

「オンライン学習コミュニティにおける協調」

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Collaboration in Online Language Learning Communities

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Abstract

学習者が学習している外国語のコミュニティは、多くの場合、学習者から地理的な距離がある。オンライン学習のコミュニティは、本格的で意義深い学習交流の場を提供している。本稿では、オンライン学習と関係がある社会文化理論と構成主義を概説した上で、この種の学習が協調学習においていかに適しているかを提唱する。次に、一般的なオンライン学習のコミュニティを概観し、これらの学習における成功例に着目する。また、同期型学習と非同期型学習の具体例を挙げ、それぞれの着眼点を紹介している。本稿では、テキストベースの学習共同体とテキスト以外にアバターを組み合わせたマルチユーザーバーチャル環境についても論述する。

Introduction

Online learning communities are becoming increasingly viable as an option for language learners as they seek to connect and communicate with other learners and experts in the languages they are studying. For foreign language learners, in particular, who are often geographically isolated from communities that use the language they are studying, the Internet opens up a rich world of opportunity and connection.

By participation in online learning communities, learners are able to achieve meaningful interaction with peers and instructors as well as have a level of access to the language that would not be possible in face-to-face lessons. The online environment favors collaboration

and in many ways, provides an ideal environment for collaborative learning (Warschauer, 1997). Taking the notion of modern sociocultural theory that language acquisition takes place through active participation in a community of language users, emerging online environments have the potential to provide learners the communal support they need to improve in the language they are studying.

In this paper I briefly review some key sociocultural theoretical concepts related to how learning is connected to community. Next I move into an explanation of collaborative learning and look at how the online environment is uniquely suited to implement this kind of learning. From there I look at online learning communities in general, drawing at-

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tention to some key aspects of successful communities before moving on to look at specific examples of online language learning communities. In my examination of online learning communities, I provide examples of both synchronous and asynchronous environments and consider characteristics unique to each medium. In this paper I look primarily at text-based learning communities but also look into a variant of text-based communities, multiuser virtual environments (MUVES), where participants combine text chat with the use of graphic representations of themselves, called avatars.

Sociocultural Theory

To better situate the potential applications of online learning communities to language learning, it will be useful to briefly review some key advances in second language acquisition (SLA) theory over the past few decades. In particular, I would like to highlight some key aspects of sociocultural theory.

A significant shift in SLA perspective occurred when Firth and Wagner (1997) published their seminal work calling for a reconceptualization of SLA theory. Moving away from cognitive perspectives that considered language as something that is learned through a process of input and internalization, Firth and Wagner suggested that language learning be looked at as both a social and cultural process.

A key aspect of this new sociocultural approach was a concept of learning based on the work of Vygotsky (Swain & Deters, 2007). For Vygotsky (1978), the environment

was not simply the context of mental development, it was the source. That is to say, learning arises through an individual's interaction with his or her environment. Rather than the mind and environment existing as completely separate phenomenon, they are intimately connected. While this concept of learning was originally developed in connection to child development, it quickly found application in other fields, including SLA (Ohta, 1995; Swain & Deters, 2007; Zuengler & Miller, 2006).

For Vygotsky, the individual is formed by his or her interaction with the surrounding culture and community. Language, then, is a key component to the development of the individual and the way language is acquired is through interaction within a community. This process of language acquisition happens in what Vygotsky (1987) called the zone of proximal development (ZPD). The ZPD is the area between what a learner can do and what a learner has the potential to do with guidance. The language learner has a certain level of ability with the language and, while in a community of others with more knowledge, is able to get guidance as to how to achieve his or her potential level of language ability. A key aspect of this notion of the ZPD is that it happens within a community of others who have greater knowledge than the learner, or novice. These knowledgeable others, or experts, within the community can be peers as well as instructors; there is no restriction in this regard. In fact, the roles of novice and expert are often fluid with the novice becoming expert and vice versa as multiple interactions occur within the community. This pro-

cess of expert-novice interaction is often referred to as scaffolding (Wood, Bruner, & Ross, 1976) with the idea that the community of experts provides a kind of tutorial support for the novice which, as learning proceeds, is modified and, ideally, eventually removed.

