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Identity, sense of community and connectedness in a community of mobile language learners

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Abstract

Mobility can affect a learner's participation in different communities that support language learning. In this paper we report on our experience with supporting a course in which language students are encouraged to travel to a country where the target language is spoken. On the one hand, students who travel abroad get in contact with local communities,which can promote their learning of the language and the culture. On the other hand, they risk losing contact with their classmates and the support that they provide. In this context we introduced a mobile community blog with the aim of extending the learning arena and promoting the sharing of knowledge among the students, independently of their location. This paper discusses the design considerations for the blog and describes its use to support students' sense of community. An evaluation and analysis of the usage of the blog is presented. These results suggest that the learners lack an identity within the community of language learners and there was no sense of community among the members. Reflecting on these results, we suggest that while a blog might be an appropriate tool for promoting knowledge sharing, it lacks functionalities to promote connectedness among learners and foster their identity as a community.

Keywords: Mobile language learning, learning community, mobile community blog, communities, connectedness, design

1 Introduction

One of the areas where educational technologies, in particular mobile technologies, have

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been popular is in the area of language learning. The popularity of mobile technologies such as mobile phones, Personal Digital Assistants (PDAs) and portable media players in education have been documented by several researchers (Roschelle, Sharples & Chan, 2005; Naismith et al., 2005). Learning through the use of mobile devices has often been described as Mobile Learning, e.g., Quinn (2000). The focus in Quinn's view of Mobile Learning is on the technology that delivers the learning resources rather than the learner. However, more recent views of Mobile Learning focus on the learner rather than the technology and argue that there are dimensions other than technology that should be considered (Vavoula et al., 2005; Sharples, 2006). Mobile Learning is also considered as learning anytime and anywhere, introducing the dimensions of time and place. Sharples et al. describe the term "mobile" in Mobile Learning in terms of time, technology, physical domain, social domain and conceptual domain (Sharples et al., 2007). By introducing the social dimension of mobility, the focus is not only on the learner, but includes the various social groups, family, classmates and others with whom the learner interacts in the learning process.

We consider a socio-constructivist approach to language learning, where learning is supported by collaboration and the interaction with others (Vygotsky, 1978). In collaborative language learning, the social construction of knowledge occurs through the learners' interaction with other learners, teachers and various communities that support the learning process. The individual learner is part of a community of practice (Lave & Wenger, 1991), where learning takes place through the sharing and interaction among the members of the community. Sharples advocate conversation as an important issue in effective learning, where learning is considered as a continual conversation with other learners and teachers (Sharples, 2005). Many scholars agree that learning is most effective when it takes place as a collaborative rather than an isolated activity and when it takes place in a context relevant to the learner (Murphy & Laferrière, 2003). Thus, it is important to understand the social needs of the learners, who they interact with and when they need access to a community that supports the learning process.

The notion of community is central to learning any language. There are several definitions of a community. A community has been defined as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986). The most essential elements of a community have been suggested as spirit, trust, mutual interdependence among members, interactivity, shared values and beliefs and common expectation (Rovai, 2002). More relevant to our work is the notion of community proposed by Lave and Wenger, where they define learning as involving participation or membership in communities of practice, where the participants share understanding about what they are doing and what that means in their lives and for their communities (Lave & Wenger, 1991). Communities are important for the student to learn in an appropriate cultural context. For language learners, the culture where the local language is the one studied is an appropriate learning arena. It is important for the student to interact with communities that exist in the cultural setting and to practise the language with native speakers, fluent speakers and peers.

In our work, we consider mobility as the mobility of the learner rather than that of the technology. Mobility of students learning a language, and consequently the Information and Communication Technology (ICT) support for it has been mainly addressed in terms of movement in space, i.e. of physical location. We believe that to fully exploit the potential of

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ICT in supporting the learning of a language, mobility must also be explained in terms of movements across multiple communities. When language learners move to a culture where the language is spoken, they change not only their location but also the communities they interact with. Here, the learner is mobile and has to move to another geographical (physical) location in order to obtain the cultural context for learning and to be able to interact with communities that can help the learner acquire a better understanding of the language.

