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Chapter 4

Microblogging on Twitter: Social Networking in Intermediate Italian Classes

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Keywords

Educational Networking, Microblogging, Cross-cultural Competence, E-communication, Computer-mediated Interaction

1. Introduction

Second language acquisition (SLA) research has explored the significance of computer-mediated communication (CMC) in educational models for second language (L2) pedagogy. Recently, the proliferation of Web 2.0 technologies has become the focus of many teachers and researchers who study the impact of Web 2.0 innovations on L2 teaching and learning. The majority of students enrolled in language courses in postsecondary institutions, too, are “digital natives”—a generation of “‘native speakers’ of the digital language of computers, video games and the Internet” (Prensky, 2001, p. 1)—who desire obtaining information in new ways. Web 2.0 provides the core for an internet experience that is focused on the user: its principles and practices foster active participation that, in turn, harnesses a collective intelligence (O’Reilly, 2005). This interactive and dynamic nature of the web creates new opportunities for language teaching and learning because of four key features: it is participatory, authentic, immediate, and it engages the community. These characteristics parallel those of the L2 acquisition process and make Web 2.0 a promising language-learning environment (for numerous examples of how technology can be best employed in the L2 curriculum to enhance and enrich the learner’s contact with the L2, see Blake, 2008).

1.1 Web 2.0 and Microblogging

The most preliminary exploration of Web 2.0 technologies reveals a plethora of applications and services, and selecting from such a myriad of tools may pose a conundrum for a language teacher. A wealth of research is available to assist one in assessing the advantages and shortcomings of these tools and reviews their role in L2 learning (Sykes, Oskoz & Thorne, 2008; Thorne & Payne, 2005). Yet, to date, microblogging, which is not considered mainstream Web 2.0 technology and is only recently beginning to acquire popularity (Vascellaro, 2008), has not been investigated in the context of L2 learning.

Microblogs are, in some ways, comparable to blogs and thus can also be perceived as “I, I, me-me-me” environments in that they are owned and controlled by an individual and reflect that individual’s point of view (Thorne & Payne, 2005, p. 382). According to Wikipedia, microblogging is

a form of multimedia blogging that allows users to send brief text updates (say, 140 characters or fewer) or micromedia such as photos or audio clips and publish them, either to be viewed by anyone or by a restricted group which can be chosen by the user. These messages can be submitted by a variety of means, including text messaging, instant messaging, email, MP3 or the web. (Micro-blogging, n.d., Introduction section, ¶ 1)

The message size constraint of the microblog post creates the individual’s ‘sound bites,’ that is, succinct messages that update and inform. This brevity also establishes unique conditions for online discourse in that community members may reply to a post directly, similar to a conversation one would have in a group setting.

Twitter (<http://www.twitter.com>) is one such microblogging service and an example of a Web 2.0 technology. The content of microblog posts is user initiated. Users (twitterers) create text-based posts (tweets) that are read by community members (followers) in reply to the overarching question asked by the site (“What are you doing?”) or may share information about personal matters, friends and family, work, news and events, and more (Mischaud, 2007).

Figure 1 shows the simple layout of the Twitter webpage interface. On the left side are the text field box (where tweets are updated) and the timeline, in reverse chronological order, of users and their followers (identified by an avatar and Twitter name). In the right sidebar, one finds data relative to the Twitter statistics: (a) how many people you are following (people whose updates you will see in your timeline), (b) how many people follow your tweets (people who get your updates in their timeline), and (c) updates. The tabs immediately below the statistics and to the right of the timeline automatically categorize tweets as follows:

1. @Replies: posts addressed specifically to the attention of the user and begin with @+username that appear in the timeline;
2. Direct Messages: private posts not viewable in the public timeline;
3. Favorites: a “bookmarked” list of the user’s favorite tweets; and
4. Everyone: the timeline of all public tweets of users.

Figure 1
The Twitter Homepage



Finally, the community is visibly identified by means of avatars under the heading “Following.” In addition to reading the updates posted by people followed in their timeline, users can reply to a post by simply clicking on the reply icon, a feature which emulates instant messaging (IM) chat but which can be followed by the entire community, thereby creating an open conversation in which any community member can participate.

Twitter’s layout and features, its basic Unicode text font (without embellishment of type style, size, color, etc.), and its ability to share links via URL shorteners (services that abbreviate URLs in order to use a minimal number of the 140 allowed characters) make it easy to learn and simple to use.

1.2 Online Communication and L2 Learning

Few studies have investigated the role of Twitter as an educational networking tool (Rheingold, 2008; Parry, 2008; Wesch, 2008); however, extensive research on other forms of CMC demonstrates that it generates high levels of interactivity (Salaberry, 2001) and can be implemented for both linguistic and intercultural purposes (Blake, 2008).

Previous research confirms a valuable role for both synchronous and asynchronous modes of communication. Sotillo (2000) claims that “[A]necdotal and experimental data seem to support claims that both synchronous and asynchronous exchanges, in first- and second-language student populations, encourage interaction and help improve the quality of written and spoken discourse” (p. 84). However, research indicates that these modes benefited language acquisition differently. For instance, Sotillo found an advantage for asynchronous communication with regard to writing skills and reported that “asynchronous discussions in particular allow language learners more time to plan their writing, edit their spelling, grammar, and punctuation when paying attention to form, and make longer contributions than students composing synchronously” (p. 106). Other studies have reported similarly positive results. Van Handle and Corl (1998) analyzed the role of email exchanges between American students of German and found that these exchanges improved their writing skills. Recent studies on other Web 2.0 tools such as blogs have also shown them to be an effective reflexive tool for language learning (Murray, Hourigan, & Jeanneau, 2007).

Synchronous communication, on the other hand, was found to increase learner output by increasing their participation and advancing their lexical L2 interlanguage development (de la Fuente, 2003). Tudini (2003), for example, found that public native speaker (NS) chat rooms offer “optimal environmental conditions for SLA by providing opportunities for the negotiation of meaning in an open ended conversational task” (p. 145). Specifically, according to Toyoda and Harrison (2002), chats with NSs revealed that negotiation of meaning for both learner and NS occurred at two different levels: sentence and discourse. Such contact with NSs is an important factor in the language acquisition process, not only for the development of oral but also of written communication skills; as Sayers and Brown (1987) observe, “foreign language students need authentic contacts with native speakers and much practice in a range of language skills—including reading and writing—if they are to develop cultural awareness and communicative competence” (p. 23). The potential for task-based chats to foster negotiation of meaning was confirmed by Pellettieri (2000) who also highlighted their role in enhancing form-focused interaction and facilitating successful communication among learners. Finally, in her study of chats, Sotillo (2000) notes that her participants produced discourse “similar to the types of interactional modifications found in face-to-face conversations that are deemed necessary for second language acquisition” (p. 82).

In addition to these investigations of predominantly text-based chats (lacking in nonverbal cues), Tudini (2003) explored live web chat and Sotillo (2006) conducted a pilot study on IM with audio and video. The findings of both of these studies also substantiate the claim that chat and instant messaging constitute “a potentially ideal tool for learning, communicating, and community building” (Sotillo, Conclusion section, ¶ 4).

In short, previous research clearly highlights the role of CMC in simulating face-to-face interactions (Sotillo, 2000), increasing learner output (de la Fuente, 2003), and accommodating the negotiation of meaning (Pellettieri, 2000). These

online exchanges, particularly when combined with the potential for contact with NSs, reflect the conditions that Long (1996) highlights for optimizing language acquisition:

negotiation for meaning, and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways. (Long as cited in Tudini, 2003, p. 141)

Microblogging has the potential to facilitate acquisition by providing input with which learners engage and an online audience for their output as well. As Chapelle (1998) notes, because all output is not meaningful, “it may be important that learners have an audience for the linguistic output they produce so that they attempt to use the language to construct meanings for communication rather than solely for practice” (p. 23). Interaction with other members of the online community and contact with NSs provide opportunities for the negotiation of meaning. Microblogging is also a context for what is considered “good interaction” (Chapelle, 1998, p. 24). The findings of several studies on effective L2 tasks suggest that those that require a “‘two-way’ interactant relationship” are more effective than those in which the communication is unidirectional (Chapelle, p. 24).