An important implication of the sociocultural paradigm is that learners can learn from peers as much as from instructors. To show how scaffolding occurs among a group of peers, Donato (1994) audiotaped the interactions of a group of three students in a French class at an American university as they prepared for an oral presentation. After transcribing the dialogues, Donato found 32 examples of peer to peer scaffolding in the form of peer assisted utterances. Of those 32 scaffolded utterances, 24 were actually used by the students in the oral presentation which followed.

This awareness of how peers can learn from one another has led many teachers to reform how they design their lessons and an important result of the socioculturalist approach to SLA has been a shift to communicative based activities within second and foreign language (L2) lessons. Ohta (1995) suggested that L2 learning within the traditional classroom context provided little opportunity for learners to interact with experts in the target language. According to her, most classroom language interactions followed a pattern of initiation, response, and follow up (IRF) ; that is teachers would ask a question and thus initiate a response from students after which they would follow up on the students' responses. This type of practice tended only to

prepare students to answer questions and the language patterns did not represent natural conversations. A potential disadvantage of this classroom situation was that students would become "socialized into interactive styles inappropriate for communication within the L2 community (p. 98)." One potential remedy, she suggested, was to rely on peer to peer exchange for meaningful and socially appropriate interaction within the target language. To support her claims, she attempted to provide empirical evidence for the successful effect of scaffolding amongst peers within a ZPD, which for purposes of this study she defined as the level of L2 interaction the student was capable of alone compared to the level of L2 interaction the student was capable of with help from someone with a higher level of L2 ability. Using audio and video recordings of a Japanese lesson at an American university, she examined both teacher-centered and pair based discourse and analyzed student language production and interaction.

Ohta's study focused, in particular, on two students, Mark and Becky, and looked at their discourse as they participated in different class activities during the lesson. Becky was considered to be a high level student whereas Mark was comparatively lower in Japanese language ability. During the teacher-fronted parts of the lesson, when Mark and Becky were called upon, they tended to reply quite simply and directly to the teacher's questions without offering any additional information. Becky, especially, even though considered one the more advanced students in the class, tended to offer minimal responses to the questions

given to her.

In pair work, however, Ohta observed that the two students' language production was "strikingly different (p. 103)." She noted that, when working in a pair, Mark and Becky used a lot more Japanese and naturally moved into the roles of novice and expert, with Becky at first becoming the expert and Mark becoming the novice. For example, Becky exhibited scaffolding for Mark as she would naturally pause or repeat herself to help Mark better fulfill his role in the interaction. Furthermore, she noticed that, at times, the roles would reverse and Mark would occasionally take on the role of expert during the interactions. "Even a peer who is weaker overall is expert when his or her strengths are contributed to help another learner (p. 109)."

Along with increased and meaningful interaction between the students, Ohta observed that the pair work activities allowed the teacher to shift more into the role of a coach or facilitator, which is a key aspect of collaborative learning, as will be discussed in the next section.

Collaborative Learning

Constructivism, which is closely connected to sociocultural theory, posits that knowledge is something that is constructed through social interaction (Zuengler & Miller, 2006). Rather than learners acquiring knowledge from an external source, they create knowledge as they negotiate meaning with one another and help one another to traverse their ZPDs. The social context, or community, within which learning occurs, shapes the learning

outcomes.

From this notion arises the concept of collaborative learning. In a collaborative learning environment, a group of learners collaborate with one another to create knowledge. Instructors, rather than deliver lectures and overly control the class learning content, tend to function in roles of guides or facilitators, providing support for students as they create meaning together. One vital element needed for collaboration to occur is for there to be a sense of community among participants (Pall-off & Pratt, 2010; Swan, 2002). Learners need to feel valued and connected to the community within which they are learning

For the L2 learners, the nearest social community using the target language (TL) is most often the language classroom (Oxford, 1997). The community of L2 speakers, of course, extends far beyond the classroom and learners will hopefully expand their L2 interactions as they integrate more and more into the language and various L2 communities. However, the fact is, that for many learners, their first exposure to the TL will be in the classroom, be it physical or virtual.

