Personal profiles

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Personal Profiles: Enhancing Social Interaction in Learning Networks

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Abstract. Nowadays, we witness a surge of online profiling sites; in them people make their profile available to others with the intention to share it and get in touch with others, find old friends, classmates or colleagues, or look for new opportunities. Given their capacity to encourage members to be connected with other members and their growing popularity, we hold that some lessons can be learned from such profiling sites. In this paper's initial exploration, we analyze some of the most popular profiling sites to spot indications on profile composition and the affordances they use to encourage people to interact and to establish connections with other members. Based on this we discuss the importance of personal profiles depicting the characteristics and support mechanisms needed to enhance social interaction in Learning Networks. We also present results of a pilot survey of actual use and perception of user profile sites, and comment on the current views and findings about this topic in the Web-Based Communities Conference of 2008.

Keywords: learning networks; personal profiles; social interaction; profile composition; social network sites; Facebook; Myspace; LinkedIn; Web 2.0; WBC2008.

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1. Introduction

The notion of Learning Networks (LN) is about the provision of support for online, non-formal learning. These self-organized networks consist of participants and learning actions related to a certain domain (Koper & Sloep, 2002). Participants take part as learners, teachers, peer-tutors or, collectively, as institutions; and depending on the circumstances, they can have various roles. Learning actions can be any type of learning resource or events (e.g., courses, websites, blogs, etc.) that might help learners to acquire competences. In Learning Networks the learner has to take an active role, setting up her competence development plans, looking and searching for relevant resources, and finding experts and peers that can support them, but also providing resources, answers, and advices to others. Social interaction, therefore, is a key factor to turn these networks into (collections of) communities that emerge from the interaction of the participants, and evolve over time (Sloep, 2008). To find out how this interaction can be fostered is our foremost topic of research. Our main assumption is that increasing the Learning Network sociability is crucial to enhance the knowledge sharing process and, ultimately, to help members to achieve their learning goals.

In this paper we concentrate on exploring the importance of personal profiles as a means of stimulating active participation in Learning Networks. We start introducing related work regarding people's motivation to contribute in online communities. Next, we analyze some popular profile sites, namely Facebook (www.facebook.com), Myspace (myspace.com) and LinkedIn (www.linkedin.com), to spot indications on profile composition and on the affordances they use to encourage people to interact and establish connections with other members. Thereafter, we discuss lessons learned from these sites –particularly in the context of Learning Networks–, we present results of a first exploration of actual use and perception of user profile sites, and comment on the current

views and findings about this topic in the Web-Based Communities Conference of 2008 (WBC2008). Finally, we lay out opportunities for future work on fostering the emergence of communities in Learning Networks.

2. Participation in online communities

Communities can be defined as groups of people with a specific or joint goal. Most of the online communities are related to people's interests and hobbies, or are related to work. Several theories can be found in literature that explain people's behaviour and motivation to participate and contribute in online communities. For example, the social exchange theory (Thibaut & Kelly, 1959) and the reciprocal altruism theory (Trivers, 1971) state that people will invest only when they can expect something in return. Erickson and Kellogg (2000) as well as Millen and Patterson (2002) argue that visualising people and their actions in a network can enhance members' contribution and participation, in particular when the benefits of these actions are made visible. Ling *et al.* (2005) found an increase in contribution in Movielens —a web-based movie recommender site—when the site would indicate to the members how unique they and their contributions were; whereas Lui *et al.* (2002) refer to intrinsic and external motivational factors, or personal and interpersonal factors.

Using similar lines of argument, we thus have argued before (Berlanga *et al.*, 2008; Kester *et al.*, 2006) that effective learning communities depend on social space, characteristics of the members, and characteristics of the community. Affective relationships, strong group cohesiveness, trust, belonging, and satisfaction characterise social space, the emergence of which can be enhanced through social interaction. For social interaction, in particular knowledge sharing, to occur we have identified three conditions: the boundary condition, the heterogeneity condition, and the accountability condition.