As new technologies emerge, they create new contexts for language learning. Salaberry (2000) insightfully observes that each new technological medium represents a new environment with different features (e.g., mode of communication and channel of communication) for interaction. Learners create and exchange information in accordance with the technological tool used, and each different tool may benefit the learning process differently. Thus, microblogging, specifically via Twitter, also creates favorable conditions for online interaction that may foster language acquisition. Twitter not only gives language learners the opportunity to interact in the L2 outside of class but also, regardless of students’ geographical location, makes communication with NSs a viable option. The present study focuses on the unique features of Twitter and its potential as a language-learning tool.

1.3 The Learning Potential of Twitter

Twitter provides a means by which learners can regularly use the L2 outside of scheduled class time, thereby extending the walls of the classroom and expanding the potential for learning. The learners provide written output when they update, receive comprehensible input when they read the tweets in timeline, and negotiate meaning by conversing/engaging in discourse with community members. Twitter, therefore, maximizes opportunities for learner interaction with peers, the teacher, and NSs. The learning process on Twitter is a multifaceted one in that learners (a) are engaged in either synchronous or asynchronous modes of communication implementing the same Web 2.0 tool, (b) interact with individuals or community members in the L2, and (c) participate in the virtual classroom and in the L2 culture.

In contrast to other forms of CMC, such as email or chat, Twitter is a hybrid platform, that is, it facilitates both online and offline communication, thereby adapting itself to both synchronous and asynchronous modes. The fact that it is “always-on, hyper-connected” (Rheingold as cited in Mischaud, 2007, p. 16) allows for immediacy (very low lag time) of tweets. The Twitter environment accommodates users’ learning styles. Thus, twitterers can adapt this Web 2.0 tool to simulate conversations by way of an asynchronous mode of communication (e.g., email) to reflect and plan their reply before posting a tweet¹ or a synchronous mode of communication (e.g., IM) and immediately engage their followers by reply tweet.

Membership in the Twitter community, which may also include access to the L2 community, requires that learners create an online identity. The notion of online identity is complex; as Donath and boyd (2004) note, “[I]dentity is faceted; we have different interests, beliefs, traits, etc, and share different ones with different people” (p. 74). In the case of Twitter, users establish their identity by personalizing their account; selecting a username, avatar, and page design; and including profile information and updates (see Figure 2).

Figure 2

The Twitter Profile



profeac

Name profeac
Location Montclair, NJ
Web <http://chss.montc...>
Bio Diventiamo twitter!

Since “social network sites are structured as personal (or “egocentric”) networks with the individual at the center of their own community” (boyd & Ellison, 2007, History section, ¶ 24), the learner’s social network display (i.e., identity) conveys information about the user and his or her membership within the community. The identity users wish to represent online may not be an accurate representation of self, but rather the qualities that they wish to share with the network community (Donath & boyd, 2004, p. 73). In this regard, the Twitter profile of the learner is also telling simply because the representation of self is in the L2, the tie that binds this community.

The aspects of mode of CMC, language use, and group membership strengthen the learning potential of Twitter. The present study documents the experiences of one teacher/researcher and her students with this unique social-networking tool.

2. Method

Motivated by computer-mediated interaction theories in SLA and the desire to provide a means for learners to use the L2 outside of the classroom while keeping with the ways in which digital natives obtain information, this study investigates

¹ The frequency with which people tweet requires that any reply and interaction in discourse occur within a socially acceptable time frame. Given the brevity of the update size, a reply could be given within minutes of a conversational exchange rather than the seconds in which it would be given in synchronous mode.

the effects of microblogging on the language experience of learners. The two research questions posed were

1. What are students' Twitter habits? With what frequency do students tweet, what factors affect that frequency, and what topics do they initiate?
2. How do students evaluate Twitter as a pedagogical tool for learning Italian language and culture?

The following section describes in detail the data collection process used to address these research questions.

2.1 Participants and Procedures

The 22 participants in this study were university students enrolled in two sections of an intermediate-level Italian course at a mid-sized public university. The majority of the students in these sections were taking Italian to fulfill the university's language requirement, and most had previously taken either first-year second-semester Italian in college or 4 years of Italian in high school.

The course syllabus provided instructions on how to register for a Twitter account and, subsequently, learners were given the Twitter names of their peers to facilitate the creation of the Italian community.² Students were required to subscribe to the accounts of their classmates but not the students in the other section. During the second week of class, the teacher/researcher accompanied students to the language lab to ensure that all students had created accounts and knew how to subscribe to different twitterers, thereby becoming their classmates' followers. This online community was contrived, that is, a learning environment set up by this teacher/research in which students would use Italian exclusively to tweet with their classmates, engaging in both individual and community language use. Per syllabus expectations, students were required to post three tweets a week: two tweets of a personal nature and one reply to a tweet of a follower in their timeline. Given the experimental nature of this investigation, grades were determined only based on adherence to these expectations (i.e., on a completed/not completed basis). The grade distribution for the course allocated 5% of the final grade to participation in this Twitter study. At the end of the semester, students were required to have posted 28 updates and replied to 14 tweets. The grade earned by the learner was determined by dividing the number of weekly updates and replies tweeted by the expected quantity of each and then converted to a score on a 5-point scale. For example, a student who posted 15 general tweets and replied to 7 tweets earned a grade of 2.6 out of 5.

In keeping with Chapelle's (2001) recommendations about introducing technology in the language-learning environment, specifically with regard to task creation, purpose, and authenticity, the teacher/researcher initially prompted learners

² Previous research that has explored the social aspect of networking considers "community" friends and acquaintances (Donath & boyd, 2004; boyd, in press) in contrast to the present study in which the community component consists of strangers brought together by this Italian course.

by posing questions, offering URLs to explore or providing students with a task to help reduce anxiety about the integration of this social-networking platform and to encourage them to tweet. However, the course was student centered and learners were not restricted by teacher-directed themes or topics.

The teacher/researcher monitored student tweets on a weekly basis by logging their participation and providing feedback to learners, commenting both on the content of their tweets and the accuracy of their language use; a discussion of the latter component is beyond the scope of this chapter. Generally, all students received feedback on a weekly basis, but the teacher/researcher communicated more frequently if learners interacted with her more than once a week.

During the fifth week of the semester, again in the lab, the teacher/researcher formally introduced native language twitterers representing both northern and southern Italy, most of whom are technology specialists (e.g., an expert in electrotechnics and an internet marketing specialist) to the online community. Twitter is not at all common in Italy: approximately 1% of users are from Italy and Twitter ranks 1,998th in terms of internet traffic there, compared to the US, where 51.9% of users live and where Twitter ranks 227th (<http://www.Alexa.com>). The teacher/researcher had followed these NSs and engaged with them for a period of 7 months before contacting them to request their participation in this study. All students subscribed to the account of these Italian twitterers but were not required to communicate with them directly if they felt uncomfortable. For the remaining nine weeks of the semester, students were free to interact with all members of the Twitter community.

The data collected for this study come from three different sources: (a) the students' tweets (accessible on the Twitter website under the user's profile), (b) a questionnaire with 4-item Likert-scale questions distributed to all students enrolled in the two sections (see Appendix A), and (c) an open-ended and follow-up questionnaire given to those students who tweeted regularly and who interacted with the NSs (see Appendix B). Both questionnaires were developed using two previous studies on synchronous (Wang, 2004) and asynchronous (Son, 2007) CMC and addressed the value of Twitter as a tool for social/educational networking in general and for learning Italian language and culture in particular. Questionnaires also explored student opinions of Twitter and the nature of posted tweets.

