

Sharing as Educational Practice: A Case-Study from University of Udine

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Abstract

Social media websites and new practices associated with the increasing use of the Net are deeply affecting many aspects of daily life, including at least some aspects of the education process. They have a strong influence on the lives of millions of users, many of whom are students, who spend a lot of time interacting online with their peers. Scholars and researchers for some years have begun to think about possible positive spillover effects within the educational context. This paper is focused on an experimental project implemented at the University of Udine in the course Theory and Techniques of the New Media. The class in question was comprised of approximately thirty students; half of them were following the lessons in co-presence with the professor in Pordenone and half were following the lessons from another site of the University situated in Udine. The distance learning was supported by several technologies. However, the fact that the class was made of two different parts, one in Pordenone and the other in Udine, and that the distance learning had severe constraints at the structural level, risked to be obstructions of the efficiency of the learning process and students' socialization. To overcome this difficulty and create a place of debate, internal socialization and organization shared by all the students, we activated two platforms: Facebook and GoogleDocs. The analysis of our case-study highlights, that the use of familiar platforms can have positive effects in education and represent excellent resources for professors and students.

Introduction

The aim of this paper is to verify the potential of social media as a tool for informal and collaborative learning. In everyday life, thanks to Web 2.0 interactivity and to a new generation of Internet applications (for example, social network sites, blogs and video or photo sharing sites), a large number of people use digital media to express themselves and to share information, photos and videos with a vast network of contacts. Online information sharing and collaboration platforms are massively used to support social relationships and are adopted in various contexts of everyday life. Through their use, people are changing the way they interact with others and challenge some traditional organizational and social practices. It is not surprising that the educational environment has also quickly be-

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come a terrain of penetration by this new generation of information and communication technologies (ICTs).

The University of Udine course, Theory and Techniques of the New Media, is run inside the Master's degree in Multimedia Communication and Technologies of Information in the Faculty of Education. Within this course, an experimental project has been implemented with the purpose to improve some areas of the education process, such as students' socialization as well as organization and communication among themselves. At the same time, it aims to investigate the potential of social media as a tool for informal and collaborative learning. This paper focuses on the project.

In this paper, we first provide a review of the current literature on social media and education (section 2). Then, we illustrate the project (section 3). In the following section (4), we describe the aims and the methodology, while in section 5 we present and discuss the findings of our exploratory research. Finally, we draw some conclusions and sketch some future challenges for research in this field (section 6).

Social media and education

Social media websites and new practices associated with the increasing use of the Net are deeply affecting many aspects of daily life, including at least some aspects of the education process. Web 2.0 environments have a strong influence on the lives of millions of users, many of whom are students, who spend a lot of time interacting online with their peers. Over the past four years, social network sites (SNS) have become one of the most popular online features. According to Boyd and Ellison, SNS are web-based services allowing people 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.” (Boyd & Ellison, 2007)

The rapid and increasing adoption of SNS, and in particular of Facebook, has brought changes in various social contexts. SNS are becoming embedded in contemporary culture and in daily routines of millions of people. SNS have been adopted by people with the hope to build and maintain complex networks of personal and professional relationships and to create connectedness with other users who are registered in the websites or groups they joined.

Scholars and researchers working in the education sector and considering that the use of social media is quite widespread among students in their everyday life, for some years have begun to think about possible positive spillover effects within the educational context (Mason, 2006; Ajjan & Hartshorne, 2008). The first research questions guiding research projects in this field of investigation included: Are SNS able to play a role inside and out-

side the classroom? Can the popularity of social media be an advantage for the education process and can SNS positively influence learning practices? In recent years, several studies were able to partially answer these research questions, showing that these online environments can support educational activities and learning experiences by allowing interaction, collaboration, communication, participation and resource sharing among the users (Selwyn, 2009). As highlighted by Mazman & Usluel,

“Using social networks in educational and instructional contexts can be considered as a potentially powerful idea simply because students spend a lot of time on these online networking activities. While the current generation of Learning Management Systems (LMS) allows each student to have their personally chosen course(s) in which they are enrolled, many of these LMS lack of social connectivity tools and personal profile spaces that can be used by the students involved.” (2010, p. 444)

