

Identity in Online Communities: Social Networking Sites and Language Learning

Richard Harrison and Michael Thomas. Richard Harrison is associate professor at Kobe University in Japan. Michael Thomas is professor at Nagoya University of Commerce & Business in Japan.

Abstract

Since their emergence in 2005, Web 2.0 technologies have been advanced as potentially transformative in the area of education in general and foreign language learning in particular. Web 2.0 technologies are presenting new opportunities for developing diverse online learning environments and enhancing interactivity, participation and feedback between students, their peer groups and teachers. This article examines one of the most significant Web 2.0 tools, Social Networking Sites (SNS), and focuses on Livemocha, an example of an online community specifically aimed at encouraging collaboration between foreign language learners. Results from the ethnographic approach adopted in the paper indicate that: (a) SNSs can be used by language learners to explore new relationships rather than merely maintain existing ones and that (b) longitudinal studies are required to achieve a better understanding of the complex processes of mediation involved in online community formation and maintenance.

Keywords: Social Networking Sites – SNS – Livemocha – Web 2.0 – language learning – community

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Introduction

A major research study published in December 2008 on the use of digital technologies by adults from 16 industrialised nations suggests that “on average [they] spend a third of their leisure time online, belong to two social networking sites and have regular contact with 16 people who they have ‘virtually’ met on the internet” (TNS 2008: 2). While most European countries and the USA hovered around the 30% average, Asia’s digital natives (Prensky 2001) far exceeded it, with China, Korea and Japan registering at the 40% mark due to their cultural fascination with blogs, Social Networking Sites (SNS), online gaming and virtual worlds. In Asia in particular, the widespread availability of 3G telephony has made access to these new applications via portable handheld devices all the more significant. The popularity of SNSs such as Facebook, MySpace and LinkedIn demonstrate the addictive appeal of online and virtual communities across generations and cultures, particularly their attraction to teenagers, housewives, students and a new group of recently enfranchised elderly digital immigrants (TNS 2008). Facebook, for example, reputedly has more than 175 million international users, a claim that, if true, would make it the sixth largest country in the world. By 2007, over 22,000 commercial organizations had a presence on Facebook and it regularly attracts over 20 million unique visitors per month (Freiert 2007). Other SNSs such as QQ (China), Cyworld (Korea), Skyrock (France), Orkut (Brazil), Mixi (Japan), LunarStorm (Sweden) and Hyves (Holland) are testimony to the widespread success they have achieved internationally. Some SNSs, such as Dodgeball, are ‘mobile-specific’, while the most popular sites have also increased their exposure by developing mobile interfaces (boyd & Ellison 2007), a feature that when coupled with Global Positioning Systems (GPS) integrates them even more seamlessly into the architecture of the ubiquitous network society (Castells 2000).

This article examines how one example of social software is having a direct impact on foreign language teaching and learning in Japan, by allowing both teachers and learners to build and participate in multimedia collaborative learning environments that are able to promote active and creative language learning. Language learning that takes place in these social networks can be based on the creation and sharing of user profiles, friends, instant messaging, blogging and comments, as well as photos and videos. What follows will present research findings from a pilot project carried out on the first SNS specifically aimed at developing an online community of language learners, Livemocha.com, which was launched at the end of 2007 in the United States. The aim of the project was to examine the way that an SNS designed specifically to enhance language learning responds to a number of concerns of existing research in this area, impression management, friendship performance, networks and network structure, and privacy issues (boyd & Ellison 2007), as well as the potential to enhance opportunities for language exchange between native and non-native speakers.