3. Results

3.1 Students' Twitter Habits

There were several steps in analyzing the data to address the research question regarding the quantity and quality of students' Twitter habits. First, students' questionnaire responses on the social aspects of Twitter were tabulated. Then, all tweets from their Twitter profiles were closely examined. The analysis here focuses on those tweets that highlight or exemplify issues raised by the questionnaire.

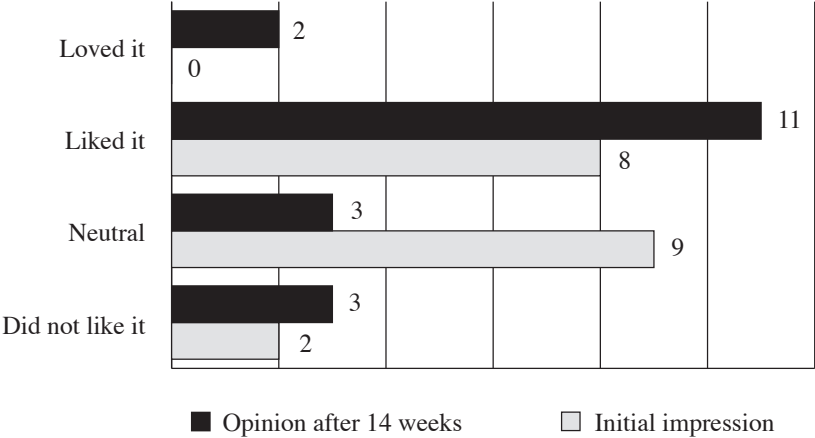
3.1.1 Questionnaire data

Before discussing student tweets, it is important to understand their Twitter habits

and regular use of social-networking sites prior to taking the course. Of the 19 students who completed the first questionnaire, 17 (89%) reported visiting at least one social media website regularly and 13 (76%) claimed to have visited three or more different social media platforms. Only 1 respondent was already microblogging prior to using Twitter for this class.

Because Twitter was not a mainstream social networking site at the time these data were collected, it is important to consider students' impressions of the tool both initially and after 14 weeks of participation in the project. Their opinions, taken from the questionnaire, are reflected in Figure 3.

Figure 3
Student Opinions of Twitter as a Form of Social Media



At the end of 14 weeks, the majority of learners either liked microblogging (11 of 19; 58%) or loved it (2 of 19; 10%). The number of learners who were initially neutral (9 of 19; 47%,) in their opinion of Twitter decreased by two thirds by the end of the semester; only 3 of 19 (16%) remained neutral. Respondents who did not like microblogging increased from 11% to 16% by the end of the semester.

Several observations can be made about students' opinions on the social aspects of Twitter from the questionnaire data provided in Table 1.

Table 1
Social Aspects of Twitter

	Strongly disagree	Disagree	Agree	Strongly agree	Mean (4-point scale)
1. I looked forward to reading everyone else's tweets.		32%	58%	5%	2.11
2. I found myself wanting to post tweets.	5%	26%	48%	16%	2.78

3. I liked that we can share links and images.		5%	74%	16%	3.11
4. The information I read from other tweets contributed to a greater sense of class community.		16%	74%	5%	2.89
5. Knowing the people I am following made me feel more comfortable tweeting in Italian.		11%	68%	16%	3.06
6. I enjoyed rereading past tweets of others on my timeline.	5%	22%	63%	5%	2.72
7. I enjoyed rereading past replies of others on my timeline.	5%	26%	53%	11%	2.72
8. I enjoyed rereading past conversations of others on my timeline not related to me.	5%	32%	53%	5%	2.61
9. The tweets were relevant to real-life language use in Italian.			68%	27%	3.28
10. Not knowing the Italians we were following made me feel more comfortable tweeting in Italian.	10%	37%	48%		2.39
11. The information I read from the Italians contributed greatly to my knowledge about Italian culture.		37%	58%		2.61
12. I was overwhelmed by the frequency of tweets by the Italians.		10%	32%	53%	3.44
13. I found that the language used by the Italians was overwhelming.		42%	37%	16%	2.72

Note: For each question, respondents' total is only 95% since one participant per question did not respond. The "no answer" was not always the same respondent.

Overall, more than half of the respondents agreed or strongly agreed with the statements made about Twitter's use for social networking. Although 16 of 19 respondents (85%) were overwhelmed by the frequency of the Italians' tweets and felt more comfortable knowing the people they followed in the Twitter community, 17 of 19 (90%) liked the ability to share links and images (approximately

half of the students used this feature), and 18 of 19 (94%) agreed that the tweets were relevant to real-life language use.

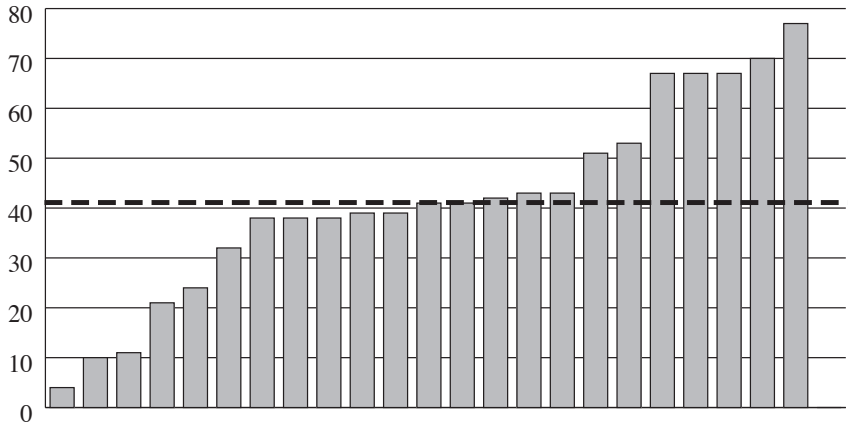
Approximately one third of the respondents expressed negative opinions about the value of Twitter as a language-learning tool. In particular, 6 of 19 respondents (32%) negatively responded to the following statements: “I looked forward to reading everyone else’s tweets” and “I enjoyed rereading past conversations of others on my timeline not related to me;” 7 of 19 (37%) indicated that they did not enjoy rereading the past conversations of others and that they did not believe that the information they read from Italian twitterers contributed to their knowledge of Italian culture. Also, 8 of 19 respondents (42%) did not agree that “the language used by Italian twitterers was overwhelming,” and 48% (9 of 19 respondents) did not agree that having unknown Italians in the Twitter community decreased their level of comfort. In short, though some students did not enjoy reading the posts, the majority did not view the presence of native Italians or their language use as negative.

Overall, students’ responses to Twitter as a course component were positive. A more detailed analysis of the tweet updates posted, together with the responses from the open-ended questions, will shed additional light on students’ views of Twitter as a language-learning tool.

3.1.2 Frequency of tweets

As previously noted, Twitter was categorized as a required component of written production and comprised 5% of the final grade. To receive full credit, students had to twitter twice a week and reply to a classmate’s tweet once a week (3 tweets per week in total). Thus, at the end of the regular 14-week semester (not including examination periods), students were to have posted 42 tweets (see Figure 4).

Figure 4
Frequency of Tweets Versus Expected Tweets



The data in Figure 4 indicate that frequency expectations were not met by all students; only 10 of 22 students (45%) reached the required minimum. There

was an average of 41.5 tweets per student, ranging from 5 to 77. The follow-up questionnaire questions provide additional insights. A rationale for these low-frequency rates was proffered by a respondent on the questionnaire:

It was graded therefore I felt pressured to post tweets every week. If the tweets were not graded I probably would of [sic] posted more often and would be able to interact more with the people on twitter it would of been just a social network, not school related.