The boundary condition means that the community should have clearly defined goals and rules about allowable behaviours of its members. According to the heterogeneity condition, communities should be populated with participants who differ from each other with respect to at least three characteristics: experience with communities ("newbies" *vs.* veterans), being prepared to set a trend (connectors, mavens, salesmen) (Nichani, 2001), and inclination to participate (posters *vs.* "lurkers"). Concerning the accountability condition, three characteristics should be present regarding community members: 1) their identification and performance should be recognisable, 2) their past actions and behaviour should be accessible to others members of the community, and 3) they have to be able to meet again in the near future. We call these characteristics, respectively, recognisability, history, and continuity of the contact (Sloep *et al.*, 2007).

It turns out that the majority of these characteristics are already present in non-educational online communities (Berlanga *et al.*, 2007). Social network systems, considered as an essential part of the Web 2.0 (O'Reilly, 2005), such as profile sites (e.g., MySpace, LinkedIn, Facebook), resources sharing sites (e.g., Flickr, del.icio.us, YouTube), or Q&A sites (e.g., answers.yahoo.com, www.answerbag.com), use policies to enforce what we call the accountability condition. These communities are self-organized communities without hierarchies, whose participants share the common goal of knowledge sharing, much like in a Learning Network.

All these non-educational online communities have in common that each participant has a profile. With it, participants share with others their interests, background, motivations, friends, and so on. Profiles also enforce the continuity of commitment by letting members create links to others and comment on each other's profile. They are, therefore, indispensible for fostering interaction between community members. In the

next section we explore three popular profile sites to determine what kind of information is made available through their member's profiles and how they motivate registration and stimulate contribution. Ultimately, we aim to arrive at an understanding of how profiling data may be used to promote sociability amongst participants of Learning Networks.

3. Online profile sites

Online profile sites allow people to look for, contact or share information with past or new contacts (e.g., friends, classmates, colleagues, etc.). They do so by allowing people to add their profile to the site. Some sites serve a rather specific aim, e.g. dating sites, networking sites, file sharing sites; others have a general social function. But, no matter what their aim is, all these sites have in common that the services they offer evolve around the members' profiles. The metaphor of these sites is to construct an online individual profile, which then can be linked to other individual profiles.

As mentioned earlier, we have analyzed three popular profile sites: Facebook, Myspace and LinkedIn, to determine what kind of information is made available in their members' profiles and how they motivate registration and stimulate contribution. They all aim at maintaining and organizing relations; whereas Facebook and Myspace target friends and contacts, LinkedIn targets professionals.

These sites all aim to have as many registered people as possible. Therefore, registration is free but required to get access to other people's profile and personal information, although all sites offer public access to (parts of) the profile. They differ in how they entice people to register and vary in the way they indicate the benefits of registration. At most sites the need for registration becomes obvious when trying to access certain areas of the site.

The homepages of LinkedIn and Facebook invite people to join the network while offering a basic search facility for non-registered people. Myspace has an extensive homepage offering a lot of functionality, which hides the benefits of registration; they become clear when accessing certain areas of the site. The areas that only are available to registered users fade out and a message is overlaid stating that this area is available for members only; clearly, describing the benefits for registered members provides a point of entry to the registration process on the spot.

The three sites provide extensive information about the benefits of the membership and importance of the profile; they assist in compiling the profile, often already in the registration process. There is quite some variation in the data requested during the registration process. Facebook seems to have the shortest registration profile, consisting of full name, indication whether you are at school, company, high school or none of the above, email address, password and birthday. The other sites use a more extensive registration profile, distinguishing at least first name and surname, address, country, interests, school, company. Table 1 lists the fields used during the registration process on each one of the sites ("R" means required, whereas "O" means optional). Due to space constraints the table only shows those fields that are present in more than two sites.

It turns out that during registration only part of the profile is being completed. After registration, all sites offer the option to update and change the profile. The profile then proves to be far more extensive, containing additional areas and fields to complete. The sites distinguish public profiles and profiles available to registered users or "friends" only, although sites differ in the level of detail and not all fields can be hidden. Figure 1 shows the fields these profiles contain. The fields are grouped in categories, and their position and shapes indicate their similarity. For instance, the category "basics" of

Facebook, is more or less the same as the "basic data" category of Myspace. Therefore, in Figure 1 the same type of shape is used for these categories.

Table 1   Fields used during the registration process

	LinkedIn	Facebook	Myspace
Personal data			
Email	R	R	R
Password	R	R	R
First name	R		R
Surname/Last name	R	R (full name)	R
Day of birth		R	R
Zip code/postal code	R	O (city)	R
Country	R	O	R

Figure 1 shows, as was to be expected, many similarities in the profile composition of these sites. Of course basic information is common, but also information as interests and "information about me" are present in all three cases.