Background

In 2007 the *Journal of Computer-Mediated Communication* published, what it claimed to be, the first collection of edited works on Social Network Sites. In their contribution, boyd and Ellison (2007), provided the following definition of this new phenomenon:

We define social network sites as web-based services that allow individuals to:

1. construct a public or semi-public profile within a bounded system,
2. articulate a list of other users with whom they share a connection, and
3. view and traverse their list of connections and those made by others within the system (boyd & Ellison 2007: para. 5)

At the core of SNSs are the profiles and network of 'friends' that users create. After a user signs up to an SNS, s/he will be prompted to create a profile that varies in sophistication depending on the networking site concerned. Facebook, for instance, provides a sophisticated profiling system that allows users to create very detailed information about themselves and also fine tune the level of privacy by determining what information is to be made public. Profiles typically involve sharing a photograph of the user and consist of such information as age, location, personal interests and added details in an 'About me' section. Making profile information available is highly sensitive and as boyd and Ellison suggest, "Structural variations around visibility and access are one of the primary ways that SNSs differentiate themselves from each other" (2007: n.p.).

Once a profile is created, users are then regarded as a member of the online community, and can create a list of friends that will form the basis of their social network. This process is achieved in two ways. Firstly, users establish lists of friends by sending a request to a potential new member until the user accepts or declines the invitation. In this way, group membership in SNSs is based on consensus and mutual recognition, values typically associated with high context Asian cultures such as Japan (McCarty 2009), and unlike the unidirectional process associated with 'followers' on Twitter. Secondly, the majority of SNSs also have group or community functions, which allow users to create groups within the SNS based on a particular theme. In Facebook, for example, there are literally thousands of such groups, and these can be found using sophisticated keyword searches. Users can then join these groups, which may or may not be moderated by the creator, and receive information from other users within the group. This may in turn lead users to become friends as a result of attending group meetings.

This ability to make connections or establish networks with people that one may be meeting for the first time through joining a group, raises a series of difficult issues in research into SNS, in that two terms 'social network sites' and 'social networking sites' are commonly found in the literature. Given this ambiguity, boyd and Ellison (2007) attempt to clarify the relationship between them:

'Networking' emphasizes relationship initiation, often between strangers. While networking is possible on these sites, it is not the primary practice on many of them, nor is it what differentiates them from other forms of computer-mediated communication (CMC)... What makes social network sites unique is not that they allow individuals to meet strangers, but rather that they enable users to articulate and make visible their social networks. This can result in connections between individuals that would not otherwise be made, but that is often not the goal, and these meetings are frequently between 'latent ties'... who share some offline connection. On many of the large SNS, participants are not necessarily 'networking' or looking to meet new people; instead, they are primarily communicating with people who are already a part of their extended social network. To emphasize this articulated social network as a critical organizing feature of these sites, we label them "social network sites" (boyd & Ellison 2007: n.p.).

Social network sites are thus primarily concerned with people who already know each other, and use the Internet as one way of keeping their *existing* social connections alive, rather than for making new ones.

Based on the research conducted for this article, it will be argued that the concept of 'latent ties' (Haythornthwaite 2005) is limited in that it is founded on an essentially monolingual SNS, and does not take into account the different levels of *networking* that are occurring when SNSs are used for language learning. In this context, the primary goal of users seeking target language learning 'friends', which is what would occur in a foreign language learning context, is precisely that of carrying out 'networking' as opposed to developing existing networks. In what follows, the term SNS will therefore be used to indicate social 'networking' sites where the primary goal of users is to make *new* social connections for the specific aim of learning a new language.

The History of Social Networking Sites

The most popular Social Networking Sites are often associated with the broader context of Web 2.0 technologies, which came to widespread prominence towards the end of 2004. The difference between the first and second generation Web has clear implications for CALL pedagogy, as Pegrum (2009) explains:

Web 1.0 refers to the initial *information-oriented web*, authored by a small number of people for a very large number of users. Consisting mainly of static webpages, it offered little room for interactivity. Educational uses largely fell into two categories: information retrieval (as in webquests) or rote training (drill exercises). While there were some clear benefits in terms of student autonomy, use of authentic materials and exposure to multiliteracies, and while problem-based learning and guided discovery approaches to Web 1.0 were not unknown, it was most often used in ways corresponding to traditional transmission or behaviourist models of pedagogy. (Pegrum 2009: pp. 20-21)

By contrast Web 2.0 or the 'read/write' Web, refers to a group of Web-based applications (blogs, wikis, podcasting, multimedia sharing sites) centred around developing online communities based on greater degrees of interactivity, inclusion, collaboration, authentic materials and digital literacy skills (Haythornthwaite & Kazmer 2004; Lankshear & Knobel 2007; Thomas 2009). Through user-generated content and "many-to-many" forms of publication, the use of Web 2.0 applications in the language classroom has implications for social constructivist pedagogy based on integrating "diverse skills (e.g., listening, speaking, reading, writing)" and negotiating "an array of cognitive and social processes (e.g., identity formation, critical literacy, information overload)" (Warschauer 2009: p. xx).