Physical mobility also disconnects or splits communities and it is important to consider this disconnection from a social perspective. The disconnection may affect a student's feeling of connectedness. Connectedness has been defined as "a positive emotional experience which is characterised by a feeling of staying in touch within ongoing social relationships" (van Baren et al., 2003). The feeling of being connected has been identified as a critical factor within communities for sustaining membership and belonging (IJsselsteijn, van Baren & van Lanen, 2003) and Rettie (2003). Feeling disconnected not only affects social wellbeing, but also the process of sharing experiences and reflection that are critical to the learning process.

In this paper, we explore the notions of mobility and community among a group of language learners by considering full-time students at our university studying French. The main objective of our work is to support the language learners in creating and maintaining a sense of community among them when some of them travel to France. We identified the needs of the students through discussions with their teacher and as a result a mobile community blog was designed and introduced to support students. From this perspective our research can be classified as action research, since it was conducted with the active participation of the teacher with the aim of improving the situation of the students (Greenwood & Levin, 2007).

The blog was intended to provide a collaborative work space for the students to share their work, collaborate and use as a communication medium. Our assumption was that if the blog was introduced at the beginning of the semester, it would support the establishment of a community and create a sense of community among the learners before some of them moved to France. The continued use of the blog was then expected to support the maintenance of the sense of community.

The paper provides a detailed description of the design and implementation of the mobile community blog and the evaluation of the blog. The results of the evaluation of the usage of the blog indicated that the language learners did not identify themselves as members of the community and that there was no sense of community among them. The paper presents our reflections on the results of the evaluation and we believe that one of the reasons why the learners failed to establish a sense of community may be due to the lack of a feeling of connectedness. We explore the notion of connectedness and how connectedness can be fostered among learners to promote a sense of community among them.

The rest of the paper is organised as follows: Section 2 provides a detailed description of the case, analyses the case in terms of mobility and communities and describes the evaluation framework and the research method used. Section 3 provides an introduction to the use of blogs in language learning, a detailed description of the design and implementation of the mobile community blog, and how it was introduced to the language learners. Section 4 reports on the evaluation of the usage of the blog, Section 5 analyses the results of the evaluation, Section 6 reflects on the results of the evaluation and Section 7 summarises the paper.

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2 Language learning: case description and research method

This part of the paper describes our case and provides a detailed analysis of it in terms of mobility and communities. The framework for the evaluation of the sense of community among the learners and the research method that we have used are described.

2.1 Case description

The case described in this paper is based on a collaboration between the Department of Computer and Information Sciences and the Department of Modern Foreign Languages at our university (hereafter referred to as NTNU). We have developed a course on Contemporary French Society, taught in French. It aims to teach about today's French society, how it works, its institutions such as the education and social system, the political system, immigration and the current debates in society. The course is based on two textbooks which are supplemented by other material as necessary, e.g. the coverage of a current issue in the French media. The students are also encouraged to contribute their own materials that they feel are relevant to the course. The course is based on classroom lectures and one mandatory assignment.

The course lasts one semester; the time available for classroom learning is approximately twelve weeks, with 90 minutes of lectures each week. Due to recent changes that have been introduced in the curriculum, students taking language courses also follow another study program such as European Studies or Teacher Training and attend language classes for a few semesters to master a language.

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. NTNU has an arrangement with Caen University in France to send students to conduct a part of the course in France. Each semester, some of the students travel to France to attend classes at Caen University for four weeks. In the spring of 2006, the class consisted of 33 students (approximately one third male and two thirds female), 19 of whom were able to travel to France. The curriculum is coordinated between the two universities so that the students follow the study program that they have been following at NTNU. When the students return from Caen, they have a written and an oral exam.

The teacher wanted his students to share their ideas with the class and contribute any learning material that they thought was relevant for their learning. He wanted their class to remain connected when the students travelled to France so that the students in France would continue to feel that they belonged to the class. The students in Norway could update the students in France about what was happening in Norway, while the students in France could inform students in Norway about what was happening in French society and provide relevant material from France.

2.2 Mobility and communities

When the students move from Norway to France, they experience geographical mobility or are mobile with respect to physical space (Cooper, 2001 and Sharples et al., 2007). This mobility can be analysed using the modalities of mobile settings proposed by Kristoffersen and Ljungberg (1998). When the students move from Trondheim to Caen,

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they travel or move to Caen and are visiting Caen for a period of time. While they are visiting Caen, they wander locally around Caen to enrich their knowledge about French language and society.

The class of students can be considered as a language learning community. When some of the students move to France, the community splits or becomes geographically disconnected into two communities: the community of students in France and those in Norway, as shown in Figure 1.

