

ONLINE SOCIAL NETWORKS AND COMPUTER SKILLS OF UNIVERSITY STUDENTS

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ABSTRACT

Currently a large number of college students belong to social networks and spend several hours a week on them. Some sectors of society, like parents and teachers, are concerned about the negative impact on their academic work and in their personal lives. However, because the potential positive impacts have not been explored enough, this research addresses the question: What are the characteristics of online social networks that could facilitate the development of college students skills? The research was qualitative and was conducted in a private institution of higher education. Twenty-one college students and thirteen college teachers participated. The results show that the characteristics of social networks that favor the development of ICT skills are primarily: 1) environment conducive to learning where students can learn by playing, racing, linking and imitating; 2) rich environment in technology tools, where there are primarily face tools, external tools executed outside the social network, internal tools, and external tools executed within the social network; 3) appropriate environment for the exchange of information, where communication can be: one to one, one to many, one to all contacts and one to all followers.

KEYWORDS

Online social networks, ICT skills, virtual ethnography.

1. INTRODUCTION

Information and communication technology (ICT) development has been enabling communication between people to become simpler and faster. Internet penetrations, emergence of new electronic devices, online social networks, and overall improvements in the area of computing have completely transformed the way we live and communicate. However, the complex environment of today's society requires the development of digital competences. These competences include the skill set that allows managing information effectively and properly utilizing ICT (Wallis, 2005).

For today's college students, developing computer skills is essential for their everyday interaction with the world; not only in education, but in any aspect of their lives. Oblinger and Oblinger (2005) explain that, for the *Net Generation*, technology is not new; they are not surprised by the advances in computer, Internet, and other online resources, because these already existed when they were born.

Online social networks are part of these available tools. While some studies have analyzed the possible negative impacts of the use of online social networks (Silkset, 2013), it can be assumed that using them will improve computer skills. Online social networks are information systems that allow interaction of millions of people distributed around the world (Kazienko & Musial, 2006). Facebook, Myspace, Twitter, LinkedIn are just popular examples of a broad universe of social networking tools that are available to the public through the Internet.

Facebook is the platform selected for the purposes of this study. This selection was made not only because of the overall number of users but for its implications in education. In the past many studies have shown the high participation of college students in the platform, usually around 90% are active members

(Hargittai, 2008, Smith & Caruso, 2010); studies also identify the same frequency of daily use by this population (Christofides, Muise, & Desmarais, 2009; Pempek, Yermolayeva, & Calvert, 2009). In addition, there is an emerging theoretical development in identifying applications of Facebook in learning environments (Mazman & Usluel, 2010; Barczyk & Duncan, 2013) that generally reflects the receptivity of students of the use of this technology in the classroom.

In order to take advantage of the online social networks it is important to identify the characteristics of online social networks that could facilitate the development of college students' digital skills. Given this situation, the question that this study addresses is: What are the characteristics of the environment in online social networks that could develop computer skills?

2. METHOD

This research is qualitative, and is divided into two separate studies which are not dependent on each other. According to Creswell (2008), one of the advantages of qualitative research is the ability to achieve a holistic understanding of the phenomenon under investigation. This is why it was decided to continue the naturalistic paradigm as it provides an overview of the experiences, values and beliefs of the participants. In this type of research theory emerges and develops from the data (Lincoln & Guba 1985).

The first study included thirteen teachers experienced in e-learning and use of Web 2.0 tools. We used the focus group and the formal interview as tools for data collection. Data analysis was performed with the method of constant comparison of Lincoln and Guba (1985). The second study included twenty-one university students. It consisted of a virtual ethnographic design, in which online participant observation was monitored, using Facebook and informal interviews, during a semester. To analyze the data obtained from this observation the Spradley (1980) methodology was followed. The method of constant comparison of Lincoln and Guba (1985) was used to analyze the information from the interviews.

