LANGUAGE LEARNING: DESIGN CONSIDERATIONS FOR MOBILE COMMUNITY BLOGS

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ABSTRACT

Communities are important for language learners to learn and practice the language. A classroom provides a sense of community for a group of students learning a language. We aim to extend the learning arena outside of the classroom and maintain the sense of community while the students are mobile. We propose the use of a mobile community blog to encourage collaboration among the students and to bridge the disconnection that is caused when some of the students travel abroad to improve their language. We discuss considerations that have been taking into account in adapting standard blog functionalities to support a community of mobile language learners.

KEYWORDS

Mobile Language Learning, Mobile Community Blogs, Collaborative Learning, Disconnection, Design

1. INTRODUCTION

Language learning is an area where the learner has the need to complement the classroom learning with experiences outside of the classroom. Learners often experience situations where they would like to continue their learning processes while they are mobile. We refer to such situations as *mobile situations*. Mobile situations arise due to a number of reasons; e.g. a learner may wish to study while her motivation is high or when she has free time. In particular, language learners often find themselves in mobile situations when they travel to a country where the target language is spoken. An exploratory study of language learners' use of technology have shown that learners desire to combine learning with leisure and entertainment, (Thornton and Sharples, 2005). For example, watching a TV program may stimulate them to learn new words in a particular subject area or they may feel the need to learn the appropriate usage of a word or a phrase that appears in a conversation in the target language.

Learning languages is strongly influenced by situations (Ogata, 2005) and language and culture are inextricably linked, and although a learner may choose not to take an interest in the culture, the language cannot be isolated from the culture that embraces it (Tang, 1999). It is important for a language learner to learn in an appropriate cultural context, i.e. within a culture where the local language is the one studied. It is important for the student to interact with communities that exist in the cultural setting and practise the language with native speakers, fluent speakers and peers.

Mobility is often expressed in terms of time or space (physical location) (Cooper, 2001). Thus, mobile personal technologies are often used to support the mobile learners of a language by promoting anytime anywhere access to learning resources. We believe that access to people or communities that support the learning process is equally important.

Communities are important for language learners to learn and practice the language in an appropriate context. We define a community as *a loosely coupled ensemble of people that interact in some way*. Learners often interact in a number of different communities at any given time. In order to understand the communities that support language learners, we have identified some dimensions to describe communities (Petersen and Divitini, 2005). A learner may interact with different types of communities for different reasons, e.g. the class of language students may be a community of learners or practice while the local group of Francophiles may be a community of interest (Wenger, 1998). The local French people that a French language learner interacts with while travelling in France could be referred to as geographical communities. Communities may also have different types of members, e.g. temporary or permanent. The member's access to the other members and resources in the community and the nature of her participation may be determined by these factors. Another dimension of community is the connection to a community. While mobility facilitates the participation in different communities and brings the learner in contact with communities that exist within the appropriate cultural contexts for learning a language, it may also disconnect the learner from the communities to which the learner normally belongs to and feels comfortable in participating.

In this paper, we describe the case of full-time students at our university studying French. A community of learners is established in the classroom through collaboration among the students and the interaction with the teacher and by sharing resources and experiences. We believe that learning is supported by collaboration and the interaction with others (Vygotsky, 1978). In fact conversation has been identified as an important issue in effective learning. We subscribe to the view of learning as a continual conversation with other learners and teachers (Sharples, 2005). This is particularly important for language learners as they need to interact with others to practise their language and we would like to promote and encourage this among the students. We would like to support the community of learners established in the classroom to continue their activities outside of the classroom. In particular, when some of the students travel to France to continue their studies, they are disconnected from some of the members of their community of learners and their teacher who stay in Norway (Wenger, 2001). The mobility of some of the members of this community causes a disconnection. The main focus of this paper is on the support for building and maintaining a sense of community and a shared sense of collaboration among the members.

We aim to create a sense of community among the students and promote active participation among the members. If such a community can be established while all the students are in Norway, they would be more encouraged to maintain this when some of the members travel to France and the community is disconnected. Blogs have recently become a popular medium for establishing and maintaining online communities (Rosenbloom, 2004). Thus, we propose a mobile community blog to create a sense of community and support the disconnection among the members. We describe the considerations that have been taken into account in designing a blog to support the needs of these students. The rest of this paper is organised as follows: Section 2 describes the case, Section 3 proposes how a community of language learners can be supported, Section 4 discusses the learning resources, Section 5 discusses how standard blog functionalities can be adapted to a mobile community blog to support disconnection among community members and Section 6 summarises the work.

