Online Learning Communities: from Personal to Social Learning Environments

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Abstract. Online Learning Communities have great potential in sharing experiences and creating a collective knowledge based on the interaction among members. This paper presents some our experience and conclusions of using PLE to mixing personal profiles with community building as a mean to exchange experiences from different stakeholders involved in learning activities. These results were applied in two different communities to promote the virtual mobility (Movinter), innovation and quality on Learning (Hextlearn). In these scenarios we explain the goals, the stakeholders and the results we achieved. The strategy chosen was based on social learning environments where each user has their own space, using PLE/PLN.

Keywords: PLE, Online Learning Communities

1 Introduction

Online communities are virtual spaces where people come together to obtain or share information, to learn, to discuss and to be with others online. Nowadays these communities are quite popular, and it may be analysed according to relevant factors such as: people involved, purposes, policies and rules to govern and promote the communication in the community [1].

These communities are based on a set of resources to facilitate communication, discussion, and the sharing of ideas and best practices. In many cases these resources are online facilities, such as mailing lists, forums or discussion channels. We have interested in the creation of online learning communities of stakeholders with the aim of the creation of a community of practice (CoP) in the sense of group of people who come together to learn from each other by sharing knowledge and experiences about the activities in which they are engaged [2]. We have selected two specific scenarios:

- CoP for the promotion of virtual mobility between Europe and Latin America Higher Education Institutions [3] to increase cooperation, structural links to internationalise curricula and fostering intercultural learning experiences. The purpose of community building is rooted on engaging institutions to promote international cooperation. Movinter project (Enhancing Virtual Mobility to foster institutional cooperation and internationalisation of curricula) is based on the understanding of the intercultural exchange based on virtual communities to enhance and complement physical mobility, internationalisation of curricula and intercultural exchange [5]. The main target audience are decision makers in Education Institutions, but also teachers, researches an students.
- CoP to increase the quality and innovation in elearning [4] by means of peer reviews methodologies, by offering a database of good practices and useful materials. HEXTLEARN project (Higher Education exploring ICT use for Lifelong Learning) aims to build a network of participants to increase the level of attention of the Higher Education Community on ICT strategic integration, by generating awareness, commitment and networking on quality assurance aspects and strategic integration of ICT in teaching, learning and innovation in Higher Education. In this case, the wider target audience based on experts and teachers/learners.

  The hypothesis based on these two communities were the same: the creation of a community of practice where everyone can learn and share their experience with the others and promoting interaction themselves to discover new areas of interest.

2 Theoretical Framework

2.1 Learning in the Knowledge Society

Nowadays Information and Communication Technologies influence any aspects of our daily life and especially, in the way we access to the information and we build the relationship with others. ICT support gives us the opportunity to build new scenarios to obtain information, transform it into knowledge, and to connect with people around the world and sharing this knowledge at the same time. Thereby, we can take advantage of these possibilities of interaction and knowledge building new digital learning spaces. These scenarios are based on the collaborative learning as a key issue. We can look for the basis of collaborative learning in the approaches of Vygotsky to the social learning and is related to the Social-Constructivism theory. It involves the development of learning and teaching strategies that provide significant learning in a mutual interaction environment. Best practices sharing are a good approach to interact and understand common issues. Members share, rate and discuss about a problem using a case study trough cognitive interchange and peer interaction. Each member achieves learning informally; each one is responsible for their own learning skills as result of the interaction in this group [6,7].

Besides collaborative learning another key issue in this approach is the building of communities of practice. This idea is strongly related with the collaborative learning that we described before. According to [8] communities of practice are groups of people who share a concern, a set of problems, interest about a topic, and who deepen their knowledge

and expertise in this area by interacting on an ongoing basis. There are three features that are crucial in the definition of the community o practice: the domain that defines its identity; the community made up of members engaged in joint activities and discussions, help each other, and share information; and the practice done by the members. In these cases, members are engaged with a clear role (stakeholders) in these communities, so they are interested and motivated in the sharing of experiences.

The use of ICT in Higher Education Institutions (HEIs) is widely spreading in Europe, and moving from a traditional profile to a new one, covering most of the areas of Lifelong Learning (covering from school teacher's education to adult education and training). Other areas such as corporate training, continuing professional development or prior learning assessment (PLA) for guidance and employment are growing so fast by their closer contact with the employment. Each of these frameworks may be considered as different territories with different stakeholders, rules and type of knowledge. The lack of synergies among territories is a drawback in order to collaborate and share good practices and closer cooperation. These communities of practices should be capable to interact each other in order to find closer cooperation and mutual understanding, and this is one of our hypotheses in the development of the Learning communities for Hextlearn project. On the other hand, Movinter project look for a better understanding of international cooperation based on ICT between Higher Education Institutions, finding new multilateral synergies to promote new achievements.

