

Micro-Input: Effects of an Instructor Model on Foreign Language Student Production on Twitter

1. Introduction

Since its inception, microblogging has been of interest to educators (Junco, Heiberger, and Loken; Rinaldo, Tapp, and Laverie; Veletsianos). Foreign language educators are particularly interested in Twitter, the most popular microblogging tool among American online users (Duggan, et al.). Twitter is a microblogging service that supports personal publishing of short text messages (280 characters) that integrate hyperlinks, images, animations, and videos. Although microblogging tools were created to quickly share personal reflections and experiences, before long they became important also for knowledge sharing and community building. Interpersonal communication is fundamental for microblogging, as it helps consolidate and deepen offline connections and form relations between like-minded people who share a personal or professional interest. Microblogging connections can be reciprocal or unidirectional; in both cases, users can freely reply to a post, mention another user, and engage in hashtag-based chats.

Twitter communication and networking features make it a valuable tool for education. Twitter has been implemented inside and outside of the classroom to contribute to the large-lecture course dynamics, to integrate face-to-face instruction, and to allow students to communicate with each other and with instructor. Twitter has been used to impact college student engagement and grades (Junco, Heiberger, and Loken 128), to promote student learning and self-reflection (Kassens-Noor 19), to support informal learning (Ebner et al. 97), and to facilitate online discussions (Bledsoe, Harmeyer, and Wu 79).

For this study, Twitter was implemented in six sections of an undergraduate Italian language course to examine whether the presence of an instructor model affects students' written production. The findings of the study will help foreign language instructors to design online learning activities that encourage students to use specific target language items for authentic communication.

1.1 Twitter and Language Learning

Twitter can be used in foreign and second language education to increase student exposure to input and to provide them with an opportunity to produce and to reformulate output for an authentic audience. Having a

real audience, students may be encouraged to use the target language for authentic communication rather than only for practice only (Chapelle 28). By interacting within a speech community that may also include participants from the target culture, students are encouraged to take responsibility for their own learning process and to build their identities as speakers of the target language (Lafford 680). The nature of Twitter, indeed, allows students to practice a foreign language according to their own communicative preferences. Within a limit of 280 characters (140 at the time of the study), they can engage in interactions that lie between the asynchronicity of the blog post and the synchronicity of the chat in a flexible semi-synchronous online communication environment (Lomicka and Lord, "A Tale" 49). On Twitter students can model formal writing, everyday speaking, and everything in between, and they can access and share authentic and contextualized online resources in the target language. These features, along with its widespread popularity (Duggan), makes Twitter an interesting tool that is used increasingly in foreign and second education.

Since the first studies were published in 2009, the body of scholarship on Twitter in language instruction settings has steadily grown. Enza Antenos-Conforti had her intermediate level Italian language students tweet for 14 weeks without topic restriction. Students showed a positive attitude towards the activity, which helped increase their exposure to the Italian language and culture and their sense of community. Kerstin Borau et al. found similar positive results for sense of community and communicative and cultural competence for their Chinese students. The same positive results for sense of community and student attitude can be found in Lara Lomicka and Gillian Lord's "A Tale of Tweets," in which they also observed their American students develop a degree of social presence while interacting with a group of French students on Twitter.

Maria Perifanou had her Italian language students complete micro-gaming language activities on Edmodo, an educational microblogging tool; she observed increased levels of student participation, collaboration, and learning outcomes. David Hattem ("Microblogging Activities") observed instances of language play and risk taking during a structured activity that required his advanced English students to use specific grammar structures. Similarly, he encouraged students to practice recently learned English grammar forms during a structured grammar task, observing that Twitter helps student notice target language features while they are exposed to input, produce output, or interact ("The Practice" 56). More recently, Geraldine Blattner,

Amanda Dalola, and Lara Lomicka invited students to analyze authentic French tweets produced by famous native speakers and found positive effects on students' cultural development and linguistic intercultural capabilities. Finally, José Antonio Mompean and Jonás Fouz-González used Twitter to focus their adult Spanish students' attention on specific pronunciation issues and observed beneficial effects on English pronunciation and participation.