This puts a certain responsibility on language teachers to provide a nurturing environment where students can connect with and feel supported by one another and the teacher. The language class becomes the seed of community that can potentially grow into a global experience as students use the language to connect with others in the world. The L2 teacher often becomes "an envoy or representative of the target culture, not just a participant in the culture of the classroom

(Oxford, p. 448).” This is particularly true where the target language is considered a foreign language. In such cases, learners often do not have as much access to the language outside of the classroom, making their in-class experience all the more vital. For example, a student studying English in Japan, after leaving the classroom, will most likely not have access to anyone who uses English on a regular basis. Their friends and family will most likely only communicate in Japanese and other typical social interactions such as participating in school activities or going shopping or ordering at a restaurant will all be in Japanese.

With the growth of the Internet, however, learners have more access now than ever before to opportunities to interact in an L2, especially those learners studying English as a foreign language (EFL). With the plethora of English websites literally at one’s fingertips, opportunities to use English and participate in various communities abound. With the immense potential of the Internet to be used in language education, it makes sense that teachers would want to get their students working in an online medium. Warschauer (1997) highlights five features of the online environment that are particularly suited for collaborative language learning: (a) text-based and computer-mediated interaction, (b) many-to-many communication, (c) time and place independence, (d) long distance exchanges and (e) hypermedia links.

Text-based and computer-mediated interaction

Computer-mediated communication (CMC)

has power to bring together the processes of interaction and reflection, Warschauer argues. In the past, interactive communication took place primarily in spoken form and reflective tasks were written. Now, through CMC, human interactions take place in text-based form. Learners can carry on a dialogue with one another through online chat functions and, at the same time, the written text can be saved to be rewritten or reflected upon at a later time. The opportunity arises with CMC to focus more deeply on specific phrases or dialogues. As Warschauer states, “Students’ own interactions now become a basis for epistemic engagement (p. 472).”

Many-to-many communication

Any member of an online group can initiate interaction with any or all of the other members of the same group. This can also happen in face-to-face classroom interactions but Warschauer calls attention to two differences. First, in an online environment, as learner interactions are able to be saved, CMC gives the opportunity for a group to combine interaction and reflection to the effect of constructing knowledge. Second, online communication has been shown to have different social dynamics regarding factors of equality and balance of interactions. Warschauer points to the work of Sproull and Kiesler (1992) who conducted a meta-analysis on published research to show that “electronic discussion groups of people of different status show approximately twice as much equality (measured by a balanced quantity of participation) as to face-to-face discussion groups (War-

schaer, 1997, p. 472).” Equality among members is, of course, a vital aspect of collaborative learning. Each member should be made to feel that they are an important part of the group. Furthermore, everyone should have the opportunity to contribute to the growing group knowledge.

Time- and place- independence

With the convenience of the Internet, learners are not bound by physical constraints such as a school campus or a particular meeting place. They can communicate with each other from all over the world, or at least anywhere with an Internet connection. Furthermore, as the interactions take place outside of a normal classroom, time becomes less of an issue. Particularly for asynchronous groups, where learners do not have to be online at the same time, messages can be written and received at any time of the day or night. A further benefit of asynchronous interactions, according to Warshauer, is that there is the opportunity for participants to reflect on and analyze communications more deeply than if they had to respond right away.

Long distance exchanges

While L2 classes have often included opportunities for students to share letters, photos, and other cultural memorabilia with people in countries where the target language is spoken, the Internet makes such interactions faster, cheaper and more convenient. Furthermore, given the nature of the many-to-many interactions that can occur, entire groups of students can be put in touch with other

groups, allowing for a more social and diverse interactive atmosphere. Also, in some cases synchronous chat has been set up among learners in different countries, allowing for a kind of direct interaction that was not possible before. Some specific examples of these types of exchanges and their effect on the development of community will be looked at later in this paper.

Hypermedia links

With hypermedia links, students can share with one another up-to-date, authentic information on the World Wide Web. An example given is of a role-play where the students would be reporting on different travel activities. Having access to hypermedia would allow the students to access information about various travel destinations that was authentic and up to date, thus giving added depth to their role-plays. Regarding CMC based learning tasks, Warshauer states, “The most potent collaborative activities involve not just finding and using information, but actively making use of technologies to construct new knowledge together (p. 477).” Through hypermedia, students have a tremendous amount of knowledge that can be accessed and incorporated into their learning.