The analysis produced by Mazman & Usluel is currently shared by many other scholars. Also, Dunlap & Lowenthal (2009) and Schroeder & Greenbowe (2009) for example argue that, although LMS offer several useful tools that support student engagement, their structures can inhibit social interaction. However, it is becoming evident that the increasing adoption of Internet-based platforms by the young generation can help in overcoming the limits cited above and their experience in social media can be exploited to facilitate the social process of learning. According to Ras & Rech:

“The Net Generation students put new requirements upon software engineering education because they are digitally literate, always connected to the Internet and their social networks. They react fast and multitask, prefer an experimental working approach, are communicative, and need personalized learning and working environments.” (2009, p. 555)

Ras’s and Rech’s ideas are shared by many other authors who suggest that current social media can be seen as the right space for collaboration, communication and interaction between students, tutors and professors. In their perspective, SNS provide online environments and collaborative features for students to engage in social activities, lead online discussions, present their ideas and share their points of view. They can facilitate student-to-student collaboration, help professors to share educational content, provide innovative ways to involve young people in some topics and enhance communication among teachers and students and among students themselves. Above all, SNS are characterized by gratuitousness, ease of use, allowing for rapid updating, network effects and ready availability (Boon & Sinclair, 2009). Integrating SNS into existing educational practices becomes significantly important to achieve more robust learning opportunities (Mazman & Usluel, 2010), but, obviously, the professor monitoring (that is, reviewing, discussing, etc.) continues to play a pivotal role also during collaborative learning (Dillenbourg, 1999). According to Mazman & Usluel SNS provide

“opportunities for moving beyond the mere access to the content (*learning about*) to the social application of knowledge in a constant process of re-orientation (*learning as becoming*). Social media platforms allow to continue the interaction outside the classroom and acquire in this way new knowledge through informal learning and collaborative processes.” (2010, p. 445)

However, the experimentation of these tools inside the education process is at the beginning. So, it is not surprising that this debate is immature. Many fundamental research questions such as those concerning the quality of the education outcome after the introduction of high levels of artificialization and technological mediation may be ignored because it is too difficult to investigate them at the moment. Current studies generally focus on the description of the new technological tools introduced in the education process and of their effects, generally depicted as positive, without making this introduction problematic in respect to the educational process. They avoid, in fact, asking the true questions: What are the motivations inside the educational sector that justify the repeated use of these tools? Which aspects of education as complex activity should be improved through the use of these tools? As Bruner (1996) reminds us, education is not simply a technical issue of how to capably manage information processing, but it is a complex activity, aiming at adapting a culture to the needs of its members and to adapt its members and their ways of learning to the needs of culture (pp. 55–56). The fundamental point for education is not the technology, even if this is essential for any culture, but the methodology of research and in general of mind use (p. 111).

Bruner’s theory of education has to be hybridized with the large, current debate on digital generation. The term ‘digital natives’ was introduced by Prensky in 2001 to describe the young people who were born in the late 80s and who grew up in environments saturated by all kinds of digital technologies. In his vision, this generation is so accustomed to the new media that their members can be considered ‘natives’ of the digital world, while their parents, who did not encounter the digital media until adulthood, are considered ‘digital immigrants’. The eruption of this generation of digital natives inside the education scene has several consequences. First of all, middle-aged and elderly people, who in the past were the guides of technological development, are becoming less accustomed to electronic technology and to the information science of the digital world. Although they have been using ICTs since they encountered them at a certain point of their life, they find it more difficult to appropriate themselves than the digital natives. Presky proposes to call them digital immigrants.

Presky is only one among many scholars and journalists who have created various terms to express the characteristics of these new generations. Other examples of the labels that have been proposed are: “Nintendo Generation” (Green, Reid & Bigum, 1998), “Net generation” (Tapscott, 1998; Oblinger & Oblinger, 2005), “The Millenials” (Howe & Strauss, 2000) and “Generation Me” (Twenge, 2006).

