Virtual Mobility Support for Academic Cooperation on eLearning 2.0 Approaches

Miguel Gea[1], Miguel Gonzalez Laredo[1], Rosana Montes Soldado[2]
[1]eLearning Centre (CEVUG)
University of Granada 9
Department Lenguajes y Sistemas Informáticos
ETSI Informatica y de Telecomunicación
University of Granada
{mgea,mglaredo,rosana}@ugr.es

Abstract

The new models on communication and interaction based on online communities should be a basis to improve the collaboration between education institutions to internationalize curricula. The background of this cooperation can be achieved increasing the cooperation on virtual mobility. This paper analyzes the relevance of e-learning online communities and proposes features for such community and method to put in practice.

1. Introduction

Information society is an umbrella term to describe and identify all those changes that are happening in our social structure in the last three decades, and thus establishing new models of communications and relationships for citizens. These changes are rooted on an underlying technological revolution, growing so fast and popularizing their uses in everyday life, according to the envisioning prediction that *the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are* indistinguishable from it (Mark Weiser, [1]). Technology is also related with knowledge sharing and networking in the new space and dimension of global communication.

A key issue is the concept of Web 2.0 where society becomes as *Digital citizens* not only for searching and using information on the web, but also became content providers themselves. This framework allows users to construct personally reflected knowledge adapted to one's individual needs from information represented in cyberspace, as didactic basis of eLearning 2.0 [2], to improve the formal and informal learning skills.

Another related phenomenon is the creation of *online community as a group of people with a common interest or a shared purpose whose interactions are governed by policies in the form of tacit assumptions, rituals, protocols, rules, and laws and who use computer systems to support and mediate social interaction and facilitate a sense of* togetherness [3]. These communities represent an important challenge for designers to facilitate social engagement and interaction among members. These studies are oriented to message analysis, group dynamics analysis as well the analysis of communication patterns. These studies are oriented to understand the relationships between participants in the online community and the dynamics which it controls these society.

2. Literature Review

In previous research works, we developed an online community called Mobi-Blog [4] (the European Weblog Platform for Mobile Students) with the aims at bridging traditional story telling approaches with Web 2.0 applications such as blogs and wikis, at fostering processes of model learning, self refection and independent decision making of European exchange students and at informally supporting learners in formal Higher Education environments. Mobi-Blog has accordingly the following aims and objectives:

- To provide a multi-institutional, web-based, bottom-up but well-structured and multi-lingual service on European level for peer-to-peer exchange of experiences of individual mobile students containing all not-organisational aspects of mobile studies like motivation, social issues, communication and cultural issues;
- To develop a structured and comprehensive online guide for mobile students;
- To encourage a network of universities in Europe to integrate the Mobi-Blog service into their portfolio of services for mobile students; to gradually complement existing conventional services; and to integrate the Mobi-Blog services to existing virtual campuses;
- To test the innovative learning concept of combining (and linking) the relatively

unstructured concept of blogs with the structured offer of an online guide for learning purposes.

A key issue for Mobi-blog is how it can provide a bridge between the 'formal' and 'informal' learning domains. The conceptual framework therefore is incorporating a model of the interaction between learning across different target users, and at different levels of scale, in order to address the project's commitment to developing methods and tools that are applicable at European, national, regional and local levels.

The methodology is largely based on psychological theories of motivation and learning by and through role models. Differing from other theories of learning, the approach of learning with models explains how complex and difficult tasks, for example driving a car, can be learned. For learning with and from a model it is important that the learner feels the model as realistic and as similar to him/herself. During the learning process of the model, some problems should occur before the aim is achieved. The model should be especially interesting and encouraging for the learner. Additionally examples should refer to single persons (not to institutions), which are as similar to the learner as possible to enable mechanisms of identification with the model.

Mobi-Blog has also a clear cultural dimension as it provides realistic, first hand information about different cultures and languages in Europe and thereby helps to promote better understanding and tolerance among the different European countries and cultures. For such purpose, we are focusing on a multilingual support to have stories in the native language (using translations mechanism to be available in any language).

In previous research work [5], we analysed different dimensions of such community, such as:

- population, countries and popular cities where Erasmus students are telling. These data are very helpful to understand the aims and motivations of Erasmus Students telling their stories (nature of destination, cultural differences, etc.)
- the main topics of discussion. Although there are several categories and tagging systems, we have grouped the stories on more general areas of interest. These topics represent the most relevant problems and challenges for an Erasmus student on a foreign country.
- Motivation of choosing the country. It is also important to find out if the selection of the target country is based on a recommendation, a personal decision or a random choice.
- The feeling and affective motivation regarding storytelling. In most of the cases, when people are telling about their day-to-day in a foreign city/country, you can guess (as to the way they tell their story) their positive or negative feelings. Emotional motivation is a key issue in storytelling, and thus in the students' life experience.