Online Learning Communities

Palloff and Pratt (2010) called collaboration “the ‘heart and soul’ of an online course (p. 6).” They further observed that for collaboration to occur there needs to be a sense of community. Learners must feel connected to one another and have the sense that their in-

dividual success is connected to the success of everyone. Taking the concepts of sociocultural theory and constructivism and connecting them with possibilities of online learning we can imagine a situation where learners work together with a facilitator, perhaps spread out from one another in physical space but united in cyberspace, working together to create a meaningful learning experience, an online learning community. How can an online learning community be achieved? What is necessary for such an environment to flourish?

Preece (2000) gave four features of online communities, people, purpose, policies, and computer systems. For an online community to occur, people must gather together under a common purpose and organize themselves according to a certain structure or set of policies. Naturally, without access to computer systems, none of this could occur. Preece's description referred to online communities in general and not specifically to online learning communities.

Palloff and Pratt (2007) took Preece's description of online communities and added two more features, collaboration and reflection. Adding these two features, they claimed, would transform an online community into an online learning community. By collaborating together, knowledge is created. By reflection, knowledge is integrated. As was mentioned earlier, one of the benefits of the online environment for collaborative learning described by Warshauer is the ability to save the texts of class interactions and reflect upon them at a later time. By this definition, then, we can

conceive of an online learning community as a group of people, united together for a common learning purpose, working together under the structure and guidance of a facilitator, collaborating together to create and integrate knowledge.

There are a number of potential obstacles to achieving an online learning community. One such obstacle is technological readiness (Palloff & Pratt, 2007; Peterson, 2006; Wang et al., 2009). Before a person can actively engage in online learning he or she must be comfortable with the technical aspects of the hardware and software being used. For L2 learners, for example, the very act of typing fast enough to keep up with synchronous chat may prove to be a deterrent to collaborative interaction. The type of software used in the online environment can also make things difficult. Particularly for some of the virtual interactions that will be discussed later in this paper, there is a certain amount of learning and preparation that is required to be able to communicate in cyberspace. One strategy that instructors of online courses have used to help with this issue is to hold training sessions, either in person or online, before the actual course begins (Peterson, 2006).

A related issue regarding technology is that sometimes students simply don't have access to a computer for enough time to be able to participate fully in an online course (Palloff & Pratt, 2007; Thorne, Black, & Sykes, 2009). Participation in online learning assumes a certain level of technological privilege. While CMC is becoming more and more accessible throughout the world the fact is there are

many potential and desirous learners in the world who do not have access to the necessary technology.

Another potential obstacle to creating a successful online learning community is the pedagogical approach of the instructor. Even online, it is possible to design an environment where the instructor delivers online lectures or essays and keeps the class teacher centered. For a sense of community to develop, the environment needs to be one that favors collaboration (R. M. Palloff & Pratt, 2007; Warschauer, 1997). The instructor needs to move into the role of a facilitator. The facilitator guides the learners and provides the support and structure for the online community to thrive but they do force the direction of the learning. Learning arises from the interaction of all members with one another. The facilitator tries to keep the learning environment conducive to collaboration. There are even some cases of online learning communities where there is no specified instructor. As will be looked at later in this paper, Black (2005) looked at English learners participating in an online fan fiction community. There was no specific facilitator for this community, rather participants would move between the roles of expert and novice as they aided each other in their writing.

Looking at correlations between 22 course design factors and reported student satisfaction from data collected from 73 online courses offered through the State University of New York, Swan (2002) concluded that the three most important components of a successful online learning experience were clear

and consistent course design, contact and feedback from the instructors, and a sense of active and valued discussion on the part of the students. These three factors, Swan suggests, point to the importance of creating opportunities for student interaction, both with the instructor and with each other, in online course design. Student interaction, as Swan states, is strongly connected to students' sense of social presence, that is, how real they feel within the online environment.