Besides the similarities between the fields, it is interesting to notice the importance of the school and work background. All three profiles contain this information. Even though Facebook and Myspace are oriented to friends, they also include work information. Obviously, such information is essential to establish users' network and to recommend possible contacts/friends.

Once a person has become a contact, a member of the community, new interaction options become available to her. Examples are invitations to answer questions or to participate in discussions; the possibility of sending notifications to invite someone to join your network—see Taylor (2006) for an example in LinkedIn—, or searching for people one may know using tools like the "Friend Finder" tool of Facebook.

Indeed, the affordances these sites use to encourage people to interact and establish connections with other members are, also, very similar. Mainly they consist of providing mechanisms to find people the user might already know in the outside world. They all provide, for instance, matching tools that use the email address books of the user to identify the people the she knows and search for them in the site. If the match is successful, then the site suggests inviting that person to the user's network. LinkedIn also uses the user's profile information —such as companies the user has been working on or the schools the user has been enrolled into— to advice the user of other registered users with the same characteristics, so the user can find possible connections (e.g., former colleagues or classmates).

Other mechanisms these sites use consist of keeping users informed about the new connections their contacts establish. By showing this information, users are aware of new contacts that they might also know. Moreover, these profile sites show the user's network by displaying the user's contacts (or friends), as well as the mutual connections between that particular user and the user that is visiting the profile. So, members themselves can look into these contacts and explore the contacts of their contacts to find mutual connections.

Facebook

Basics
sex, birthday, hometown, political views, religious view

Contact
email, IM screen name, mobile phone, land phone, addresss, city/town, zip, website

Relationships
status, former name, interesed in (man/woman), looking for (frienship, dating...)

Personal
activities, interest, favorite music, TV shows, movies, books, quotes, about me

Education

Work

Myspace

Basic data
sex m/v, birthday, occupation, city, country, province, ethnic background, physique, lenght
I'm here for: dating, serious relationships, friends, networking

Name
username/chatname, display name, first name, surname

Background and life style
marital status, sexual preference, hometown, religion, smoker, drinks, children (wishes), education level, salary

Interest and personality
title, info about me, whom to meet, interests, music, movies, TV, heroes

Schools

Companies

Networks

LinkedIn

Name and Location

Contact settings
types of messages, oportunities, preferences

Professional summary
profesional headline, industry of expertise, professional experience and goals, specialities

Additional information
web sites, interests, groups and associations, honors and awards