Also, the study was supported with a usability analysis (with eye-tracking methods) to understand what user are really interested when they are looking the website. Figure 1 shows the most viewed part of the website, to understand what is relevant for visitors.

Figure 1. Heatmap of mobi-blog website

Although the data and use was really intensive, we found that this kind of communities is based on the exchange of personal experiences but with a low level rate of interaction among users. The exchange of information is relevant to choose a location to study abroad, but the students demand better strategies to match studies from different countries.

3. Learning strategies on web 2.0 EHEA society

Europe is involved in a huge change in the Higher Education System in order to create overall convergence at European level [6]. These changes are usually top-down policy decisions to improve the education system. In this frame, the Erasmus Programme (launched in 1987) is one of the best-known Community actions to encourage student mobility and translational cooperation among Higher Education Institutions across Europe (ERASMUS is managed by the European Commission through its Executive Agency (EACEA).

In parallel to the described technological impact on nowadays learning, the 'Bologna Process' initiated by the European Commission is aiming at increasing the mobility of European students by removing existing organisational and administrative obstacles. As a benchmark to monitor the progress the European Commission and the Member States agreed that by 2012 a number of at least 3 million individual participants in student mobility shall be reached. The 'European Credit Transfer System' (ECTS), the European assimilation process of Higher Education studies (i.e. the Bachelor and Master system) and mobility portals to find available places for studies or internships are undoubtedly important steps to foster the idea of a mobile community of

European students. The readiness of students to use the opportunity of Europe-wide studies clearly depends on these organisational and certification issues, but the number of mobile students will also depend on decisions of single students to study abroad, which are strongly influenced by personal, motivational and other self-related considerations.

Mobility of students and teachers has for many centuries been an important aspect of higher education. Today, with the growing importance of internationalisation on the one hand and the increased use of ICT for education on the other hand, both the interest in student/teacher mobility and the possibilities to offer mobility schemes have increased.

There are many important programmes that support mobility actions and, in recent years, an important number of projects and initiatives have contributed to a better understanding and organisation of mobility and Virtual Mobility activities.

Virtual Mobility is seen as an important development because it has the potential to provide large populations with access to international study experiences that are now reserved to a relatively small minority. It also allows for stable and deep collaboration among teaching and research teams, and their institutions, building on recognised complementarities and specialisation. Further it allows for European universities to link with other universities and institutions within Europe and in the world.

The online learning communities should also be a strong support for this European Higher Education Area (EHEA), increasing the interactivity and communication. Our research goes toward the definition and implementation of virtual mobility to increase the internationalisation of curricula of institutions.

3. Virtual mobility

In the framework of the MOVINTER project [7] we propose to further explore and reformulate the concept of Virtual Mobility in a systematic way. Virtual Mobility is mainly aimed at the internationalisation of higher education in a mutual benefit approach, and with respect to the local cultures and the need to valorise existing excellence of education and research in all parts of the world. At first glance [8*] Virtual Mobility is defined as the use of information and communication technologies (ICT) to obtain the same benefits as one would have with physical mobility but without the need to travel*. But really it's much more than this, virtual courses where part of the activities are done on online communities and combined with face-to-face seminars. Also it may be used as a preparatory activity to physical exchange, enabling a better preparation and follow-up of students who participate in physical exchange programs. So, in order to understand what virtual mobility is, we identify the following relevant features:

- International teaching team, cooperating in the design, implementation, support and evaluation of courses;
- International clusters of students from different countries who mainly study in their local (chosen) university with their fellow students and without going abroad for long periods of time to study; for those students, Virtual Mobility is a way to internationalise
- High interaction and communication through ICT, among the groups of students/teachers based in different countries to discuss diversity depending on national/local/contextual elements;
- Intercultural exchange: the multicultural component constitutes an integral part of the concept of Virtual Mobility. and choice of subjects that justifies the contribution from different countries (especially social sciences, law, economics, but practically any subject in which comparisons from different national contexts may enhance the value of curricula and prepare students for an international social, economical and professional environment;
- Appropriate technological solutions/choices that support the different types of
- Virtual Mobility activities, that facilitat the communication, the learning and the intercultural exchange. (reflective tools, non-interactive tools, collaborative tools, communication tools, social networking tools)

The other important features that may be present on virtual mobility are the following:

- Joint titles, wherever possible, based on a long term confidence relationship
- Among the participating HEIs, built on previous research and teaching cooperation.
- Joint design of curricula, which adds enormously to the value in terms of reciprocity and mutual benefits between the HEIs in the different countries.
- Joint production of learning resources that enrich the learning experience and the potential of Virtual Mobility.
- The originating vision stresses that the choice of subjects and the design of the learning experience should reflect the advantages of a multi-cultural approach.