2.2 Towards Personalized Learning (PLEs and PLNs)

The theoretical framework is based on the principle that the learning process is continuous and that cannot be limited to a classroom environment. Learning is a lifelong process, made up of our experiences in different environments. In this context, the concept of "informal learning" represents a kind of learning that takes place during the daily life, at home, at work, etc. Informal learning is thus independent from structured materials; it is not formally organized and does not lead usually to a certification. With the ICT support, people become more independent and proactive, managing autonomously their own learning process, representing a smooth challenge towards "prosumers" instead of learners [9]. The learner as individual producer of knowledge is the main focus here: he/she is, at the same time, the origin and the target of knowledge.

PLEs can be considered as the methodological and technical enablers of this new cultural paradigm. While PLEs can be defined in term of the tools their offer, the concept behind them is probably more far-reaching than the simple technical aspects. PLEs can be seen as spaces in which people interact and communicate and whose ultimate result is learning and the development of collective know-how [10]. In terms of technology, PLEs are made-up of a collection of loosely coupled tools, including Web 2.0 technologies, used for working, learning, reflection and collaboration with others. Both PLEs and their more social version, PLNs, answer the need of managing the continuous workflow of information, communication and knowledge inside the community.

In particular, PLEs and PLNs are well suited for the following learning contexts:

- Informal learning, and also

- Communities of practice (CoP) and Knowledge Building Communities (KBC). Ence, PLEs allow individuals to monitor each other activities and works performed inside the community (the Hextlearn Case discussed in this article).

3 Movinter and Hextlearn Communities of Practice

The main goal of the Movinter and the Hextearn communities is to constitute as a meeting point to collect useful information related to these research topics. With this aims, the relevant features we should take on mind are the creation rich media-sharing repository of resources allowing the discussion. This goal motivates the design of a website as a social network. In this case, the site is built based on users (with a profile and the potential of content creation) and reflecting social relations among people, (sharing interests and/or activities). This is an informal user-centric point of view of the community. Users can freely choose their "friends" to share their state and resources. Figure 1 represents a preliminary sketch of a user profile. In the analysis phase, prototype sketching and preliminary design was done in collaboration with U. Aveiro. Implementation of both communities was based on the ELGG open source library [11].

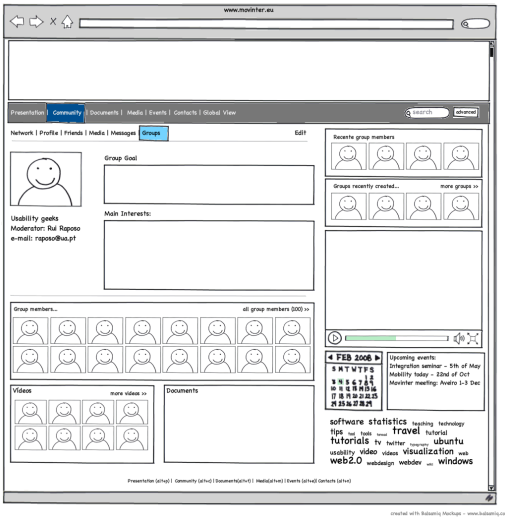

Fig. 1. User profile

The core of this approach is a PLE, where each user has their own learning space, describing their skills, preferences, profile, interests and motivations. On top of this approach, a second level is established, where groups and common knowledge are settled informally with members sharing common goals. These groups can be open or with some kind of restrictions. Sometimes, these groups may detect relevant topics of interest for other members of the community. Services for information sharing and cooperation have also included (for instance, sharing, suggesting and rating best practices examples).

Another additional issues in the development of these communities were the following:

- (Movinter) promote the collaboration between institutions, so therefore, one of the most important issues is to discover other user preferences and create new group with common interest.
- (Hextlearn) enhancement of quality assurance on different territories of Learning and their mutual visibility. So therefore, a peer review model of evaluation was included in the CoP, where "expert" groups of member can dynamically coordinate to evaluation process for one of the community member.

These additional issues are really interesting to understand the relevance of these two communities.

