Social networking as a university teaching tool: what are the benefits of using Ning?

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Abstract

Recent research shows that the abilities and competencies of the so-called 'digital natives' have often been overrated and that children and young adults often use such technologies only to play or to communicate. In this respect, it is necessary to provide the digital natives with a suitable scaffolding in order to encourage more 'advanced' applications of such technologies, that could also involve the creation of learning networks. This paper describes a case study: the use of a social network as part of a formal course of Management at the University of Pisa. The institutional Virtual Learning Environment (VLE) – based on Moodle – has been integrated with a student support group hosted on Ning. Problems and opportunities for using Ning have been discussed in small groups and students feedback will be reported. The shift from Learning Management System (course-centric) to a Personal Learning Environment (PLE, people-centric) and then to Personal Learning

Network (community-based) is also been discussed and a framework was provided for a further implementation of the platform.

1 Introduction

There have been various debates in recent years about usage patterns of social computing and web 2.0 tools in learning contexts.

Among these we should consider the 'digital natives' debate. According to Prensky's definition (Prensky, 2001), a digital native is a person born in the eighties, who has grown up with digital technology such as computers, the Internet, mobile phones and MP3s. This label originated in the United States and was mostly used in educational context, together with similar ones, such as: Net Generation (Tapscott, 1998; 2009), Millenials (Oblinger & Oblinger, 2005), Gen Y (Weiler, 2005) and, more recently, i-Generation (Rosen, 2010).

According to Marc Prensky (2001), digital natives:
- are used to receiving information really fast;
- like parallel processing and multi-tasking;
- prefer graphics to text;
- prefer random access (like hypertext);
- function best when networked;
- thrive on instant gratification and frequent rewards;
- prefer games to 'serious' work.

A very large debate issued from Prensky's assumptions: it was doubted whether there is any adequate evidence for claims made about digital natives (Margaryan & Littlejohn, 2008; Jones *et al.*, 2010) and their implications for education. Bennett, Maton & Kervin (2008), for example, drew on the fields of education and sociology to analyse the digital natives debate. Their critical review of the research evidence pointed out that "there is as much variation within the digital native generation as between the generations". Though limited in scope and focus, their research showed that although there is a proportion of young people highly adept with technology, there also appears to be a significant proportion of young people who do not have the levels of access or technology skills predicted by proponents of the digital native idea.

In this paper, a case study made it possible to investigate into the competencies and abilities of a group of 'digital natives'. We observed that some attitudes might be enhanced thanks to teachers' good practices. To analyze the sample we used different techniques: in addition to periodical focus groups, in 2010 an online survey was performed before the course started. After the presentation of the case we will discuss the results derived from the use of these tools of quantitative and qualitative analysis. The logical and scientific framework of

pedagogical experience is also provided.

2 A framework for Education 2.0

Web 2.0 is an important driver of innovation in learning, as it enables different types of learning and teaching settings (formal, non-formal and informal); but, as a matter of fact, there is no unifying theory, except an unending parade of tools that sometimes can be puzzling even for a well acquainted with technologies teacher.

According to some scholars (for example Wiley & Edwards, 2002), our best response to the variability and complexity of the subject matter along with the changing nature of the learner is to design systems that are decentralized, to push learning decisions down the hierarchy or out to the edges of the network.

In technology-enhanced learning discussion there is a strong trend that promote the change from Learning Management System (LMS), course centric, to Personal Learning Environment (PLE), people centric (Attwell, 2007) and then to Personal Learning Network (PLN; Downes, 2010).

In order to promote this change, it is not merely necessary to create a network into which to situate episodic learning, but rather, to create a network that learns and thus adapts and reshapes itself based on those conversations and interactions (Downes, 2007).

Basing on these assumpionts and thinking on teachers' side McLoughling and Lee (2008) outlined the 3 P's of 2.0 Pedagogy: personalization (learner choice, learner agency, customization, self-regulation and management); participation (communication, collaboration, connectivity, community); productivity (learner created content, contribution to knowledge, generativity, creativity and innovation).