To complement the learning that takes place in the classroom, the student engages or participates in multiple communities at any point in time (Lave & Wenger 1991). In addition to the language learning community, the students also belong to the communities of students in their other courses such as European Studies or Teacher Education. The French students are learning not only the French language, but about French culture and society. The communities that could contribute indirectly to their learning process are less clear and we envisage that there are a number of communities that can support their learning process. For example, interacting with French people, both in France and in Norway, would contribute directly to their learning process. It may be interesting and useful for the students to discuss ideas with francophiles in Norway. Similarly, it may be helpful to meet other foreign students who are studying French in France. Moving to France not only makes the students mobile in the physical domain, but also mobile with respect to communities or mobility in the social space (Sharples et al., 2007). The main communities for the students who move to France are the students studying French in Norway and the students in France. While the mobility of the students splits them into two language learning communities and takes them away from the communities that they currently participate in and feel comfortable participating in, it also facilitates them to come into contact with other communities in France that may play a role in their learning process, as shown in Figure 2. The students are now able to interact with communities of native speakers as well as communities of students in the same situation. A detailed discussion of the communities for language learners is available in Petersen & Divitini (2005).

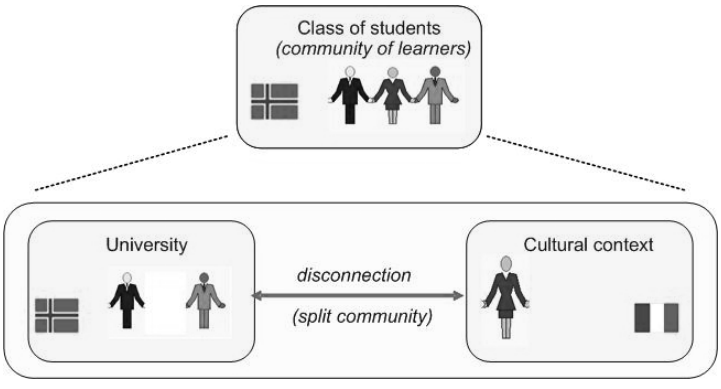


Fig. 1. Language learners split into two communities

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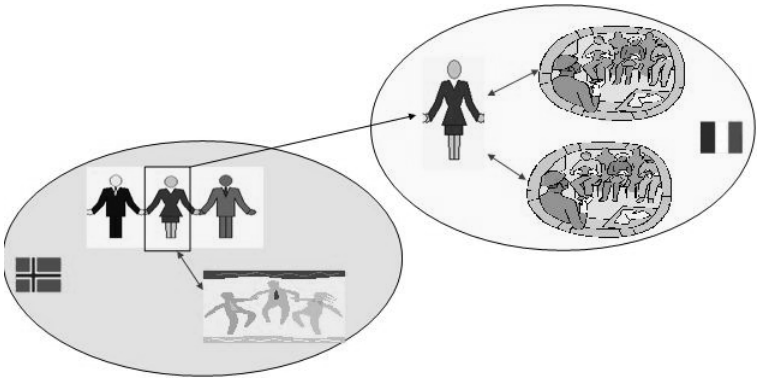


Fig. 2. Geographical mobility facilitates new communities

Mobility among communities affects a student's role within different communities. For example, a student may be very active and enjoy full member status in the community of language learners in Norway. When she begins participating in the community of foreign students in Caen, her membership may be temporary and her participation may be peripheral (Lave & Wenger, 1991). Mobility among communities can also be mobility in the conceptual space (Sharples et al., 2007) where the student's focus or interests may shift. For example, joining the community of foreign students in Caen may stimulate new interests.

In Caen, the students are geographically connected to French culture and new communities and geographically disconnected from the communities in Norway that they have been participating in. However, the students may feel conceptually disconnected from some of the communities in Caen and conceptually connected to the communities in Norway. The main challenge in this case is to create and maintain a strong sense of community among the class of language learners while encouraging them to participate in other communities and engage in activities that can contribute to their knowledge of the French language and society, outside of their classroom.

2.3 Evaluation framework

The main focus of our work is to support language learning through building a sense of community among the class of learners from the beginning of the semester. We aim to do this by supporting the students in participating in the activities of their learning community by sharing their ideas and experiences, 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 who travel to France to maintain contact with their peer learners and their teacher, to feel that they are still a part of the

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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.

