SOCIAL NETWORKS AS EDUCATION TOOLS

Francesco Galati¹, Barbara Bigliardi¹, Angelo Deiana², Serena Filippelli¹, Alberto Petroni¹

¹Department of Engineering and Architecture, University of Parma (ITALY)
²Confassociazioni (ITALY)

Abstract

The Net Generation relies heavily on ICTs for interactions with others and could expect that technology will be an integral part of their education [1]. However, few studies investigated the educational use of social networking sites (SNS) such as Twitter and Facebook [2]. They offer new ways to communicate and spread information. Higher education staff have an opportunity to help students use SNS and it has been posited that college and university students will soon demand the use of Web 2.0 technologies in their communications with academic staff ([3]; [4]). Consequently, more research should be conducted to investigate how Web 2.0 technologies can be utilized as teaching tools [5]. In the past, SNS were considered useful for students who needs to communicate with peers about course content, thus increasing collaboration between students, resource sharing, and active and informal learning ([4]; [6]). The aim of this study is to gain insights of the use of social networks for education purposes by conducting a comprehensive review of the extant literature on the topic.

Keywords: social networks, education, student, review.

1 INTRODUCTION

Technology is taking on an increasingly important role in everyday life, applying itself to almost every area, including that of higher education [7]. To date, researchers have focused on studying the implications of Web 2.0 technologies on various aspects of everyday reality, focusing in particular on its effects on the health, education and psychology of younger subjects ([8]; [9]). The so-called Net Generation, that is the part of the population born from the 80's onwards, in fact makes abundant use of ICTs both for recreational purposes and for social and work ones, claiming to live the technology as an integral part of their lives [7]. Until the emergence of Web 2.0, higher education was founded on a teaching model based on traditional learning concepts. In particular, it focused on how the environment, including the actions of teachers, led to the desired response of students, i.e. the change in their behaviour over time. A practical example is the success of a university exam: well-structured lessons led students to learn what they had taught and to successfully complete the exam. This traditional model, therefore, ensures that the student's performance is good only if he follows the lessons blindly, while variables such as commitment, previous knowledge and motivation do not play a fundamental role. This learning model has been criticised by cognitive psychologists since the 1970s, who have instead focused on the student's learning processes. In this new perspective, learning is no longer seen as a mere individual act of memorization, but as a real process that is placed within learning communities that benefit from conversations and collaborative work [5]. Social Networking Sites, considered as tools for communicating and sharing resources, are a valuable means of changing learning methods, causing a shift from the traditional paradigm to the process-oriented one [10]. The extant literature shows that the use of Social Networking Sites in education is gaining ground, therefore the aim of this paper is to study the use of social networks as tools to support learning in higher education. We believe that there is a high level of interest in how social networks can be integrated into such a context and how they can positively impact on learning. So, an in-depth investigation about their use and the advantages and disadvantages of their adoption in a context of higher education has been carried out through an analysis of the existing literature. In particular, we focused on the adoption of two specific social networks: Facebook and Twitter.

2 SOCIAL NETWORKING SITES: AN OVERVIEW

The use of the Internet has completely transformed the way people communicate. Websites dedicated to communities of interest still exist and prosper, however social networking started playing a significant role in communication [9]. Conversely to websites, Social Networking Sites (hereafter,
SNSs are primarily organized around people, not interests. The online connections that users create on SNSs are often already a part of their physical (offline) lives, but computer mediated communication helps to manage, regulate and expand their social networks [11]. Their growing importance may be seen as the result of a shift in the organization of online communities.

The available literature on SNSs has mainly focused on 5 main issues: (i) definitions and types of SNSs, (ii) friends and friendship performance, (iii) networks, (iv) online/offline connections, and, especially in recent years, (v) privacy [12].

As far as definitions and types of SNSs are concerned, a generally accepted definition of SNSs is that provided by Boyd and Ellison [12]: “We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system”. SNSs started to be used in 1997, when SixDegrees.com was launched. Since then, hundreds of SNSs supporting a wide range of interests and practices have been introduced. The most known and used SNSs are schematically depicted in Figure 1. Visual platforms, in particular Instagram, continue to grow in popularity. Snapchat saw the biggest growth, as well as Twitter that has seen a surge in usage. However, Facebook remains the most popular SNS.

These means allow the connection among people through shared activities. Indeed, their members may interact on SNSs by creating personal profiles, as well as joining interest groups or uploading videos, pictures and music [13], share ideas and events by both posting public comments or sending private messages [9].

As far as friends and friendship performance are concerned, researchers agree in stating that ‘friends” on SNSs are not the same as “friends” in the everyday life; instead, SNSs’ friends provide users an imagined audience. On SNSs, users can search for old friends or add new ones ([14]; [15]; [16]; [17]).

As for networks, the literature on SNSs suggests that most SNSs primarily support pre-existing social relations (e.g. [18]), and classify argued that there are passive members, inviters, and linkers “who fully participate in the social evolution of the network”.

