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## Self and identity: raising undergraduate students' awareness on their digital footprints

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### Abstract

It is well known the important role that technologies have as mediators of identities. Taking as departing point the assumption that 'digital identity' refers to the aspect of digital technology that is concerned with the relation between people's experience of their own identity and the identity as shaped by others in the cyberspace, the main aim of this paper is to explore the implications that underlie in the perception of student's digital identity in a higher education context. As it focuses attention on critical questions about personal development and social relationships, knowing about the way in which identity is shaped will lead us to a better understanding of the nature of our students' social and cultural experiences. The paper aims at highlighting the need of SNS-related research which is still at an emerging point, at the time it tackles from an epistemological perspective issues such as identity construction, impression management, friendship, network structure and privacy awareness. Though any undergraduate students can be considered digitally competent, as they have become comfortable with the idea of authoring and posting content online, it is still relevant to make them aware of the responsibility they have at the same time that they receive proper guidance in the way in which they contribute voluntarily to the public or semi-public corners of the Web. Since digital identity poses attention on critical questions about personal development, social relationships and lifelong learning, the results of this research provide both quantitative and qualitative data which evidence how students shape and also perceive their identity.

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### 1. Social networks – the space of a new youth identity

The Internet is associated with some of the most diverse opportunities, from the access to educational and informational resources in various fields of activity, to civic and political engagement, the stimulation of one's creativity and communication skills, the promotion of artistic and economic environments, or the easy dissemination of information regarding various health-related or general interest issues. Children and youngsters were the most easily adaptable to the changes that have occurred following the impact of the technological development of the past few decades, as many of them grew up in family and school environments that were abundant in digital equipment (Palfrey & Gasser, 2008). For the „net generation”, the places of socialization have thus moved from the schoolyard

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or playground to social websites or personal blogs, which allow them, unlike face-to-face communication, to continuously model, transform and adapt their identities or personalities, as well as to experiment with different identities (Goldman, Booker & McDermott, 2008).

It is well-known that the virtual space offers individuals the freedom to choose who they want to be, how they want to be and whom they want to impress, without being constrained by the norms and behaviors that are desirable in the society to which they belong. Thus the Internet provides not only new social spaces, where identity can be renegotiated, but also new forms of social life, and spaces for learning and self-presentation (Costa & Torres, 2011). Therefore, for young people online identity becomes an opportunity to escape the constraints, norms and values of the society in which they live, by providing them with the opportunity to construct themselves as they have always wanted to be (Alvesson, Ashcraft & Thomas, 2008).

Specialized literature refers to this construction as digital identity (in some online contexts due to the advent of Web 2.0 technologies also called „identity 2.0”). It is about the aspect of digital technology that is concerned with the mediation of people's experience of their own identity and the identity of other people and things (Castañeda & Camacho, 2011), about „how we participate and interact in shared spaces”, which ‘persona’ we assume as part of our presence online (Costa & Torres, 2011).

Whether the personal information uploaded to the virtual space is real or not, studies have been conducted showing that „in the current networked society” (Costa & Torres, 2011) there is a balance between young people's tendency to promote an image of themselves that is as attractive as possible in the virtual environment (Goldman, Booker & McDermott, 2008) and the content of the experiences that they choose to share by means of social networks, the latter being an emotional approach of the negative components of their own experiences meant to impress or draw attention to themselves. Turkle (1999) argues that, in the case of young persons who experiment the most in the virtual environment from this point of view, their identity changes, becoming unstable and fragmented, and can be dismantled into pieces and built again, negotiated, recreated and indexed in a variety of new types of online interactions. Some are uncomfortable; others are relaxed, while others feel they can discover themselves. No matter what the perspective is, digital identity offers them a unique opportunity to present themselves as they really are, without being constrained by the social values that officially govern us.