2. CASE DESCRIPTION

We are currently collaborating with the Department of Modern Foreign Languages at our university, identifying the needs of students studying French language, culture and society. These are full-time students who attend regular classes on campus. The course focuses on today's French society, how it works, its institutions such as the education and social system, the political system and the current debates in the society. The course is based on a textbook and supplemented by other material as necessary, e.g. based on a current issue and how that is covered in the French media. All students are encouraged to travel to France as part of their university course, in order to obtain an insight into today's French society and to practise the language. This is an agreement between our university and Caen University in France, where the students

spend 4 weeks during the spring semester. The students attend classes in France and the curriculum is coordinated between the two universities. The students in Norway and in France use the same textbook.

The class consists of 33 students, 19 of whom are able to travel to France. Thus, the class gets divided into two sets of students that are geographically separated and disconnected, see Figure 1. When all the students are in Norway, they remain connected to their peer students or their learning community. When the students travel to France, although they become more connected to the French culture and society, they become disconnected from their community of learners, learning resources and their teacher.

At present, when the students travel to France, they have little or no contact with their teacher in Norway and there is no formal context for maintaining this contact. There is no indication of communication or collaboration between the students in Norway and France, although we assume that there may be some private communications.
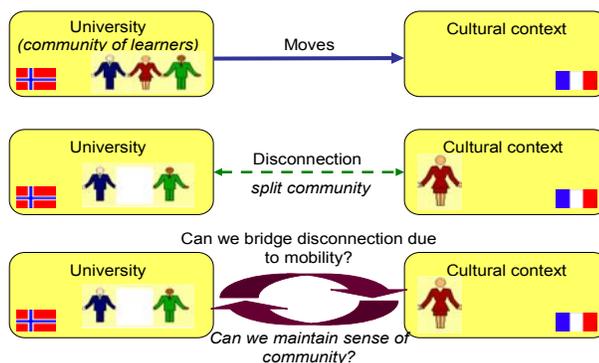

Figure 1: Mobility and Disconnection

At the end of the semester, the students have a written and an oral exam. The students that travel to France have their written exam in France and the oral exam when they return to Norway, conducted by their teacher in Norway. They can choose to do a written exam that is set by either their teacher in Norway or in France. A representative from Norway visits France to ensure that the curriculum and the examinations are aligned between the two universities.

3. SUPPORTING A LANGUAGE LEARNING COMMUNITY

We would like to support the students in participating in the activities of their learning community by sharing their ideas and experiences when they are outside of the classrooms, either in Norway or France. When all the students are in Norway, the regular classes provide an opportunity to interact with the teacher and the learning community and an arena for expressing oneself and sharing ideas. However, they need a space for sharing and collaboration outside of the classroom. When the students travel to France, they are now in a desirable and appropriate location and cultural context for learning the French language. Nevertheless, the shared space provided for them by the regular on-campus classes is no longer there. We believe that it is important for the students that travel to France to maintain contact with their peer learners and their teacher to feel that they are still a part of the community and maintain a sense of belonging. It is important for them to be able to continue sharing ideas and discussing with their peer learners. It is equally important for them to have access to their teacher so that he may answer their questions and provide feedback and guidance.

Our aim is to support the language learning process by promoting collaboration and a sense of community among the learners by providing technological support. Thus, we have considered collaborative activities that we believe contribute to the learning of a language. We also aim to support the learning

community outside of the classroom and to bridge or minimize the disconnection caused by mobility by providing support to do the following, independently of the learners' physical location:

[1] Collaboration among students, both in France and in Norway: students should be able to collaborate with each other by exchanging ideas, sharing information and discussing with each other. When some of the students move to France, they are now culturally connected to the French language and society. However, they are disconnected from their original community of learners, their learning resources and support such as their teacher. The students that remain in Norway are connected to their learning resources and their teacher. However, they are disconnected from the French culture and society. The students that travel to France can play an important role in conveying a bit of the French culture to the students that remain in Norway while the students in Norway can keep the students in France updated about what's happening with their classes in Norway and the university. The students in France can also support the students in Norway by supplying learning material that may not be available in Norway, e.g. they can act as consultants by responding to queries from students in Norway and supplying additional learning material.