1.2 Rationale

From the foregoing review, it is possible to see that Twitter can be used to meet several pedagogical goals in language education. On Twitter, students have the opportunity to interact in the target language and to develop their autonomy as learners while they are exposed to and produce a varied and creative language in a low-stress environment (Egbert, Chao, and Hanson-Smith, quoted in Stockwell and Tanaka-Ellis 87). However, “the use of technology should not be seen as a panacea, or a goal in and of itself” (Chun, Smith, and Kern 77), but as an instrument to meet learners' abilities and interests and reach specific learning goals. One of the goals that Twitter may help reach is reinforcing learners' acquisition. Rod Ellis (*Learning*) defines acquisition either as “the internalisation of some previously unlearned item or rule” or as “an increase in control over the use of previously acquired items” (234). Focusing on this second aspect, a repeated practice in a meaningful context can help learners proceduralize and automatize forms that have already been taught explicitly (DeKeyser 57; Hattem, “The Practice” 51). When asked to engage in actual acts of communication outside the classroom, students are stimulated to create pragmatic meaning while using familiar linguistic forms in context. This practice is intrinsically motivating for learners as it helps them increase in control over previously acquired material and develop true fluency in the target language (Ellis, “Principles” 212).

This study examines an activity on Twitter that encourages foreign language students to engage in written acts of communication in which they are in control of the discourse. Students do not have any specific content requirement or restriction and they are free to create pragmatic meaning using previously acquired language items or even experimenting with new forms. However, without a specific topic to cover, beginning students may be tempted to overemphasize form at the expense of meaning and engage in a drill-and-practice type of activity (Meskill and Anthony 81). It is important, then, to balance the focus of

the activity in order to avoid overemphasis either on form, with the risk of having students complete yet another drill exercise, or on meaning, with students neglecting proper form while focusing on communication. Carla Meskill and Natasha Anthony list a few strategies that the instructor can interweave into the online conversation to call students' attention to specific forms without disrupting or threatening the conversational flow. Among them, they suggest saturating the input with specific linguistic forms to engage students in incidental modeling (Ellis, "Frequency" 176).

The activity and the study presented here were designed with this suggestion in mind. For the activity, a native foreign language instructor posted microblogging messages along with students in order to model common target language use in a conversational setting. The purpose of the study is to observe whether the instructor model encourages students to use specific language items. The research question is: Does the presence of an instructor model affect foreign language student production on Twitter? Specifically, the study aims to explore whether students who follow an instructor who models language items recently covered in class (experimental condition) use these items more than students who follow an instructor who models items that are already familiar to students (control condition). Further, this study examines student reaction to the activity in order to understand what is behind and beyond the messages that they post.

2. Methods

2.1 Participants

Participants are 93 students enrolled in six sections of a second level Italian language course at a large research university in the United States. Although a few more students participated in the activity, for this study only the tweets and questionnaires of the students who signed the consent form were analyzed. The sample is a nonprobability, convenience sample. To meet the purpose of the research and to not disrupt the normal dynamics of a class, all the students of a section were assigned as a group to the experimental or control condition. Four groups were assigned to the experimental condition, for a total of 52 students, while the two remaining groups were assigned to the control condition (N=41). Students of both treatments had equal opportunities to learn and practice the language; all the course sections had the same syllabus, used the same instructional material, and were taught by graduate student teaching

assistants (TAs) with similar educational backgrounds and teaching experiences.

Students were encouraged to create a Twitter account, to select a recognizable username, and to post a profile picture so other students could easily identify them (Domizi 46). They were also required to follow on Twitter all their classmates and the researcher, who was part of the team of Italian TAs but did not teach any of the second-level courses under investigation. In his role as co-tweeting instructor, the researcher posted messages from two different accounts—one for each research condition. By connecting with classmates and the researcher, students had a chance to access the input and information that they posted and to communicate with each other (Lomicka and Lord, “A Tale” 59). For the sake of simplicity, from now on we will refer to the researcher, in his role as co-tweeting instructor, simply as the “instructor.”