By using the 3P's as background and building on Enterprise 2.0 literature, we provided a framework for Education 2.0, a set of educational and technological approaches steered to enable new educational models, based on open involvement, emergent collaboration, knowledge sharing, internal/external social network development and exploitation.
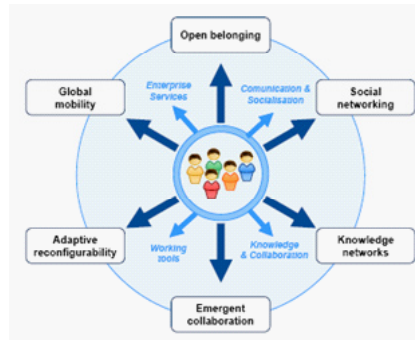
Fig. 1 - Education 2.0 framework

We modelled the emerging needs of learners from the emerging needs of knowledge workers 2.0. These needs can be divided into six key dimensions (Fig. 1): open belonging (secure and selective access to information, tools and connections that go beyond the institutional boundaries, interacting in an increasingly rich and effective manner with networked players); social networking (learners increasingly need to develop and maintain that network of relations that is becoming a more and more important asset for their professional efficiency); knowledge networks (learners must be able to build their own network to have access to knowledge and information from different sources, both explicit - document management systems, video-sharing, pod-casting, RSS -, and implicit - systems that ease interaction between experts, such as forums, mailing lists, surveys, blogs, folksonomies, wiki); emergent collaboration (learners need to create cooperative settings in a fast, flexible way, even outside the formal organisational patterns); adaptive reconfigurability (students need to quickly reconfigure their own processes and activities); global mobility (ubiquitous access to one's own network of tools, thus making the workspace and working time more flexible).

3 The case of EduORG2.0

EduORG2.0 was created in 2009 for the course of Management – one of the Management Engineering degree - at the University of Pisa. It is based on two platforms: Moodle, which was already present in the Institution, and Ning, introduced by the teacher of this course.

While the first is used for the delivery of the programme (presentation of the course, calendar, slides etc.) and for formal communication (exams, calendar, mid-term tests etc.), Ning is used as a sort of 'laboratory', an environment in which students can enhance their learning through interaction and availability

of further, non-compulsory, resources. There is some integration between the social network and the VLE. There is a login on the Moodle course page, which allows participants to log on to Ning network, and an RSS feed displays news about the current module on the social networking site.

3.1 EduORG2.0 structure

The following resources are available on Moodle: (1) the calendar of the course (Google Calendar); (2) the course presentation with a link to the teacher's website; (3) resources (slides, handouts, exercises, links, lessons video clips), ordered by module; (4) sign up for exams (link to faculty service); (5) assignments for the team competition (see later).

In Ning there are: (1) a blog with post concerning daily lessons or team competition; (2) a forum, with are 3 pre-fixed categories (SOS, for better understanding; course continuous improvement; (3) groups: every group has its own page with logo; (4) case histories of entrepreneurship: an article is available every week and can be downloaded with BoxNet (integrated in Ning); (5) useful links; (6) twitter in home page: for rapid prompts by the teacher; (7) Most popular videos; (8) Must-read books: books review concerning Management are posted every week; (9) RSS from Il Sole-24 Ore and Ansa news; (10) Events: seminars with visiting professors; (11) scheduling meetings with the teacher through Doodle; (12) surveys trough Polldaddy; (13) feeds from Diigo; (14) cultural links.

In 2009 EduORG 2.0 had 156 members, 13 groups, 49 forum discussions, 200 comments and more than 41.000 visits. In 2010 members became 318; accesses, discussions, posts and comments tripled.

3.2 EduORG2.0 approach

The Ning platform was customized in order to outline a path for guided learning: a message is posted by the teacher after every lesson, describing what has been done, where and how to study. The idea is to offer opportunities and stimuli beyond the mere 'technical knowledge', a '360-degree' support that could enhance student learning and encourage them to develop not only their 'hard' but also their 'soft skills.

The social network has been presented with the metaphor of football camp, where students can train themselves.

During the semester a team competition takes place: every week each of 14 groups has to solve a problem on the current course module, proposed by the teacher and discussed at the end of the week in a plenary session.

The level of users' participation and proactive involvement is high when

they see the community as an important element to increase their wealth of knowledge, create new relations and increase their "learning" effectiveness and visibility. In addition, a number of users proactively participate in the creation of contents, take part in discussions and create interpersonal relations of trust and mutual engagement. At the same time, the teacher's commitment is very high, but the Institution does not 'see' and recognise the community as an important means to achieve its purposes, by proactively supporting it and allocating it some resources.
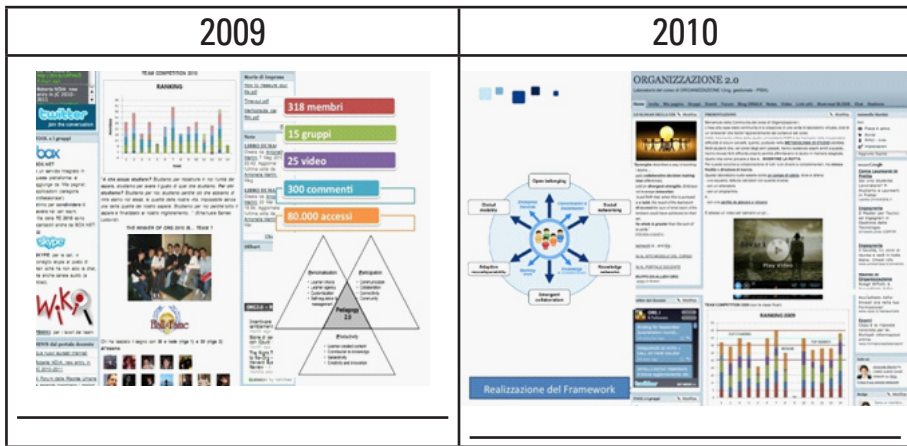