[2] Interaction between students and teacher: students should be able to interact with their teacher whenever they feel the need for it. Students should be able to send queries to the teacher as well as receive answers and feedback regarding their questions and contributions. Although the students attend classes in France for a short period, their teacher is still the one in Norway and he will be the one examining them when they return to Norway at the end of the semester. Thus, the students may feel the need for support from the teacher while they are in France and it is important for them to maintain communications with the teacher.

[3] Active participation of the students, independently of their location: students should be able to join in the activities of their learning community by providing ideas and feedback. Students both in Norway and France can take the initiative to find material that may be interesting to the whole community and initiate a discussion, fostering the practise of the language. Students in France may be proactive and act as correspondents from France by providing contemporary material that supports an understanding of the French culture and society.

[4] A sense of community among students: it is important for students to feel that they continue belonging to the class and that their ideas and contributions are visible to others in the community. It is also important that a student at any time does not feel isolated and disconnected, but feels that she has the support of her community. This is even more important when the students travel to France and the regular classroom meetings are no longer there. Since the students return from their short stay in France, it is important to maintain the sense of community throughout the semester, independent of the students' physical locations.

We plan to use the four collaborative activities described above to develop a framework for the evaluation of technology to support our students.

4. MULTIMEDIA LEARNING RESOURCES

A language learning community needs an infrastructure for collaboration, sharing and contribution of learning resources, where learning resources play a central role in the learning process. Literature on language learning address the issue on the selection of learning resources, e.g. (Milton, 2002). Some of these issues are related to selecting material that reinforces the classroom learning as well as topics that the students will be interested in. We believe that learning resources are not only provided by the teacher, but by the students as well. For example, a student may raise a question that is beneficial to all the students and trigger an important discussion. Also, if the students provide some of the learning material, it may be easier for them to retain what they have learnt. Thus, one student's interaction with the teacher by asking a question may stimulate collaboration among the students. Students may attempts to answer each other's questions and foster a discussion that leads to increased sharing of ideas and experiences. Students may also actively participate by contributing material for discussion or by sharing their thoughts and experiences.

We are convinced that multimedia is critical in language learning. Multimedia can be defined as computer-delivered combination of a range of communication elements and language learning has exploited these communication elements. The advantages of using multimedia in language learning are discussed in (Brett et al., 1998). Multimedia utilises a multi-sensory collection of elements and the combination of the different media is seen as a strength, as each of these deliver a message in a particular way and can elicit communicative language. Multimedia also facilitates simultaneous practise of several skills, e.g. listening, reading, speaking and writing (Butler-Pascoe, 1997). Multimedia can also be virtual realia from France that can stimulate language development (Smith, 1997).

4.1 Content

Prompting or stimulating students to contribute may be a challenge, see for example (Divitini et al., 2005). Thus, we have decided to introduce some topics so that students may feel encouraged to start contributing and feel that they can contribute. The initial topics that have been selected by the teacher are French films, French music and French cuisine. We believe that these topics will help obtain an insight into the French culture, in particular, contemporary French society. These topics were also selected so that the students will not be able to just obtain references from the library alone, but have to access French media and preferably French society. The topics have been chosen to also encourage the use of multimedia. For example, French music will encourage the students to listen to and analyse French songs. Songs, in particular, are believed to have certain natural advantages for language learning in the way the vocabulary is structured and the built-in repetitions and the music is thought to be an aid to memory. Films, although they use less language, are a visual media and make great use of images supported by music (Milton, 2002). The saying "a picture is worth a thousand words" is absolutely true in bringing a bit of France to the students who remain in Norway. We hope that a picture or a sound or a video would stimulate a student to express or learn some new words.

These topics may also interest the student to seek other communities to interact with, such as music fans. We hope that the students in France will provide updated information to the students in Norway about the music that is played in the French cafes, the food at the university canteens as well as other interesting topics. If such contributions are visible within the community, this can promote a sense of community among the students. We envisage scenarios where one student writes something about her experience and several other students contribute to the initial contribution as comments, where the students may create their own little stories that they want to share with their community. Language teachers have found that there is benefit from extra informal writing done by students in discussion forums or similar environments, e.g. (Black, 2005) and (Godwin-Jones, 2003).