2.2 Activity

Joanna Dunlap and Patrick Lowenthal propose a set of guidelines for using Twitter in education. They suggest establishing a clear purpose for the activity, defining clear expectations for participation, and modeling effective Twitter use. Further, they suggest including the activity in more conventional assessment and encouraging student participation even after the end of the course. The activity was designed and implemented with these guidelines in mind.

At the beginning of the semester, the researcher went to each class to introduce the activity, to present the logistics of the tool, and to explain how to use it (Hubbard 48). He revisited this information two more times during the semester, when he went back to the classes to touch base with students and to troubleshoot any problem that they may have experienced (Rinaldo, Tapp, and Laverie 202). For this activity, students were required to post at least one microblogging message a day, a minimum of five days a week. The activity lasted 12 weeks and had no content requirement or restriction; students were free to use any language item they deemed appropriate for communication. For the experimental condition, the instructor modeled language items recently covered in class. For the control condition, he modeled items that had been covered in the first Italian level and were already familiar to students. No item covered during the course was consistently modeled for the control condition.

Most of the students who participated in the experiment (87%) had taken the first-level Italian course the previous semester, which

ended only a few weeks before the new semester started. All the second-level students had already been exposed to the basic vocabulary items and verbal forms covered in the first level. For example, they were already familiar with gender and number agreement between articles, nouns, and adjectives, the present tense, and the present perfect tense. In the first-level course, students also learned Italian vocabulary for personal information, home, school, family, and weather, and more. The second-level course introduced for the first time such tenses as the imperfect, the future, the conditional, the imperative, and the present subjunctive; during the course, students also learned vocabulary related to food, sport, leisure activities, and clothes, and used this vocabulary to complete different kinds of activities, in class and at home.

Usually, the instructor posted simultaneously on the two Twitter accounts. For the experimental condition, he posted tweets that included verbs and vocabulary that students had learned recently in class. For example, he could talk about something that he would like to do (*“Che sonno! Dovrei dormire di più di notte,”* “I’m so sleepy! I should get more sleep at night”) or he could talk about sports (*“Oggi ho giocato a calcio con i miei amici, è stata una bella partita,”* “Today I played soccer with my friends, it was a good game”). Although the majority of these tweets for the experimental condition included one or more new language items, some tweets did not. They were composed simply to keep the conversation going to avoid giving the activity a feeling of drill-and-practice. These tweets did not include any new items. Usually they were comments on students’ tweets, replies to their questions, or spontaneous updates (*“Sono al concerto di Marcus Roberts,”* “I’m at the Marcus Roberts concert”). For the control condition, instead, the instructor consistently avoided modeling new language items, posting messages that only included forms that had been covered in the previous course.

There was no timing preference for posting the tweets. The instructor usually posted one or more messages during the busiest time of the day (from 9 am to 5 pm) (Kennedy and Levy 327) and some more messages in the evening or at night—typically, replies and comments to students’ tweets. Students were graded on the frequency of their postings—one point for every day that they tweeted—not the quality of their writing, so they could freely experiment with the language in a low-stress environment (Krashen 11). Every four weeks the researcher manually counted the number of updates and assigned scores following the grading scheme included in the syllabus of the course (Ullrich, Borau, and Stepanyan 434). The activity was mandatory for every

student, independent from their participation in the study, and contributed to 5% of the final grade of the course.

2.3 Data Collection

The primary data source for this study is the student tweets. Tweets were collected using Twitonomy, a Twitter analytics paid tool. Twitonomy offers the possibility of downloading the last few thousand tweets sent by each selected user, along with their date and timestamp. Once all the tweets that were not written in Italian were erased, the researcher organized the data into six different spreadsheets, one for each group. Each spreadsheet included all the tweets sent by the students of that class along with the tweets sent by the instructor, either from the account of the experimental condition or the account of the control condition, organized according to the chronological progression of the Twitter timeline.