Fig. 2 - EduORG 2.0 different layouts

4 Student feedback

4.1 Qualitative Analysis

Each year, during the course, two meetings with team leaders are held to discuss on the following subjects: groups internal management (learning process and state of the art, learning difficulties, participation of all group members at the project works); evaluation of didactical resources (books, slides, handouts and exercises); suggestions. The opinion gathered during these meetings are very useful for the teacher, that asks the team leaders to express freely any problem arisen during group activities. Some responses are centered on subject engagement, class connections, and learning. Answers focus also on classmate and group feedback: sometimes – due to different problems – groups are not o tight and so collaborative as the team leader would expect. Some students (not all) show awareness of the 'additional value' of EduORG2.0 network for their personal growth:

"Ning allows to meet, communicate and collaborate with more people as it

would normally happen in a class attended by 170 students".

It was also observed that "Ning allows forms of communication and interaction, that overwhelm the normal class and lesson boundaries.

Much appreciated are the opportunities to discuss on difficult topics or to ask the teacher for help.

These opinions show that powerful, intuitive social media tools represent and facilitate fundamental shifts in classmates interactions - shifts that can improve university learning.

Other important elements emerging from meeting reports stress ease-of-use and practical application of Ning, and are related to the affordances offered by EduOrg2.0 network. Students reflected on functionalities and features a social network should contain so to encourage students participation, to allow them develop competencies and to motivate them to learn.

4.2 Student Survey

At the beginning of 2010 course we prepared an on-line survey to investigate deeply into Management student attitude towards 2.0 tools. The research has been run through a questionnaire to analyze student have 'behaviours' and their use of technology for learning, both at home and at university[1]. The questionnarie is based upon constructs derived from the literature on digital natives (Prensky, *op. cit.*; Lorenzo *et al.*, 2007) and the items were adapted from a pre-existing model (Salaway *et al.*, 2008).

The sample was formed by students of the 1st year students (100), 2nd year (52) and 3rd year (2). The average age was 20. The response rate was 43.5% (corresponding to 67 students).

Tools for university learning. Most students use their own notes to study for exams (92.5%), and/or teacher slides and handouts (74.6), and/or books (62.7%). A very few of them are using resources from the web (10.4%) or from the University library (1.5%). Because of the multiple choice available in this question, the sum of data it is not obviously 100%. Furthermore, analysing these data, it emerges that students used always the same three study supports (notes, books, slide).

Sharing information and resources. Relevant was the answer of survey: only 60% of students ticked off "I can share educational resources", while about 40% of them admitted they were not able to share resources for university exams.

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[1] The questionnaire was created in 2009 by teachers of the University Campus Bio-Medico di Roma. It is was divided into 4 parts: the first one, related to collection of personal data (University, course attended, age); the second one, about resources used for studies and about fruition modalities of university's platform; the third one, related to the comprehension of internet utilisation, both at home and at university; the fourth and last one, to investigate on use of web 2.0 tools (social networking and bookmarking, blog) and on research modalities on internet. The on-line version was created with Google Docs & Spreadsheets: https://spreadsheets0.google.com/viewform?hl=en&formkey=dE5TSzZON2FtTFcwTUlsdHpkQUJOR1E6MA#gid=0

For those who put "yes", the most common tools to share resources are e-mail and Facebook (both 24.4%), followed by MSN, and paper notes (17.\%), Ning (14.6%). Only 1 student declared the use of Google Docs.

As far as the sharing of information and messages is concerned, many more tools are indicated. Social networking sites play an important role for this activities (29% Facebook + 9% Ning = 38%), besides synchronous communication via cell phones and SMS (15% calls + 18% SMS = 33%) and/or via chat and Instant Messaging (3% chat + 18% MSN = 21%).