4.2 Operations

Consider how learning resources may be used in language learning. Some situation stimulates the *creation* of learning material. A student may write something or capture a situation as a photo or a multimedia file that she wishes to share with her learning community. This learning material is then *published* somewhere so that the other members of the learning community can access it. This learning material may be of interest to others and they may wish to contribute by *commenting*, *annotating* or *editing* it. Sharing learning material and reflecting upon this and contributing to it is a part of the learning process. Providing support for students in mobile situations, e.g. when in France, to perform these actions will no doubt accumulate an enriched set of learning material that can be shared among all.

For the students travelling to France, multimedia offers them an opportunity to capture a part of the French culture and share it with peer students in Norway. For example, an interesting scene in the city, a flyer in the students' canteen or a window display in a trendy clothes boutique may trigger the need for sharing it with the peer learners. Similarly, it also facilitates sharing of their own activities with one another, e.g. photos from a party or an excursion will be informative to the students in Norway as well as strengthen the sense of community among the students. The ability to annotate the picture or write comments or notes on the picture provides additional information about it that may stimulate more thoughts and discussions.

Sound is particularly important in language learning in order to practise speaking the language and improving pronunciation. Thus, podcasting has recently been of interest to language teachers, e.g. (Munro, 2005). In addition to publishing sound files such as songs and podcasting, we are interested in the students

capturing or creating their own audio learning resources and how they contribute to language learning. We are also interested in the students commenting, annotating and editing multimedia learning resources.

5. DESIGN CONSIDERATIONS

We have designed a mobile community blog for the class as a common space for sharing ideas and discussions. Blogging allows students to post ideas and comments and share their interests via a webpage. Blogs have been used with varying degrees of success by a diverse set of communities including classrooms. Examples of blogs used by classes where students reported about their projects and commented on each other's postings are reported in (Nardi et al., 2004). Unlike traditional webpages for sharing information, blogs offer two-way communication or interaction between the writers and the readers. This interactive nature facilitates feedback provision, corrections and encouragement, all of which are crucial for language learning (Milton, 2002). The use of a blog for supporting learning English as a foreign language is discussed in (Ward, 2004), where each student had her individual blog, and a common blog for the class linked all the individual blogs. Students were given an assignment where they had to respond to an article in the news by articulating an opinion. Most of the students preferred writing the weblog rather than the traditional journals and the majority of the students believed that the weblog could improve their English.

Standard blog functionalities include creation of learning resources (posting a contribution), publishing for sharing, commenting and filtering content according to the date. We believe that by customising the functionalities of the blog, we can support collaboration, interaction, participation and the sense of community among the students.

5.1 Adapting Functionality

The main consideration in the design of the blog is that all students must be able to contribute the desired learning resources to the blog, from anywhere, anytime, thus, supporting the contributions from both the students in France and Norway. Mobile blogging is thus necessary so that students can capture a situation as it happens, from anywhere and publish it on the blog as well as access the blog from anywhere, via a mobile device such as a mobile phone, PDA or a smart phone. Similarly, access to the teacher is strengthened as a query that comes to the mind of a student outside of the classroom hours can be sent to the teacher as well as to the other students. Standard blog functionality, where contributions can be made through the blog webpage, can be enhanced by plugins that support blog contributions via email and S/MMS. Supporting mobility by facilitating the use of S/MMS and email also provides varied interaction modes, thus encouraging interactions among the members of the community.

In order to support an enriched set of learning resources, multimedia content is supported, e.g. links to webpages, pictures, audio files and videos. Supporting multimedia allows students to capture a situation by taking a picture or making sound or video recordings and sharing it with the other members of the community. It also supports a varied and rich set of learning resources. We envisage that this may provide additional stimuli to contribute to the class as well as promote a sense of community. Also, the ability to share sound files can be used by students to collaboratively work on their pronunciations and get feedback from the teacher to audio contributions.