The secondary data source for the study is the pre-activity and post-activity online surveys. During the first week, the researcher sent several reminders to encourage students to take the pre-activity survey, which was completed by 94 students. This survey helped to collect information on the students' experience of using Twitter for non-educational and educational purposes and their expectations for the Twitter activity (Stockwell 3). At the end of the activity, 92 students completed the post-activity survey, which included Likert-scale and open-ended questions on student perception of the activity.

2.4 Data Analysis

For the experimental condition, the researcher did not analyze all the students' tweets but only the tweets that students posted after one of his relevant messages, within the same day. For this study, relevant messages included one or more language items recently covered in class (i.e. the conditional tense "*Stasera mi piacerebbe uscire ma devo studiare*," "I would like to go out tonight but I have to study"). For the control condition, the researcher analyzed the tweets that students posted during the same time slots selected for the experimental condition. This way, it was possible to compare students' production under conditions that differed only for the instructor model. Table 1 (Appendix) presents a list of the verbal forms and vocabulary items that the instructor modeled for the experimental condition.

The dataset includes 577 student tweets and 161 instructor

tweets for the experimental condition and 515 student tweets and 88 instructor tweets for the control condition. After a preliminary review of the data, the researcher developed emergent coding categories for the student tweets (N=1092) and proceeded to content analysis. The codes fall into two main categories: instructor-related and syllabus-related tweets (Table 2). For each of these categories, the researcher looked at the content, verbal forms, and vocabulary of the student tweets to observe whether they were modeled on the instructor's previous tweet and/or whether they included language items and topics covered in class.

Tweets were coded as instructor-related when their content and linguistic features were modeled on an instructor tweet; they were coded as syllabus-related when their content and linguistic features related to the information covered during the course. Therefore, if a student described her meal, the tweet was coded as syllabus-related for content and vocabulary (the first unit of the course covers vocabulary and expression related to food). If the same tweet was sent after an instructor tweet about food, the tweet was also coded as instructor-related for content. If it included vocabulary that the instructor used in a tweet (i.e. "*pasta*," "*pizza*"), it was coded as instructor-related for verbal forms. The only exception was made for tweets that included the present tense. Those tweets were not coded as instructor-related, even if the instructor just used the same tense—for example, "Every day I go for a run at 6 pm" probably does not influence the tense selection in "I'm tired."

When the content analysis was completed, the researcher ran a one-tailed independent t-test for each coding category and examined whether incidental modeling and use of recently acquired forms significantly differed across the two conditions. Finally, the responses to the surveys were analyzed using content analysis and descriptive statistics to observe trends in the students' reactions to the activity.

3. Results

3.1 Tweets

The researcher manually counted the number of tweets for each group and coding category and converted numbers to percentages to better compare and contrast the two conditions (Table 2). Results are mixed for what concerns instructor-related tweets. The percentage of students who tweeted about the same topic as the instructor is similar for both conditions—respectively, 18.2% for the experimental condition and 18% for the control condition. However, the students in the experimental

condition tended to use the verbal forms modeled by the instructor (11.4%) more than the students in the other condition (8.9%). This result is reversed for vocabulary: the students in the experimental groups (7.3%) used vocabulary items modeled by the instructor less than students in the control condition (10.1%).

The second main coding category is syllabus related tweets. When the instructor included in his tweets content, verbal forms, and vocabulary covered in the course, the students in the experimental condition used them in their tweets more frequently than the students in the control condition. While for content and vocabulary the difference between the two conditions is minimal, the results for grammar are worth special attention. The students in the experimental condition, indeed, used the newly covered verbal forms almost twice as much (16.0%) as their colleagues in the control condition (8.5%).

The researcher ran a one-tailed independent t-test for each coding category to observe whether these differences were statistically significant. For what concerns the verbal forms, there is no significant difference between the students in the experimental condition ($M=1.33$, $SD=1.57$) and the students in the control condition ($M=1.12$, $SD=1.55$; $t(91)=.62$, $p=.266$). This result suggests that the presence of an instructor model does not affect student production of recently covered verbal forms. However, there is a significant difference between the two conditions ($M_{exp}=1.88$, $SD_{exp}=2.01$; $M_{con}=1.07$, $SD_{con}=1.93$) for what concerns the verbal forms covered in the course ($t(91)=1.96$, $p=.026$). This finding suggests that throughout the whole semester students in the experimental condition used recently learned verbal forms more than the students in the control condition.