Social Presence

One can imagine the beginning of an online course as students begin to get to know one another, perhaps by posting a brief self-introduction to a discussion board. All they have to portray themselves with, most likely, are their words. Perhaps some of the students might upload a picture of themselves, if that is possible, but, for the most part, they will need to rely on the written word to both convey their personality as well as get a sense of the personalities of their classmates. With no facial expressions or gestures to observe or voices to hear, it can be challenging to express oneself to others online. The degree to which an online learner can establish a sense of self-expression, or social presence, plays an important role in how satisfied he or she will be with the online environment (Gunawardena & Zittle, 1997; Palloff & Pratt, 2007; Swan, 2002).

Considering the Vygotskian concept that individuals are formed through their interactions with the surrounding culture and community, a similar process happens online.

Through online interactions, a sense of social presence develops in people; that is, they begin to form online identities. Piccano (2002) notes that for social presence to develop, a sense of community must be present. An individual must feel supported as they adapt to the online environment.

Paloff and Pratt (2007) mention that the somewhat anonymous atmosphere of an online environment provides a new level of freedom for students; they are free to create for themselves new identities. Notions of things like appearance, social position, age, gender and ethnicity become less relevant in the CMC medium. In this way, the online medium serves as a kind of equalizer. As was mentioned earlier, Warschauer pointed to the fact that online interactions promote more equal participation among group members.

One potential downfall of the free and somewhat anonymous atmosphere of the online environment, however, is that people can become overly direct expressing negative emotion or might become rude to their fellow collaborators. Such online behavior, called 'flaming,' is something that facilitators need to pay attention to as a negative atmosphere can quickly make it difficult for students to participate.

Returning to the notion of CMC acting as an equalizer, it may be true that online environments promote a more equal form of communication, however, it does not necessarily mean that social hierarchy is entirely absent. In a study by Matsuda (2002) looking at markers of deference in interactions between Japanese teachers of English in an online sup-

port community, he noted that while normal, socially hierarchical markers such as age and gender tended not to exert much influence on the group interactions, over time, a different kind of hierarchy evolved, which Matsuda observed to be based on the level of knowledge the participants possessed. Participants who spent a lot of time helping others with various questions that came up developed a certain amount of seniority. Essentially, those who tended to act in the role of experts for the group gradually were treated with more deference by other participants.

Another way that the online medium is able to serve as an equalizer is by offering the opportunity for equal participation (Sproull & Kiesler, 1992; Warschauer, 1997). Considering the case of L2 learners, establishing an online presence might be easier than it would be to express oneself in a person-to-person class situation, particularly if the group was of mixed levels. In a face-to-face classroom situation, students with higher ability are able to speak faster and with less preparation and so tend to dominate class discussions. In an online medium where participants take turns writing posts or responding to messages, people with less ability can take the time they need to prepare their answers.

Similarly, Palloff and Pratt (2007) observed that students who are typically introverted tend to do well in text-based, online environments. The CMC medium, by allowing participants to take their time and compose their statements at their own pace, frees up the voices of many who find face-to-face social interactions challenging. Conversely, extrovert-

ed students have been shown to struggle with a purely text-based online environment. Pall-off and Pratt further note that the use of virtual environments where it is possible to create visual avatars that can move and express a certain degree of nonverbal communication can give naturally extroverted people more learning satisfaction. Virtual environments as places of language learning will be looked at in more detail later in this paper, but first some examples of text based language learning communities will be examined.

Text-Based Online Language Learning Communities

A large amount of online courses take place within a text-based CMC medium where participants interact primarily through e-mail, discussion lists, forums, and similar types of communication. In this section I would like to look at some examples of text-based language learning communities.

One well documented study was done by Kern (1996). He paired a class of first year university students in America who were studying French with students in a high school history class in France. Students wrote several essays about themselves and their family history for one another and communicated via e-mail in an asynchronous environment. What Kern observed is that beyond the assignments, student developed meaningful communication with one another through e-mail exchange. A common connection that many of the French and American students had is that they were from immigrant families. Various dialogues ensued between them

as they discussed different aspects of their family and cultural histories. This is a good example of how communities can facilitate learning. The common immigrant background of many of the students provided a sociocultural base for them to open up meaningful communication and as they interacted with each other, they began to create knowledge. Kern observed that not only were the students practicing language, they were exchanging historical and cultural knowledge as well.

