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## Using Facebook for Learning: A Case Study on the Perception of Students in Higher Education

Teresa PÉREZ<sup>a</sup>, María de Jesús ARAIZA<sup>a</sup> Claudia DOERFER<sup>a</sup>

<sup>a</sup> *Universidad Autónoma de Nuevo León, "Monterrey", México*

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### Abstract

Facebook is essentially a successful online social network site, in which individuals can share information; the company was founded in 2004 by Mark Zuckerberg, Dustin Moskovitz and Chris Hughes as a way to support the communication of Harvard University. This network was successfully used within the Harvard community, and then was quickly spread out to other institutions. Site was opened to the public in 2006. Nine years later, when the company was established and it became into the most popular social network in the world, more and more users are being added every day, coming to already be millions around the world, including students in higher education. This paper shows the results of a study conducted in one a Mexican University, in order to explore the potential benefits that might have this social network in the learning process. Data were obtained by the survey was analyzed and commented upon using the SPSS program with the percentage, frequency, and mean statistical analysis techniques. The results indicated that students will benefit from this interaction tool. The potential benefits of Facebook for students are not only limited to the improvement of learning process used as a communication and a interaction tool, but also as a tool useful to help students in their professional development.

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In this global world the digital era is very dynamic; students are more immersed in the technologies (i.e. Facebook, twitter, space). Facebook is essentially a successful online social network site, in which individuals can share information. The company was founded in 2004 by Mark Zuckerberg, Dustin Moskovitz and Chris Hughes in Harvard University. At the beginning this social network was successfully used within the Harvard community, but quickly spread to other institutions and finally the site was opened to the general public in 2006.

Facebook provides members with a platform to share their stories, pictures, music, and common interests. Users can create individual profiles and can also designate other users as friends, send private messages and join groups. Facebook is used not only for social networking, but also for business and educational objectives. Originally founded in the U.S. Facebook is expanding worldwide and becoming one of the top social networks in the world, reaching over than one billion active users around the world Facebook Inc. (2012), Surveys of undergraduate students in the United States showed that over 90 % of them use Facebook Ellison (et al. 2007); view focuses on the use of Facebook by students, present a detailed the time the students spend on Facebook in a day to educational issues. A social networking site is an online site that presents a platform used by individuals; it focuses on building and reflecting academic's relations in accordance with interests and/or activities of students.

This paper aims to explore the perception of students in University about whether it would be appropriate to use Facebook for the teaching-learning process; and the actual use by teachers for educational purposes]. The reviewed studies have been categorized into three sections: (1) Descriptive statistics – Facebook for educational purposes (2) Pedagogical uses by teachers, (3) Perception of students about Facebook as a learning tool. Facebook also presents opportunities for members to organize themselves into groups in relation professional affiliations, which might include, submission of ads, class schedules, application of tests, submit work, upload presentations, set discussion rooms, chats, and messenger among students.

## **2 Literature Review**

### **2.1 Facebook**

Facebook can have several uses: to maintain contact with a group of students of the same course; to develop a network with others students; to engage in communication with the teacher and with former colleagues, to meet students with similar interests, and share all types of information. The acknowledgement of a student's use of Facebook is of crucial importance for the academic community, as well as for the teacher and students, since this application could have a large impact on teaching-learning dynamics. As stated by Mazer, Murphy and Simonds, (2007); Tuncay & Uzunboylu, (2010) the use of Facebook has a great impact on the motivation of students to turn, effective learning and the climate in the classroom.

### **2.2 Facebook in higher education**

Why we think that Facebook can be learning tool for both teachers and students who are engaged in their studies of higher education?, the answer is that they can create groups based on common interests and have information fast and updated. According to figures provided by Facebook indicating that 30% of users are younger than 30 years, we can conclude that it could be the network of choice among students of universities. Stutzman (2006) said that 90% of the students in their study indicated the use of Facebook. We also think that other means of communication which are email and courses online have become obsolete, but Facebook tool for now is the most widely used, you may need sense to use Facebook as a tool of teaching - learning because students rather than teachers are already actively participating opening groups and sharing online information related to courses that you are taking at the level of higher education. There have been studies about the use of Facebook -[by] teachers. Gross and Shopping (2005) reported that only 1.5% of the population of one faculty at a University where the study was done used Facebook. Maybe, if it motivates teachers to use it, Facebook can become an opportunity for interaction and communication with students.