The results for vocabulary items are also worth noting. There is a negative significant difference in the use of vocabulary modeled by the instructor for students in the experimental condition ($M=.87$, $SD=.86$) and control condition ($M=1.27$, $SD=1.41$) but this difference is barely detectable ($t(91)=-1.69$, $p=.047$). This result suggests that students may be more prone to notice and reproduce vocabulary that they have already automatized than vocabulary that they are still in the process of noticing and fine-tuning. On the other hand, there is no statistically significant difference for what concerns student use of recently learned vocabulary ($t(91)=-.14$, $p=.443$). Non-significant results can also be found for the content modeled by the instructor and the content of the course in general. The presence of an instructor model does not influence student production of the topics covered in his tweets ($t(91)=-.33$, $p=.371$) and of the topics covered in class; $t(91)=-.02$, $p=.491$.

3.2 Surveys

The surveys help to shed light on how students approached and reacted to the activity. Almost half of the 94 students who completed the first survey already had a Twitter account (44.7%). However, only 36.6% used it often or very often, while the majority declared using it only occasionally (34.1%) or never (29.3%). It is noteworthy that only one student had already used Twitter for academic purposes. Despite these low percentages, the majority of students considered Twitter a potentially useful tool to practice a foreign language (58.5%). When asked about the potential benefits of Twitter for language learning on a set of five-point Likert scale questions, students agreed that the activity could help them practice and internalize new language items (75.5%) as well as improve their writing (64.9%) and reading skills (75.5%).

After 12 weeks, students' perception of the usefulness of Twitter in an educational setting barely changed. The majority of students still considered Twitter a useful tool for language learning (53.3%). When asked if they liked to use Twitter to practice Italian, half of the students agreed (50.0%), while one-third expressed their discontent with the tool (35.9%). In general, however, the activity was well received. Students valued the opportunity to practice new language items in a conversational setting (66.3%), especially because they perceived that the activity helped them to improve their writing (49.0%) and reading skills (57.6%). Although other studies registered learner discontent for the reduced number of characters on Twitter (Bista 94; Lomicka and Lord, "A Tale" 54), students did not perceive it as a constraint on their practice (80.4%).

Following Lomicka and Lord ("A tale"), the survey included some open-ended questions that addressed what students liked most and least about the activity. Among the positive aspects that they highlighted, students valued the opportunity to practice Italian outside the classroom, as the activity helped them to integrate the target language into their daily lives ("I started to think in Italian") and to use it in everyday phrases for authentic communication ("I like how Twitter let me have a conversation with my classmates in Italian that was not prompted by a textbook"). Students also valued that they got to learn and use colloquial Italian words and expressions ("I got to practice using slang") and expressed satisfaction for being able to practice vocabulary and learn new words ("The activity broadened my Italian vocabulary"). The activity also helped students to practice verbal forms ("The activity helped me practice different verb tenses") and to get in contact with the Italian

culture, although the cultural aspect was not the main focus of the activity (“I followed Italian cultural Twitter accounts which made me learn even more”).

Students also pointed out the drawbacks of the activity. Two students out of three (66.3%) found it easy to forget the daily requirement and to miss the daily participation point. Half of the students (48.9%) expressed discontent for some aspects of the activity (“It’s extra work,” “I didn't like doing it daily,” “I don't think it should be a grade”). Moreover, students sometimes did not know what to write and were bored by the sameness of the messages (“Everyone posted the same kinds of things over and over”). Finally, a few participants showed a negative attitude toward Twitter and, in general, toward social media for education (Bista 85): “I don’t like Twitter,” “I do not think social media and school should combine.”