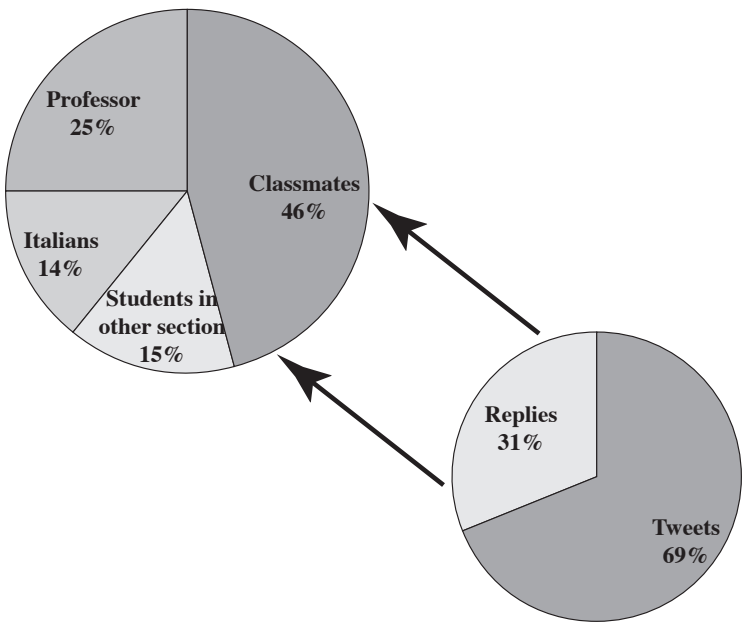
This student’s enjoyment of Twitter as a social-networking tool was hampered by the academic “strings” attached (i.e., being graded). More enthusiastic students made comments that highlighted the benefits of their experience and justify frequent tweeting such as “it made me use Italian everyday,” “helped me use the Italian language outside of the classroom,” and “it was a fun way to communicate.” Yet another student said that it was probably something he would not have done otherwise.

As discussed below, students made further comments about the nonacademic nature of tweets, expanding beyond what was being learned in class.

3.2 *Twitterers’ Tweets and Replies*

Again as noted above, the course syllabus required students to post two general tweets and one reply weekly. Though frequency expectations were not met (students did not post three tweets weekly), they did follow instructions in regard to the type of tweet they posted (see Figure 5).

Figure 5
Distribution of Tweet Updates and Replies



One third of the postings (31%) were reply tweets, and two thirds (69%) were posted updates. This distribution of tweets and replies indicates that the majority of tweets posted did not engage students in conversation but were used instead as status updates. In addition to the frequency of tweets, it is also important to analyze students' replies, specifically to whom these replies were directed. Students replied most often to classmates (46%) and next most frequently to the teacher/researcher (25%). Because this research was conducted in two sections of the same intermediate level course, students also had the possibility of replying to peers in the other class, and, indeed, 15% of replies reflected that option. Finally, the native Italian twitterers received a 14% share of the replies.

Students' preferences for communicating with their classmates and professor are supported by their responses to the open-ended questions of the questionnaires. Learners repeatedly commented that they "liked being able to stay in touch with my classmates and teacher outside of the classroom," and, in addition, they noted that "we helped each other learn the Italian language in a fun way by talking to each other in a non-classroom environment so we didn't [*sic*] have to feel timid or afraid of our pronunciation."³ Students' comments suggest that the contrived community of professor and students increased the learning potential and reduced affective filters: "[I]t just made us all more comfortable [*sic*] with each other." The nonthreatening environment is further evidenced by the following exchange:

Figure 6

An Exchange Between Classmates

Quattro settimane fino a la laurea!
09:26 AM April 08, 2008 from web

[Four weeks till graduation!]

@marianneturner Sei triste per lasciare MSU o allegra?

[Are you sad *to leave MSU or content?]

05:58 PM April 20, 2008 from web in reply to marianneturner

@sammydee77 Sono felice e un po' triste a lascio MSU

[I'm happy and a bit sad to *I leave MSU.]

06:31 PM April 21, 2008 from web in reply to sammydee77

Note: * indicates an error in Italian.

The comfort level indicated by the comments in the above exchange denotes the quality of social networking. These classmates (both real and virtual) express their willingness to share certain facets of themselves with the online community (Donath & boyd, 2004). The goal of expanding this community to include NSs of Italian was to simulate a more authentic language community. By doing so, learners were exposed to the reality of the Italian language as used daily within the Twitter environment. Moreover, the membership of NSs presented opportunities

³ Although affective filters are beyond the scope of this investigation, it is worth noting that this learner's opinion upholds the previous research presented by Arnold (2007) in her study on L2 communication and computer-mediated communication in her third semester German class. Her research suggests that the anonymous environment, the time lag of asynchronous communication, the lack of paralinguistic clues may ease learner anxiety.

for conversations and negotiation of meaning between the learners and the NSs. Previous research (Tudini, 2003) indicates that in NS chat interactions, learners are engaged in synchronous exchanges that include the negotiation of meaning: “Analysis of chat interactions with unfamiliar NS interlocutors indicate that they offer learners a type of informal conversational practice which includes a central component, namely, negotiation of meaning” (p. 156). Membership of NSs in the new community also signifies that students are literally at the threshold of the L2 community and represent an important contact for language learning that learners themselves recognize. As one learner stated,

The only way to really learn Italian is by having a fluent Italian help you out and correct ur [*sic*] mistakes. liek [*sic*] its [*sic*] said, the best way to learn a language is to go and visit the country. since we have class and are unable to visit the country, they come to us and help us learn better.

Another student commented that what she liked most about Twitter was “the sense of community, despite being from different parts of the world.” This sentiment was also echoed by an Italian twitterer.

Figure 7

Elyl's Tweet

che bello twittare con gli amici del NJ:
un saluto domenicale a tutti!!!
about 14 hours ago from web ☆

[How nice it is to tweet with my
friends from NJ: a Sunday greeting to
all!!!]

Such participation and indirect interaction via the social-networking site, as demonstrated in Figure 7, is a positive substantiation of social network community membership for both learners and NSs. There were several exchanges between American learners and Italian twitters that further support Twitter's uniqueness for cultivating community membership and authentic exchanges on topics such as birthday wishes, exam nerves, and just small talk (see Figures 8, 9, and 10).

Figure 8

Birthday Wishes

ciao oggi e il mio compleanno :).. ma
devo lavorare tutto il giorno:(.. che bel
regalo no..
11:19 AM March 07, 2008 from web

[Hi today's my birthday ☺.. but I
have to work all day ☹.. nice gift, is
it not?]

@Bellisima66 ho visto solo adesso
che hai compiuto gli anni. auguris-
simi!!
10:28 AM March 09, 2008 from web in reply to
Bellisima66

[I just saw right now that you are one
year older. Best wishes!!]

@elyl grazie!
08:05 AM March 16, 2008 from web in reply to
elyl

[Thank you!]

Figure 9

Exam Nerves

marianneturner ho molto nervoso per
esame di italiano ...
about 6 hours ago from web

[I *have so nervous for *Italian exam
...]

Note: * indicates an error in Italian.

Figure10

Exchange Between a Learner and Two Italians

rulerjuler Ciao @elyl Che cosa fai?
about 5 hours ago from web ☆ ☺

[Hi @elyl! What are you doing?]

elyl ciao@ rulerjuler io lavoro e studio.
E tu? :)
about 5 hours ago from web ☆ ☺ 📱

[Hi @rulerjuler, I'm working and
studying. And you? ☺]

@rulerjuler buongiorno, fa freddo?
che tempo fa?
📱 04:29 PM February 25, 2008 from twhirl in
reply to rulerjuler

[Good morning, is it cold? What is
the weather like?]