Common characteristics in these conceptualizations are that this digital generation is tech-savvy, has a strong multitasking capacity and has an increasingly global vision.

This definition of digital natives has been criticized by many scholars for being too generic and even misleading as it suffers from technological determinism (Bennett et al., 2008). However, the digital divide between digital natives and digital immigrants poses important questions regarding crucial aspects of the social life, such as the models of socialization, the effectiveness of educational strategies at primary and secondary levels and the changes in the relationship between professors (most of them are digital immigrants) and students (who are mainly digital natives) and among students themselves. The generation of digital natives has made the education process, even at the higher (university) level, even more complex than in the past.

Starting from these theoretical premises, we decided to investigate if the introduction of social media inside the educational process could enhance at least some areas such as students' socialization, organization and communication among themselves and at the same time to verify the potential of social media as a tool for informal and collaborative learning.

Our hypothesis was that with these digital native students, at least some aspects of the educational life could be improved.

The project

Before reporting on the main findings of our study, we will describe an experimental project that has been carried out in the educational process, with the purpose to allow students to take advantage of SNS at different levels. This project was implemented at the University of Udine in the course Theory and Techniques of the New Media; the course was a requirement for the Master's degree scheme in Multimedia Communication and Technologies of Information in the Faculty of Education, during the academic year 2010–2011. The class in question was comprised of approximately thirty students; half of them were following the lessons in co-presence with a professor in Pordenone and half were instead following the lessons from another site of the University situated in Udine. The distance learning was supported by the following technologies: two Video Conferencing Equipment Systems consisting in one on-board video camera (viewing class), second camera (PTZ – Pan, Tilt, Zoom – viewing teacher), teacher microphone, ambient microphone, wireless microphone for students' feedback and an Interactive Whiteboard.

This course was not designed in a traditional way, with typical lessons in which the professor teaches while students attentively take notes; rather, it was designed as highly participatory on the part of students and with the professor acting as facilitator of students' performances. Furthermore, this course had planned the participation of some of these students in two postgraduate conferences, which were organized inside the network of uni-

versities with which this course collaborates internationally and annually organizes for moments of debate. In this year, the two workshops were organized firstly by the University of Erfurt (Germany) and secondly by the Hong Kong Polytechnic University (Hong Kong). Students were encouraged also to discuss and select among themselves, their representatives for these two major events. However, the fact that the class was made of two different parts, one in Pordenone and the other in Udine, and that the distance learning had severe constraints at the structural level, risked being obstructions to the efficiency of the learning process and to students' socialization. To overcome this difficulty, we activated two social platforms that are becoming increasingly embedded in the daily life of young people: Facebook and GoogleDocs. Why did we decide to activate Facebook among the various social networks? – Because, Facebook is the most adopted SNS in Italy. According to the data provided by Socialbakers.com, there are around 20 million people who use Facebook in Italy. Facebook penetration in Italy is 35.4%, compared to the country's population, and 68.5% in relation to the number of Internet users. The largest age group is made of young people who are currently between 25–34 years old, with a total of 5,350,067 users, followed by the users between the ages of 18–24.

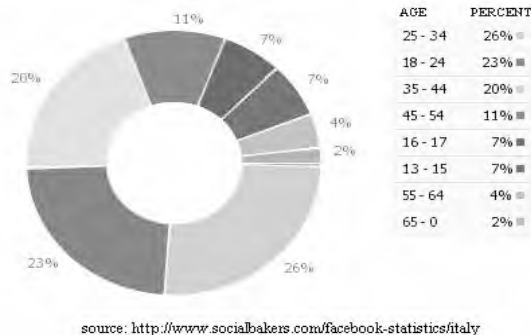


Fig. 1: User age distribution on Facebook in Italy (source: Socialbakers.com)

So, given that Facebook is a social utility used by many young people and our students spent a significant amount of time interacting on this site, we decided to exploit Zuckerberg's platform in order to design an informal venue for students' learning experience.

