

## *Use of Social Media in Academic Environment: a New Platform for Enhancing Independent and Collaborative Learning*

Behdja Boumarafi, University of Constantine 2, Algeria

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### **Abstract**

In past two decades social media technologies generated deep transformation in societies by capturing worldwide audiences. Social network sites (SNS) that were initially used for socializing, and entertainment have in recent years experienced a rapid increase in participation that has been accompanied by a diversification of purposes and usage patterns. They expanded their reaches into learning activities providing an open space to create content, share ideas and engage with universal knowledge. They are offering a new perspective to students' engagement in collaborative learning to expand their own learning outside the classroom boundaries. As education institutions are embracing social media technologies there is a need to optimize the positive effect of such technologies to bring them into pedagogy to make instruction and learning active and applicable to the cyber environment of the new millennium. Social networking appears very helpful in building academic groups to achieve independent and collaborative learning. Students learn to communicate and collaborate electronically, conduct research online, create digital objects in form of text documents, images, email messages, online discussion and create their e-portfolio. This requires rethinking the way pedagogical activities are carried out in the networked environment and assessing their effect on instructors and learners to create the best learning model in line with this new educational paradigm.

The main purpose of this paper is to investigate Algerian students' engagement in academic interpersonal relationships. It examines students' interpretation of collaborative learning to understand the developmental implications of academic achievement. The author seeks to advance the use of instructional interactions in two ways: i: enhancing the academic validity of social networking, ii: making the link to students' collaborative learning explicit. An online questionnaire is used to collect data from 300 students and statistical analysis of participants' responses show that social media are used for a multitude of purposes including communication and entertainment. They also use SNS to have a presence in the virtual world and improve their personal image. Facebook topped the use followed by YouTube, Twitter, LinkedIn, and the least used network is MySpace.

**Keywords:** social media, social networking, collaborative education, active learning, independent learning, academic achievements, Algerian students.

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## **Introduction**

The unprecedented developments of information and communication technology (ICT) and related digital technologies have ushered in many changes in all spheres of life. They have changed the way people communicate, work and study. Furthermore, the speed at which such technologies are penetrating education institutions and offering new ways and tools for the delivery of knowledge across the globe making the cyber-space a borderless learning sphere. By the adoption of social media in academia, instructors are shifting some of their teaching activities to students seeking their involvement in enhancing self and collaborative learning. Documented literature that attempts to shed light on social media adoption in learning indicates an increase in the use and popularity of social network sites among students. Facebook, twitter, LinkedIn, Skype, YouTube, MySpace, Google+... are making a considerable impact as essential tools to promote exchange of knowledge and to create virtual academic communities. The internet revolution is creating a new culture in learning and instruction activities. It is very clear that education industry worldwide is in the midst of a revolution caused by the evolving technologies such as the web 2.0 and the advent of web 3.0 allowing students to create content, exchange ideas and share knowledge. So much so that in the last few years there has been extensive discussion and heated debate exploring social media in journal articles and conferences and much of this discussion has focused on developing a clearer understanding of the capabilities of such technology as a new platform for enhancing students' independent learning and how much academic achievement social networking has yielded and whether it could be used as a new pedagogical tools outside the classroom.

As education institutions are embracing social networks there is a need to optimize the positive effect of such technologies to bring them into pedagogy to make instruction and learning active and applicable to the cyber environment of the new millennium. In recent years, more and more education institutions are making a presence in social networks such as blogs, twitter, YouTube, Facebook among others to create effective ways for the establishment of collaborative and interactive online learning system. Therefore, technology-driven culture is featuring prominently in all pedagogical activities. Hence, the focus of learning and instruction needs to be viewed from a newer perspective "without gathering students and teachers in the same physical space" (Maney, 2009). By and large, learning is no longer tied to a particular location and a particular time table. For a generation immersed in a world of evolving technologies where internet applications, specifically the web 2.0 and 3.0 is having a considerable impact on the way people work, study, play, and communicate. Social network sites promise the opportunity to motivate students to constantly quest for new learning experience out of the physical locations of the university encouraging them to create and share ideas rather than simply memorizing lecture notes. The use of social networks in education has created a paradigm shift from emphasis on teaching content to helping students develop the ability to create content tailored to their learning needs and share it with peers. Basically, social network sites provide open avenues for "collaborative education which in essence creates a synergy by bringing together technologically learners and instructors with a shift towards less instructor led teaching to a greater student's involvement" (Boumarafi, 2010). It is therefore, pertinent to say that the use of social network sites extend far beyond their traditional purpose of communication and entertainment to promote students' self-reliance in learning through enquiry and sharing. This