@clarita82 buongiorno, ieri faceva
bella! oggi fa freddo:/ che tempo fa lì?
11:40 AM February 25, 2008 from web in reply to
clarita82 ☆

[Good morning, yesterday was *nice!
Today it is cold :/ what is the weather
there like?]

@rulerjuler scusa il ritardo!qui è umido
et c'è la nebbia stasera
📱 10:17 PM February 26, 2008 from web in reply
to rulerjuler

[Excuse my tardiness! Here it is hu-
mid and there is fog tonight!]

Note: * indicates an error in Italian.

Students' comments suggest that the social-networking factor was what prompted their willingness to tweet, that is, that they were able to engage with their classmates outside of class time. In addition to expanding the classroom walls, Twitter provided learners a forum in which to represent themselves in the L2 to their fellow community members. They also engaged one another in brief exchanges that contributed to the sense of community and this sense of community, as noticed by this teacher/researcher and other scholars, "changed the classroom dynamics for the better" (Parry, 2008, ¶ 5). Finally, the feature of Twitter that learners found to be most useful was, according to 45% of the respondents, using language with classmates outside of contact time. Italian was the bond of this Twitter community.

3.3 Student-Initiated Content

A sample of 470 student-initiated tweets from approximately 10 different twitterers was selected and reviewed for themes. Those tweets written in response to the teacher/researcher's prompts were not included for analysis. Table 2 summarizes the 10 most popular topics for the students' tweets.

Table 2
Top 10 Tweet Topics by Frequency

Topic	Frequency
1. School	22.3 %
2. Entertainment	13.6 %
3. Feelings	13.6 %
4. Food	12.1 %
5. Hobby	8.0 %
6. Family	4.9 %
7. Home	4.4 %
8. Friends	4.1 %
9. American life	3.9 %
10. Events	3.6 %

The students tweeted first and foremost about school-related matters (e.g., classes, homework, assignments and exams, and course selections) and then posted with equal frequency information about (a) various forms of entertainment (e.g., music, movies, and books) and (b) how they were feeling (e.g., hungry, fatigued, stressed, ill, happy, excited, and surprised). Food ranks fourth as the most popular tweet topic; in most cases, students shared information about meals or cravings. The fifth category—hobby—includes tweets about sports, cars, dancing, and the gym. Information about immediate and extended family members ranks sixth. Home ranks seventh and consists of updates about both students' on-campus residence and their family home. The eighth category contains posts about friends, describing who they are and what they do. American life ranks ninth, with posts about New York City and Broadway dominating, which is not surprising given the proximity of the university to Manhattan. Tweets comprising the tenth topic included birthdays (of twitterers and of their family and friends) and other special events like showers and weddings.

The content of tweets outlined in Table 2 represents only some of the topics about which students tweeted. These thematic elements correspond to those items that frequently appear as unit/chapter themes in Italian language textbooks. In a recent investigation of current elementary Italian textbooks, Antenos-Conforti and Colussi Arthur (2007, p. 16) outline four major categories found in the textbooks:

1. oneself in everyday life (*l'autopresentazione* 'presentation of self,' *la scuola* 'school,' *la famiglia* 'family,' *la routine personale* 'personal routine,' *le vacanze* 'vacations,' etc.);
2. aspects of Italian life (*l'alimentazione* 'food,' *fare commissioni* 'shopping,' *l'aeroporto* 'airport,' *i negozi* 'stores,' etc.);
3. social issues (*la salute* 'health,' *l'ecologia* 'ecology,' *l'ambiente* 'the environment,' *la politica* 'politics,' *la tecnologia* 'technology,' etc.); and

4. culture and civilization (*la lingua [italiana]* ‘[Italian] language,’ *l’arte e la musica* ‘art and music,’ *il cinema* ‘movies,’ *l’immigrazione* ‘immigration,’ etc.).

This categorization suggests that the content about which students chose to tweet was closely related to the curriculum. They took the knowledge acquired in the classroom and applied it in communicative situations. The learners commented: “Only writing a sentence or two at a time and relating it to my everyday life really got me interested in twitter,” “It forced us to use Italian to talk about everyday things,” and “I was able to use the Italian that I knew.”

Figure 11 provides an example of students’ use of Twitter to address “everyday” topics.

Figure 11

Everyday Things

Io vado a casa mia per il weekend! Ho molto felice. [I am going home for the weekend. I
*have very happy.]

02:48 PM February 15, 2008 from web

Note: * indicates an error in Italian.

As their confidence in tweeting in Italian increased, the students also shared the following reflections: “I became more expressive and wrote longer tweets which had me checking my grammar and vocab more often” and “I think I became more willing to talk about things other than what I ate and such.”

A preliminary analysis of the questionnaire data provided in Table 1, the students’ actual tweets, and their responses to the open-ended questions indicate that their positive and negative responses to the questions about the social aspects of this Web 2.0 tool were consistent with their twitter habits. Less than half of the participants indicated that they looked forward to posting and then actually posted tweets. Moreover, 13 of 19 participants (68%) stated that language use outside of contact time with classmates and the professor was the most important feature of Twitter. The factor that encouraged the frequency with which they twittered is at the core of social networking (i.e., membership within a community), in particular, their comfort levels with peers and outsiders.

The students’ responses on the questionnaires were strongly supported by the tweets they posted in discourse mode; the hierarchy of student interactions was classmates, teachers, and then Italians. Finally, the topics they initiated represent daily, real-life language use via text, images, video and links. One student aptly noted: “It made me use Italian in other ways than just academic aspects.” From the perspective of Twitter as social media, the data are encouraging.

3.4 Students’ Perspectives on L2 Learning with Twitter

Students’ perception of the learning potential for Twitter as a tool for language practice and cultural understanding underlies the second research question: How do students evaluate Twitter as a pedagogical tool for learning the Italian language and learning about Italian culture? In response to this question, the questionnaire data listed in Table 3 below and the students’ responses to the open-ended ques-

tions will be examined within the framework of computer-mediated interaction provided by Chapelle (1998, p. 22). According to Chapelle (2001), the CALL task is valuable to the language learner if it is interactional and has a communicative objective. In this light, an interactionist model could lend itself to the role of Twitter in the SLA process: the tweet is the input of a community member for the learner who faces the task of comprehending both its semantic and syntactic content in order for the tweet to become intake. The tweet is then integrated into the learner's linguistic system and, in the final phase, the student's posted tweet or reply tweet is produced as output. The tweet may or may not be meaningful, but Twitter allows its users to engage in exchanges with other community members and use the language for negotiation of meaning until miscommunications are resolved. The online community provides many opportunities for students to provide comprehensible output, notice errors (via feedback given by the teacher/researcher and other community members) and correct their language output. Twitter, as a tool that maximizes opportunities for good interaction, requires the twitterer to interact with content in an authentic context, to generate communication, and to negotiate meaning.

The summary of students' opinions about Twitter's learning potential for learning language and culture is presented in Table 3.

