7th World Conference on Educational Sciences, (WCES-2015), 05-07 February 2015, Novotel Athens Convention Center, Athens, Greece

University student communities and media habits: from formal LMS to social networks

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Abstract

According to Wenger (1998) communities of practice are important, not only for the profiles of professionals, but also for university students that do not know each other personally, but nevertheless share a "common practice" (Brown, Doguid, 2000, p.205) in order to activate dynamics to exchange knowledge and help each other (Trentin, 2004). Between 2005 and 2011 the Department of Education of University of Milan – Bicocca opened four student communities, using a Learning Management System, for the purpose of answering students' orientation needs and engaging students in discussing university issues. The first surveys confirmed the positive acceptation of the communities as an important place to discuss issues, share common goals and find important information about the degree programs. From 2012 due to the growth in the number of social network users (CENSIS 2012, Nielsen 2012), the students of the Department of Education began to spontaneously create Facebook groups and to move slowly to them from official communities. In this research we present the results of a longitudinal study on comparing the use and perception of quality of communities implemented in LMS versus those of Facebook groups. This analysis is the reason the department decided to adopt Facebook groups to develop student communities. The results of this research highlight the importance of media habits over other factors also in the presence of processes where there are high levels of quality realized in less used media.

Keywords: Community, Social Network, LMS, University, Students

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1. Theoretical background: community and social networks

1.1. Concept of community

In this research we present the results of a longitudinal study on comparing the use and perception of quality of communities implemented in LMS versus those of Facebook groups[†]. The term community etymologically refers to a group of people that live with other people and share norms, values and behaviors, and seek to work together to accomplish daily tasks (Petti, 2011), so the term is closely linked to physical presence. The term online community, according to Rheingold (1993), indicates groups of people who do not meet face to face, entertain distance relationships, have a common goal, and establish a climate of trust between them.

According to Wenger (1998) communities of practice are important, not only for professionists, but also for university students that do not know each other personally, but nevertheless share a "common practice" (Brown & Doguid, 2000, p.205) in order to activate dynamics to exchange knowledge and help each other (Trentin, 2004). In the community, as in our case study, people share common goals, working practices, beliefs, interests and value systems (Elliot, 2002). Wenger (1998) studied the concept of communities of practice as a reference to a broader conceptual framework: in our experience, learning is an integral part of everyday life and is in our participation in the community (e.g. family) and organizations. Learning is also social participation, where participation means to take part in a process of relationships that helps to confirm the existence of knowledge.

1.2. Participation

Participation is fundamental to maintain a community. It refers to the roles that individuals can play in a specific community or society in general; many authors emphasize the importance of promoting a culture of participation in youth (Mortari, 2008).

In a community, the number of active users is smaller than the total number of members; this is in line with the "1-9-90 rule" (Nielsen, 2006) that defines three levels of participation (1%, 9% and 90%) for each respective entity on the Web (active authors, occasional authors, readers). The author argues that, on average, in an online environment, participation in the generation and/or distribution of the content is divided into the respective percentages: active authors are 1%, occasional authors make up 9% and readers, those who only read, are the remaining 90% (Petti, 2011).

According to Jenkins (2009) the development of a participatory culture through and on web 2.0 would also give young people skills that are relevant to being full citizens. The issue of participation is in fact the Achilles' heel of the era of social media, despite social tools establishing new opportunities for sharing and producing content, according to research by Walejko and Hargittai (2010), there are few people that produce and distribute content: the prevalent tendency is to consume and use information from the network rather than contribute to it.

1.3. Social Network versus Community 1.0

The contraposition between social networks and "old" communities is driven by technology: communities originally used forums for communication which allowed, due to their a-synchronous nature, reflection and discussion without forcing users to immediately provide answers. For this reason, the community of students in our case study was originally implemented in the Learning Management System using forums of a specific course for all students of a particular degree course who were enrolled; this environment did not encourage high levels of interaction between members. According to Rivoltella and Ferrari (2010), in social networks, the very high level of synchrony seen in interactions tends towards immediacy; examples demonstrate that social media responses often arrive in a timely manner. It follows, on the one hand that communication on social networks is characterized by the difficulty of keeping the thread "on topic" with the result being an increase in 'communication drifts' (Rivoltella,

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[†] Andrea Garavaglia wrote par.3; Livia Petti wrote par.1 and 2; Paragraphs 4 and 5 were co-written by both authors

2003). On the other hand, being immediate, the messages on social networks are often instinctive, and have negative consequences on the possibility to post messages before a reply is posted. It should also be underlined that the tools of Web 2.0, probably because of this immediacy, seem to be less adequate for keeping online communication in order (Petti, 2011).

However, in communities the character of informality always prevails: regardless of the way in which these communities develop and which tools are used, they are marked by tones, language and manner that strongly reflect aspects of informality.