3.1 Movinter Community: Looking for Partnerships

This community (born in 2008) has grown up to 100 active users with 6 groups and 40 best practices of international cooperation between institutions. Members posted documents and events to share knowledge about good practices towards the virtual mobility cooperation between institutions. Contributions are the main outcome of the community, in terms of useful links, paper positions, videos explaining concepts, etc. This information (as shown in Figure 2) is relevant for decision makers for better understanding of this approach and also to generate group dynamics between members.

Fig. 2. Movinter video repository

3.2 Hextlearn Community: Experts vs Learners

This is an active community (born in 2009) with more than 750 active users, 36 groups and 76 best practices reported by users. Community is built around different learning territories, with a relatively high community of experts and several procedures to share best practices, to ask for a review and to prepare a (blind) peer review in the same community.

Fig. 3. Hextlearn community

This approach is opposite to other alternatives, where the experts have their own space and tools like LinkedIn, Facebook, Twitter and Blogspot for their professional or personal purposes. According to the principle "less is more", the HEXTLEARN website offers “low-scaled” community where it should be easy to subscribe and to use the website for information consuming and sharing. Another possibility is to post comments in the Discussion Board and the use of the WikiMendations section of the community. The platform is offering also the possibility to go through the self-assessment and review process online. That is an important step to create a demand for the HEXTLEARN quality label in the online community. The WikiMendations service of the portal is the individual component of our Living Toolkit of the HEXTLEARN project. The name is coming from the longer: Recommendations Wiki term, which suggests that you will read recommendations for ICT Good practices in a Wiki format as shown in Figure 4.

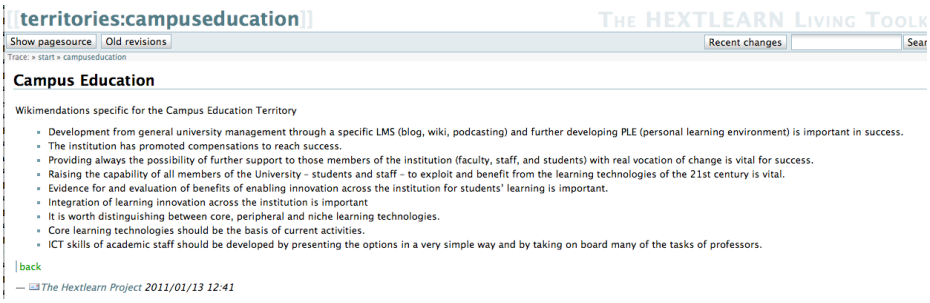

Fig. 4. Hextlearn WikiMendations

This is an effective tool to actively participate in the Hextlearn community by:

- Reading the recommendations we have prepared for you by analysing the good practices we have identified so far.
- Proposing your own recommendations to add them to the list we offered.

4. Main Outcomes of each CoP

The creation of these communities involved some developments to fit the different tools to suit these requirements. Extensions are needed to include other plug-ins such as forms, pages, tag cloud and create new widgets (such as "my practices") or modify existing ones. Although the goal is similar in both scenarios (enhance the interaction between stakeholders), the results we achieved were completely different.

Movinter community was less active and less participative. Regarding the language (Spanish-English Portuguese), one of the big problems were to find stakeholders really interested and motivated. Information was useful but we found low interaction level between members. The activity was more related to information and clarification of concepts instead of building project. The users didn't build their knowledge of interest. As a conclusion, few groups were created, and the interest decreased.

On the other hand, the Hextlearn functionality is more complex with different activities, and process (peer reviewing, self assessment, look for territories and activities, etc.), and member play different roles (experts versus learners). Member use their own PLE to describe their experiences and skills. Groups are more active and more productively. Activities and communication is more fluent and the information about territories is more updated by more members.

5 Conclusions

In this paper we have shown two online learning communities. These examples are also good examples of the opportunities and difficulties of using PLE/PLN to promote collaboration and knowledge building. Learning from others is a good methodology to

create a common understanding and a growing community to create a CoP. Although we are developing a social learning environment, in both cases, users collaborate from their own Personal Learning Environment. In one of the cases this activity is more evident and natural (to create the user's learning expert profile for Hextlearn). The size and motivation of the community is also important.

In addition to this conclusion, the development of added functionality on PLE/PLN is far from be easy. We used Elgg 1.6.X [11] and we found several (dramatically) difficulties to develop plug-in for new features, and the functionality is unstable. This is a problem that is solved (partly) with new versions, but is far from a good solution for developers.

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