Consequently, information disclosure practices, due to their visibility, become opportunities to learn social norms and social networks sites etiquette. The social status and the negotiation of relationships are made public and explicit, offering young people a context for learning from other members of the same generation by observing their adequate, socially acceptable behavior. Beyond the possibility of (re)constructing a new identity (ideal or desirable at a given moment) in the virtual environment, however, one cannot fail to ignore the risks faced by young people who overuse social networks (Fizesan, 2010).

The act of socializing in the virtual space implies a „fragmented presence” (Costa & Torres, 2011) – depending on one's choices – an online „logging” of one's personal life and, therefore, a disclosure of personal data in various degrees, according to the user's choice and the specificity of the virtual environments used. By means of online social networks, large quantities of personal data posted by young people are being circulated, which can potentially be used by ill-intentioned persons who will exploit vulnerabilities from this viewpoint (i.e. one can be denied future employment as a consequence of a photograph or video clip from a party). On the other hand, online practices such as grooming and stalking are favored by the fact that the new identity that young people build in the virtual space is not always based on fake identification information, as the predominant tendency is rather that of presenting real facts in this sense and „fabricating” only new personal traits, a personality that is different from the real one. Thus, in social networking platforms like Facebook or Twitter we're confronting with a digital identity scattered all over cyberspace, making really hard to manage a coherent one.

The virtual world allows one to adopt – freely or based on certain interests – various physical aspects such as age, gender, performances or appearance. This game, however, can end up undermining one's self by means of a multiplication that goes out of control. Moreover, even one's real self may become inconsistent, as it is only one of many identities experimented with temporarily. However, findings of Pew and Research Center (2007-2010) show that nearly half of the users are becoming more aware of their digital footprints.

To this respect Costa & Torres (2011) propose to analyze a digital identity from an „open or closed”, „single or multiple”, „genuine or fake” perspective, which cause a shift especially in online learning situations: whereas anonymity may help some students achieve a greater level of comfort; teachers must maintain an active identity with which students may interact.

## 2. Study methodology: setting, tools and method

The study was carried out during the academic session 2011/2012 in the Department of Pedagogy at the Universitat Rovira i Virgili, Spain. The research addressed 135 students of the Bachelor in Education degree. The results presented are based on data representing a diverse group of students whose age ranges between 18 and 45 years old. The sample is a convenience one (Gravetter & Forzano, 2009), with data not being representative for the entire student population, but it can be a starting point for future studies and discussions. However, in order to gather data we made use of the social network Facebook and a special tool designed for it called „The Museum of me”.

As it is known, originally designed for college students in the United States in 2004 as a social networking website, Facebook later expanded to different educational settings from other countries too, and then to the general public. Facebook allows each user to create a profile, complete with personal information such as home address, mobile phone number, interests, religious views, and even data like relationship status. In addition to creating individual profiles, Facebook users can also designate other users as friends, send private messages, join groups, post and /or tag pictures and leave comments on these pictures as well as on either a group or an individual’s wall. Members can also install and use third-party applications based on the Facebook platform, such as games, polls and quizzes or even create pages for different events. With an active users’ base of over 500 million, Facebook is the largest multilingual social networking site on the Internet, which can be accessed both on the web and through mobile devices. Perhaps the most important digital medium in recent history of the Internet, Facebook has a core segment of 18-24 year-old college students and this segment is now the fastest growing, at 74% year on year (Grosbeck, Bran & Taru, 2011).

„The Museum of me” is an application created by Intel, out of the social network Facebook, as a new system of content syndication, which gathers together words, pictures and „likes” into a virtual gallery, that simulates a museum, dedicated to the personality of each of us. The online application, destined as an example of what can be done dynamically from a rough data base, uses the latest available technologies. The user just has to authorize „The Museum of Me” to access his/her own Facebook page and in just a few seconds, the application will create a short movie of three minutes using the profile data. Not only the images, but also the background music transposes the user into a science-fiction world, giving the sensation of being in a cloud moving by its own will, without any possibility of control, no stop, forward, etc. buttons existing. All you can do is be guided through your friends’ list, the uploaded pictures, posted comments, likes, and even video clips. And so the user doesn’t feel „lonely” through this adventure, every now and then he/she meets people, men and women, who look at the digital footprints from the Facebook network. The exit from this museum is an apothecic one: the friends’ pictures are projected having as background the user’s profile picture, like planets, then stars shining in the universe, bound to each other, as if symbolizing once more that we are not alone, that we do have contact to any person on earth. The final result can be posted only on Facebook, it cannot be uploaded/integrated to a blog (or site) and is only in English.