Swan (2002) observed that in text-based online environments, people tend to open up more and disclose more personal information with one another than they would in person. These acts of self-revealing within writing are called verbal immediacy behaviors. One explanation for the increased verbal immediacy behaviors in text based CMC is that with the lack of visual and audial expression, people are trying to build more intimate connections with one another in order to create a more communal atmosphere. In the case of Kern's students, this seems to have been true, with students going far beyond the parameters of their original assignments to share information with one another.

Another case where students were seen to engage in verbal immediacy behaviors in text-based communication was documented by Beauvois (1998a). She looked at a class of university students studying French that had a face-to-face component as well as a CMC based component. In this case, the CMC was done synchronously by e-mail chat in a computer laboratory. The e-mail chat, Beauvois

suggested, formed a bridge between written and spoken language, allowing students to think as they wrote. These types of interactions she likened to “conversations in slow motion (p. 198).” By carefully observing all the face-to-face sessions as well as reviewing the online dialogues between the students, she concluded that the students exhibited much more interaction with one another during the CMC based sessions. She further observed that there was a number of self-revealing utterances that occurred between students via e-mail whereas no such utterances were observed in the face-to-face session. By her observation, students communicated more often and more in depth through the e-mail exchanges compared to the face-to-face class sessions.

She also noted that some students who were rather shy and didn't participate much in the face-to-face sessions seemed to come alive in the CMC component of the course. Speaking of one student's change in interactive behavior through e-mail, Beauvois said, “It was as if, after a self-imposed silence, she had suddenly found a ‘voice’ and was able to communicate (p. 208).” She further noted that the interactions between the students tended to be more equal during the online sessions. As for students who were normally outgoing and did well in the face-to-face lessons, they also were observed to do well in the text-based sessions; there was no decline in performance. This observation is in contrast to the findings of Palloff and Pratt (2007), who, as was previously mentioned, found that extroverted students often don't

do as well in text-based online environments.

While Beauvois didn't specifically address the formation of community as an impetus for collaboration, the expressions of verbal immediacy and the increased interactions suggest that the students were, in fact, attempting to create social presence and form closer relationships with one another through the online medium. Beauvois also noted that in the e-mail chat sessions, the role of the teacher shifted to more of a partner or facilitator, another marker of the collaborative learning community environment.

In a more recent study by Zeng and Takatsuka (2009) done specifically from a sociocultural point of view, they looked for examples of scaffolding as a group of university level Chinese learners of EFL engaged in synchronous, text-based CMC collaborative tasks. To find evidence of scaffolding, they examined student dialogue looking for negotiation of meaning, specifically for instances where students questioned or talked about their language use as well as situations where students corrected themselves or their partners. They observed a high frequency of language that exhibited negotiation of meaning within the student dialogues and wrote that the “text-based medium amplified learners' mutual attention to linguistic form and fostered their collaborative construction of knowledge (p. 443).”

In the examples so far, the studies have all looked at instructor designed CMC learning environments. There are, of course, online communities that exist without the guidance of a specific instructor; rather peers within

the community periodically shift between the roles of expert and novice as the need arises. In one such case, Black (2005) looked at English language learners (ELLs) participating in an online fan fiction community. Fan fiction is a form of written fiction where people write stories based characters and settings of famous works although they are not the original creators of those works. They write the stories as 'fans' of the original works. Websites have been built up around the writings of fan fiction and serve as a place where writers can share their work with other fans and get feedback. There are usually a set of rules or guidelines regarding what can be posted and how people should interact with one another.

Black examined one well known website, *FanFiction.net*, and followed the postings of several ELLs. When the ELLs would post their fiction, they would often explain that they were not native English speakers and some would ask for advice about their language. According to Black, the responses that the ELL writers would get tended to be very positive and supportive. On this website there is very little tolerance for flaming, which was mentioned earlier as rude or hostile behavior online. Black noted one case where one ELL received somewhat rude feedback by one person and another member of the site quickly responded by praising the ELL's writing and encouraging them not to be concerned by the negative comments. Regarding this online community, Black wrote that "a strong emphasis on peer review, constructive criticism, and collaboration within

the community scaffolds ELLs toward more sophisticated literacy practices and provides them with safe and unthreatening access to the many resources of this writing community (p. 125)."