These two platforms were chosen with the purpose of creating a place of debate, and for internal socialization and organization shared by all the students. A Facebook closed group, called "Theories and techniques of the new media@Uniud" was created in February 2011 in order to encourage students to take part in class-life, to talk to each other, to have a dialogue with the professors and to share various content with their peers. The Facebook group was requested by the students themselves in order to discuss questions

among themselves and to support the communication between Udine and Pordenone and vice versa. They probably strongly felt the lack of an interaction channel and above all of a social space where they could meet each other. To ensure that only the students of the course of Theories and Techniques of the New Media joined the Facebook group, membership required the tutor's approval. Once approved, students could interact, post items, share links on the wall and chat with other members of the online group. Within the first week of the course, about 95% of the classroom joined the Facebook group. Obviously, joining the group was entirely optional, as it represented just a supplemental tool, but the response of students and their degree of participation were very high. On the other hand, GoogleDocs turned out to be a useful tool to support the organization and to share and edit documents in real time. Students worked on the same sharing files and made changes together.

Methodology

In order to verify the potential of social media as a tool for informal and collaborative learning, a qualitative multi-research method was deployed. A period of intense participant observation lasting three and a half months was carried out. Furthermore, a content analysis of the Facebook group was activated. On the whole, a corpus of 108 messages in the Facebook group was collected. This corpus has reached an adequate degree of saturation, as after a certain number of messages, no new data in respect to the purposes of this study and only already acquired information emerged. This method addressed the centre of the subjective dimension of respondents and aimed to identify the meaning of the discourse archived in the Facebook group. The content analysis applied was mainly a descriptive method, as it treated data as personal documents which were analyzed in all their richness and individuality.

Messages like those collected here might be seen as the answer to an open question. The choice of using this tool was dictated by the need to avoid as much as possible the so-called effect of social desirability, typical of the answers in questionnaires and interviews (Corbetta, 1999), and to have an instrument which would allow more expressivity and spontaneity in the content. The messages examined contain very little 'reactive' information, so they are influenced to a very limited degree by the interaction between the researcher and the object of study and are less influenced by distorting effects. Operatively, these messages were broken down into categories of discourse with the purpose of capturing the most relevant discursive frames and were studied by means of content analysis (Altheide, 1996). The frequencies of the categories were singled out to ensure the most recurrent ones were calculated, but were also retained and discussed, as Silverman (1993) suggests. Furthermore, categories with relatively low frequency but high significance for enlightening or clarifying some points of the analysis were also included. This allowed us to trace a conceptual map of the discourse outlined by these students in the Facebook

group. This type of content analysis is a fairly non-intrusive and very flexible methodology (McNeill & Chapman, 2005). Additionally, although these kinds of texts might be analyzed from many aspects, here our analysis is limited to some of the most relevant issues outlined by students.

Participant observation and content analysis of the messages written by students were triangulated with another method, made of ongoing conversations between us and students on the topic of their informal learning experience.

On the whole, the criteria that were applied during this research in order to ensure a degree of reliability are those discussed by Bryman and Burgess (1994). Apart from saturation, the other criteria considered were reactivity and internal acceptance, which regards the position of the researcher in the relationship with the subjects investigated; internal coherence, which concerns the final product that should exhibit and justify the choices made and the path followed during the research and finally; completeness, which regards the synthesis that aims to reflect the complexity of the research undertaken.

Results

Given that the course of Theories and Techniques of the New Media required a slide presentation about a topic chosen by the student among the topics covered by the program, during our course the most used file edited on GoogleDocs was a simple Excel file with a table where each student wrote his/her name, the topic and the title of his/her presentation and the date chosen for the discussion. So, students frequently used the Facebook group to communicate and the Excel file shared on GoogleDocs to decide the agenda of their presentations.

The Facebook group supported the lessons of the Theories and Techniques of the New Media course, allowing students to create and maintain a direct link with their peers and the professor. It turned out to be a great space for students to work on collaborative projects with each other and with the tutor. When a group member posted something in the group, such as a link to an article, other members received a Facebook notification with that update. Furthermore, Facebook groups could be used to connect with students without needing to “friend” them on the social network. This was a good option, especially for the professor, who in this way did not necessarily have to become a “friend” of the students.

