’ updates	2.10

\*based on a 6 points scale; 1= never and 6: always

Participants were also asked to denote their degree of agreement with a series of statements concerning Facebook use in higher education. Students tended to agree with statements “Facebook improves communication between classmates” (mean score= 3.75), “Facebook improves the information on announcements of the course” (mean score= 3.56) and “Facebook improves communication between members of the group essays” (mean score= 3.55) which were placed in the first three positions in the ranking (Table 11). For statements placed from the fourth to the ninth position, students neither disagree nor agree with these whereas students disagreed with the rest fourteen statements. Specifically, students disagreed

**Table 11: Facebook and Academic Community**

Ranking	Statements related to Facebook and use in HE	Degree of agreement (mean score)*
1	Facebook improves communication between classmates	3.75
2	Facebook improves the information on announcements of the course	3.56
3	Facebook improves communication between members of the group essays	3.55
4	Facebook improves conversation outside the classroom	3.41
5	Teachers should accept friend requests of their students	3.28
6	Facebook groups contribute to formation of a scientific community that keeps in contact the students of an academic institution	3.25
7	Facebook groups promote participation and communication outside the classroom	3.24
8	Facebook provides the platform for exchanging information sources	3.18
9	Facebook improves communication between students and teachers outside the classroom	3.07
10	Facebook groups are an important part of the educational process	2.99
10	Facebook has helped me in my studies	2.99
12	Facebook contributes to the successful integration of students in the academic environment	2.8
12	Facebook helps promote student's active participation in the educational process	2.8
14	Facebook has a positive impact on the learning process in an academic institution	2.79
15	I find my participation in Facebook groups important for my academic life	2.78
16	Facebook is preferable to Moodle as an educational tool because it enables immediate response	2.74
17	Facebook improves the delivery of a course and the relevant bibliography	2.72
18	Facebook contributes to knowledge promotion to students	2.71
19	Facebook improves the educational experience of a student	2.69
20	Facebook provides resources for students to write their essays	2.68
21	Facebook helps foster a positive attitude towards learning and education	2.62
22	I feel that I belong to an academic community with Facebook	2.33
23	Facebook should be a formal tool supporting the learning process	2.26
24	Facebook represents a much more natural learning environment than that offered by an academic institution	2.07

\*based on a 5 points scale; 1= totally disagree and 5: totally agree

with “I feel that I belong to an academic community with Facebook” (mean score= 2.33), “Facebook should be a formal tool supporting the learning process” (mean score= 2.26), and “Facebook represents a much more natural learning environment than that offered by an academic institution” (mean score= 2.07) (Table 11).

## Discussion

This research aimed to explore Greek LIS undergraduate students' use of Facebook for educational purposes. The majority of the participants owned a Facebook profile further confirming the results of Bicen and Cavus (2011), Roblyer *et al.* (2010) and Selwyn (2007, 2009)M.D.;

McDaniel, Michelle; Webb, Marsena; Herman, James; Witty, James Vince. Unlike these studies, this research explored the specific reasons why students have deleted or do not own a Facebook profile. The stated reasons did not directly relate with Facebook having an educational use, however, only a small number of students did not own a Facebook profile.

Students begin to maintain a Facebook profile at a very early age, that of 15 years old. This indicates that by the time students start higher education at the age of 18 years old in Greece, they are already expert Facebook users.

Building on Bicen and Cavus (2011), Roblyer *et al.* (2010) and Selwyn (2007, 2009)M.D.; McDaniel, Michelle;

Webb, Marsena; Herman, James; Witty, James Vince, this study also found that students spend a lot of time on Facebook, some even reported that they stay connected “all day long”. Academic institutions and lecturers should take this under serious consideration. Specifically, universities when they develop their marketing and recruiting strategy and academic staff when designing and delivering their courses.

Facebook high usage was recorded between 12.00 and 24.00 which means that half of the time students are at the university campus, they spent it connected with Facebook. Teachers could take advantage of this fact in order to promote communication and interaction both inside and outside the classroom, not only among students but between teacher and the students as well.