Another interesting feature of this website is that it provides for both synchronous and asynchronous interactions. People can post their writings and respond to others' writing at their own pace. They can also participate in real time chat, if they want to.

Considering this website and recalling Swan's three most important components of successful online learning experiences, we can see that the components are present. There is a clear structure for the interactions. There is interaction with instructors, although in this case the instructors take the form of more knowledgeable peers, or experts. And there is meaningful and valued interaction with other members of the community.

Another feature of this website and similar ones that will be important to language educators is the fact that it is a community of experts outside the class environment. As learners acquire a second or foreign language it is natural that they will want to use it beyond the boundaries of their learning institution. Language teachers, no doubt, hope their students will be able to find viable and welcoming communities within which to grow in the languages they are learning. Another group of online communities that exist outside of the class environment that have strong potential for learning are virtual communities, as will be discussed in the next section.

Virtual Online Language Learning Communities

Multiuser virtual environments (MUVES) are different than the previously discussed online environments in the fact that people interact with one another in a three dimensional, graphic world. While the primary source of communication is still text-based (though recently some have also started integrating voice chat), users also have three dimensional representations of themselves, called avatars which they can also use to move around in the virtual world and communicate with their peers. Avatars tend to be highly customizable and users can usually choose aspects such as gender, body size, and hair, eye and skin color. Some environments even offer the opportunity to create an animal avatar or a fantasy race, such as an elf or a dwarf. Along with their appearances, avatars can also be made to do various kinds of nonverbal communications like waving or pointing or dancing. They can also sometimes exhibit different emotional behaviors like laughing or crying.

The use of avatars in CMC has been connected to an increased sense of presence (Palloff & Pratt, 2007; Peterson, 2006; Svensson, 2003) in CMC mediums which, as has been discussed, is key factor associated with an interactive and communal online atmosphere. There is also evidence (Palloff & Pratt, 2007) that for students who are more outgoing or extroverted by nature, avatar based virtual worlds can give more learner satisfaction than a purely text-based world.

As was observed earlier in this paper, for

social presence to develop, there must be a sense of belonging to a community. Online identities evolve out of meaningful social interactions within a group. Peterson (2006) looked at Japanese university students studying EFL as they engaged in learning tasks within the MUVE, *Active Worlds*. As a base for the study, he assigned communicative tasks to students that they then worked on within the virtual world using avatars. Saving the dialogues that they wrote to one another he looked at various types of interactions, paying special attention to evidence of negotiation of meaning, specifically clarification and definition requests and comprehension checks and confirmations. Also, through examining student interactions online, he investigated whether students used the extra features of the avatars such as gestures, emotional expressions, and movement. Finally, through interviews, he tried to assess whether the avatars contributed to a sense of presence or online identity for the students.

Peterson's findings were that, while some examples of negotiation of meaning were present, they accounted for a relatively small percentage of the multiple types of interactions observed. One possible reason for this, he suggests, is that in the chat exchanges, which occurred in real-time, it was possible that the dialogues were happening too fast and students simply chose to ignore things they did not understand. This possibility points to the importance of gauging student ability with the tasks given to them.

Regarding how much students made use of the avatar functions, Peterson observed that

most students did use them though usually only at the beginning of interactions when a large group were present. Once pairs were formed and text-based chat started, students tended not to use the avatar functions. Most all of the students, however, reported that the use of avatars gave them a deeper sense of social presence with the group. An implication of this is that avatars play perhaps a superficial role in online interactions, for the most part. They give some sense of presence to the users but do not play a large part in the actual way users communicate.