Whereas Web 2.0 is widely acknowledged as deriving from O'Reilly (2005), Scholz (2007) argues that early forms of social software including SNSs such as Match.com and Classmates.com had already been in existence for nearly a decade, having emerged during the tail end of the dot.com boom. Consequently, a history of SNSs, straddling both Web 1.0 and 2.0 emerges, and a number of phases can be identified (boyd & Ellison 2007).

In the first phase, SixDegrees.com, widely credited with being the first SNS, was founded in 1997. SixDegrees combined such features as profiles, friends and messaging; however, due to the lack of users with extended online networks and little appeal for contacting new friends, the site closed in 2000 along with many dot.coms due to their unsustainable business models. From 1999 sites such as LiveJournal incorporated additional features, including increasingly interactive components such as guest books and diary pages, and with

the turn towards more effective financing, in 2001 a series of business networking sites such as Ryze.com and LinkedIn appeared.

SNSs started to achieve more widespread appeal beyond their former niche markets with the emergence of Friendster, MySpace and Facebook. Friendster in particular came to prominence by attracting early movers in SNS communities, including music followers, pioneering bloggers and gay networks. Friendster's demise sprang from the collapse of protocols between social groups; the emergence of 'fakesters' or users who provided incorrect information on their profiles in order to attract more friends; the loss of privacy and therefore trust between users and the site itself; and latterly the introduction of fees.

As Friendster faltered, a new wave of SNSs targeted niche markets from 2003 onwards, drawing on the emergence of multimedia sharing and users' ability to create their own content with WYSIWYG (What You See Is What You Get) editors (Benito-Ruiz 2009). MySpace profited from Friendster's problems, and with the aid of new features allowing users to personalise content, its target groups (formerly excluded SNS groups such as teenagers and college students) and its sale in 2005 for \$580m, made SNSs a truly global phenomenon.

While the sale of MySpace widened the appeal of SNSs, its association with scandals relating to the stalking of minors, did little to stop the emergence of a new wave of cultural specific sites in Asia and Europe in particular. This ushered in the final wave of SNSs to date starting in 2004, in which Facebook spread from being a Harvard University SNS to one that attracted the driving energy of high school students. Facebook is differentiated in the SNS market by preventing users from fully disclosing their profiles to uninvited participants, as well as gaining momentum from the development of Facebook compatible applications that function as add-ons to the site.

While clearly deriving initially from the need to establish communication with others, from 1997 until the present time, SNSs have had a strong appeal to language teachers and learners, though they have rarely been used in a targeted way for this purpose. SNSs have changed the nature of online communities, but they have also been met with increasing resistance – MySpace was banned by the US Military (Frosch 2007) and Facebook by the Canadian government for all state employees (Benzie 2007). Just as the Japanese government has recently floated legislation prohibiting the nationwide use of cell phones in elementary schools, following a ban in schools in Osaka (Johnston 2009), a similar concern with the use of such technologies by young people led the US Congress to consider moves to ban SNSs in libraries and schools (boyd & Ellison 2007).

This brief history of SNSs outlines some of the opportunities as well as the challenges presented by the technology for language educators and learners. While a dearth of literature exists on the subject to date (McCarty 2009), Carroll (2008) notes that by 2005 social networking had been recognised as a Web 2.0 technology with the potential to be used for structured language learning purposes. Students, however, require 'guidance' in order to use SNSs effectively and to resist using Web 2.0 applications with a Web 1.0 pedagogy. From the general context of SNSs, the end of 2007 saw the appearance of two highly significant SNSs aimed specifically at language learning, *iKnow*, a Japanese SNS aimed at Japanese native speakers wanting to learn English, and *Livemocha*, a multilingual SNS drawing on the theme of an online cafe, which will be discussed in more detail below.