According to Bugeja (2006), Facebook affects all levels of the academy and academic environments (Villaino 2007); opening wide and exciting new worlds of learning for educators and students Couros (2008). Students can create and join group's base on interests, and can connect to others through a range of channels.. It has also been used for information, knowledge and document sharing trough the built-in applications (Mack et al. 2007; Cho and Lee, 2008). It also has the potential to be used for educational applications (Boon and Sinclair, 2009). Facebook can also become a valuable resource to support students educational communication and collaborations with faculty Roblyer et al., (2010), which can provide that a different model of online tools can be used in educational contexts. Mazman and Usluel (2010) are aimed at designing a structural model explaining how users could use Facebook for educational purposes. They found that the use of Facebook as an educational tool could be explained by the effects of the user, along with the adoption of processes of Facebook. Finally, (McCarthy, 2010) discusses integrating physical and virtual learning environments to improve the experiences of students in first year. With an emphasis on the use of social networks to support learning and teaching in higher education, students were drawn into a university culture of social and academic interaction between peers. We believe that Facebook can positively affect classroom practices and student participation.

### 2.3. The perception of students about in the learning process

The digital divide is now lower and students use more computing resources for communication either personal as well as for support for education. According to research, Facebook contributes to an easier flow of communication between teachers and students and could enhance learning and this could improve teaching – learning process. For instance Berg et.al, (2007) describes how one university used Facebook as a means to build better relationships with its students and staff. O'Hanlon (2007) describes how educators engage with an inform students via Facebook, while Sturgeon and Walker (2009) report that some of the most effective faculty members are those who create informal relationships with their students via Facebook. Facebook provides opportunities for students to communication in new ways, but the students believe that the teachers are not updated in the tool. Another area of concern is friending students on Facebook (Lipka, 2007; Young, 2009). The convention seems to be that it is less acceptable for professors to invite students to become friends than the other way around. Students are preoccupied by this situation.

### 2.4. The aim of the research

The aim of this study was to investigate the Facebook usage of students and also to find out which Facebook tools can be used for of learning. The study attempted to find answers to the following questions.

1. What are the Facebook usage habits of student's hours/day/places?
2. What are the most preferred Facebook tools usage habits of students?
3. If the teacher use Facebook for teaching-learning?
4. Which is la perception of students about in the learning process?

## 3. Method

### 3.1 Sampling

The present study used a sample of higher education students enrolled in management 35.9 % (128), counter public 27.5% (98), international business 18.5% and information technologies 15.7 % (56) and of carrier other 2.5% (9) courses at public university located in the North part of the Mexico. The sample was decided by

convenience because undergraduate students are the primary users of social networking sites; we intentionally recruited undergraduate students to complete our survey.

### **3.2 Instruments**

The instrument was the implementation of a survey and consisted of two sections. The questions included at the survey were also built from literature review They selected 15 questions that were grouped into two sections: first section, demographic characteristics of students and also length of time spent in Facebook were collected. The second section consisted of items related to perceptions of students about using Facebook for learning. Each item was measured on a five-point Likert Scale (5 - Strongly agree, 4 - Agree, 3 - Not sure, 2 -Disagree, 1 – Strongly disagree). Some of the questions were negatively worded and subsequently recoded so that after being recoded, higher subscale total scores indicated more comfort(less anxiety) with computer technology, and/or more enjoyment and higher perceived usefulness of computer technology.

### **3.3 Data Analysis**

The students were contacted through their personal email accounts and link containing the survey was sent to them. A following e-mail was sent as a reminder five days after the first e-mail to some of the elements surveyed that hadn't answered. A total of 357 students completed the survey. The study was conducted during march-July 2013. The data was downloaded as an SPSS file and analyzed using SPSS Statistics Version 21. Descriptive statistics were used to interpret the data.

## **4. Results & Discussion**

### **4.1 Descriptive statistics – Facebook for educational purposes**

#### **4.1.1. Demographics**

Forty-one percent of the participants were male and the fifty-nine female. The mean age of the participants was 20. The age of participants ranged from 17 to 44, though 91% were between 18 and 23 years old.

#### **4.1.2. Use of electronic devices**

According to figure1, and in order to achieve the proposed aim, first, students are asked about their use of electronic devices for access to the Facebook. Mobile phone (61.3%), laptops (35.0 %) or personal computers-home (28.9%) are de more used devices.