Education

Experience (positions in companies)
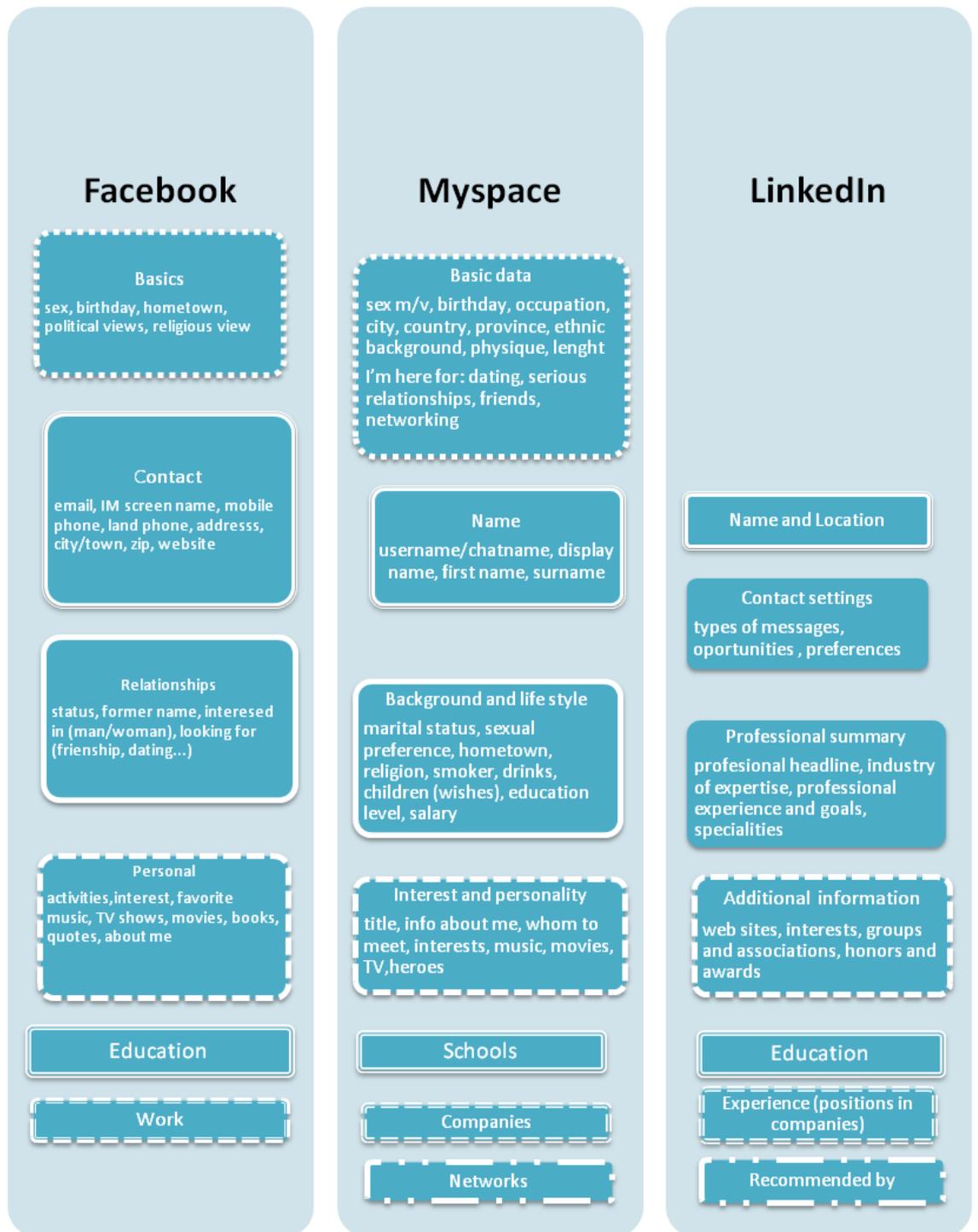
Recommended by

Figure 1 Information contained in the various online profiles

Finally, the sites clearly consider it important that users create a suitable profile and keep it updated and recognize the value of supporting them in the creation process. All sites send out notifications via email about changes to the site, new registrations that may be relevant, or possible new contacts. These notifications usually explain the benefit of the new additions or provide hint and tips explaining why expanding the profile is of benefit to the user and to others. LinkedIn, for example, provides extensive support and guidance to ensure that people use the profile to the maximum benefit. The site visualizes to which extent the profile is completed and provides clear hints and tips on how best to add to the profile (see Figure 2).
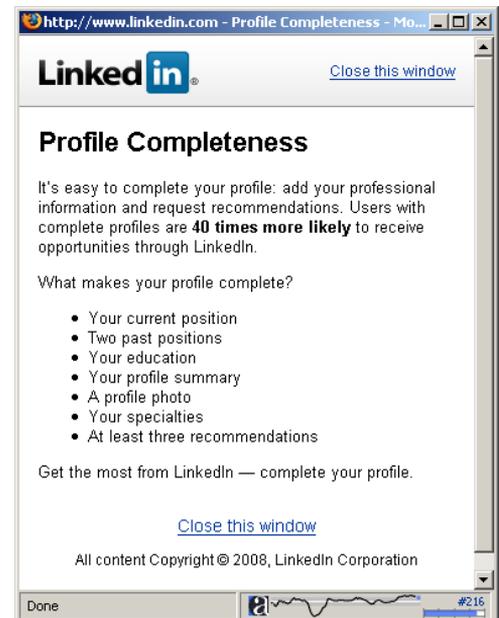

Figure 2 LinkedIn advice to complete the user's profile

4. Personal profiles in Learning Networks

For various reasons, learning in a Learning Network is a social activity. It takes place in interaction with peers, both people and resources distributed across cyberspace. Contrary to cohort-based classroom teaching neither the study route nor the learner's peers are known before. As mentioned before, the learner herself has to find her way in the learning community to achieve her learning goals. Indeed, the Learning Network should make provisions to enhance social interactions, thus enabling a learner's own learning process and affording help for other community members by sharing her expertise. In accordance with this, our research focus has been on finding out the crucial factors that trigger social interaction for effective community development in Learning Networks. It is important to stress that, as Bouman *et al.* (2007) claim, functionality *per se* does not imply socialization. The secret is to find out what are the mechanisms that trigger social interactions. In this paper we have focused on what is commonly used to profile oneself in well-known online profile sites.