Research on SNSs

boyd and Ellison's (2007) overview of SNS research serves as a good point of departure to examine current theoretical perspectives on the subject and to consider the implications for teaching and learning. Firstly, they outline the core concept of *identity*, which refers to the way in which users develop their online profiles and list of friends to carry out four important community processes:

1. *Impression management* is concerned with personal identity formation, in which users define their own identities through the information they provide in their profile, and the extent to which they make it public or private in the community and thereby send out identity signals to others.
2. *Friendship management* is linked to impression management in that users use publicly displayed profiles of others to choose who they would like to include as friends on their list, that is, they look at the identity markers of other users as a benchmark for establishing levels of social interaction.
3. *Network structure* relates to the roles that users play in the social community in which they participate. Some users will be fairly passive and have a restricted personal network. Others will be active posters of information, and build up intricate networks of friends. Others will play an even greater role in actively promoting and developing the SNS as a whole, by setting up groups and communities and posting publicly available information to encourage interaction.
4. *Bridging* of online and offline social networks, which is concerned with the degree to which the SNS becomes an integral part of the users' actual life while offline (Turkle 1995).

Mediation and Social Networking for Language Learning

One of the main concerns with SNSs is how computers can transform the way people learn languages using *socially* oriented software. In order to do this, a framework needs to be established that takes into account learning in social environments, where people are interacting with other, looking at what kinds of interactions are taking place and what they mean in terms of language learning, as well as informing us about the technology itself and how we can critically analyze its efficacy.

For this reason, this article has chosen to limit the following discussion to a social constructivist approach to language teaching and learning, arising from research in the fields of applied linguistics and educational psychology (Burden & Williams 2003). The key concepts underpinning the field of educational psychology and which are also potentially valuable when approaching the area of SNSs, are the meaning of teaching, the learning process, instructional and assessment strategies and knowledge of students. The key aspect of this definition is the concept of continuous reflection, particularly in relation to the cultural values and beliefs structuring teachers' own actions as well as of their students. This understanding can be seen to be highly relevant to the discussion here as one of the central themes in SNS research on language learning is not only how learners develop their language skills, but also how the learning process impacts on their overall personal development in terms of cultural values and beliefs, something that has been generally overlooked in CALL research to date. Of the four major schools of thought within educational psychology, social interactionism offers the most insightful approach for the study of SNSs.

Social Interactionism

The role played by what Erikson (1968) terms 'other significant people' has been recognised as a fundamental concept in social interactionism. Vygotsky's (1978) notion of the Zone of Proximal Development (ZPD) and Feuerstein et al.'s (2003) idea of Instrumental Enrichment, stressed that mediation is fundamental to all human development including learning. Successful learning is seen as being dependent on how learners interact with the people around them in order to overcome problems they cannot solve by themselves, so that they can move to the next stage of development that lies in the ZPD. The role of the significant other or *mediator* (also referred to as the 'more knowledgeable other' or MKO) is to attempt to find ways of helping the other person to learn. While Vygotsky noted the centrality of language as an essential tool used by humans to carry out mediation, Feuerstein et al. (2003) emphasized the fundamental role of mediators in the transmission of culture. In this way we can see that the concept of mediation provides us with a means to examine the roles of both language and culture in human development.

Social Networking and Ethnomethodology

Social constructivism provides a theoretical framework and the key concepts to understand the complex layers of interaction that occur when language learners use SNSs. The concepts that have emerged from the different schools of thought from educational psychology have now been developed into a coherent framework of social constructivism that provides teachers and researchers with a guide to understanding the teaching and learning process. Social constructivism views learning as a social process, with meaningful learning only occurring when people work together collaboratively (McMahon 1997; Ernest 1998), emphasizing the importance of not only the roles of individuals and the forms of social interactions, but also the context and culture in which learning takes place (Kukla 2000).