Table 3

Learning Italian Language and Culture

	Strongly disagree	Disagree	Agree	Strongly agree	Mean (4-point scale)
5. The learning experiences on Twitter made this a more interesting course.		21%	58%	21%	3.00
6. The tweets contributed greatly to my knowledge of Italian grammar and vocabulary.		32%	58%	10%	2.74
7. I learned more about Italian culture in this class than I would have learned in a regular Italian class.	5%	32%	58%	5%	2.63
8. Because of Twitter, I put more time into this class than I would have invested in a regular Italian class.		32%	53%	15%	2.84
9. Posting tweets helped build my confidence in writing Italian.		10%	74%	16%	3.05
10. Twitter reduced my anxiety in learning Italian.	5%	32%	58%	5%	2.63

11. Twitter increased my motivation in learning the language.		21%	53%	26%	3.05
12. With Twitter, I found myself negotiating for meaning using Italian	5%	21%	63%	11%	2.79
13. I was able to infer meaning from the tweets according to the context/ conversations.		16%	63%	21%	3.05
14. I gained confidence in my abilities as an independent learner.		16%	79%	5%	2.89
15. My reading skills in Italian have improved as a result of Twitter.		37%	37%	21%	2.83
16. My writing skills in Italian improved as a result of Twitter.		37%	58%	5%	2.79
17. I learned a lot from the replies to my tweets.		47%	47%	6%	2.58
18. I learned a lot from replying to other students' tweets.		37%	63%		2.63
19. I learned a lot from reading other peoples tweets.		32%	68%		2.68
20. I learned a lot from clicking the links provided by the professor.	10%	32%	58%		2.47
21. I found it helpful receiving correction from the professor via replies.		21%	42%	37%	3.16
22. Twitter allowed me to ask for more information using Italian.		21%	74%	5%	2.84
23. Twitter allowed me to clarify using Italian.		16%	74%	10%	2.95
24. Having the professor reply to the tweets increased the learning potential.		10%	53%	32%	3.22
25. I enjoyed tweeting better than traditional writing assignments.			53%	42%	3.44

26. I found the 140-character tweet length too limiting.	16%	53%	21%	10%	2.26
27. Reading tweets with language mistakes in them doesn't help me learn.		32%	53%	10%	2.78
28. I did not enjoy having to wait for feedback or corrections.	5%	74%	16%		2.11

Note: The total for some questions is not 100% because not all participants answered all questions.

Overall, more than two thirds of the respondents agreed or strongly agreed with the statements made about Twitter as a teaching tool. The average score was 2.81 out of 4 (70%). There are several salient findings. First, students had positive opinions of the influence of Twitter on affective factors of language learning: 18 of 19 respondents (95%) enjoyed tweeting better than traditional writing assignments,⁴ 17 of 19 (90%) agreed that posting tweets helped build confidence in writing Italian, 15 of 19 (84%) gained confidence in their abilities as independent learners, and 14 of 19 (79%) agreed that Twitter both increased motivation and made the course more interesting.

Second, regarding the development of students' writing skills, 15 of 19 respondents (85%) agreed that teacher feedback increased the learning potential, 14 of 19 (79%) found it helpful to receive feedback from the professor via replies, and 12 of 19 (63%) perceived that their writing skills in Italian improved as a result of Twitter. This perception, of course, is subjective and may simply reflect that they liked Twitter better than writing compositions.

Third, questions related to interaction and negotiation of meaning were rated positively. Sixteen of 19 respondents (84%) agreed that Twitter allowed them to clarify using Italian and infer meaning from the tweets according to the context/ conversations. Moreover, 15 of 19 respondents (79%) stated that Twitter allowed them to ask for more information using Italian, and 14 of 19 respondents (74%) found themselves negotiating for meaning using Italian.

The statements on which student scores averaged below 70% are interpreted as reflecting the fact that students perceived those aspects of Twitter to be less effective as teaching tools. For example, when asked whether they agreed that reading tweets increased their knowledge of Italian language and culture, 68% (13 of 19 respondents) and 63% (12 of 19), respectively, replied positively indicating less than good support for these statements. Additionally, students tended to disagree with statements regarding improved language skills (only 58% agreement; 11 of

⁴ This finding is not surprising when one considers the limitations inherent in Twitter. Without a doubt, tweeting is a much simpler writing task than compositions because it requires very little structure, sequencing, or development in terms of topic or writing style. When Twitter was introduced to the course syllabus, students were required to write two fewer compositions. The objective was to have students regularly post tweets and use the L2 more frequently despite the limited message size.

19 respondents), the learning value of the links provided in the instructor's tweets (again only 58% agreement),⁵ and the value of received tweet replies (53%; 10 of 19 respondents).

The qualitative data from the open-ended questions, however, seem to contradict these data. Learners commented about the cultural value of the project: "It [Twitter] provides students with a great sense of cultural information while expanding our vocabulary," "Yes, because we learned more about the culture" (relative to language-learning potential), and "Also, Twitter was informal so I didn't feel pressured to be correct when writing in Italian."

Students' evaluation of Twitter as a pedagogical tool for learning Italian language and culture appears favorable, if viewed within the context of computer-mediated interaction. Learners responded positively to the questions focusing on their discursive output production in Twitter and the feedback they received. The input they received also provided an opportunity for them to use Italian to ensure they had been understood, thus the negotiation of meaning. Although these data reveal the participatory nature of Twitter, at the same time they also demonstrate that it can help motivate students to learn the language and about the culture⁶ while also reducing their anxiety about practicing the language skills it supports (i.e., writing and reading).

3.5 Unexpected Findings

The fact that students were able to use Twitter for functions the teacher/researcher did not anticipate (e.g., as a "help desk") highlights their identity as digital natives who are savvy and innovative in their approach to asking for and obtaining information. Learners used Twitter as a bulletin board, requesting information and help from one another in an academic context (e.g., looking for misplaced textbooks, wondering where the handouts for an upcoming class were stored, and asking about deadlines for assignments) and assistance with technology-related matters (e.g., how to tweet from a cell phone or how to personalize a Twitter homepage the way someone else did). Some students also tweeted rather than emailed the course instructor with questions. Twitter served as a public diary, a note pad (Parry, 2008), and information desk for both class matters and technical issues.

A welcome surprise was the subscription of eight other Italian twitterers who

⁵ There is considerable disparity relative to the idea of sharing links. When considered as a benefit for social networking on Twitter, 90% replied favorably, compared to the 58% in the learning environment.

⁶ There are various posts that indicated learners wanted to learn more about the culture as a result of Italian twitterer posts. Cbrid, for example, replied to elyl telling her how lucky she is, that Italy must be so beautiful and that one day, she'd love to go there (10:49 PM March 23, 2008); antonellap asked Stefigno what music he was putting on the CD he was making for his friend (03:05 PM April 03, 2008); and Bellissima66 told clarita82 that she knows about Italian ice cream and thinks it's the best in the world, and also asked about favorite flavors. (08:15 PM April 21, 2008).

decided to follow our community. Given the restricted framework and the need to limit the number of NS participants in this project, the additional Italian twitterers were allowed to follow the students and were able to read the classes' tweets, but their tweets were not included in the classes' timeline, with only one exception. In late April, estragon, an Italian NS who was planning a trip to New York, saw recent posts about the city in the community and began to follow the class. He appealed to those who had visited Manhattan to offer suggestions on where to go and what to do, given his limited budget. The teacher/researcher decided that this request presented a great learning opportunity and called the students to action, requesting that the learners make suggestions to estragon's posts. Within a matter of days, a number of students not only made suggestions but also replied to him when he communicated directly with them. Figure 12 follows the posts.

Figure 12

Unexpected Surprise: New York City

STUDENTI, @**estragon** viene a NY e vuole dei consigli su cosa fare, dove andare. Cosa gli suggerireste? <http://snurl.com/2535i> (il suo blog)
04:04 PM April 20, 2008 from web

[Students, @estragon is coming to NY and wants suggestions on what to do, where to go. What do you suggest?]

@**estragon** Tu devi andare a ristorante Zen a Soho per del cibo giapponese fantastico <http://snurl.com/2588t> [maps_google.com]
11:07 PM April 21, 2008 from web in reply to **estragon**

[You must go *to Zen restaurant in Soho for fantastic Japanese food.]