2. Description of case study

In 2005, the professors of the Department of Education decided to open online communities dedicated to the students of degree courses to meet students' orientation needs. Thus, communities pertaining to the following degree courses were established:
- Community Primary Education
- Community Education and Human Resource Development
- Community Education Sciences
- Community Pedagogical Sciences

These communities are hetero-directed (Garavaglia, 2010) and were proposed by the institution, but the needs analysis carried out before and the design and implementation of the on-line environment was performed with the students of each degree course, through the distribution of questionnaires and by conducting focus groups. The results of which revealed the requirements and generated ideas to build online spaces which fit students' needs.

In order to assure students their privacy and to ensure maximum freedom of opinion, teachers and their assistants cannot access communities. These communities are made up of only students and are moderated by the e-tutor, usually ex-students of the degree course that manage online communication, collect the questions that arise and interface with the university offices. They take care to manage threads according to an agenda setting that, from time to time, remind members of deadlines and important topics (deadlines, curriculum, scholarships, internships etc.); from their birth to 2011 communities were held in the Learning Management System DoceboLMS, an online environment used by the department to deliver courses or e-learning courses to support teaching in attendance, but they then moved to Facebook groups for the reasons explained below.

3. Methodology

The communities are constantly monitored to acquire precious information or detect problems in real-time about student experiences and didactic processes. This action is also useful for monitoring the communities themselves in order to comprehend if any problems emerge regarding the moderation of posts or whether it is necessary to introduce new initiatives, resources or tools in one or more communities.

The action described also allows for a diachronic analysis of communities' interactions, so the research group decided to integrate other tools in order to monitor other important aspects such as how the communities are conceived by students and when and why students decide to use them or not and for what.

The methodology consisted of:
a) a systematic observation of the discussions conducted by a researcher: the results are reported in a wiki document as a draft to be discussed during meetings with a tutor;
b) analysis of quantitative tracking data such as statistics for usage of LMS or the number of posts in social network groups (on Facebook it is not possible to access group data statistics);
c) administration of a survey to students;
d) conducting student focus groups.

The methodology is the result of a mixed method approach (Creswell et al., 2003; Creswell, 2009) that permitted us to redefine and introduce new tools as time went by based on changes detected and new research instances.

4. Lesson learned: the reasons the communities were moved from a LMS to a Social Network

The results of analysis give us the possibility to underline student perception and usage of the communities: all students generally appreciate them; particularly they seem to be a useful bridge that keeps non-attending students informed (according to the data of the survey 33.5% of students said they had never attended classes in the previous semester). The surveys confirmed the positive acceptation of the communities as an important place to share files about degree courses and lessons notes (53%), discuss issues (27%) and to find help (20%).

In the last two years, the number of working students has decreased by about 10%, probably because of the economic crisis; in fact, from the questionnaire results only 30.4% claim to be a full-time student; the remainder is classified as workers (full time, part time or occasional).

As previously mentioned, in the early years the communities were implemented in the e-learning platform DoceboLMS, the online environment most known and used by students: as shown in Fig. 1 the question "Do you know the Community of Students in DoceboLMS?" confirmed that 83% of the students said they did know and had logged in at least once.
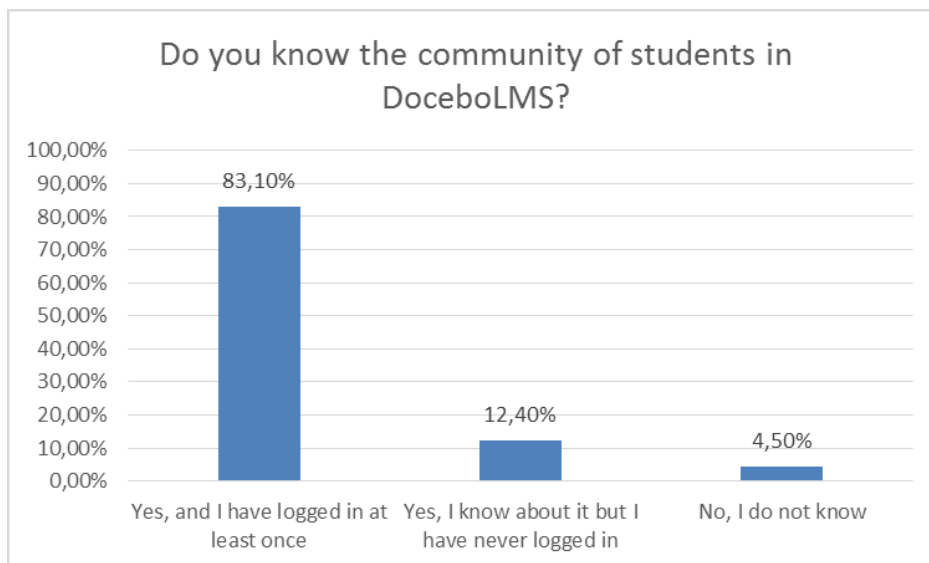

Fig. 1. Knowledge of the Community of Students in DoceboLMS.

Despite the appreciation just described, in 2012 the growth in the number of social network users (CENSIS 2012, Nielsen 2012), contributed to students of the Department of Education beginning to spontaneously create Facebook groups and to move slowly to them from official communities in the LMS.