underscores the need to empower students to take charge of their own learning taking place anytime anywhere. This requires a rethinking of the way core pedagogical activities are carried out and assess their effect on both learners and instructors. The purpose of this study is to provide a better understanding of how students at the University of Conantine 2 (Algeria) are investing their technological skills and learning time, in using social networks for better academic achievements and to examine factors affecting their use. The study will build upon the existing body of documented literature that seeks to explore the use of social media in the academic environment. To explore such understanding further, the following objectives were set forth:

- Seek Algerian students' insights about the use of social network sites in learning;
- Identify which social network sites are more popular among students;
- Identify the reasons for social networking.
- Identify which personal information users reveal when using social media.

## **Literature Review**

Boyd and Ellison (2008) traced the history of social network sites (SNS) use back to 1997 when sixdegrees.com, was launched. Since then several social networks were established between 1998 and 2000. However, it was not until the introduction of Friendster, Myspace and Facebook that SNS started to grow in popularity and gain significant mainstream and worldwide popularity (comScore, 2007). The use of social media in academic environment was explored by Jabr (2011) who argued that people use social media for interacting to exchange information, brainstorm ideas, search for new friends, and share everyday news. Back in 1996, Blake and Sikkal declared that in the academic environment, new technological developments specifically Web 2.0 applications will group students into virtual communities whose homogeneity in interest and intellect will create a synergy to learn and benefit from their heterogeneous cultural background and experience. In a similar context, Ellison, Steinfield & Lampe, (2007) observed that Facebook supports resource sharing by establishing the social foundation between students and their peers. In essence the advent of social networking technology is also the advent of new learning systems. There is a whole host of surveys that point to the increased use social network sites by academic community and their impact on instruction and learning activities. Just as social networks extended the function of communication, they also extended their usefulness to learning and instruction allowing for better "communication, collaboration, community creativity, and convergence". (Friedman and Friedman, 2008). The best example of this is the increasing trend towards what is today called collaborative and interactive learning where students' self-governed and problem-solving activities are considered the focal point of a new learning process. For example, Tiryakioglu and Erzurum (2011) moved the focus to facebook as an educational tool. They reported that the majority of participants they surveyed have a Facebook account. Most of them used it as a communication tool. 80% agreed that it contributed to the communication between classmates. Results of their study also indicate that most faculty members are willing to use Facebook to create academic groups to share information about their courses. Al Munitairi's (2013) study also highlighted that Facebook is used as a supporting tool offering faculty at the University of Kuwait a substitute channel to enrich their educational experience through a communication channel for both students and educators. Jabr (2011) used

online questionnaire to explore the use of social networks by students at Sultan Qaboos University in Oman. The study revealed that 70% of the 650 respondents use Facebook, 26% have a MySpace account, 9% use Twitter and only 5% use LinkedIn. The study confirmed that these are mostly used for communication and socializing purpose at a percentage of 91 and only 23% use social networking for assignment preparation.