@**yehladkihai** grazie. Non mi piace molto il giapponese, ma forse lì è più buono. Proverò. :)
02:41 PM April 22, 2008 from web in reply to **yehladkihai**

[Thanks, but I don't like Japanese food very much, but maybe there it is better. I'll try :)]

@**estragon** Continental è un bar economico e buono. <http://www.continentalnyc.com/>
03:49 PM April 22, 2008 from web in reply to **estragon**

[Continental is a cheap bar and it's good.]

@**estragon** ce un ristorante fantastico a 43 street tra 6th and 7th in new york. Si chiama Vivo Poncho, e un ristorante con il cibo Mexicano
02:06 PM April 21, 2008 from web in reply to **estragon**

[There *is a fantastic restaurant on 43rd between 6th and 7th *in New York. It is called Vivo Poncho, and is a restaurant with *Mexican food]

@**estragon** quando lui viene a New York dovrebbe andare a Serendipity 3 perche e' famoso per la sua cioccolata gelata calda
04:01 PM April 23, 2008 from web in reply to **estragon**

[When *he comes to New York *he should go to Serendipity 3 because they are famous for their hot frozen chocolate.]

Ciao @estragon Venirai a new york?
Potresti andare a 9th ave. tra 40 st.
e 50th st. per mangiare, ci sono molti
buoni ristoranti.

10:56 AM April 24, 2008 from web

marianneturner : @estragon Se hai
un po 'di tempo per rilassarsi c'è
veramente un grande negozio di libri
di nome The Strand vicino Union
Square.

2008-04-22 18:11:19 Reply

marianneturner : @estragon The
Strand è sul l'angolo della 12th Street
e Broadway. Ha otto miglia di libri e è
il mia preferito negozio in città.

2008-04-22 18:11:46 Reply

marianneturner : @estragon The
Strand è sul l'angolo della 12th Street
e Broadway. Ha diciotto miglia di libri
e è il mia preferito negozio in città.

2008-04-22 18:13:34 Reply

@estragon Se ti piace a ridere, vai in
Caroline's Comedy Club on Broadway.

07:28 PM April 25, 2008 from web in reply to
estragon

@Sscog grazie per il tuo aiuto, però
ho paura che mi perderei qualcosa.
Non conosco molto bene l'inglese, ma
sto studiando come te :)

09:02 PM April 27, 2008 from web in reply to
Sscog

@Estragon Mi dispiace, se desider-
ate andare dove la lingua non sarà un
problema, dovreste andare al museo
metropolitano dell'arte.

09:16 PM April 28, 2008 from web in reply to
estragon

@Estragon Sono stato là molto volte
ed ogni volta imparo qualche cosa di
nuovo.

09:17 PM April 28, 2008 from web in reply to
estragon

Note: * indicates an error in Italian.

[Hi @estragon! You *will be coming
to New York? You could go to 9th
between 40th and 50th to eat. There
are many good restaurants.]

[If you have time to relax there is
really a big *store of books named the
Strand beside * Union Square.]

[The Strand is on the corner of 12th
and Broadway. It has 8 miles of books
and is *my favorite store in the city.]

[The Strand is on the corner of 12th
and Broadway. It has 18 miles of
books and is *my favorite store in the
city.]

[If you like to laugh, go to Caroline's
Comedy Club *on Broadway.]

[Thanks for your help but I'm afraid
that I would not get it. I don't know
English very well but I'm learning,
like you ☺]

[I'm sorry. If you *wish to go where
language won't be a problem, you
*should go to the Metropolitan Mu-
seum of Art.]

[I have *been there many times and
each time I learn something *new.]

Twitter not only connected these language learners to Italy and its people but also enabled them to use Italian as a vehicle for sharing their world with these same NSs. This educational networking tool permitted learners to inform native twitterers who desired to learn more information about them and their life in America. The cross-cultural engagement facilitates authentic language use by

allowing learners to share opinions, experiences and perspectives with the NSs, which, in turn, enriches the learning interactions. Chapelle (2001) points out that cross-cultural communication is inevitable in most internet activities and can benefit language learners because of the many cross-cultural opportunities it can provide (e.g., good language practice, increased appreciation for the language culture, and experiential learning).

4. Discussion

This preliminary investigation has focused on the potential of Twitter as a form of CMC in L2 learning. Twitter is a promising Web 2.0 tool that creates an environment in which users can interact in real and deferred time, and thereby accommodates different learning styles. It contributes to the classroom community by creating a virtual extension of the physical classroom and providing an opportunity for membership in the L2 community. The brief posts in the L2, limited by the size of the message, are self-perpetuating and generative and encourage learners to twitter in a manner that is relevant to them. Occasionally, learners were given prompts to direct the content of their tweets, but, by and large, they did not have prescribed tweet topics or tasks. Rather, the majority of posts were directed by their actions, opinions, or feelings.

This study suggests that microblogging via a service like Twitter can transform social networking to educational networking. The data revealed that learners who tweeted regularly experienced the benefits of this social networking site. First, they found that it was relevant to real-life language use and that it fostered a strong sense of community in which they were willing to participate. Students' active participation via Twitter confirms Salaberry's (2001) claim that CMC fosters high levels of interactivity and, as Sotillo (2006) found for chat and IM, the use of Twitter also promoted community building. This interaction occurred with classmates, the teacher/researcher, and NSs alike. Group membership, as Donath and boyd (2004) remind us, has a profound effect on the way people work, the opportunities they have, and the structure of their daily lives, and it benefits the members if there is valuable information or opportunities to be shared between them. Second, Twitter helped reduce affective filters. As learners tweeted, they felt more comfortable and became more confident about communicating in Italian. Moreover, some students remarked that the tweets improved their writing in Italian in terms of grammar and vocabulary, acknowledging that the replies of the teacher/research also benefited their learning, and contributed to their knowledge of Italian culture.

More important, learners stated that twittering led them to ask for more information and allowed them to clarify using the L2. Thus, Twitter provided a context for the informal negotiation of meaning, an important component in the language acquisition process that is well documented for other forms of CMC (Pellettieri, 2000; Tudini, 2003). Twitter has the potential to assist in the SLA process as a tool for computer-mediated interaction because it provides learners with an audience with whom to practice their output and from whom they receive comprehensible

input. This interaction, in which they negotiate meaning in a rich, learner-centered community, also provides opportunities for unforeseen exchanges in terms of what is being said (given the generative nature of the tweets), how it is said (in view of the message size constraint) and by whom it is being said (considering the number of members in the community). This latter feature is unique to Twitter because communication is never strictly one-to-one but rather one-to-many. However, this feature can also be deemed a shortcoming and impede the benefits of group membership. Twitter, as a form of synchronous CMC that simulates IM/chat, does not have a user interface that visually presents the logical progression of a dialogue. Since reply tweets appear in the timeline in reverse chronological order, following the thread of a discussion becomes almost impossible if other members of the community are particularly active. Group membership, for some learners, was not advantageous in the project described here because their timeline was inundated with tweets of frequent twitterers and they became frustrated trying to find tweets of members in whom they were more interested. Students wanted a choice about who was part of their community, and some students did in fact exercise their preference. When considering the role of contact with NSs in the development of “cultural awareness and communicative competence” (Sayers & Brown, 1987, p. 23), it is important to give students options and to respect their choices. That is, though teachers can provide NS contact for their students, they should not necessarily force interactions.

One of the purposes of this investigation was to explore Twitter habits of L2 learners and determine how they evaluate this tool for learning language and culture. The data have shown that microblogging has great potential for success in the L2 classroom and clearly merits further investigation because of its unique nature which integrates popular technological tools in innovative ways.

5. Limitations and Areas of Further Investigation

This investigation only studied the integration of Twitter as a tool to extend regular use of Italian outside of scheduled class time. It assessed the learning potential of this Web 2.0 technology in terms of students' Twitter habits and their evaluation of it as a tool for language and culture learning. However, the present study does not provide any empirical evidence to assess acquisition of grammatical, lexical, or cultural knowledge (e.g., pre- and posttests). Future research on microblogging and the development of language proficiency should seek to provide measurable results of a pre-/posttreatment nature to evaluate the effectiveness of this form of social media.