These nine elements (shown in figure 2) may change and adapt to the different contexts and models, the expected benefits, outcomes; to the ambitions and needs and the evolving in time.

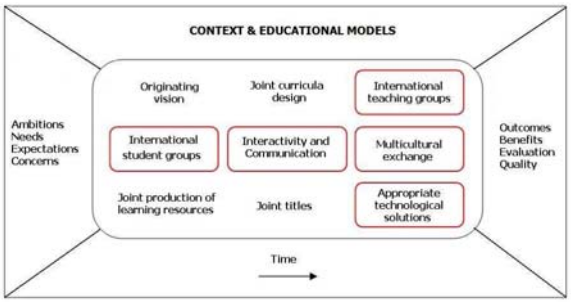

Figure 2. Virtual mobility features

In this context, we can identify three main dimensions in the aim of increasing the potential use of Virtual Mobility. Figure 3 shows the policy, research and community of practice dimensions and related concepts related within.

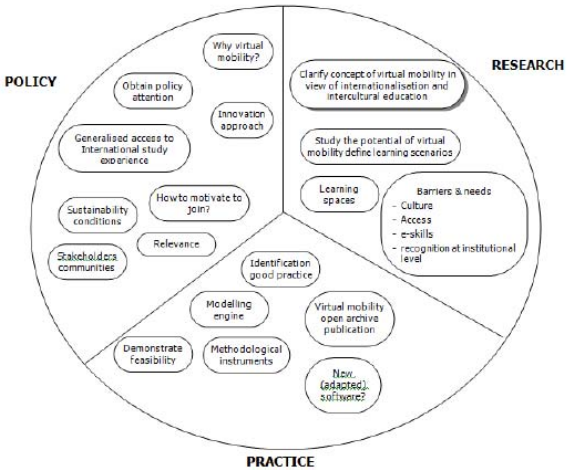

Figure 3. Scopes of the virtual mobility

5. The e-Community

In order to increase and promote the virtual mobility, one of the most interesting tasks is to create an online community to interact between different stakeholders.

The main goal of this community is a meeting point to share experiences, best practices and collaboration, so creating informal groups of collaborations.

Figure 4 represent a preliminary sketch of such community. Now we have a preliminary community with more than 150 users. We are now identifying how to create bottom-up synergies from these users to universities. An interesting resource is a best-practice collection of virtual mobility experiences, where community collects, rates and suggests case studies. Up to now, we have identified more than 50 experiences.

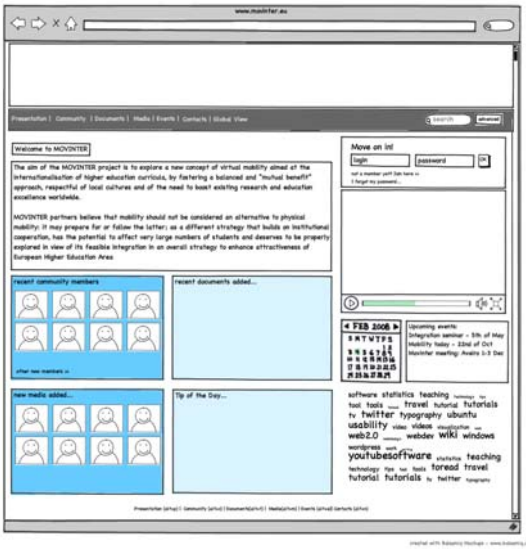

Figure 4. The Movinter community (sketch)

6. Conclusions and Future research

In this paper we have introduced the relevance of information society and the need of informal mechanism to create online communities on Higher Education institutions. Nowadays, physical mobility is a challenge to study abroad, and students follow and share information of their experiences in online communities such as mobi-blog. Although in most cases students comment their experience satisfied, they demand better mechanism to match studies of different countries. A further step it the increase of cooperation and internationalization of curricula.

This aim could be a straightforward approach in the European Higher Education Area (EHEA), but also, it may be a opportunity to enhance cooperation with third countries (i.e. Latin America). Virtual Mobility is key factor to strength these challenges due to the wide use of technology and the culture of information society. Now we have achieved an online community to exchange experiences based on virtual mobility.

Future works will be oriented on collect interviews of stakeholders involved in best practices of virtual mobility. Another complementary goal is to propose a service framework to evaluate, design and implement virtual mobility services for internationalisation and academic cooperation.

7. Acknowledgments and Disclaimer

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