Some researchers are not convinced that social networking can be used as a medium of education. For example, results of a survey conducted by Malesky and Peters (2012) show that 40% of students and 30% of faculty believe that it is inappropriate for professors to use SNs. Other surveys have painted a different picture. For instance Reuben (2008) contends that there is a great potential in education for Facebook and YouTube. SNs have been utilized by institutions of higher education to connect with, and disseminate information to current students, potential students, and alumni. Universities have links to Facebook and Twitter on their homepage; they use them to relay information to students (Malesky and Peters, 2012). In retrospect it is important to learn how to integrate evolving technology into learning strategies; not just for technology's sake, but for the added value that these tools already familiar to learners provide Brotherton (2011). Social media can cause negative feelings and reduce members' life satisfaction. A survey of 600 facebook users reported that more than one third developed feelings of frustration and envious when reading friends' postings, checking news feeds and browsing photos related to friends' travel and leisure posted on the platform. This may cause a negative effect on users' satisfaction with their own life. (Krasnova and Buxmann, 2012)

Despite the contradictory survey results, what is clear is that a considerable portion of the digital era students consider the traditional mode of learning and instruction no longer the most appropriate model of education. However, the growing use of social network sites by students for learning has increased concerned about the quality of knowledge exchanged among them and how do they assess its credibility. Although social network sites tools are not created for educational purposes, Dalsgaard (2005) argues that they can be used to support learning. Using social software can help facilitate an approach to e-learning which differs from using learning management systems and which better supports self-governed, problem-based and collaborative activities. Basically, the purpose is to provide students with tools which they can use to solve problems on their own and/or in collaboration with other students. Battouche (2012) conducted a seminal study to investigate the use of social networks by Algerian youth aged 8 to 24. He found that 84% of the surveyed population used Facebook, 8% used twitter and only 4% used MySpace. 37% of respondents indicated that making new friends was the main reason for using social networks, 40% cited their usefulness in acquiring new knowledge, 11% mentioned effective communication and 18% networking. The results of the study also show that 65% of the surveyed population benefited from social networks in improving their foreign language skills, 25% in strengthening national identity and belongingness and 11% in acquiring the ability to convince in debates.

## **Research Methods**

### **Data collection**

To collect data for this study, a questionnaire instrument was designed based on the previous literature. The questionnaire used a five-point Likert scale ranging from (1) completely inappropriate as a learning tool to (5) completely appropriate. The statistical package for social sciences (SPSS) was used to analyze the data. Four students and two faculty members pre-tested the questionnaire. Based on their suggestions, the questionnaire was revised to its final form.

### **Survey population**

Participants of this study consisted of master students at the Institute of Library and Documentation Science at the University of Constantine 2. A request for participation along with 300 questionnaires was e-mailed to participants through the “Infocomdz” group. This is a discussion group created by students of the University of Constantine 2 and using it to communicate and share information and knowledge. Respondents were asked to complete the questionnaire which included questions on type of social network used, frequency of use of social network sites, purpose for the use of social network sites, perception about the usefulness of social network sites, and drawbacks of social network sites. 140 usable questionnaires were returned; a response rate of 46.66%.

## **Results**

### **Participants**

All respondents were master students at the Institute of Library and Documentation Science. Female student participants (n=90; 64.28%) outnumbered male participants (n=50; 35.71%). In actual fact the number of female students outnumbers the male students' intake in general in Algerian Universities. The age group of students is 21-28, those who grew up as active users of different internet applications i.e. the internet generation. All participants (n=140; 100%) reported using social network sites (SNS) for different purposes and some of them have more than one account.

### **Type of social network preferred by students**

Respondents were asked which social network they prefer to use. Their preferences are summarized in table 1. As expected, all respondents 140 (100%) gave the top rank to Facebook at a mean of 4.95. Previous studies also identified Facebook as the most frequently used SNS (Tiryakioglu and Erzurum, 2011; Jabr, 2011; Battouche, 2012; Al Munitairi, 2013). Twitter is used by 70 (50%) respondents as the second most popular social network site with a mean of 3.95. Respondents put YouTube in third position in terms of importance with 40 (28.57%) users and a mean of 3.78. Other social network sites scored lower means i.e: 2.75 for Skype that respondents use to communicate with family and friends abroad. 2.01 for LinkedIn. MySpace is ranked last with only 5 (3.58%) respondents at a mean of 1.40.