We designed a mobile community blog to support language learners in maintaining a sense of community and a shared space for collaboration. Encouraging user participation and fostering social interactions have been identified as fundamental to designing successful socio-technical systems (Girgensohn & Lee, 2002). Learning is fundamentally social and involves social interaction (Hartnell-Young & Cornielle, 2006), participation and collaboration in communities (Lave & Wenger, 1991: 54). Thus we believe that it is important to support the following collaborative activities:

1. Active participation of learners, independent of their location: learners join in the activities of the community by contributing learning resources, providing ideas and feedback. Learners are encouraged to take initiative in finding material that may be of interest to the community, which could stimulate discussions that foster the practice of the language.
2. Social interaction among the learners: learners interact by sharing material that may be of interest to the community, but not necessarily related to the content of the course. Learners are encouraged to share photos, personal information or information regarding social events or activities that fall outside of the syllabus, which would also stimulate the practice of the language.
3. Collaboration on tasks: learners collaborate with each other by exchanging ideas, sharing information and discussing with each other as a part of performing various tasks related to the course. The students who remain in Norway, who have contact with their teacher, can update the students in France about the activities in Norway. Similarly, learners in France could act as consultants or correspondents from France and provide contemporary material to help learners in Norway learn about French culture and society.

2.4 Research method

In the research presented in this paper, we adopted a teacher-centred approach, i.e. we identified the needs and designed the case study through discussions with the course teacher. The selection of this design approach is based on the assumption that technology should be introduced in an educational context only if there are strong pedagogical motivations for it. Technology should try to strengthen patterns of behaviour that are considered as beneficial with respect to the learning objectives or try to create new patterns that are better aligned with the pedagogical objectives of the course. In this perspective, the introduction of technology is seen as one additional tool available to the teacher to meet the pedagogical objectives and it must align with other mechanisms that are adopted in the design of the course.

Students were not involved in the initial design phase. The course, requiring a period abroad, is rather different from what the students have experienced before. We therefore assumed that it would have been difficult for them to identify their needs in a realistic way. For example, the students might not be aware of the importance of collaboration

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and of keeping in touch and exchanging information when some of them are abroad. We therefore decided to prioritise the teacher's perspective and collect informed feedback from the students only after they had used the system, in order to inform the subsequent phases of the tool adoption.

The mobile community blog was introduced to the students at the beginning of the semester and they were asked to contribute actively to the blog starting from the beginning of the semester. The students were given the option of contributing either in French or Norwegian, in case some of them did not feel confident in writing in French. The usage of the blog was evaluated at the end of the semester, using the statistics that were available from the blog log and by reading the contents of the blog. The blog statistics were used to evaluate the activity level on the blog. The social interaction and collaboration on tasks were evaluated by analysing the actual content of the blog.

In addition, two volunteers, one in Norway and one in France, were asked to submit semi-structured diaries twice a week for the four week period that part of the class was in France. The two volunteers were chosen by inviting the whole class to volunteer a few weeks before they travelled to France. They were also asked to contribute regularly during this period to encourage the other students. The motivation for the diaries was to understand the interactions of the students with the other communities (Alaszewski, 2006). The diaries gathered information about the students' interactions with other people such as their classmates, teacher and people in France, the type of information exchanged and the medium that was used for the interaction.

We also interviewed three students, individually, at the end of the semester to obtain their views of using a blog to support the sense of community. Two of these students contributed with the diaries and the third one was selected as she had taken the initiative to use the blog to invite her classmates to a party on the blog. The interview was unstructured and conducted as an open discussion and the motivation was to obtain information on how the students felt about the blog in general, and how the use of the blog could be improved in the future. The interviews were conducted by the blog developer and the teacher.

3 Mobile community blog

This section of the paper provides an introduction to blogs and their use in language learning. It describes the ideas and rationale for the design of the mobile community blog and how the blog was introduced to the class of language learners.

3.1 Blogs in language learning

Blogs have recently become a popular medium for establishing and maintaining online communities (Rosenbloom, 2004). Some of the reasons for the popularity of blogs have been that blogs have made it very simple to disseminate information and comments in public spaces, and their scope for interactivity (Williams & Jacobs, 2004). In particular, blogs support learning networks and they are a flexible environment for learning for the individual as well as the community (Efimova & Fiedler, 2004).