Regarding the results of participant observation, it became obvious that the possibility to count on the shared file on GoogleDocs was the indispensable premise for the students of this class to develop self-organizational skills and also a new proactive attitude. To become protagonists of the lesson, these students needed a space to organize themselves with their peers and also to react to several proposals that were launched to them by the professor.

The content analysis applied to the messages published on the wall of the Facebook group instead revealed that students used the platform to discuss topics related to the class life and to share files of their presentation:

“Hello everyone! I entered the final version of the slides presented on May 3 on slideshare: <http://www.slideshare.net/MarcoLiotta/media-production-cap-3-marco-liotta-ttnm-7872239>.” (Marco)

“Hello guys ... sorry I am a little late and I have not yet chosen the topic of my presentation ... any suggestion??? Thanks a lot.” (Nadia)

Among the others there is, for example, a general discussion among the students about the final decision making process regarding four ‘volunteers’ to represent the class in the postgraduate workshop organized in Erfurt by professor Joachim Hoeflich, or to participate in another postgraduate conference in Hong Kong, as we already mentioned. Furthermore, the four students selected for the workshop in Erfurt spontaneously decided to use the wall of the Facebook group to tell the other students about their trip from Udine to Erfurt and to post some status updates regarding their travels or, more generally, their experiences in Germany. This is well illustrated in these four quotes:

“On the road to Erfurt with Marco, Stefano and Enrico...next stop: Villach!” (Tommaso)

“Arrived safely in Erfurt, about 9 hour driving! the hostel is so cool and even the city, too bad it's raining! The beer is the top (of course)! updates will follow” (Stefano)

“Just had breakfast, our hostel is a former police station : P Now let's take a guided tour with the other students, followed by BBQ in college =) we will do some videos ... stay tuned!” (Marco)

“We are preparing the suitcases ... last ride in town, then last lunch at the campus with the guys of Erfurt University and then home. I would have stayed a few days more ... it's a really nice place!” (Enrico)

They also uploaded a photo with the German students and a video recorded in Erfurt University during the workshop in order to share in this way their feelings and their emotions with the other members of the classroom.

The messages analyzed, moreover, show that sometimes the students used the Facebook wall to also share some news about other courses that they were attending during the same period of time or to ask information regarding the exams:

“3D Modeling classes begin Nov. 4! Monday we can stay at home =)” (Stefano)

“For all those who must make the exam of Sound Processing on September 20, Professor suggests to go to his office at 14.30.” (Melissa)

There were also a couple of students who used the wall for non-academic activities/purposes, such as Fabrizio, who used it to ask other students to vote for his photographs for a competition on the Internet.

“Hello guys, I'm participating in a photo contest. If you like my photos can you please express a ‘like’ on this page? Thanks :)” (Fabrizio)

The content analysis applied also showed that the students used the Facebook wall to recoup a unity, as the class that did not exist in the real life. Also, this was really important for them: having a place where all the students, together, could speak to each other and become acquainted with the members of the remote class. The class-half, which did not have the professor present, in fact expressed several times the fear to be a series B class. This sense of inferiority was partially overcome through these tools. These preliminary results show a significant increase in students' communication outside the classroom and outside the regular working hours. Given that young people were already accessing Facebook for personal purposes, they were used to checking Facebook notifications and to contribute in this way to the debate outside of the lessons. Very often, they wrote a post or shared an article during the weekend or after dinner, while they were chatting with their friends or just checking their email. This new practice was really noteworthy because it extended regular class time, encouraged and favoured a continuous social cooperation and provided easy access to knowledge, allowing students to go over the offline lectures' experiences.

Finally, the main outcome of the informal, ongoing conversations with students made it clear that the students hated the distance learning while they loved the Facebook group and the GoogleDocs. So, this tool allowed the students to reflect about the effectiveness of the educational process and its technological supports. For example, Andrea said:

“The course is cool and interesting. It has only a limit: the distance learning, which makes difficult the interaction. It would be nice to be all together in the same classroom.”