Blogs have initially been a forum where an individual publishes her views and experiences to share with others. A community around an individual's blog evolves when several people read the blog's contents regularly and participate by commenting on the contents. This is still an individual's blog with a number of readers. Blogs that have links to several individual blogs, e.g. a common blog for a class of students that has links to each student's individual blog, have become popular recently. Both these types of blogs support original contributions by one individual that others can read and comment on. The concept of a community blog can be enhanced to support contributions by a community of peer contributors, readers and comments providers. For our case, we have designed a community blog where all the students are registered as editors and have equal rights to edit the contents of the blog, i.e. they are all peer authors and readers of the blog contents. Blogs have been referred to as "participatory media" (Blood, 2004), e.g. in this case any student can create and contribute learning resources to the community and each and every student and their activities are visible from the blog. By using a blog to support learning material that is complementary to the classroom

learning material, it allows students to contribute with ideas and stimuli. We have tried to find a balance between individual authority and participatory democracy (Rosenbloom, 2004), by moving or distributing the control of the learning material from the teacher to the students, thus hopefully increasing the participation of the students. The contents of the blog can be filtered according to the author too, thus emphasising the visibility of each member of this community.

Categorisation of blog contributions, such as French music and French films, supports the different interests among the community members. This helps define different topics of interests as well as an additional means to filter the contents of the blog. In addition to contributing to the blog and commenting, the students can also include new categories and subcategories. So, if one student desires to start a discussion on a topic that is not included among the existing categories, she can create a new category and contribute. We envisage that this functionality will encourage students to be active in their contributions and sharing thoughts, ideas and experiences with the other members of the community.

Capturing of situations also helps the contextualisation of the learning resource. For example, a picture of a certain place in France where the location of that can be captured and displayed relative to other places that are reported in the blog will help the students in Norway to visualise the situation in France better. Similarly, organising the contents of the blog on a visual image, where multimedia contributions can be attached to zones of the image, e.g. points on a map, provide additional support for collaborative learning and content creation, e.g. (Mediaboards, 2006). Thus, categories of contributions can correspond to a zone on a conceptual map. The ability to annotate pictures, e.g. (Flickr, 2006), conveys additional information about the situation captured by that picture. The possibility to comment the picture, in particular the annotations on the picture, fosters a discussion about the situation as well as a sense of community and sharing of experiences.

In addition to contributing to the blog via a mobile device, it is also possible to transmit blog contributions via a mobile device. This may be useful if the teacher needs the students to look at some of the content he has published on the blog as soon as possible. This capability can be used as triggers and to create awareness to the contents of the blog. To further support awareness, RSS (Really Simple Syndication) is used so that students can subscribe to the blog and be informed of changes that take place in it. This also supports podcasting, where students can subscribe to the blog and receive updates of any audio files.

6. SUMMARY

Language learners often find themselves in mobile situations in which they would like to continue their learning processes and interact with their community of learners. For example, a student learning French travels to France as part of her studies. While in France, it is important for the student to remain connected to her peer students and teacher back in Norway, as well as have access to the learning resources that are shared by the learning community. This paper discusses the design considerations for a mobile community blog to support interaction, collaboration, participation and a sense of community among a class of students studying French. It aims to extend the learning arena outside of the classroom and to support the disconnection in the community caused by the mobility of some of the students, when they travel to France. We believe that the disconnection can be bridged by facilitating better collaboration among the students and improving the interaction between the students and the teacher. This can be achieved by encouraging active learner contribution and participation in discussions and fostering a sense of community among them.

We have implemented a mobile community blog using the open source system Serendipity (Serendipity, 2006) to support our students. It has been introduced to the students at the start of the spring 2006 semester and we have collected data on the activities on the blog when part of the students travelled to France in March. The data collected for evaluation is based on the collaborative activities described in Section 3. Data collection has been done using the automatic logs compiled by the blog. In addition, we plan to use a questionnaire and interview some of the students at the end of the semester for a better understanding of their patterns of usage of technology as well as their needs. We also plan to analyse the contents of the blog.

In addition to evaluating if the use of a blog facilitates collaboration, interaction, participation and a sense of community among the students, we are also interested in the role of multimedia in facilitating these activities. We are currently working on analysing the data that we have and designing a questionnaire and interview for further data collection.

ACKNOWLEDGEMENT

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