Blogging allows students to post ideas and comments and share their interests via a webpage and it gives visibility and presence to the distributed community (Henri &

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Pudelko, 2003). Blogs have been used with varying degrees of success by a diverse set of communities including those in classrooms. Examples of blogs used by classes where students reported their projects and commented on each other's postings are reported in Nardi et al., (2004). Blogs seem an appropriate medium to support students who are geographically distributed; an example of a blog for supporting nursing and social work students who were geographically scattered in the UK and Austria is described in Keegan (2006). We have come across several examples of blogs that have been used to support language learners. 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. In another example, a class of distance education Spanish learners were supported by a blog when some of the students travelled to Spain as a part of their course (Comas-Quinn, 2007). Blogs have also been used as a complementary tool to other media; Hampel et al. used blogs for the learners as a medium for working together and reflection on their learning, where the main learning environment was an audiographic tuition environment which included audio, textchat and graphic interfaces (Hampel et al., 2005). They also used a blog for the tutors for reflection and discussion

Unlike traditional webpages for sharing information, blogs offer two-way communication or interaction between writers and readers. This interactive nature facilitates the provision of feedback, corrections and encouragement, all of which are crucial for language learning (Milton, 2002). Standard blog functionalities include the 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 a sense of community among the students.

3.2 Design considerations

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 contributions from the students in both France and Norway. Blogs that consist of contents posted to the internet from a mobile device such as photos from a mobile phone are called mobile blogs. Mobile blogging is necessary so that students can capture a situation as it happens, from anywhere, publish it on the blog and access the blog from anywhere, via a mobile device.

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 work collaboratively on their pronunciation and get feedback from the teacher on their audio contributions.

Blogs have hitherto been a forum where individuals publish their views and experiences to share with others. A community evolves around an individual's blog when several people read the blog regularly and participate by commenting on the

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content. This is still an individual's blog with a number of readers. Blogs that have links to several individual blogs, e.g., Ward (2004), have become popular recently. Both these types of blog support 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 peers, readers and comment providers. In our case, we designed a community blog where all the students are registered as editors and have equal rights to edit the content of the blog, i.e. they are all peer authors and readers of the blog content. Blogs have been referred to as "participatory media" (Blood, 2004), for example, 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, students can contribute ideas and stimuli. We 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.

Promoting the visibility of people and their activities has been identified as a key challenge in designing social websites (Girgensohn & Lee, 2002). The blog is designed to display a list of all authors, who can enter their profiles, individual photographs and information about themselves to personalise their membership. The content of the blog can also be filtered according to the author too, thus emphasising the visibility of each member of this community.

Categorisation of blog contributions supports different interests among the community members (Chin & Chignell, 2006). This helps define different topics of interest as well as providing an additional way of filtering the contents of the blog. If a student desires to start a discussion on a topic that is not included among the existing

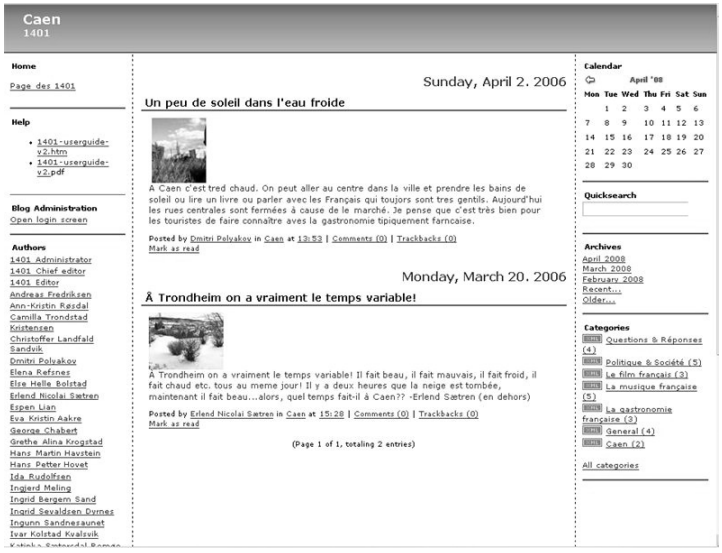


Fig. 3. Screen shot of the blog; names of authors are listed on the left-hand side, calendar and categories are on the right-hand side.

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categories, they can create a new category and contribute. We envisage that this functionality will encourage students to be active in their contributions and in sharing thoughts, ideas and experiences with the other members of the community.

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 a trigger and to create awareness of the content of the blog. To further support awareness, Really Simple Syndication (RSS) 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.