Thomsen, Straubhaar and Bolyard (1998) present a very strong case for what they consider to be the best approach to investigating online communities including SNSs. They argue that quantitative approaches are unable to provide the detailed type of data needed for analyzing concepts such as social interaction. Only through prolonged observations of what is happening in these environments can researchers obtain a rich description of individual and social interactions. Ethnography has a long history in the study of human social interaction, and essentially involves the researcher entering and becoming a member of a particular community, observing and recording over a prolonged period very detailed data on how the community is organised and functions. Researchers following this approach must learn the language or discourse of communication, identify the key concepts associated with the shared social interaction taking place between individuals and groups (Emerson 1983), and decode this shared knowledge and cognition from the viewpoint of an observer who has gained deep insights into the community (Apgar 1983).

Analytical Concepts in SNSs

As online communities began to emerge around 10 years ago, research based on ethnographic approaches attracted criticism from traditionalists in that two key concepts of ethnography, *social interaction* and *social bonding*, could not be regarded as valid because social interaction takes place via computer-mediated communication rather than in face to face environments. Critics argued that in online communities social interaction and bonding, that is, the making of intimate friendships, was fundamentally different to real-life situations in that they were superficial and required 'co-presence' to make them true relationships. However, studies by Cerulo (1997) and Parks (1996) showed that in fact both social

interaction and social bonding via computer-mediated communication in online communities could lead to personal relationships with an *intimacy* on a par with real life, when given enough time to develop. They found cases of people who had never met before meeting online yet developed intimate and lasting friendships that led to communication via other media and even to offline meetings.

Oldenburg (1989) argues that these emerging online communities are transforming the ways in which people are communicating, by providing them with a new *place* in which to meet people. He suggests that individuals conduct their activities in three locations: the home, workplace and social meeting places, and that in modern society the gradual disappearance of the latter has led to people moving onto the Internet to find places in which to conduct 'idle banter and socialization' and feel membership of a group outside of the home or workplace. Rheingold (1993) developed this idea and argued that researching online communities is like looking into a social space such as a café, and attributes the rise of these virtual communities to the need for people to fill a gap that has arisen through cultural shifts that have led to the disappearance of informal meeting places in modern society. This issue of metaphors that we use in an attempt to make sense of online communities is an area of research that is still yet to be fully developed. Another key research concept that is at play in any community is that of identity formation (Turkle 1995). Individual members will construct their own personal identity through their profiles and the community as a whole will construct a cultural identity through the linguistic codes (special terminology, emoticons and so on). Further research into the role of language in the formation of both personal and cultural identities is essential to research in SNSs.

Ethnomethodology, then, has come to be recognized as a significant qualitative method of researching virtual online communities of the type that is increasingly becoming prominent in the context of Web 2.0 technologies. Such research can provide a 'thick description' of the intricate personal and social behaviours that occur in these contexts, including the social and cultural mechanisms that are at work as they are manifested in the (socially constructed) linguistic signs/codes that can be observed and collected.

The Example of Livemocha

Livemocha (www.Livemocha.com) describes itself as "an exciting e-learning Web 2.0 startup ... a first of its kind web based language learning solution integrating online instructional content with a global community of language learners" (Livemocha 2008). As of February 2009, Livemocha has an estimated 350,000 users from over 200 countries (Harigunami 2008). Tutoring takes places between members, in which native speakers of the community can be called upon to correct non-native speakers in voice or text chat. As the name suggest, Livemocha is intended to mirror the relaxed nature of a coffee shop, in which members can interact with one another, breaking down the boundaries between study and leisure, teacher and student, and fostering a supportive online community of like-minded language learners.

As with most other SNSs, when logging in users are prompted to create a profile which includes submitting information about their native languages as well as those languages which they would like to learn. This profile information about native and target language competence is one of the key features of the underlying design philosophy of the system.