In the same line with Grosseck *et al.* (2011), Roblyer *et al.* (2010) and Selwyn (2007, 2009), Greek LIS undergraduate students reported mainly social related reasons for employing Facebook (i.e. stay connected with friends) rather than educational. Further confirming Grosseck *et al.* (2011), Roblyer *et al.* (2010) Selwyn (2007, 2009), Sánchez *et al.* (2014) and Bowman and Akcaoglu (2014), it can be argued that Facebook although valuable has not yet being recognised by students as an important educational tool, promoting the learning process. However, educational use of Facebook was ranked fourth indicating that students do recognise this specific aspect/ use of Facebook.

Smartphones and laptops were the most used devices for logging on Facebook perhaps because students are on a constant move, travelling between their home and the university. This was further supported by the fact that both home and university were the first two most used places for connecting to Facebook. Although at university, students use Facebook for uses other than educational.

“Messages”, “chat”, and “photos” were the most often used Facebook features further confirming the results of Bicen and Cavus (2011). In contrast to Bowman and Akcaoglu (2014), Facebook “groups” and “events” were the least employed features. This should be taken into consideration when teachers incorporate the use of Facebook groups into their courses.

Complementing Sánchez *et al.* (2014), Bowman and Akcaoglu (2014), and Roblyer *et al.* (2010) M.D.; McDaniel, Michelle; Webb, Marsena; Herman, James;

Witty, James Vince studies, Greek LIS undergraduate students employ Facebook to perform often some educational related activities namely to watch Department’s updates, discuss course material related issues with classmates, become friends with classmates, watch my groups updates, and discuss essays related issues with classmates. These activities focus on students being kept updated or even commenting on course material and essays related issues. It is worth mentioning that students would never comment on their teachers and department’s updates further confirming teachers’ reluctance to use Facebook for professional purposes. Students’ low use of Facebook for educational purposes is further confirmed by students’ agreement on just three statements namely Facebook improves communication between classmates, Facebook improves the information on announcements of the course and that Facebook improves communication between members of the group essays.

This study revealed some implications for research. Academic institutions should stay abreast of the changes in Web 2.0 and especially follow all developments on the current and future social networking sites. More and more young people are joining social networking sites from a young age formulating a gateway for the academic institutions to identify their potential students, their characteristics and interests, and thus, formulate accordingly their approach. During their studies, academic institutions could employ social networking sites to promote events and students’ engagement and interaction creating a unique college experience for students. In terms of alumni, universities would maintain a constant connection with their graduates further enforcing their image and role both in public and private sector.

Moreover, teachers need to keep track of the developments in social networking sites and take advantage of every opportunity these new media provide to facilitate learning. Although students are currently reluctant in actively interacting with their lecturers, teachers need to insist on developing and promoting professional profiles in order to increase students’ engagements. In the context of designing and delivering courses, lecturers need to compliment formal procedures and tools of learning with informal with the view to adjust to current development in education. It seems according to Garoufallou (2014) that “once more (like other studies have indicated) Facebook seems to completely fulfill the role assigned from its creator that of an effective and efficient communication

and social interaction tool. And it is regarded as such both by teachers and far more importantly by students, as they are the target research group. Students dismiss Facebook as a tool for academic purposes and they are quite right to do so at least in its current form with the tools and services provided through it. Possibly future developments in its design and features may allow it to claim a place among the family of academic tools. For the time being it is a highly efficient communication tool that indeed can be and should be exploited by the academics”.

This research posed also some limitations. This study tried to explore with a mean of a questionnaire, with fairly close-type questions, students’ perceptions and actions regarding Facebook use in higher education. The adoption of a more qualitative method (i.e. interview, focus groups) would provide more insight on students’ personal thoughts and justifications of why Facebook is or is not and whether it should or should not be employed in higher education.

## Conclusions & Future Research

This research focused on exploring Greek LIS undergraduate students’ use of Facebook for educational purposes. Overall, it was found that students employ Facebook mainly for social communication and interaction. Although, students admit that Facebook is an important tool and can be used in higher education, however their use of this new Web 2.0 tool is limited to participating in a Facebook group and keeping track of the course material updates.

Future research should focus on identifying the factors that could promote Facebook use further among students for educational purposes. Could increase in teachers’ presence in social networking sites promote students’ engagement? Could a university’s policy on adoption of social networking sites drive both academics and students in finding more educational uses of Facebook? Nonetheless, the means of formal learning dominate among lecturers and students in higher education. However, the wide acceptance and dominance of social networking sites in all aspects of public’s daily lives should not be underestimated. Academic institutions and academics need to stay alert on new developments and always be prepared to adjust to changes.

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