3.3 Implementation

The mobile community blog was implemented using standard capabilities available in the Serendipity open source weblog system (Serendipity, 2006), where all the learners are registered as authors and have equal rights to edit the contents of the blog. The main page of the blog is shown in Figure 3. The page is divided into three sections to accommodate all the information and functionality that we wanted to have on the blog. The three columns contain the following information:

1. The left column provides a list of all the authors, the menu for logging in to make a posting, links to the user guide and contact for the blog administrator. By clicking on an author's name, a profile of the author and their contributions are displayed.
2. The right column provides menus for filtering the contents of the blog according to the categories and date. RSS is used on each category so that learners can subscribe to the content of the blog and be informed of changes in the blog content.
3. The middle column displays the contents of the blog and the display varies according to the viewing criteria, e.g., category, author or date.

3.4 Introducing the blog

The blog was introduced to the students at the beginning of the semester. The blog website and the main functionalities were presented to them during a lecture. The teacher introduced the idea of using the blog and a presentation was given by the developers of the blog system. There were mixed reactions from the students: a few of the more mature students felt that this was technologically demanding, while others were more enthusiastic and excited about it. During the presentation and discussions that followed, one of the students took the initiative to post a picture to the blog using her mobile phone as a demonstration of the functionality.

A group photo of the class was taken and included in the main page of the blog, with the aim of creating a sense of community and providing a feeling of inclusion in the community. In order to stimulate the students to contribute to the blog, some topics were introduced by the teacher as categories for contributions. The initial categories were "Le

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film français", "La musique française" and "La gastronomie française". These particular categories were selected so that the students would not be able to simply obtain references from the library, but would have to access French media and preferably French society. The categories were also chosen to encourage the use of multimedia. The teacher posted at least one contribution in each category as 'seeding'.

4 Evaluation

The usage of the blog was disappointing. Only 33 contributions (postings and comments) were made, nine by the teacher and 24 by the students, 14 of which were by the two volunteers who were specifically asked to contribute. In the rest of this section, we will evaluate the usage of the blog according to the collaborative activities, active participation, social interaction and collaboration on a task.

4.1 Active participation of learners

In addition to the three categories created by the teacher at the beginning of the semester, only one new category, "Caen", was created by a student, to share information about the city of Caen with the students in Norway. This initiative was taken by one of the students in France, yet it did not receive any comments. Ten photographs, most of which were captured content, nine audio files with songs and several weblinks were included in the contributions where students had taken the initiative to share something they came across when they were on the street.

Of the two volunteers who submitted diaries, one reported that he had difficulty finding something he thought would be interesting for everyone else. However, he reported that he did find interesting things while in France that he would have liked to share, if he had better access to the blog. The other volunteer reported that he had no problems finding something interesting to contribute to the blog and that he thought it was "cool" that he could contribute sound and photos. The enthusiasm the two volunteers had at the beginning slowly diminished due to a lack of response from the other members of the community.

4.2 Social interaction

There were three postings that were not directly related to the course content: two were information exchanges between the students in Norway and France about the weather, and the third posting was an invitation to a party.

Both volunteers who submitted diaries reported that they communicated face to face with classmates when they met for their classes and that communication was both related to the course and unrelated. The volunteer who was in Norway reported that his communications with the students in France were not related to the course. Most other communication with classmates was via SMS. One of the volunteers claimed that he communicated via the course blog; an interesting perception of communication, where there was no response from the members of the community.

We were also interested in any interaction with other communities, such as native

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French speakers, that could have supported their learning process. The volunteer in France reported that he spoke to French people on the streets. He also interacted with students from other countries, in the university canteen, who had travelled to France to learn French, as well as with French students studying Law. The volunteer in Norway spoke to a French student studying in Norway; they discovered that they had a common interest, French hip hop. So, they discussed such interests, and about travelling to France.

4.3 Collaboration on tasks

During the semester, the teacher introduced a new category, "Politique & Société", to encourage students to contribute material related to the mandatory exercise that they had to deliver. Four contributions were made in this category by the two student volunteers. These messages included links to Norwegian newspapers that covered events in France in March 2006, and links to Radio France and Le Monde newspaper. None of these contributions received any comments or questions from the other students. The volunteer in France attempted to record sounds from the streets during demonstrations in Caen. However, the sound quality on his MP3 player was not adequate and these were not published on the blog. Other than these few postings related to the exercise, three general questions were posed to the teacher on the blog, the answers to which would benefit the whole class.