3. RESULTS

Overall results show that online social networks have the potential to encourage the development of skills through its ludic environment, rich in technological tools and plenty of spaces that promote information exchange.

3.1 Favorable Learning Environment

The development of competences involves learning, and social networks provide a learning environment where students can play, imitate linking and even compete:

- *Learning by playing.* In this research, teachers and students considered that the relaxed and ludic environment of these tools is useful for developing skills for using new technologies. According to one participant (teacher): "People normally access a social network, such as Facebook, to socialize. In fact, participating in Facebook for entertainment causes changes in personal attitudes". Even if it seems like you are just playing, "you are actually acquiring some useful skills, in a natural way. Although it is entertainment, these skills will help you in the future".
- *Learning by imitating.* This environment fosters the exchange of information, encourages users to see what others are doing, and it creates a kind of imitative behavior. During research, for example, several practices were initiated and eventually were replaced by others. Although many of these "trends" are mere amusement, some of these help develop skills that can later be used in completely different areas. For example, the logic of *Notes* on Facebook is very similar to that of *Blogs*.
 - *Learning by linking.* In general college students not only learn by imitating, but they also learn by linking. Students enter online social networks for many reasons, but none of the students said that learning was one of them. However, a user can identify elements of amusement in his network, as well as recognize its utility in academic terms. An example of this is when certain functions of Facebook can be used in other computer systems in academic or professional areas.

- *Learning by competing.* In this environment, students can learn to compete. In fact, competing with the popularity of a friend or member of the network promotes interest in "making" improving their space (profile). Users like to experiment with new tools, using their creativity. According to one professor: "these tools are used as a kind of competition because an important part in these networks is the profile, and how sophisticated it is... that has helped people to focus more on certain computer competences".

3.2 ICT-rich Environment

Facebook users use different tools in their social practice. The large majority of the tools that they use are supplied by the same platform, but not all. During the observation, four types of tools were identified: presential tools, digital tools external to the network, tools provided by the same online social network and external tools executed inside the social network.

- *Presential tools.* This category includes diverse tools like digital cameras and mobile phones. These tools, although typically not observed in the interaction on the platform, are very important in the culture studied. These devices produce much of the information shared within the online social network, through photos and videos. Furthermore, some of these mobile phones also enable access to the platform immediately, through mobile technology. Therefore, users of online social networks share information asynchronously.
- *Digital tools external to the network.* These are tools very important because users use it for their content preparation or for finding interesting information. For example: photo and video editors to "prepare" the content; video sharing sites like *Youtube*, to share something funny; blogs or webs to share news.
- *Tools provided by the same online social network.* These include different types: wall, mailbox, chat, video calling, photos, video, links, events, birthday.
- *External applications executed within the social network.* External applications are developed by individuals or external companies, but are still valid for use in the social network environment. Many of these apps are games or recreational applications enabling users to play. These applications also generate the interaction network, and some of them allow simultaneous joint participation.

3.3 Information-exchange Favorable Environment

During research, four different types of communication and information sharing options were identified: a) one to one exchange, b) one-many exchange, c) one- all contacts exchange a-d) one- all followers exchange:

Exchange one to one.

- *Chat.* The function of chat is to exchange information with a user privately. However, group chats can be set up where multiple users can sign up and interact in a conversation at the same time. It works basically like any synchronous messaging tool, but is designed for the same social network platform.
- *Private Message.* This is the most direct and confidential way to, asynchronously, send information, or have a conversation with a user or group of users. Private message users can send information at any time of day, allowing users flexibility to answer.
- *Video call.* This is the most direct way of engaging in dialogue, and includes the voice and image. It streamlines the communication process and is more personal, since people can actually see each other. So far, it does not allow for multiple users from different computers to interact simultaneously in a video call.

Exchange of one to many

- *Groups.* These are spaces that can be open, private or even hidden, depending on the configuration. All Facebook users are entitled to create these social spaces, which are commonly created to work around a topic.
- *Events.* This is very similar to a group, unless the activity revolves around a particular event with organizer features, guests, date, place and time. This application allows you to create and communicate an event with detailed information about it.