Table1. Use of electronic devices

Electronic devices	Frequency	%
Mobile pone	219	61.3
University computer	23	6.4
Home computer	103	28.9
Laptop	125	35
Other	19	5.3
Total	357	100

#### 4.1.3. Using Facebook

Regarding the day of week in which students access Facebook, data revealed one high point (table 2). The day that more used the Facebook was monday (65.5 %) followed by wednesday (48.5%).

Table 2. Use of Facebook per day

Day	Frequency	%
Monday	234	65.5
Tuesday	158	44.3
Wednesday	173	48.5
Thursday	164	45.9
Friday	146	40.9
Saturday	77	21.6
Sunday	110	30.8
Total	357	100

#### 4.1.4 Time spent for educational purposes

In table 3, a rather high percentage (32.8%) of students used Facebook for educational purposes (between 30 min and -1hr).

Table 3. Time spent for educational purposes

	Frequency	Percentage
Valid	8	2.2
1 hr. to 2 hrs.	89	24.9
2 hrs to 4 hrs.	50	14
30 min to 1 hour.	117	32.8
4 hrs 8 hrs.	8	2.2
more than 8 hrs.	1	0.3
less than 30 min.	84	23.5
Total	357	100

## 4.1.5. When do you Access Facebook?

Table 4. Time spent for educational purposes

Valid	Frequency	Percentage
From 06:00 AM to 12:00 PM	70	19.6
12:01 PM to 06:00 PM	134	37.5
06:01 PM to 12:00 AM	170	47.6
12:01 AM to 05:59 AM	16	4.5

The majority of respondents, approximately 47.6%, use Facebook between 06:01 PM to 12:00 AM and use it daily for a relatively short period of time (23.5 used less than 30 min daily and 32.8% between 30 minutes to one hour at the most).

## 5. Results and discussions

Table 5 below shows in a descriptive way the results we obtained for each of the aspect we try to evaluate. As we have already mentioned above, we are not dealing with a validated methodological construct, but with a qualitative aspect that came out from our informal discussions with the students (and colleagues) about their experience with using Facebook, deriving in the inclusion of seven questions in the survey. Based on your experience in the use of FACEBOOK, your teacher uses it to support teaching-learning processes.

According to the results obtained, Facebook has not been used specifically for teaching-learning processes. With respect to the question whether it offers students and teachers the possibility of submitting help, 46.5 % responded negatively]. Regarding class scheduling], 51.8% responded that they do not receive such information via Facebook; and with respect to tests, 86.3% of students reported not experiencing an application through social networks. Concerning the submission of information or the uploading of presentations, 53.8% responded negatively, for discussion rooms, chats, or messenger, respondents responded negatively with an 80.7%. Finally,

regarding the provision of exclusive groups for education purposes, a 59.1% negative response was obtained. As a conclusion, teachers at a higher education levels are not using Facebook to support teaching-learning processes.

Table 5. The pedagogical use of Facebook by the teacher

FACEBOOK	1	2	3	4	5	lose	total	Mean	SD
Assignment of tasks	169	91	40	34	17	6	357	1.97	1.192
	47.3	25.5	11.2	9.5	4.8	1.7	100.0		
Submission of helps	166	78	47	43	17	6	357	2.05	1.239
	46.5	21.8	13.2	12	4.8	1.7	100		
Class scheduling	185	70	50	30	16	6	357	1.92	1.192
	51.8	19.6	14	8.4	4.5	1.7	100		
Application of tests	308	15	14	2	12	6	357	1.28	.852
	86.3	4.2	3.9	0.6	3.3	1.7	100		
Submit abstracts, upload presentations	192	64	50	28	17	6	357	1.90	1.199
	53.8	17.9	14	7.8	4.8	1.7	100		
Make rooms discussion, chats, messenger	228	31	15	7	10	6	297	1.35	.881
	80.7	8.7	4.2	2	2.7	1.7	100		
Opened exclusive groups for students	211	52	40	29	18	7	357	1.83	1.220
	59.1	14.6	11.2	8.1	5	2	100		

Conversely, sharing certain aspects of faculty's private lives with students may have potential educational value aimed to identify the positive or negative outcomes of student exposure to the more personable image of professors that social networking sites inherently afford (expressions of self-disclosure) to their users. Thus, six questions about the perception of the inclusion of Facebook in the support of teaching-learning processes were included in the survey. Table 6 shows the results descriptively of each one of the aspects that were evaluated [about] the perception of the use of Facebook for teaching - learning in the public University. A 5-point Likert scale was used. where 1 = not supporting, 2 = possibly supporting, 3 = often supporting, 4 = mostly supporting and 5 = always supporting