Tudini (2002) discusses the role of online chatting to develop oral proficiency because of authenticity and interactivity of chat. Given the brevity of tweets, microblogging could also be investigated to determine whether twitterers prefer synchronous to asynchronous exchanges and whether such a preference translates into the development of oral proficiency.

Motivated by a study on a teacher's virtual presence on students' chat behavior (Ene, Görtler, & McBride, 2005), a similar study could be conducted to determine

the impact of the teacher's presence in Twitter on students' Twitter behavior with regard to error correction, uptake, and on-task behavior.

Microblogging is a form of CMC that has great potential for L2 learning. Twitter effectively created a virtual classroom that was visited weekly (if not daily by some learners); it complemented the classroom setting and further expanded it. Learning Italian was no longer limited to the contact hours between classmates and the teacher/researcher: it was always on, always connected, and was extended to allow for interaction with students enrolled in different sections, and NSs of the L2. Computer-mediated interaction via Twitter can offer learners a L2 community in which they have many opportunities to produce output (i.e., use the L2 to construct meaning). Community members, in turn, provide feedback that help learners negotiate meaning and encourage language use in an environment that is comfortable, nonthreatening, and relevant to real-life situations. This preliminary study suggests that microblogging through social networking sites like Twitter is an innovative and promising area of research in CALL.

DISCUSSION QUESTIONS

1. Discuss how the hybrid platform of Twitter might accommodate different language learners.
2. How could the limited message size of 140 characters benefit language learners? What different tasks could be given to address different writing styles in this format?
3. Twitter is considered similar to status updates on Facebook. Given the popularity of Facebook, what would you consider the potential advantages and disadvantages of introducing the updates feature of Facebook to achieve the same objectives of this Twitter investigation?
4. What would be the benefits of allowing students to choose which members of the L2 community they follow? What would be the shortcomings?

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Appendix A

Questionnaire

Using Twitter in ITAL 103

By filling out this survey, you will help me understand better how Twitter can be used as an educational networking tool. It will help me determine whether having you write little “sound-bites” in a practical, day-to-day setting is effective for improving language skills and cultural understanding.

1. Before taking this course, which of the following social networking websites did you use:

- ☐ MySpace
- ☐ Facebook
- ☐ YouTube
- ☐ del.icio.us
- ☐ Flickr
- ☐ SplashCast Media or blogTV.
- ☐ widgetbox
- ☐ reddit, Digg, or Fark.
- ☐ LinkedIn
- ☐ Twitter or Jaiku
- ☐ Friendfeed
- ☐ Second Life
- ☐ a Yahoo group, a Google group
- ☐ personal blogs
- ☐ Gmail/Google/Google reader
- ☐ Tumblr
- ☐ other (list as many as you want):

2. What was your initial response to Twitter?

- ☐ Loved it ☐ Liked it ☐ Neutral ☐ Did not like it ☐ Hated it

3. And NOW, after 14 weeks, what do you think?

- ☐ Love it ☐ Like it ☐ Neutral ☐ Do not like it ☐ Hate it

4. Please indicate the following features of Twitter that you found useful in learning Italian. Check as many as you like then indicate your first choice.

- ☐ being able to have delayed communication
- ☐ being able to have instantaneous communication
- ☐ being able to reply to someone's tweet
- ☐ being able to share links
- ☐ following Italian twitterers in Italy
- ☐ having a 140 character limit
- ☐ using language with classmates outside of contact time
- ☐ using language with professor outside of contact time

Which is the most important to you? _____

Learning Italian language and culture

In this section, I will ask whether you agree or disagree with these statements about learning Italian.

[Each statement was followed by the four options below]

☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree

5. The learning experiences on Twitter made this a more interesting course.
6. The tweets contributed greatly to my knowledge of Italian grammar and vocabulary.
7. I learned more about Italian culture in this class than I would have learned in a regular Italian class.
8. Because of Twitter, I put more time into this class than I would have invested in a regular Italian class.
9. Posting tweets helped build my confidence in writing Italian.
10. Twitter reduced my anxiety in learning Italian.
11. Twitter increased my motivation in learning the language.
12. With Twitter, I found myself negotiating for meaning using Italian.
13. I was able to infer meaning from the tweets according to the context/conversations.
14. I gained confidence in my abilities as an independent learner.
15. My reading skills in Italian have improved as a result of Twitter.
16. My writing skills in Italian improved as a result of Twitter.
17. I learned a lot from the replies to my tweets.
18. I learned a lot from replying to other students' tweets.
19. I learned a lot from reading other people's tweets.
20. I learned a lot from clicking the links provided by the professor.
21. I found it helpful receiving correction from the professor via replies.
22. Twitter allowed me to ask for more information using Italian.
23. Twitter allowed me to clarify using Italian.
24. Having the professor reply to the tweets increased the learning potential.
25. I enjoyed tweeting better than traditional writing assignments.
26. I found the 140-character tweet length too limiting.
27. Reading tweets with language mistakes in them doesn't help me learn.
28. I did not enjoy having to wait for feedback or corrections.

Social Aspects of Twitter

These next questions will ask you to agree or disagree with the social networking part of Twitter. [Each statement was followed by the four options below.]

☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly agree

1. I looked forward to reading everyone else's tweets.
2. I found myself wanting to post tweets.
3. I liked that we can share links & images.
4. The information I read from other tweets contributed to a greater sense of class community.

5. Knowing the people I am following made me feel more comfortable tweeting in Italian.
6. I enjoyed rereading past tweets of others on my timeline.
7. I enjoyed rereading past replies of others on my timeline.
8. I enjoyed rereading past conversations of others on my timeline not related to me.
9. The tweets were relevant to real-life language use in Italian.
10. Not knowing the Italians we were following made me feel more comfortable tweeting in Italian.
11. The information I read from the Italians contributed greatly to my knowledge about Italian culture.
12. I was overwhelmed by the frequency of tweets by the Italians.
13. I found that the language used by the Italians was overwhelming.

Twitter and posting tweets

Here are the last 5 questions about Twitter and your personal opinion about your experience.

- a) What did you like most about Twitter?
- b) What did you like least about Twitter?
- c) Do you think you will use Twitter for learning Italian in the future? ☐ Yes ☐ No ☐ Maybe
- d) Do you think you will use Twitter for your own personal use? ☐ Yes ☐ No ☐ Maybe
- e) I am interested in your input that might not have been captured by the questions in this survey. Please use the area below to share with me any thoughts, feelings, ideas, or any other information that you believe will help improve the implementation of Twitter as an everyday tool in the language class.

Appendix B

Follow-up Twitter Survey

As a follow up to the general Twitter survey, I would like to ask you to take a few more minutes and provide me with additional information about your tweets and Twitter in general as an educational networking tool.

1. Please explain what you liked when using Twitter for learning Italian and why.
2. Please explain what you did not like when using Twitter for learning Italian and why.
3. If you review your tweets from the beginning to the end of the semester, do you feel that your writing in Italian has improved? Explain.
4. If you review my reply tweets to you from the beginning to the end of the semester, do you feel that they were helpful in your learning of Italian? Explain.
5. If you review your communication with your classmates sending and receiving tweets, do you feel that helped your learning of Italian? Explain.

6. If you sent replies but did not get responses to your tweets, did that negatively shape your opinion of using Twitter to learn Italian? Explain.
7. If you review your timeline on Twitter, do you feel the Italian twitterers enhanced your learning of Italian? Explain.
8. If you review your communication with the Italians sending and receiving replies, do you feel that helped your learning of Italian? Explain.

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