Andrews (2000), Berlanga *et al.* (2008), Kester *et al*. (2007), and Preece (2000) emphasize that engagement and active participation in communities does not emerge

automatically; personal profiling presumably is an important driver for commitment to a community, which can be deduced from the immediate requests issued by social networking sites to register, become a member, and acquire additional facilities to acquaint oneself with others and become active member of the community. The user profiles of the online sites that we analyzed all offer presentation options to profile oneself, using basic identifiers such as name, age, city, etc. Next, they give registered users additional options to enrich both their way of expressing and positioning themselves by presenting more personal background information and contact preferences. The existing options for presenting oneself to the other community members (e.g., via invitation, friend of a friend, email searchers, friend finder, etc.) present a crucial pre-condition for the emergence of interactions with others. As they give the member an identity and makes her both recognizable to and accountable for contributions to the dialogues in the community.

The exploration of the characteristics of successful online profiles presented in this paper, confirms what we argued before (Brouns *et al.*, 2007), i.e. that people should right from the start be able to present their identity both to present themselves and to get in touch and interact with other participants. Moreover, as it is clearly of importance to ensure that participants create a suitable profile, the site should support them in the creation process. Later on, mechanisms or tools that help users to find new connections are also essential. They provide the means to easily connect to other people, so they foster participation in and registration for these sites because users know they will benefit from it. Support for building social relations requires however that one feels comfortable to get engaged. This implies that profiling also enables understanding of the participant's context (Brouns *et al.*, 2007; Daniel *et al.*, 2003; Preece, 2000), gives security to build up trust between peers, and provides safety within the conventions and boundaries of the community.

For Learning Networks, the process of creating a personal profile could be supported providing a template that contains those required fields that are imperative, such as first name, surname, email, but also background information about reasons for participating in the network, preferences, interest, competences to be developed, favourite resources and people.

It has been also argued before (Brouns *et al.*, 2007) that the pEXPi (abbreviation for *personal expertise inventory or personal identity and expertise profile*) can be used as such template. It has been tested in several learning communities, e.g. several virtual company environments (Westera & Sloep, 1998), in which students have to collaborate to create authentic products. Examples include OTO, a virtual software company for Computer Science students and European Virtual Seminar (EVS), as well as a community of international students in environmental sciences that collaboratively work on European sustainability issues (Schoonenboom *et al.*, 2004). A survey (N=34) on the experiences with pEXPi and dialogue structure in the EVS reported that students and tutors indicated that using the pEXPi at the start of the project explicitly helped them getting to know each other. In particular, they agree that the exchange of personal information facilitates to develop a sense of belonging and to create the community (Ogg *et al.*, 2004).

The pEXPi template contains similar areas (see Figure 3) as seen in the profiling sites. Position, knowledge and expertise are also found in LinkedIn, Myspace and Facebook. Interests and hobbies are important in Facebook and Myspace, while LinkedIn provides more attention to work-related interests and expertise. In contrast to the profiling sites that contain many fields for a user to complete around these themes/subjects, the pEXPi only distinguishes the main categories and allows users to enter in free text their description. This, however, could be problematic if mechanisms to find people, such as

those the profiling sites include, are implemented in Learning Networks, since these mechanisms are more powerful in finding and matching people's information if fed with structured data.

Additional data contained in the pEXPi are contextualised categories, i.e. those data relevant to the particular purpose of the learning community: indication of availability and the mindmap of expertise. While the profiling sites ask the users to give a general description, the pEXPi is intended for the particular situation in the learning community, so should only contain contextualised, relevant data.

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pEXPi

Personal data
First name:
Surname:

Position within OTO
(Briefly describe your objectives and which tasks you have within the team)

Availability for OTO
(Which hours (date/time) are you available for OTO; at which moments are you active in eRoom?)