Exchange of one to all your contacts

- Profile's page. Contains the latest news concerning people that are of interest to the user and that are part of their social network. In this space, for example, the user receives information requests from people who want to be part of your social network, invitations to events and groups, birthday reminders and even promotions.

Exchange one to all followers

- Pages. Facebook pages are usually used by a person or entity when the group activity revolves around him/it. Pages do not require registration, so anyone who gets the address can reach the page without invitation. However, the page has to be created by a Facebook user. Pages have virtually the same spaces and tools as a Group.

It is noteworthy that in addition to these internal applications of Facebook, there are several external applications: games, applications for music, apps to make surveys, and others. These tools involve various types of communication (one to one, one to many, one to all) depending on the nature of the particular application. To summarize, Figure 1 shows the characteristics of online social networks.

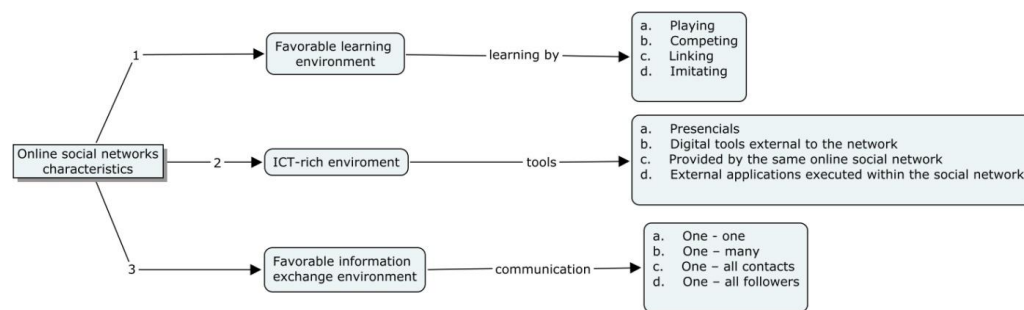


Figure 1. Environment properties of online social networks that favor the development of IT skills

4. CONCLUSION

Online social networks were not created for the development of competences. The business of online social networks does not seem to be in education but in socialization, as pointed out by McLaughlin and Davenport (2010). Users typically access these networks with the sole purpose of socializing, having fun, relaxing. Learning is not one of the most frequent reasons for accessing those sites. However, the process of socialization through these online social networks can encourage the development of computer skills.

Given the characteristics of these social networking platforms, using them can facilitate the development of certain competences that may be helpful professionally in a knowledge-based society. The results of this research demonstrate that the particular situation of online social networks (the structural features of the platform of online social networking, the nature of college students, the activities they perform in the platform, and the tools) enable the use and development of certain competences.

Participation in online social networks favors the development of skills in a relaxed atmosphere, with a largely playful approach which invites users to explore the many tools at their disposal. Online social networks are essentially spaces for moving data through multiple tools (Korzynski, 2013). These spaces of information transfer have the distinction that they concentrate a variety of tools in a single place, (Wattanasupachoke, 2011). These tools are often used separately: messaging tools, mailboxes, collaborative groups, forums, event management tools, calendars, contact directories, photograph management tools, video management tools, link management tools, Web pages and many more.

The combination of a playful environment and access to numerous tools for collaboration and interaction at different levels creates an ideal environment for students to explore, without pressure, many of the tools available. This stimulates college students to engage in activities that are usually perceived as boring or complicated. For example, many of the LMS (Learning Management Systems) used in universities as well as collaborative tools used in the workplace, have similar tools to those offered on online social networks.

However, it is important to note that not all college students use the same amount of tools while they are connected online. Thus, the development of skills does not occur to the same extent. In fact, it is important to point out that we are not saying that the use of online social networks will always have a positive impact on the development of skills. Like all tools, the outcome depends on how it is utilized.

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