As far as connections are concerned, the available literature (e.g. [19]) suggests that connections may be divided into offline and online. Offline connections (maintained or reinforced by means of SNSs such as, for example, Facebook), conversely to the online ones, are often weak ties, but these connections may interface each other’s [19].

Finally, concerning privacy issues, the literature has often investigated issues such as the safety of younger users and, in general, the potential threats associated with SNSs (e.g. [20]). The main threat refers to the possibility to reconstruct users’ social security numbers using information often found in profiles, such as hometown and date of birth.

Given that SNSs enable individual’s connections, it is not surprising that they have become embedded in our lives. Their use has become common among teenagers [13]. In particular, the literature on this matter is investigating the implications of SNSs’ use with respect to schools and universities, as detailed in the next section.
3 SOCIAL NETWORKING IN EDUCATION

At a time when Web 2.0 technologies have become an integral part of people's daily lives, it is important to study their implications in areas of major interest, such as higher education.

Despite concerns that the adoption of SNSs to implement educational methods may be a source of distraction for the student, causing a lowering of his academic performance, higher educators are interested in better understanding how the use of these tools can instead help to improve the quality of teaching. In fact, if well structured, the use of such platforms can represent an opportunity rather than a threat: by leveraging on a different way of communicating with the student, i.e. through the SNSs, the teacher could design an innovative didactic to improve the learning of the students. SNSs give students and docents the opportunity to interact with an additional platform, thus extending the classroom experience in terms of both space and time ([5]; [8]). With regard to the benefits that such tools can bring to students, we find an enhancement of their informal learning. Informal learning, in fact, means learning that does not take place only in the classroom through the classic approach of frontal teaching. It can be developed in different ways, such as reading articles, participating in debates, watching videos or, as in the case considered in this article, using web platforms [6] [8]. SNSs can also be used for motivational purposes. Indeed, they may allow for example the promotion of self-efficacy amongst students [21].

3.1 Use of Facebook and Twitter

Facebook is the most popular SNS and therefore has received considerable attention from researchers and educators, the latter interested in using it as an alternative teaching tool, capable of changing the way students learn [8]. In an educational context, therefore, Facebook is seen as a valid vehicle for interaction, collaboration, information and sharing of resources, both between students and between student and teacher [7]. In recent years, a lot of research has been done to examine the results of studies on the effectiveness of Facebook integration in teaching. Education researchers have revealed the need to better understand how social media can be integrated into teaching in order to make both teachers and students comfortable about it [8]. According to a study by Niu [8], the most positive effect of using Facebook for academic purposes is a considerable increase in interaction between students themselves and between the student and the teacher. The study conducted by Prescott et. al [1], however, focuses on the point of view of teaching staff who use Facebook as a tool for learning in the classroom. It was found that the most recurrent motivation of the teachers participating in the study regarding the adoption of social networking in the classroom was the facilitation of communication between student and professor. In fact, students are used to using Facebook not only for recreational purposes but also as an auxiliary study tool, for example to coordinate coursework. Another point in favour identified by the interviews with the teachers is the greater involvement in the discussions faced in class, which in this way can continue outside the classroom once the lesson is over. Agreeing with Niu [8], Prescott et. al [1] reveals that Facebook is a valuable tool to encourage informal learning between students; thanks to greater communication between peers there is greater support about course content and assessments. There are also many drawbacks that emerge from the various studies considered. Some concern the difficulty of keeping reality in the classroom separate from that outside the classroom: students identify Facebook as the way to approach the teacher more directly, bypassing his role as an educator. The Social Network risks to blur the boundaries between professional and personal reality ([1]; [22]).

Twitter is a micro blogging portal used in education extremely useful also across academic applications. It represents a space where academics may share and discuss practice. In particular, it allows academics and students to create their own networks, making virtual discussions possible. Teachers, students, and parents can benefit greatly of the advantages offered by using Twitter in education. The short tweets can be used to inform students about any changes and to collaboratively work as a great team. Many scholars also agree in stressing positive results regarding learners' interaction with the Twitter interface [23]. As far as higher education is concerned, Twitter is used for various research, networking, learning, and identity development activities ([24]; [25]; [26]) also demonstrated that Twitter is beneficial to expand learning communities, and to increase participation and engagement.

4 CONCLUSIONS

The impact of Web 2.0 technologies in the lives of students should not be underestimated, on the contrary, it can be used as an additional resource to improve the way lectures are performed and
consequently the performance of students. In this study the topic of SNSs in support of higher education has been dealt with, therefore considering their use in colleges and universities. By using SNSs in education, professors become “networked professors”. For them, the value from adopting SNSs lies in the knowledge that these means of connection provide a positive impact on classroom success for students and promote best practices in experiential learning. Taking the students’ point of view, their usage of SNSs is not only limited to recreational purposes but they can also represent an auxiliary study tool, enabling them to better communicate, collaborate and share information and resources in a quicker way. Moreover, they are useful to build a productive relationship with the instructor.

REFERENCES