Mindmap
(Make a Mindmap. This serves a twofold objective: make a mindmap indicating your expertise; you practise mindmapping technique. Place here a reference to the location of your mindmap.)

Knowledge and expertise domains
(Indicate your areas of expertise (programming languages, methods, techniques, skills, competences, etc.). And describe how other can contact you for your expertise.)

Work-related interest
(Indicate your interests. Also those for which you have no to limit experiences, but you like to expand.)

Study and work-related experiences
(Briefly describe your study and work history.)

Other interest and hobbies
(Provide other interests and hobbies that are not related to your job)

My relevant links
(Links to website you consider important for learning and working within OTO)

Figure 3 Original pEXPi template intended for the OTO virtual software company

One issue that has not been explored yet for the pEXPi is the support learners might need to complete the profile. As has been identified in the online site profiles analyzed, this support seems to be important. Therefore, for Learning Networks, during the registration process learners should be provided with sufficient information that explains the objective of the various fields and the importance of filling in relevant data. The optimal operation of learner support services –that, for example, assist them in finding peers and experts, resources, or get recommendations– rely on accurate data.

Privacy is also important; the analyzed sites allow people to decide what personal data is shown to others. Motivating people to provide as much information and more importantly the relevant data in their profile, is equally necessary. Furthermore, to motivate learners to complete their profile, visualization of peers' profiles could be restricted until the learner completes their own profile. Finally, another important aspect is to keep learners informed when the personal profile of someone they know, has changed. This visualises the actions of the learner and enhances her recognisability.

4.1 First exploratory survey

In the previous sections we have argued the likelihood that user profiling will be useful in Learning Networks. After our initial studies, it became clear that research was needed to explore the actual use and user perception of user profiling and, particularly, for Learning Networks.

To this end we designed a survey to investigate whether social network sites[1] are as popular as the literature claims they are, and to see which of their functionalities people value the most. The survey contains 67 questions, covering aspects such as: characteristics of the respondent (age, education, computer skills, weekly time spending on Internet); social network sites the respondent has ever visited, is member of, and actively participates in; respondent's perception of the benefits and drawbacks of social network sites; respondent's perception of the characteristics, usage and functionality of the three most visited social network sites; respondent's perception of social network sites functionalities as, for instance, profiling affordances. In the latter, the aim is to explore people's perception regarding what information in a member's profile is considered important to get to know others and to present oneself to others. The survey makes a distinction between the information to present oneself/others and get acquainted with you/them in order to find possible differences. This section, therefore, includes the following questions:

    A. What do you consider to be the most important information in members' profiles to present themselves to others in the social network site?

    B. What information of members' profiles is the most important if you want to get acquainted (e.g. to know someone/be familiar with) with them?

    C. What information of your profile is the most important to present yourself to the other members of the social network site?

    D. What information of your profile is the most important if other members want to get acquainted with you?

The available options to answer these questions are (respondents can indicate as many as they like):

1. Occupation
2. Interest
3. City
4. Number of contacts/friends
5. Real name
6. Hometown
7. School / University graduated from
8. Employer
9. Social network sites or communities participating in
10. Expertise
11. The intentions they /I have for participating in the social network site
12. Other

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[1] In the survey, the term "social network site" is defined as web-based service that allows individuals to (1) construct a profile within a bounded system, (2) have a list of contacts / network / friends to whom they share a connection, and (3) view and navigate through their connections and those made by others within the system (boyd & Ellison, 2007).

To validate the survey, we conducted a pilot with our colleagues of the Centre for Learning Sciences and Technologies (www.celstec.org). The survey, which was implemented in Limesurvey (snssurvey.learningnetworks.org), was taken anonymously; 47 people answer it. Of these 47 responses, 5 records were discarded because none of the questions was answered. It is out of the scope of this paper to explain the analysis of data for the whole survey, we will concentrate on describe the findings for the user profile section only. For this paper it suffices to mention that the average age of the respondents was 42.25 (st.dev 11.17). The majority of them, 93%, visited at least one social network site, and 72% registered to one or more social network sites –although 12% never revisited the site–. As registered users, the three social network sites they use the most are:

1. LinkedIn: 33,3%
2. Hyves: 15,2%
3. Facebook: 12,1%

Table 2 presents the results of the survey's profile composition section. Questions are presented in columns and options in rows. Only 34 respondents completed any of the four profile questions. For each question, therefore, each cell shows the perceived importance of the option (in percentage of 34 questions). As not all the 34 records contained values, the table also indicates how many people completed each of the questions. Occupation, interests and expertise are considered the most important, whereas the number of contacts, hometown, and the social network sites (or communities) the person is participating in are not considered important. Two respondents indicated, in the "other" option, that the information will depend on the purpose of the community, whereas other respondent indicated in the four questions that marital status, children, and age are important.