From the diary reports, the volunteer in France did not feel the need to share course-related material with classmates in France, as they received the same course material and read the same newspapers. Similarly, he did not share anything with classmates in Norway as they were studying different things. The volunteer in Norway claimed that he had the need to share information and did this during class discussions and via the blog.

5 Analysis

Our impression from the students' diaries, interviews and in general conversations with the students was that they were positive towards the blog and thought that it was a wonderful idea. But, why did the students not use it when they say it is a good system?

Based on the evaluation, there are two main issues that can be identified: the identity of the members of the community and the sense of community among them. In the following subsections, we discuss the results of the usage of the blog in the light of these two issues.

5.1 Identity

Using ideas from Wenger's Communities of Practice, building an identity consists of negotiating a meaning of membership in social communities (Wenger, 1998). The concept of identity applies to the individual and the community, where the identity of the member is how they view themselves within a community as well as how they are perceived within a community. The students in the language class were also members of other study programmes such as European Studies and some of them felt that they

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belonged to the communities of learners from their other study programmes. Identity is also described as a long-term relationship between a person and their participation within a community. Since they only met during French classes and had no other common classes, the members were unable to either define their identity within the community of language learners, nor identify themselves as a community.

The identity of a member is also affected by their sense of belonging to the group. A group photo of the class was added to the blog at the beginning of the semester, in the hope of promoting the idea of a community blog. However, a few of the students who were not present on the day the photo was taken felt excluded from the community and did not feel like participating. Although their names were included in the list of authors, they did not feel they belonged to the community of language learners and did not feel welcome to participate in the activities. Thus, the lack of participation can be due to a mismatch of identity among the members as individuals and the lack of identity as a community.

5.2 Sense of community

The results of the evaluation indicated that there was a lack of a sense of community among the learners. The fact that the students were from different study programmes meant that the community lacked an adequate shared history of learning and was not able to establish enough common ground among them for the members to be able to appreciate the value of sharing and collaboration.

The students seemed shy about publishing things on the blog. In particular, they seemed hesitant to publish something they had written in French. One interviewee said that she would not normally publish anything in Norwegian either, let alone in a second language. Could this be lack of confidence or the lack of a feeling of trust among the learners? Wenger et al. identified trust as an important issue in building a community and the lack of trust among the members of a community would have had an impact on their sense of community (Wenger, McDermott & Snyder, 2002).

The visibility and presence of the community itself (Henri & Pudelko, 2003) as well as the visibility of the individual members (Girgensohn & Lee, 2002) have been identified as crucial to successful social websites. Unfortunately, we were not always able to guarantee the visibility of the contributors and their contributions. Due to an administrative problem, a few of the contributions made via a mobile device using email ended up in a buffer for approval over a weekend. The contributor expressed his frustration as his contributions were not visible on the blog immediately.

6 Reflections: beyond blogs

The analysis above highlights that there was no sense of community among the language learners right from the start of the semester and the students were not able to establish their identities within the community. In the interviews conducted at the end of the semester, the students expressed positive views about the blog and blogs in general for the purpose for which it was used in our case. While blogs provide a collaborative working space for knowledge sharing, the learners did not manage to establish their identities within the community and experience the sense of a community. The blog did

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not support the establishment of a new community, that is, the new class of students for that semester. We believe that while blogs have strengths in supporting existing communities, they are weak in supporting and fostering new communities. One of the reasons for this weakness may be due to the fact that blogs do not provide awareness information about the members of the community. In this section, we reflect on how this can be changed and what can be done to foster a community of language learners.

Technologies that focus on social interactions, such as awareness systems, have been proposed to bring communities together (IJsselsteijn, van Baren & van Lanen, 2003) and (Kubawara et al., 2002). Nardi (2005) argues for addressing not only how to support communication, but also on how to establish a feeling of connection with others. This feeling is important for sustained interaction over time and it needs to be nurtured. The feeling of being connected has been identified as a critical factor within communities for sustaining membership and belonging (IJsselsteijn, van Baren & van Lanen, 2003; Rettie, 2003). Feeling disconnected affects not only social wellbeing, but also the process of sharing experiences and reflection that are critical to the learning process. Connectedness is important for the social wellbeing of the learner and it is important for a learner to feel connected with other learners to create a feeling of belonging and trust and to promote the community as a supportive environment for learning.