As it was previously mentioned, the objective of this research is to explore the perception of students’ digital identity in a higher education context. Results were collected by three methods, as listed below:

- pre and post activity questionnaires;
- focus groups were held to follow on from each of the questionnaires;
- the students kept logbooks on their activities related to the perceptions towards identity management.

Each of these methods was designed to reveal:

- students’ perception of their own digital identity;
- students’ attitudes towards the use of social networking sites;
- student’s measures regarding privacy and data spreading.

The pre and post activity questionnaires were used to assess how close the exhibition meets students' perception of themselves, their feelings towards their digital footprints and their online identity management strategies. A mixed quantitative and qualitative methodology was used in order to gather both objective but also subjective data regarding awareness and self-consciousness. Thus, students were asked in a first phase to answer a survey regarding their habits in social networks which included questions on the information they share on the Net, as well as privacy management. The survey, which had been previously validated by experts also included questions regarding privacy issues and intended to deepen into the students perceptions considering the image they portray, both voluntarily and involuntarily through the contents they share and the information they convey.

A second phase of the research included the development of an activity by using the application „The Museum of Me”, intended to explore the student's attitudes and feelings after having seen how the application portrays a determinate image of them, which, evidently, would eventually differ from the real one. After having taken this second activity, students were asked via a second questionnaire about their feelings regarding the portrayed image and its similarities and differences with the real one. This second questionnaire also included questions intended to make students reflect on the fact that the information they manage and generate in social networking sites could provide wrong or non-exact information about them and after that, they were asked if, after having carried out the activity, they were more aware of these issues.

### 3. Results and discussions

Only students who had Facebook accounts were invited to participate in the research. Most of them have a reasonable number of contacts in this social network: 59% have more than 200 friends; 13% have between 101 and 200 friends; 7% have between 51 and 100 friends and 4% have between 21 and 50 friends. No participant has fewer than 20 contacts. Before accessing „The Museum of Me”, participants were asked to answer some questions related their level of awareness and/or preoccupation about the footprint they leave in social networks (see Table 1).

Table 1: Participants' answers to pre activity questionnaire

	Very much	Somewhat	Not really	Not at all
Do you know social networks privacy settings?	5%	53%	25%	0%
In case you know social privacy network settings, do you use them?	30%	40%	13%	1%
How much do your contacts in social networks influence you?	1%	26%	46%	4%
How much do you think you influence your contacts in social networks?	1%	22%	52%	8%
How much consideration do you give to uploading content to social networks or to the comments you make to other people content?	13%	47%	21%	3%
Are you worried about what people think about you in social networks?	6%	15%	40%	23%
Are you worried about the influence the content you upload to social networks may have on your professional life?	17%	34%	22%	11%
How does the self you present in social networks match your real self?	49%	23%	9%	3%

Results show most students believe they have a reasonable knowledge of privacy settings in social networks and most of them say they actually use them. They seem to be skeptical about the influence other participants may have on them or on the influence they have on other participants. 60% of them reported giving some level of consideration to the information they upload to social networks though; 63% said they are not really concerned about what other people may think of them, though 17% and 34% respectively of participants said they are very or somewhat worried about the influence the content they upload to social networks may have on your professional life. Approximately a half of the participants expressed some level of preoccupation about the impact the information they upload may have on their professional life and most of them interact in Facebook exposing what they believe to be an identity close to their real identity.

After visualizing the exhibition of themselves in Facebook, students were asked to value its correctness and how much it surprised them (see Table 2). 73% of the participants found the exhibition to be precise, that is, to fulfill their expectation of what an exhibition of their self should present. That is consistent with their answers in the pre

activity questionnaire, in which most students reported using privacy settings, giving some level of consideration to the content they upload and presenting an identity closely related to their real identity.