Communities in the LMS slowly started to lose population in favor of informal groups made by students on Facebook. From the survey administrated in 2012 the question: "Are you enrolled in at least one Facebook group of students of your degree course?" 82% of students answered yes, compared with only 18% saying no. 60% of students enrolled declared that they consulted a Facebook group daily. The official communities of students were consulted less frequently: once a month (28%) and once every 15 days (21%) in most cases. Students declared that Facebook is definitely the most familiar application because it is "more practical": smartphones allow them to be accessed from anywhere, with fewer steps than desktop applications and without using a computer. 48% of students also declared that the mobile phone is one of the most utilized devices to connect to the Internet, exceeded only by desktop computers or netbooks/notebooks, which still stand at 55.7%.

Immediacy is another motivation that drives students to choose social networks: the posts in Facebook groups are fast to write and read (68% of students), even though the messages posted in informal groups sometimes are not reliable (36% of students), and the organization of topics is not always clear (29% of students).

Consistent with the data obtained from the questionnaire, the Department of Education decided to move communities from the LMS to Facebook. These "Official" communities (so called to distinguish them from informal Facebook groups created by students) were created as closed Facebook groups dedicated only to enrolled students. The e-tutors moderate communication and provide access only to students who are enrolled in courses.

The first community implemented in the LMS Docebo was "Formatori" in 2005 (master degree course in "Formazione e Sviluppo delle Risorse Umane"), then in following years the others were opened.
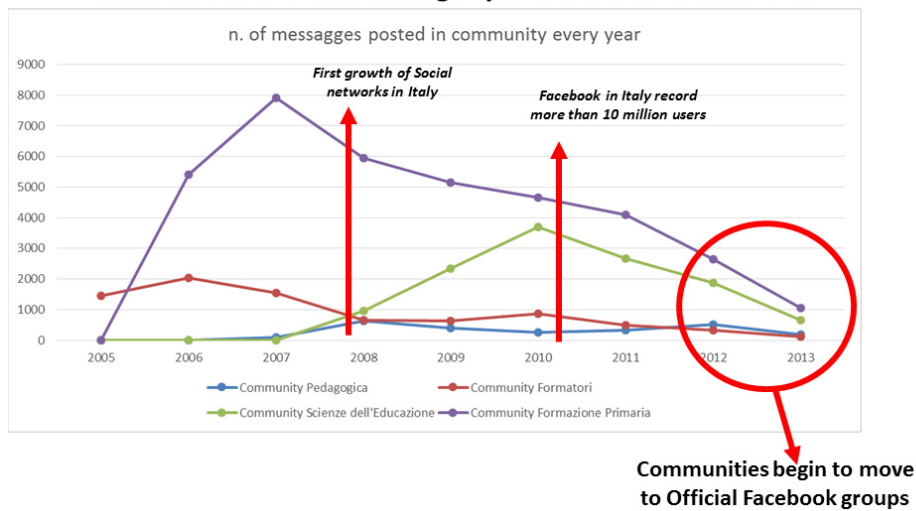

Fig. 2. Longitudinal analysis of communication activities in on line communities implemented in Learning Management System: n. of messages posted from 2005 to 2013.

The research group realized a longitudinal analysis of interactions in the communities from 2005 to 2013 (the last year of implementation in LMS) counting the number of messages posted in each one. Fig. 2 clearly shows that with the first growth in the number of Facebook users the number of messages posted in a year in the most used community decreased (Formazione Primaria). Another important result is that 2010 is a demarcation point between the period in which users gave importance to the community in LMS and the period in which the spread and convenience of social networks led users to prefer unofficial groups in Facebook.

The difference, in terms of the number of messages posted is remarkable: in March 2013 the Community of 'Scienze dell'educazione' moved to an official Facebook group and counted 1,300 posts per month and more than 15,000 posts during 2014, while in October 2013 the Community of 'Scienze della Formazione Primaria' moved to an official Facebook group and registered 272 post per month and more than 3,000 posts during 2014. In precedent years, none of the communities raised more than 8,000 posts in 12 months.

The qualitative data gathered in focus groups and from the open questions of surveys highlighted that students saw this transition as a normal event or something that the department should have done earlier. Indeed, in the final two years of LMS usage the students tended to post messages on informal Facebook group pages and to consider Communities in LMS as "vintage" environments.

5. Conclusions

This study confirms the importance of media habits for the implementation of an online environment: notwithstanding the positive perception of communities, students prefer to use social networks because they are more familiar, more practical when using smartphones and more immediately satisfy their needs. The decision to move communities from LMS to Facebook groups has been previously proposed to students in a focus group and they have confirmed that this is the right way to go.

Students are also aware that social networks present issues such as a less organized communication setting (compared to a forum), higher expectations for an immediate response to their posts, and some difficulties in managing public and private spheres (Meyrowitz, 1985).

According to Blumer and Katz (1974) media habits reflect the inclination of people. The authors offer the example of people who love football that often look at sports results. In the same way, young students, in recent years, often love to use mobile devices and social networks to resolve needs (find information, solve problems or maintain relationships), so it is fundamental to observe students' habits in order to be ready for the next change.

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