While connectedness among family members and friends is relevant in an educational setting, further research is necessary to understand the specific elements of connectedness in a learning situation (Morken, Nygård & Divitini, 2007). Three different categories of connectedness in the domain of teacher education have been identified (Hug & Möller, 2005). They are: (i) intellectual connectedness which relates to sharing and developing ideas about the subject studies, (ii) emotional connectedness which relates to the feeling of "not being alone" and supporting one another, and (iii) pedagogical connectedness which allows for the examination of beliefs about the subject. The activity on the blog reflects little intellectual connectedness among the members of the community due to the lack of active participation and contributions to the blog, and hardly any emotional or pedagogical connectedness.

In Mobile Learning, disconnection is often considered in terms of technology, being connected or disconnected to the network. Our students' lack of identity within the community of language learners can be explained in terms of conceptual or social connectedness. One of the interviewees claimed that although he found a number of interesting things in France, he had difficulty in finding something that he thought would be of interest to the community. Part of the reason for this was that he was a bit older and was from a non-Norwegian background. The other interviewee reported that he had no problems finding material that he thought would be interesting to the whole community. In the first instance, the interviewee could not identify conceptually or socially with the members of the community, while in the second instance, the interviewee could identify himself socially and conceptually with the members of the community.

The diaries reported that in addition to face to face meetings during classes, the students sometimes communicated via SMS. The fact that there was SMS or email communication indicates some connectedness between individual members of the community, although this was not enough for them to participate actively in the community. We plan to explore further the concept of connectedness among the

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community of language learners and how this affects the sense of community.

One way of fostering and improving connectedness among the learners is the use of awareness systems as triggers for communication among the members of the community. Communication is a process that is important in the creation of an identity and the sustainability of a community. Making the members more aware of each other's presence and activities may trigger their participation in the activities of the community. The use of awareness applications within the blog or complementary to the blog may improve the usage of the blog. One example of such an awareness application could be SMS triggers that are sent to the authors registered on the blog when there is a new contribution on the blog, or the author of a posting is triggered when someone posts a comment to her posting. This may encourage communication and collaboration among the learners.

In addition, there is a need to promote awareness through tools that are independent from submissions to the blog, though possibly integrated with it. Connectedness might be promoted by increasing awareness about other learners, for example, information about their expertise and how to contact them, or about events that might bring them together. In addition, following the notion of communities of practice and their core elements, we suggest that there is a need to increase awareness about learning trajectories as well as about shared repertoire, joint enterprise and mutual engagement (Wenger, 1998). Making learning trajectories more visible might increase the capability of students to relate to each other's. Making people aware of others using the same repertoire, pursuing the same enterprise and having mutual engagement, are all likely to increase the feeling of being connected and belonging to the same community.

7 Summary

This paper describes a class of French students as a community of language learners and analyses the community in terms of mobility and communities. A mobile community blog was used to create and maintain a sense of community among the language learners, in particular, when they were split into two geographical communities. One of our assumptions at the beginning was that if the blog was introduced at the beginning of the semester, it would support the establishment of a community and create a sense of community among the learners before some of them moved to France. The continued use of the blog was then expected to support the maintenance of this sense of community. However, from the results of the evaluation, it is obvious that a sense of community was not established. Our research has shown that while blogs are an appropriate means of collaboration and knowledge sharing, they do not support the creation and fostering of new communities.

In this case, we have focused on the teacher's perspective rather than the students'. Although we still believe that this is important, to ensure the pedagogical soundness of the tool, we see that this might have been a limitation of our work. A stronger involvement of the students earlier in the project, for example, in the definition and refinement of the categories, might have helped to promote the appropriation of the system.

The evaluation of the blog was conducted to assess the sense of community based on

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the collaborative activities, active participation, social interaction and collaboration on a task. The results of the evaluation indicated that members did not feel a sense of community; they could not identify a community or identify themselves with the community. Reflecting upon this result, we propose that a sense of community and identity could be supported by fostering a feeling of connectedness among the learners. We have attempted to identify the lack of connectedness that was seen from the results. However, further analysis is required to understand the connectedness in the context of language learning. In the future, we plan to understand the role played by the feeling of connectedness within a community of language learners, how connectedness can increase a sense of community and the dimensions of connectedness that are important in language learning. We aim to understand the need for awareness systems and the role that they could play in language learning for the design of appropriate technologies and collaborative environments.

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