For the students, Facebook can be used for teaching - learning as portrayed by a 47% response between scales 4 and 5. With respect to the question whether it offers students and teachers the opportunity to participate freely and smoothly in the model of in teaching-learning, 41% answered similarly. 51.30%] believe that it may be a tool that encourages the promotion of the exchange of educational content (scales 4 and 5). Finally, 63.60% (4-5 scale) perceive to be allowed that the contents can be seen anytime, anywhere. Paradoxically, although all students sample connect to Facebook only the 59.30% (4-5 scale) thinks it may be a tool that can improve the communication between the students population and expand the network. 59.30% (scale of 4-5) says that if it could be an effective channel of communication between students and teachers. But contrary, about teachers which is not efficient. Perhaps the teacher must be able to develop a personal online at Facebook experience since students know with these details that have been revealed are demeaning it. We think that for this case study, we

have to find ways to initiate and manage more efficient, creative and interactive and relevant communication with students. Fortunately, students perceive the use of Facebook as if it can help in teaching-learning method. Therefore, we can conclude that teachers should adapt to this means of communication and be updated to use the tool.

Table 6. Perception of students about if the Facebook can help to process teaching-learning

	1	2	3	4	5	lost	total	Mean	SD
It can be used for the process of teaching - learning	48	95	45	97	66	6	357	3.11	1.36
	0.13	0.27	0.13	0.27	0.19	0.02	1		
Offers students and teachers the opportunity to participate freely and smoothly in the model of in teaching and learning	47	85	75	96	48	6	357	3.04	1.27
	0.13	0.24	0.21	0.27	0.13	0.02	1		
It can be a tool that encourages the promotion of the exchange of educational content	40	57	73	109	71	7	357	3.3	1.28
	0.11	0.16	0.2	0.31	0.2	0.02	1		
Allow the contents (documents, links, videos, etc) can be seen at any time and from anywhere	38	58	74	107	74	6	357	3.34	1.28
	0.11	0.16	0.21	0.3	0.21	0.02	1		
You can improve the communication with the student population and expand the student network	14	48	65	102	121	7	357	3.77	1.18
	0.04	0.13	0.18	0.29	0.34	0.02	1		
It can be an effective channel of communication between students and teachers?	21	46	75	111	98	6	357	3.62	1.9
	0.27	0.31	0.21	0.14	0.06	0.02	1		

## 6. Conclusion

This study was intended to find out if students used Facebook, as well as their perception about this and if it could be on the model teaching - learning. First we asked about the general data students and later became questions about perception about its use in the teaching model of learning; the foregoing was since wanted to know its educational identity related to Facebook and your perception if it helps learning. When analyzing the results we found that teachers have a limited use of Facebook since 47% used it less than two hours. And for students, 46.6% use it more than two hours a day. Based on these results, we can say that students showed greater acceptance for the use of Facebook in the teaching-learning model. Concerning questions about the perception of the potential use of Facebook for teaching-learning purposes, results indicate that it could be an effective channel of communication between students and teachers and this can as turn contribute to positive learning outcomes. On the other hand, students find this tool more useful for teachers and can greatly improve the level of communication that is reflected in the interest of students if teachers are trained and use this tool. It is also important to address the limitations of this study, dealing with sample size, was not applied a survey to teachers to get to know your appreciation, limiting generalizability. All results must be interpreted with this in mind. For future research, this survey could be applied to private Universities in the same area to explore the potential benefits that could have this network in the teaching-learning process.



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**ABOUT THE AUTHORS**

Teresa Pérez Morales, PHD Professor of the Faculty of Accounting & Administration and the postgraduate program of the “Universidad Autónoma de Nuevo León”, and PHP Professor other Universities “TECMILENIO and UNIVERSIDAD REGIOMONTANA”, Monterrey, Nuevo Leon.

Maria de Jesus Araiza Vazquez, PHD Professor of the Faculty of Accounting & Administration and the postgraduate program of the “Universidad Autónoma de Nuevo León”, and Professor of the PHD program of the “Escuela de Ciencias de la Educación de la Secretaría de Educación”.

Dipl.-Päd. Claudia Dörfer, [cdoerfer@gmail.com](mailto:cdoerfer@gmail.com),

Profesoras de tiempo completo, Universidad Autónoma de Nuevo León, Facultad de Contaduría Pública y Administración (FACPYA); Maestra para la preparación lingüística-cultural en el Programa de Movilidad estudiantil DAAD-UANL