Once this profile is completed users are able to enrol for a course in one of 12 languages available (English, Spanish, French, Hindi, German, Italian, Japanese, Portuguese, Russian, Mandarin, Icelandic and Korean). Lesson plans include over 160 hours of beginner and intermediate level content teaching everyday conversational language along with a full range

of practical reading, listening, writing and speaking exercises. Livemocha also leverages the native language expertise of its members by allowing them to enhance the content with grammar tips, alternative phrases and colloquialisms. Courses are supported with a very sophisticated set of Web 2.0 oriented tools that allow a variety of language exercises in all four skills, in both asynchronous and synchronous modes. These features include:

1. *Audio comments*: members can record voice messages and practice pronunciation;
2. *Peer review*: users can choose to allow other members to read, review and leave comments for other learners;
3. *Group chat sessions*: weekly meetings with tutors from Livemocha to ask questions about language learning;
4. *Audio podcasts*: members receive audio lessons related to the language they are studying
5. *Leaderboard feature*: members of the SNS can see their position vis-à-vis other students based on their performance on test scores, thus adding an increased motivational and competitive factor to the online community.

Participants

The research was based on a project that began in October 2007 in a postgraduate course in Applied Linguistics taught to Japanese and international postgraduate students in the Graduate School of Humanities at Kobe University in Japan. A group of six master's students (2 Japanese, 2 Chinese, 1 American, 1 Serbian) were aged between 21 and 25 and all female. Their major subjects were Linguistics (3), Japanese literature (1), Psychology (1) and History (1). The non-native Japanese speakers were all highly proficient users of Japanese, having acquired Level 1 scores in the Japanese Language Proficiency Test (JLPT). The two Japanese students had TOEIC scores in the high 800s and were orally proficient in English. The course was conducted primarily in Japanese, but with reference to English when needed, with the majority of reading assignments on ethnomethodology being based on English texts. All of the participants registered to learn one of the languages available at Livemocha and used the system for three months from October 2007 to January 2008.

Method

Data was collected using a triangulation of classroom observations, in-class presentations from the students and reports. The students were observed using LiveMocha in the classroom in six of the 15 classes held. An initial introductory class was held to familiarise students with the system followed by five bi-weekly observation classes, in which the teacher observed the students using the system through classroom monitoring and 'think-aloud' sessions with individuals to discover what they were doing and focus on any issues that arose. During these classroom sessions, when any issues arose either by observation from the teacher, as a result of think-aloud discussions, or initiation/questions from the students, students' computer monitors were projected onto the main room screen and classroom discussions were held. Students gave individual presentations to the class on their experiences at two weekly intervals, and mid-semester and final semester papers were also used for feedback to the whole class.

Results

The analysis and implications of the pilot study will be discussed with reference to the framework established by boyd and Ellison (2007) and the ethnomethodology approach identified above: impression management and identity; friendship management and social interaction/bonding; network structure; mediation; and SNS Metaphors and bridging online and real life.

Impression Management and Identity

Profiles in Livemocha are very sophisticated and users are able to enter specific details about themselves and manage their identity. However, unlike more well-known and larger systems such as Facebook, there is no facility for setting the level of exposure of impression management in relation to other users. Students reported that they felt a certain amount of unease with this level of openness, and chose to use pseudonyms rather than their real names. It has not been possible thus far to find students who were willing to use their real names, and in fact evidence of users deliberately inputting false information about themselves, such as country of origin and native languages spoken, was the norm. Students reported that this online behaviour was something they were used to, but they felt it was disappointing that there was not the same level of impression management available as in other systems.

Friendship Management and Social Interaction/Bonding

This lack of sophistication towards impression management and the clear cases of false identities being used by other users impacted quite strongly on one of the Japanese students on the course, in terms of the way she carried out friendship management. She had signed up to learn French and reported that when she had a request from other users that she did not know, she would first 'check out' their profiles to see what kinds of networks they had created with other users. If she deemed the profile of the person to be 'suspicious', for example the person gave false personal information, or had a list which was predominantly aimed at users of the opposite sex, she would deny the request. Other students also reported that friendships and social interaction were difficult to manage because of this factor, and said they would find it difficult to create intimate relationships with other users. One of the Chinese students who signed up to learn English was very active in carrying out both coursework and interacting with other users by making friends with native speakers. She used the potential of the system to the full, requesting 'buddies' to check her exercises, and get feedback. She reported that she was not as sensitive towards impression management and was very positive towards interacting and making bonds with other users, one of which in particular gave her very positive feedback. Nevertheless, at the end of the project all of the students said that the likelihood of them forming intimate social bonds of the type described in the research literature was very low, as the project duration was too short. This highlighted the need to carry out a longitudinal study of the system in order to gain conclusive feedback on this issue.