Another MUVE that is somewhat more advanced graphically than *Active Worlds* and has been the subject of multiple studies is *Second Life* (Baker, Wentz, & Woods, 2009; Blake, 2011; Wang et al., 2009). In *Second Life*, numerous virtual classrooms have been created and quite a few universities have actually constructed virtual campuses within the MUVE. Both *Second Life* and *Active Worlds* are similar in that, rather than have a particular theme or set of activities to do as in online games, the environments are basically malleable by the users. For instructors wanting to design a specific type of virtual experience for students, these types of platforms can be useful.

One advantage of these types of environments for language users is that they are used by all kinds of people, not only learners or people engaged in some kind of coursework. For many, if not most users, MUVES are simply a hobby and a way to socialize. Language learners then, have access to a large population of people with whom they

can interact with. In one study (Wang et al., 2009) pairing university students from China and the U.S.A. within *Second Life*, it was observed that when the Chinese students were waiting for their American peers to show up for a session, if they were not on time, the Chinese students would use their avatars to move around and start talking to other people who were not a part of the learning group.

Another type of MUVE that offers potential for language learning communities is what is known as a massively multiplayer online role-playing game (MMORPG). In MMORPGs, people create avatars and communicate with one another via text in a similar fashion to the previously mentioned MUVES however there are some major differences. In MMORPGs, there is a particular theme or world within which players participate. Participants use their avatars to interact with one another, often in a kind of role play as inhabitants of the particular game world they are in. There are also specific tasks, called quests, that players must complete together.

The essentially task based, interactive nature of MMORPGs has led some researchers to examine them in terms of facilitating language learning. Thorne (2008) looked at interactions between EFL students in the Ukraine working together with students from the U.S.A. as they played *World of Warcraft*, a popular MMORPG. Thorne found numerous cases of meaning negotiation and peer correction, typical to collaborative learning environments. He also observed that participants, through online collaboration, formed close interpersonal relationships with one an-

other. Referring to the work of Thorne and others, Peterson (2010) wrote that “Researchers have observed that during interaction in network-based games, learners also engage in the kind of collaborative interaction involving dialog, co-construction in the TL, and the creation of ZPDs, that are held from the perspective of sociocultural research, to facilitate language learning (p.432).”

Discussion and Conclusion

The focus of this paper has been on the creation of learning communities online and the effect these communities can have on learner interaction and language production. The suggestion of much of the literature reviewed is that when learners collaborate together in an online learning community, the level of interaction between students goes up and, in some cases, the exchanges become more meaningful and exhibit increased lexical complexity. A reasonable question that has been asked is how well CMC based language learning communities can actually help with oral interactions. Some have argued the increased interactions and lexical complexity of online exchanges improves oral ability, as well (Beauvois, 1998b; Warschauer, 1996). Abrams (2003), on the other hand, comparing CMC based synchronous and asynchronous groups to a control group of American university students studying German, concluded that while the synchronous group did produce more language in face-to-face interactions than the control group, the asynchronous group did not. Furthermore, there was no particular difference in lexical complexity

between the three groups. The answer is certainly not straightforward and there is a lot of room for further research.

There are many factors to consider when predicting the success of an online language course and while CMC based learning groups may have the potential to evolve into learning communities, certainly not all of them will. As mentioned before, the role of the facilitator in providing a structured and interactive environment for the learners is a crucial component in creating an online community. The level of preparedness the learners have in regards to working in the online environment has also been mentioned. The ease of use of the software or platform that is being used will be an important issue to consider. Some types of online software lend themselves well to interaction and some are less user-friendly, with the potential of discouraging learners from the start. Also there is the natural fact that not all groups get along well together, in whatever medium they might encounter one another in.

While this paper has looked primarily at text-based CMC communication, there are increasing opportunities for learners to use audio and visual modes of CMC, as well. Some MUVes like *Second Life* now include an audio option as well, allowing users to voice chat with one another. With increased opportunities to interact online through audio and video, the nature of online courses will certainly be affected.

The text-based and virtual text-based CMC mediums will most likely endure, however, as they provide a unique environment for learn-

ing. The text-based medium's ability to act as a social equalizer allows people to create new, fresh online identities for themselves as well as gives people a non-threatening way of opening up with one another. The potential to bring learners from around the world together in a collaborative environment, where they can take charge of their learning, helping one another to grow in ability remains a deeply powerful and impressive quality of CMC experience.

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