Using the Internet at university. Teacher slides and handouts are usually available on the University VLE (Moodle) or in Ning. The usage of Moodle is limited to downloading files and resources (89.5%). 48% of the respondents do not use the Internet at University.

Using the Internet at home. 87% of the students participating in the survey stated that they use the Internet at home for more than half an hour per day ("from half an hour to an hour" - 12%, "about an hour" - 33%, "more" - 42%). The average time spent using Internet at home is 3 hours. The most frequent activity performed on the Internet is social networking (66%). The second is using email (25%), while doing researches is at third place (10%).

Social networking. Most of the students mentioned Facebook as their preferred social network (60%). Most of them have opened a profile on one (37%) or more sites (35%) and use these tools mainly to communicate (39%) or for personal entertainment (22%). Only 22% of respondents declared an 'advanced' use concerning "cultural exchanges". As far as personal data is concerned, students have made available the following items: name (86%), surname (73%), personal photos (75%), email address (55%), town (48%), photos of their friends (46%).

Concerning the creation and production of resources, most students do not actively contribute in adding contents and subjects by using popular tools such as Wikipedia and Youtube.

Web 2.0 tools and search engines. In social network sites communication takes place mostly in chat, talking about "'a bit of everything". As for the blog, it came out that 37% of students are not interested in using these tools, 28% read them or use them rarely, while only 3% of them has one and update it regularly. The preferred search engine is, of course, Google: most of the students use simple search (88,9%), while only 9.1% of the use the advanced search functions. A relatively small percentage of respondents (3%) say they also use the Italian search engine Virgilio. If the research is aimed at university studying, we can observe an increase in the use of Google advanced search or of other sources of information, like Wikipedia. Using the standard Google search is still the preferred tool (66%). Only one student uses P2P networks (eMule, Bittorrent, Kazaa, etc...). Finally, the survey has shown that social bookmarking

is not so popular among students: most of them are used to sending useful links via e-mail or to download and archive locally valuable files (36%).

Conclusions

The results of the survey are not 'surprising' taking into account more recent criticism to the myth of "digital natives". The students participating in the survey:

- have a fairly traditional approach to university learning (notes, books, handouts);
- use social networking sites only for recreational and communicative goals;
- have a rather marginal and superficial approach to consultation and research;
- are not used to creating, organizing and sharing resources.

The main purposes for implementing Ning community into the Management course were two-fold. First, we wanted to try to create a virtual classroom — an online community where students could converse and collaborate, and where the teacher could support and enrich their learning. Secondly, the teacher was hoping to enhance the course curriculum in a way that would help prepare students for the literacy demands of the 21st century.

On both accounts, the experience has by far overwhelmed the original purposes, and we have just begun to glimpse its ultimate potential. As a virtual classroom, EduORG2.0 is in many ways a much more flexible and dynamic space than a physical classroom. Students can interact with any member about any topic or question at any time. Rather than being limited to a classroom where only 20 to 30 students are able to collaborate with one another, the virtual space enables students to interact with all 100 plus of their classmates, as well as alumni who continue to participate on the site.

Ning was chosen after careful consideration of other alternatives, particularly after a benchmarking with other similar platforms[2]. Ning offers a very simple and effective tool, but to transform it into a learning space is a process that requires careful planning and a clear definition of objectives.

Main difficulties in Education 2.0 implementations do not depend on the tech side but on a lack of awareness of opportunities, a difficulty in economic benefit identification and evaluation, together with the need of educational and

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[2] The choice of Ning has been confirmed even after the company, in May 2010, changed its policies, shutting down the free version and requiring network creators to switch to a paid plan. A comparison among Twitter, Facebook, Ning and Elgg is available at the following url: http://www.c4lpt.co.uk/handbook/comparison.html (visited on 12.12.10). For a further comparison of social networking websites see also: http://www.masternewmedia.org/it/2010/06/07/alternative_a_ning_guida_alle_migliori_piattaforme.htm (last visited on 12.12 10).

organizational change. In other terms, barriers are not technological but rather cultural: most of the Institutions manage the implementation project in a purely technical perspective without systematically facing the organizational and the change management aspects.

There are some open questions to deal with:

- How to stimulate, understand and anticipate demand from customers (i.e. the learners)?
- How to leverage on suppliers of external services without becoming too dependent?
- How to drive and channel energies associated with spontaneous contributions of learners?
- How much and how to open to external contributors without compromising security and intellectual property?

Therefore our next goal is to provide empirically based knowledge ("guidelines") to help teachers design and implement new technology-based learning environments, that could extend the boundaries of University to mobile learning.

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