Network Structure: Role of Users

In Livemocha the students soon realised that although new users receive an instant message from a teacher offering tuition and help, the main principle underlying the network structure is one in which the users themselves create roles for themselves acting as 'tutors' and 'buddies' for others. Similarly it is evident that there were several different types of users that could be classified by their level of activity in the system. High activity participants were using the

system to the full, both learning via the courses available, using the community functions to interact with others (synchronously and asynchronously), acting as mediators and getting feedback from other 'mediators' thus establishing collaborative learning relationships. These processes demonstrate that they were involved in high levels of mediation. It was evident that a significant type of user would not enroll for courses, but rather use the community tools for synchronous interaction with native speakers of the target language they were learning. When online it is not uncommon to get over ten requests from online 'friends' wishing to carry out text, audio or video collaborative learning. When these students were asked why they were not enrolled on courses the majority responded that they were able to do the same kind of studying offline and chose to use Livemocha to carry out community-based learning. This highlighted the ways in which learners will actively choose the tools they feel they need to achieve the goals they set for themselves, and create their own learning environment from the options available. This process supports the ideas of active learning and the social construction of knowledge underlying the social constructivist approach to learning as discussed above.

Mediation

The above three issues were used to help map and understand the process of mediation in the Livemocha SNS. Although there initially appears to be teachers 'somewhere' in the system, as indicated in the post-registration instant message new users receive — in fact students in the study found that users were left to find mediators themselves and create their own learning support infrastructure through trial and error negotiation with other users that they encountered. That is to say, mediation is not structured, but the open architecture of Livemocha presents active users who are using and exploring the functions of the system with opportunities to create their own social network. This can be an extremely arbitrary and nebulous process. In real life people are surrounded by a number of mediators who they use to 'evaluate' face-to-face interaction. However, in Livemocha the only guide users have when attempting to find 'significant others' is based on the 'impression management' that is evident in the system, essentially conveyed through the profiles others are displaying. That is to say, they do not know the real identity of the users they are interacting with and what their real intentions are. Further research needs to be carried out on this issue of mediation as it relates to impression management, social interaction and bonding, as without a level of intimacy between users, collaborative learning is likely to encounter difficulties if it advances beyond the initial stage of self-introductions at all.

SNS Metaphors and Bridging Online and Real Life

When students considered Livemocha in terms of the 'third place' metaphor of online communities offered by Oldenburg (1989) and Rheingold (1993), the initial reaction of all six students was that Livemocha is best described as an online community represented by this socialising metaphor. On deeper reflection as the project continued this was refined to include specific metaphors of where Livemocha could be compared with their real lives. Two of the students who lived in student dormitory accommodation for international students reported that they found using Livemocha as being similar to 'hanging out' in the common room of the residence where they lived. Livemocha presented similar opportunities to encounter native speakers of other languages for the first time in an informal setting and to use what language(s) they know to communicate with those other students.

In the final student presentations, a component of the course in which students were given the opportunity to respond to their online SNS environments, one of the Chinese students who lives in the international residence, provided an interesting insight about this notion. She

indicated that rather than thinking of Livemocha as one of the 'three places', she felt there was an overlap between all three places and that that she was learning a language (English) in the same ways that she could be doing at her home (residence), work (part-time job), school (university) and informal situations (café, bars). Moreover, perhaps the notion of 'three places' was too simplistic to correctly account for the ways in which these online communities can overlap and influence real lives in the minds of users.