**Table 1: Preference of type of social network sites (n=140)**

| Type of social network | Mean | Standard Deviation | Number of users | percentage | Rank |
|------------------------|------|--------------------|-----------------|------------|------|
| Facebook               | 4.95 | 2.98               | 140             | 100        | 1    |
| YouTube                | 3.95 | 1.83               | 70              | 50         | 2    |
| Twitter                | 3.78 | 2.78               | 40              | 28.57      | 3    |
| Skype                  | 2.75 | 2.04               | 15              | 10.70      | 4    |
| LinkedIn               | 2.01 | 1.97               | 10              | 7.15       | 5    |
| MySpace                | 1.40 | 2.52               | 5               | 3.58       | 6    |

**Purpose for using Social network sites**

Respondents were asked to indicate the purpose for using social network sites. According to the results in Table 2, it is clear that social network sites is primarily used as a communication tool for exchanging e-mails, receiving the top rank with the highest mean 4.5. Keeping in touch with family and friends is ranked second at a mean of 4.1. Making new virtual friends scored 3.98, followed by sharing photos, tracing an old friend, with means of 3.95 and 3.85 respectively. These results match the findings of Gentzler and Oberhauser (2011) who reported that students use social networks mostly for communication and socializing. Respondents use social networks to discuss group project works, share assignments and course work as well as files and lecture notes also scoring high means ranging from 3.78 to 3.35 and creating content and exchanging ideas at means of 2.98 and 2.50 respectively. This indicates that the surveyed population of this study uses social networks not just for socializing and communication but also for academic activities. Respondents seem to be interested in becoming global citizen by having a presence in the virtual world. Surprisingly, the study found that joining discussion forums, searching for a job and downloading videos and audios were the least reasons for using social network sites among the surveyed population. The most likelihood is that participants are using other websites for online discussion and looking for jobs in other job announcement sources i.e. newspapers and job sites.

**Table 2: purpose for using social network sites (n=140)**

| Purpose                                | Means | Standard deviation | Rank |
|--|-------|--------------------|------|
| Communicate with others through e-mail | 4.5   | .62                | 1    |
| Keep in touch with family and friends  | 4.1   | .98                | 2    |
| Make new virtual friends worldwide     | 3.98  | .74                | 3    |
| Share photos                           | 3.95  | 1.00               | 4    |
| Trace old friends                      | 3.85  | 1.05               | 5    |
| Have a presence in the virtual world   | 3.83  | .93                | 6    |
| Discuss group project works            | 3.78  | 1.18               | 7    |
| Share assignments and course work      | 3.50  | 1.15               | 8    |
| Share files and lecture notes          | 3.35  | 1.08               | 9    |
| Create content                         | 2.92  | 1.99               | 10   |
| Exchange ideas                         | 2.50  | 1.87               | 11   |

|                                    |      |      |    |
|------------------------------------|------|------|----|
| Join discussion forums             | 2.35 | 2.50 | 12 |
| Searching for a job                | 2.25 | 2.90 | 13 |
| Download videos and audios         | 2.00 | 1.89 | 14 |
| Make a presence in the cyber-space | 1.98 | 2.00 | 15 |

### **Students' perception about the usefulness of social network sites**

The study intends to explore the students' opinion about the usefulness of social network sites. Results in table 3 show that SNs are primarily used for building relationships with a mean of 4.90 followed by "improve communication skills with 4.50 and develop social skills ranked third at a mean of 4.30. These findings support the results in table 2 that indicate that social networking is still more popular among Algerian students for communication and socializing. Respondents perceive social networking appropriate for improving their foreign language skills. This could be the reason for "making new virtual friends worldwide" being the fourth most important reason for using social networks as shown in table 2. Participants seem a little less clear about the using SNs to "share ideas, improve learning, make contact with faculty easier, and enhance academic achievement" giving them means less than the mid-point 3. This could be attributed to the fact that the use of social networks in academic activities is still new and not perceived as a very important tool for academic purposes (Al-Muitairi, 2013).