Based on Table 2, Table 3 presents the ranking of the options for each one of the questions. Besides occupation, interests and expertise, real name, school, employer and city are ranked in the top five positions.

Moreover, no real differences between the rankings; no real differences between the information perceived important in the other member's profile and in one's profile are reported, nor differences between to present oneself and get acquainted information. For instance, real name is ranked 2nd in the third question, 3rd in the first question, and 4th in the second and third questions.

It is relevant to point out that information regarding the participation of oneself and others in the network is not considered important. Options as intentions for participating in the social network site, social network sites participating in, and number of contacts are not considered important to present oneself or get to know others. From the community perspective it could be assumed that this information might be relevant to show the behaviour of the participant in the network and, therefore, know her. The results, however, do not confirm this assumption.

In the context of Learning Networks, these results give a first idea of the information people consider important and, as such, it should be included in the participant's profile. It is interesting to point out, nevertheless, that some information that is not ranked high might be needed, from the network perspective, to support participants. For instance, the hometown data is not considered important by the respondents, but to automatically recommend contacts this information is relevant to search for people coming from the same hometown and recommend possible contacts.

Table 2 Results of the survey's profile composition section

| | Member's profile | | Your profile | |
Option	(A) To present themselves	(B) To get acquainted with them	(C) To present yourself	(D) Others to get acquainted with you
1. Occupation	64.7%	55.9%	55.9%	50.0%
2. Interest	64.7%	64.7%	55.9%	61.8%
3. City	29.4%	29.4%	17.6%	20.6%
4. Number of contacts/friends	8.8%	2.9%	2.9%	0%
5. Real name	38.2%	41.2%	38.2%	32.4%
6. Hometown	11.8%	8.8%	5.9%	5.9%
7. School / University graduated from	32.4%	32.4%	35.3%	23.5%
8. Employer	29.4%	23.5%	23.5%	32.4%
9. Social network sites or communities participating in	17.6%	8.8%	14.7%	11.8%
10. Expertise	61.8%	47.1%	55.9%	47.1%
11. The intentions they/I have for participating in the social network site	26.5%	26.5%	14.7%	14.7%
12. Other	8.8%	5.9%	11.8%	11.8%
Missing records	1	0	2	3
Total number of responses	33	34	32	31

Table 3 Ranking of the options according to the survey's profile composition section

| | Member's profile | | Your profile | |
Ranking	(A) To present themselves	(B) To get acquainted with them	(C) To present yourself	(D) Others to get acquainted with you
1	Occupation; Interest	Interest	Occupation; Interest; Expertise	Interest
2	Expertise	Occupation	Real Name	Occupation
3	Real name	Expertise	School/University	Expertise;
4	School/University	Real name	Employer	Real name; Employer
5	Employer; City	School/University	City	School/University
6	Intentions to participate	City	Social networks participating in; Intentions to participate	City
7	Social networks participating in	Intentions to participate	Hometown	Intentions to participate
8	Hometown	Employer	Number contacts/friends	Social networks participating in
9	Number contacts/friends	Social network participating Hometown		Hometown
10		Number friends/contacts		Number friends/contacts

These findings must be seen against the background of the survey target group. All are employed of a research centre for Technology Enhance Learning, and therefore very acquainted with (research into) learning technologies, innovation of education. Most will have a professional interest in the social networking sites. It could be the case, however, that people who visit social networking sites for personal reasons, or even students attending a learning network might rank hometown, number of contacts or visited social networking sites higher.