Discussion

The study was able to conclude that the investigation of Livemocha provided several significant insights into how current thinking of SNSs research is limited. Firstly, regarding the initial definition of SNSs presented by boyd and Ellison (2007), it is possible to argue that when an SNS is used for language learning, the notion that people use these systems primarily to support their existing social networks rather than make new relationships is not upheld. Livemocha is oriented and indeed can only function successfully if users are prepared to make new social networks, and despite factors working against this, as described above, they do indeed use the system for just this purpose.

Secondly, conclusions support the fundamental notion that social bonding and intimacy through computer-mediated communication does indeed require time to mature. In turn this process necessitates researchers to engage in longitudinal studies about the use of SNSs in order to acquire insights into this phenomenon.

Thirdly, Livemocha demonstrates that mediation can take many forms when it occurs in an online setting. In the real world, mediation is available as a consequence of the social networks people find themselves in, in the home, at school as well as in other social networks straddling work and leisure. It can be seen through this small-scale project that mediation is something that online users themselves construct through negotiation with others, and is liable to be dependent on individual users' attitudes towards both their own identity and friendship management. This issue of mediation in SNSs clearly needs more research.

Two key trends emerge when we turn to examine the role of technology in education at the current time. The first is that of the 'courseware' approach to delivering education through 'ready-made' Virtual Learning Environments (VLEs), such as Blackboard or WebCT. The emphasis within these environments is on how to effectively convey a body of knowledge to students and evaluate how they progress through quiz and testing features that are built into the system. Classroom modes of delivering education have been essentially repositioned on the Internet, bringing with them the underlying educational theories centred on behaviourist learning modes, with the 'expert' teacher placed firmly at the centre of the educational process.

In stark contrast to this trend is the situation that is associated with Web 2.0 applications. From the above discussion of SNSs, it is possible to surmise that what we are witnessing at this moment in time is a radical shift in the way people are learning languages independently through the use of a growing range of Web-based tools that are presented in the context of a more participatory framework (O'Reilly 2005). Perhaps the most radical consequence of this is that learners are provided with tools enabling them to create their own Personal Learning Environments (PLEs) by assembling a range of free or open-source Web-based applications. As opposed to the centralising tendencies of VLEs, Personal Learning Environments represent a centrifugal or decentralising process. SNSs, which belong to the latter process, offer environments in which learners can take control of their own learning and through the

process of mediation are able to find 'significant others' that can help them in their personal development, which includes but goes far beyond learning a foreign language. Users of these systems are now able to learn languages through rich social and cultural interaction with other learners, including their peers and native speakers, in both asynchronous and synchronous modes of learning.

As well as examining the ways in which new technologies such as Web 2.0 can transform learning, it is as equally important to investigate how the technologies are also being transformed by the users. By this, we mean that as learners become more technically sophisticated, the tools themselves assume more of a background role in the learning process itself, and are appropriated by the learners in ways that could not have been expected. If learning technologists are to arrive at a clearer picture of what is happening they need to broaden their thinking about which technologies can be used to learn languages most successfully. Some recent research (Skene, Cluett & Hogan 2007) points out that students who are now at the age for entering Australian universities, the so-called 'Generation Y' students born between 1980 and 1996, are starting to raise questions about whether they learn differently to previous learners, and if so, how should educational institutions respond? Web 2.0 users now have the digital computer literacy to harness the potential being offered by the emerging technologies, enabling them to construct their own internet environments from the bottom up. Clearly these technological changes will impact on learning technologists and language educators, and bring with them the concomitant need to attempt to keep up with the changes. For this to be successful, foreign language educators will require sustained and meaningful professional development with learning technologies (Elliott 2009).

Conclusion

The preliminary research presented in this article shows the possibilities that SNSs such as Livemocha offer to transform language learning, by providing environments that allow new modes of active learning (Bonwell & Eison 1991). Livemocha presents a fascinating insight into a number of these points of conflict and renegotiation, particularly between the role of teachers and learners to direct and mediate the language learning process in networked communities (Hassan 2004). SNSs systems and the personal learning environments associated with them, present language educators with an opportunity to examine existing theories of learning, and to gain invaluable data and insights into how learning is occurring in the new age of digital literacies and the deconstruction of traditional classrooms that it necessitates (Lockard & Pegrum 2007).

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