The students still considered the technology used for distance learning ‘backward’, while they very much appreciated the SNS tools:

“This distance learning is still primitive at technological level.” (Ermanno)

And:

“A very negative element was the videoconference because from Udine it was really difficult to follow and participate to the lessons.” (Mario)

These are students who were used to having the teacher always physically present, until funding issues resulted in the University splitting this course into two classes, one being a distance learning class. These students perceived the shift to distance learning as an impoverishment of the quality of their educational process:

“Distance learning is a very limiting obstacle for the dynamics of this course.” (Paolo)

On the contrary, the Facebook group and GoogleDocs represented for these students an innovative opportunity to enhance their communication and organization capabilities outside the walls of the traditional classroom and to complement what the professor was suggesting during the lessons:

“I appreciated a lot the fact that all the students were required to prepare a presentation and to discuss with the others the presentation itself. But without Facebook it would have been difficult to organize a so high level of inter-activity.” (Elena)

The “post item” tool allowed group members to post links to any potentially interesting articles or websites or to share information about the lessons. Students appeared very satisfied with the adoption of Facebook for educational purposes. On the whole, they expressed the desire to replicate the experience with other courses and they showed a lot of enthusiasm about the opportunities to interact and contribute to the lessons in an active way. Only very few students expressed some doubts about the choice of Facebook as a platform to support educational activities. At the beginning, in fact, these few students declined to join Facebook because of some personal privacy issues; later on, however, in order to be able to participate in the group life, they spontaneously decided to open a fake account on the social network and in this way be able to contribute to the life of the group.

Conclusion and final remarks

The analysis of our case-study highlights the following important results. When used, familiar free platforms can have positive effects in education, transforming in this way the purposes for which they were originally designed. Facebook, Twitter, YouTube, Flickr and other social platforms based on the idea of sharing content might represent excellent resources for professors and students. They facilitate innovation and grassroots participation in the education process and they support especially interactive lessons. In fact, in order to cope with a high interactivity, our students needed technological support which allowed continuous organizational practice. We must consider that when students are required to play an active role inside the lesson, their organizational needs multiply. When the activity on the part of students limits itself to listening and to taking notes, the organizational needs are instead reduced to the minimum.

The important role played by the choice to adopt familiar tools such as Facebook and GoogleDocs instead of tools specifically developed for educational purposes, is something that is worth researching and discussing further. The digital generation spends a lot of time in these online spaces for online conversations and sharing content; so, nowadays it is possible to reflect on how to integrate and exploit the potential benefits of social media for educational purposes.

Positive results also emerged from students' online collaboration and sharing practices. Especially, students' communication, socialization and organization significantly benefited by the application of these kinds of tools (Facebook and GoogleDocs) inside the educational process. We observed, furthermore, that students were able to post anytime they needed, in the evening as well as during the weekends. This allowed them to overcome the traditional rigidity of the separation between education and life boundaries, as also Selwyn has observed in other circumstances (2009).

Finally, the triangulation of different modalities of teaching – co-presence, distance learning and online platforms – has allowed us to defend somehow the quality of the teaching/learning process, even in the presence of severe cut-backs in funding and also to enrich the traditional learning experiences and practices. Moreover, given that our course was “Theories and Techniques of the New Media”, this new experience undergone by the students has also represented a way to “touch” the interactive potential of new technologies and to more closely examine the opportunities offered by the new media.

As final remarks, we can say that the data suggests that the adoption of Facebook has been really appreciated by the students, but – as reported before – some perplexities were expressed about the fact that Facebook is a proprietary platform and aims to make a profit with the data of subscribers. Furthermore, the adoption of this kind of platform needs a strong presence of the tutor online in order to ensure a better informal learning experience, to guarantee a top down monitoring and to ensure a prompt response to students. This implies supplementary work for the professor and is an element that should be taken into account seriously. Finally, this kind of experience can be replicated only as a supplement to face-to-face classroom lessons; otherwise the potential benefits will never be achieved.

For the next year, we would like to design a more interactive learning experience. We are considering to also adopt the Twitter platform and to create a “hashtag” that students could use to take and share some notes during the lesson. In this way, students in Udine would feel more involved in the lesson and in the learning process.

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