4.2 Following WBC2008: Current perceptions and findings

From some of the papers and keynotes of the Web-Based Communities Conference of 2008 (WBC2008) it is evident that there is a trend to explore the benefits and pitfalls of Web 2.0. Leitner and Grechenig (2008), for instance, present a snapshot of the social networking sphere with the aim of identifying current trends, functionalities and revenue models. The authors conclude, after analyzing 100 social network sites, that 70% of them have customizable user profiles, user images, user rankings, user ratings, friend lists and groups. These findings show that customization of profiles in social network sites plays a main role and, therefore, this issue might be considered as well in the context of Learning Networks.

Privacy in social network sites is also a matter of concern. Griffith, Liyanage and Hansen (2008) analyzed Facebook and Myspace to evaluate privacy and trust issues. The authors reveal that profiling also serves marketing purposes: Facebook shows in the user's profile advertisements related to the profile information and installed applications. Furthermore, as everyone can join these sites without previous check of the identity of the newcomer, there are serious problems regarding false and misleading profiles and information that can cause confusion and personal discredit. These aspects point out, on the one hand, that some of the information of the online profile sites might be required for advertisement reasons rather than for social ones, and, on the other hand, that to guarantee trust between participants in a Learning Network, newcomers identity should be verifiable.

In his keynote, "sounds from utopia: critical issues of the Web 2.0 perspective for web-based communities", Professor Jan van Dijk stressed shortcomings of Web 2.0 applications and, as a consequence, urges the reaction to be prudent when analyzing lessons to be learnt from these applications. He argues, for instance, against the generalized belief that these applications are managed by the users. Van Dijk, following Hindman (2007), stresses that the main investments in Web 2.0 come from traditional players like Google, Yahoo and the alike. This remark points out, again, the information contained in the profiles might be there because of marketing/advertising purposes, as argued before by Griffith et al. It also suggests that (at least some) of the social network sites thrive due to income generated from advertisements and the publicity they get –or pay themselves– in other media.

Van Dijk also argues against the extended idea that everyone participates and contributes to Web 2.0 applications. He claims that in these applications, downloading and sharing are at least three times more popular than creating, uploading and contributing. Van Dijk also stresses that Web 2.0 sites are much more used by highly educated and young people; they are an 'elite phenomenon' with the exception of entertainment sites. In the context of Learning Networks, this remark highlights the fact that a social network sites are not designed for learning and that solely a profile will not guarantee social interaction in and contribution to a Learning Network, one has to bear in mind that learners might not be highly educated and, certainly, they will not be young people. This also brings up the digital skills people will need to interact in Learning Networks. In this respect Van Deursen and Van Dijk (2008) hold that operational skills,

to operate digital media, and formal skills, to handle the special structures of digital media such as menus and hyperlinks, are a necessary but not sufficient condition for searching, selecting and evaluating information (the so called information skills), nor for employing the information contained in digital media as means to reach a particular personal or professional goal. For Learning Networks, this means that content should be available to develop information skills competences, if not as part of the courses in the domain of the Learning Network, then as part of the learning instruction.

5. Conclusions and future work

In this paper we claim that, in the context of Learning Networks, personal profiles are important to enhance social interaction and foster participant contributions. In order to identify the information personal profiles should contain and in order to find out how to motivate registration and to stimulate contribution, we analyzed three popular profile sites, namely Facebook, Myspace and LinkedIn. Our central claim is that some clues for designing applications and tools from a social, user-centred perspective can be derived from these sites.

Moreover, in this paper we presented results of a survey that explored people's perception regarding the information they consider important to get acquainted with members of a social network site as well as to present themselves to others in such a network. Results showed that occupation, interest and expertise are considered important. Also, real name, school, employer and city are ranked in the top five positions. But the number of contacts, hometown, and the social network sites (or communities) the person is participating in, are not perceived as important.

Future work includes applying the survey to a larger population of lifelong learners, such as the OUNL learners, to explore their perception on the importance of personal profile and the information it should contain. Results will be evaluated and compared with those presented in this paper. Later –taking as a base the pEXPi template–, a set of fields that the profile should contain and the functionalities it should have, will be proposed and evaluated. After all, here we only have established the likelihood that user profiling will be useful in the context of Learning Networks. Still, further research is needed to provide evidence for the validity of the assumptions described in this paper about both the functions and the effects of user profile characteristics on social and learning interactions. In particular, it has to show that user profiling facilitates the emergence of communities within the larger Learning Network; communities which subsequently contribute to the overall goals of Learning Networks-based learning.

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