Table 2: Participants' answers to post activity questionnaire

	Very much	Somewhat	Not really	Not at all
How precise is the exhibition you have just seen?	25%	48%	7%	1%
How does the self presented in your exhibition match the self you want to present in Facebook?	27%	47%	5%	2%
Does your exhibition make you reconsider what you upload to social networks, the comments you make or the friends you accept?	7%	28%	29%	17%

Such consistency suggesting a high level of awareness of the relationship between the content they upload and their digital presence was justified by some participants in the following way when they were asked why they considered the exhibition to be precise:

- *[Because I'm aware of the stuff I upload and share.]*
- *[Because I liked it very much and I think the pictures and the stuff I upload present me the way I am. That is, up to now I've been very careful about everything I publish and the friends I accept and after seeing the video I think it gives a very right perspective on who I am and this is the one I want to share. So I think I should not change regarding the use I make of Facebook, I just have to keep using it the way I have been doing it.]*
- *[I have a private wall, only my friends can see my posts, so I'm very calm about it.]*

The participants in this research express a high level of satisfaction about the match between the identity they mean to expose publically in Facebook and the overall image offered by their digital footprint in the social network of the moment through the application „The Museum of Me“. Only 7% of them think what they have seen in their personal exhibition makes them reconsider very much what they upload to Facebook. It explains the apparent contradiction between most of the participants saying they do not worry about what people think of them, but still being worried about the impact their digital activity may have on their professional life. In fact, most participants in this research do not worry about what other people may see or think about them because they take measures to control their activity and what is visible of it to other people. That is clear in opinions of different participants, in line with the following participant's evaluation of his exhibition:

- *[I think the exhibition looks like me because there is little personal information, that the way I mean it to be. I do not want the use of social networks to me a constant exhibition of my personal life, but a way to communicate which is useful and comfortable.]*

Finally, it is interesting to notice that, though participants feel the need to protect their personal life and show some level of concern about the influence their digital footprint may have on their professional life, many participants expressed the desire to „be themselves“ online, showing who they really are, specially most positive traits of their lively and youthful personality:

- *[It (my exhibition) shows a curious enjoyable person who wants to have a good time with people she loves and with people who are close to her.]*

#### 4. Preliminary conclusions

The objective of the present research was to explore the perception of students' digital identity in a higher education context. As mediators of identities in new sites of interaction, technologies play an important role in the development of social relations. The interaction in social networks requires people to make decisions that shape the

way they present themselves to other users of digital environments. This process of identity construction can be done in different levels of awareness. The participants who have taken part in the present research have shown a high level of awareness of the processes of identity construction in a digital site of interaction. Most students reported using privacy settings, giving some level of consideration to the content they upload and presenting an identity closely related to their real identity. It is suggested most participants in this research do not worry about what other people may see or think about them because they take measures to control their activity and what is visible of it to other people. Though participants feel the need to protect their personal life and show some level of concern about the influence their digital footprint may have on their professional life, many participants expressed the desire to „be themselves” online, showing who they really are, specially most positive traits of their lively and youthful personality.

It is worth mentioning that, however most students feel they take measures to protect their personal life and control who they accept as friends in Facebook, the majority of the participants in this study have more than 200 friends. It is obvious the definition of a friend in real life is different of a Facebook contact, but still, most students expressed the perception they do not accept any person as a friend. They feel they are reasonably selective of the people who see their content online. Though the explanation to this phenomenon clearly exceeds the aims of this present research, we may theorize people familiar with social networks keep a greater number of flexible bonds with the people they meet than those who are not social network users. Social network users are able to keep some sort of contact with high school friends after they finish their basic studies, to keep contact with former work colleagues or with people they had a friendly but superficial contact, for example. Apparently, students need to protect their personal life does not exclude these types of personal contacts.

However, the authors suggest that further research is necessary to clarify the aspects discussed in this paper.

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