**Table 3: Usefulness of social network sites (n=140)**

| <b>Statement</b>                                | <b>Means</b> | <b>Standard deviation</b> | <b>Rank</b> |
|---|--------------|---------------------------|-------------|
| Build relationships with others                 | 4.90         | 1.96                      | 1           |
| Improve communication skills                    | 4.50         | 1.65                      | 2           |
| Develop social skills and modify one's behavior | 4.30         | 2.05                      | 3           |
| Improve foreign language skills                 | 4.05         | 1.15                      | 4           |
| Improve one's personal image                    | 3.98         | 2.01                      | 5           |
| Self regulated learning                         | 3.90         | 2.00                      | 6           |
| Share ideas and promote creativity              | 3.85         | 1.99                      | 7           |
| Create Peer to peer learning communities        | 3.80         | 1.15                      | 8           |
| Personalization of learning content             | 3.75         | 1.75                      | 9           |
| Improve learning in general                     | 3.50         | 1.70                      | 10          |
| Make contact with faculty easier                | 2.00         | 1.22                      | 11          |
| Enhance academic achievement                    | 1.30         | 1.90                      | 12          |

### **Drawbacks of using social network sites**

Participants were asked to indicate the problems and drawbacks related to the use of social network sites. Their answers as reported in table 4 indicate that students are very much concerned about the violation of their privacy rating it first with a mean of 3.73. They report that social networking is time consuming at a mean of 3.58. Participants seem to believe that social media is inappropriate for formal academic

activities. This finding is supported by previous literature which indicated that social networks are used for some sort of informal academic purpose; for revision, arranging group or project work, often initiated by students themselves and not part of a formal requirement of a course (Downes, 2004). Undoubtedly, this raises concerns about quality control of information posted by students on social networks. Participants reported “discouraging face-to-face communication” ranking it before last with the lower mean score of 2.43. Finally, participants believe that having a presence in the virtual world may turn them into schizophrenic leading two separate lives; one virtually and one in the real world and it is easy to lie about one’s life. Some respondents mentioned the use of YouTube and Skype where they can see whom they are networking with in a virtual environment.

**Table 4: Social network sites drawbacks (n=140).**

| Statement                                      | Means | Standard deviation | Rank |
|--|-------|--------------------|------|
| Violates privacy                               | 3.73  | 1.18               | 1    |
| Time consuming                                 | 3.58  | 2.18               | 2    |
| Concerned about the quality of information     | 3.35  | 2.03               | 3    |
| Not appropriate for formal academic activities | 2.87  | 1.94               | 4    |
| Discourages face-to-face communication         | 2.43  | 1.82               | 5    |
| Can cause schizophrenia                        | 2.25  | 1.78               | 6    |
| Easy to lie about one’s situation              | 2.00  | 1.55               | 7    |

## Conclusion

Professional literature indicates an increase in the use of social network sites highlighting their popularity among students. The literature also shows that social networks are primarily used for communication and socializing. They are gradually making inroads as educational tools, and seem to have the potential to support collaborative instruction and learning. A survey of use of social network sites among Algerian students in the Institute of Library and Documentation Science at the University of Constantine 2 (Algeria) indicated a high use of social network sites among the surveyed population. Participants who filled in the survey questionnaire showed a preference for Facebook followed by LinkedIn presence and YouTube then twitter. Myspace does not seem to be so popular among Algerian students. Participants are using those social network sites mainly for communication and socializing. They expressed the view that social network sites can be used for academic purposes to discuss group project works, share assignments and course work, share files and lecture notes, create content, and exchange ideas. However, perceptions of respondents expressed through the survey do not indicate that the use of social network sites is likely to enhance academic achievements. Results of the study indicate that respondents are somehow apprehensive about social networks thinking that they will violate their privacy, are time consuming and discourage face-to-face communication. They also expressed concerns about quality control of information in social network sites.

Results of this study cannot be generalized as they reported the views expressed by the master students of Library and Documentation; only a small portion of students at

the University of Constantine 2 (Algeria). As the internet becomes more readily available on and off campus we will certainly see more students reverting to this new form of self-learning. We may also see in the near future faculty members using social network sites for formal education purposes as is the case in developed countries. Further research should consider investigating the use of social network sites by faculty members for formal academic activities and whether they perceive them as appropriate instruction and learning tools.

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**bboumarafi@gmail.com**