4. Conclusions

4.1 Discussion

The study provided students with an opportunity to practice Italian in a communicative online setting in which they were in control over the content and the language of their texts. Following the literature, the activity did not drive student production by explicitly calling their attention to specific forms, thus interfering with the conversational flow. Instead, the instructor’s tweets followed the course syllabus and exposed students to forms they were learning in class. The findings of the study reveal that the instructor model does not have an immediate influence on student production of recently learned verbal forms. Students did not consistently use the present continuous, future, conditional, or *imperfetto* to mimic the instructor input. However, students in the experimental condition used these tenses significantly more than other students throughout the semester. A possible explanation is that students did notice the instructor input of new verbal forms but did not always reproduce it immediately after him. Instead, they preferred to wait to use these forms until a communication need arises. In an activity that gives students plenty of opportunities to communicate in the target language, students may want to produce new verbal forms to create pragmatic meaning instead of just reproducing the mechanics of a drilling exercise (Meskill and Anthony 81). These findings have interesting pedagogical implications. Twitter can be used both to engage students in spontaneous acts of communication in the target language and to call their attention

to specific verbal forms. To do so, the instructor should consistently model these forms over a prolonged period of time without losing the spontaneity of the production.

We also observed the influence that the instructor has on student production of recently learned vocabulary items. Although it is barely detectable, there is a negative significant difference between the two conditions. The students in the control condition used the vocabulary items modeled by the instructor significantly more than the students in the experimental condition. If we extend the observation to the use of new vocabulary throughout the semester, we cannot find any significant difference between the two conditions. It is worth recalling that, while for the experimental condition, the instructor mostly modeled new vocabulary, for the control condition he modeled vocabulary learned in the previous course, a first-level Italian class. A possible explanation for this result is that learners get access to and proceduralize individual content words at an earlier stage than they assemble them into phrases and put the phrases together within the sentence (Cook 30). Thus, second-level language students may have already automatized the vocabulary learned in the previous course and feel comfortable using it, especially when they notice it in the instructor's input, while they are still in the process of automatizing the verbal forms recently learned. An interesting pedagogical implication is that an unstructured conversational practice on Twitter helps students increase in control over previously acquired vocabulary items when they are consistently modeled by the instructor.

These results confirm the potential of Twitter for language learning. Previous studies have shown that Twitter increases student exposure to input and gives them the opportunity to practice the target language for a real audience. The body of scholarship has primarily analyzed loosely structured or unstructured activities, focusing on such factors as sense of community, social presence, and intercultural competence, while some studies also examined student production during structured grammar tasks. The findings of this study contribute to expanding the literature by showing that Twitter can be used to influence student production also during an activity in which they are in control of the discourse and the language used.

4.2 Limitations and Future Research

Fei Gao, Tian Luo, and Ke Zhang analyzed a corpus of 21 studies on microblogging in education and observed that only one study was

experimental in nature, while the rest were descriptive. According to Lomicka and Lord (“Introduction”), studies on educational uses of an emerging technology in the field of computer-assisted language learning (CALL) usually begin by describing its use for language learning and by examining student reactions to and attitudes toward the technology. Only after this first phase do researchers start to investigate the pedagogical uses of the technology and the effects that it has on second language acquisition. The body of research on Twitter for language learning follows this path. This experimental study informs the second phase indicated by Lomicka and Lord as it was designed to expand our understanding of the pedagogical potential of microblogging for language learning.

However, the study has a few limitations. The first limitation is that the content analysis only focused on student messages and its results were not triangulated with other data sources. The risk is to miss important information on the actual influence of the instructor model on student production. Future studies should try to capture this information through interviews or survey questions. A second limitation is that only the messages of the instructor were considered to have a potential influence on student production. While it is impossible to control for variables external to the microblogging environment, future studies should focus on the influence that students have on each other while tweeting. Another limitation regards the instructor’s posting frequency, which was limited to one or two relevant messages per day. The rationale for this low frequency was to not disrupt the conversational flow of the activity and to avoid that students perceive it as a mere practice of the language. However, more messages from the instructor could result in better results for what concerns student use of new verbal forms and vocabulary items. Future research should give indications on the optimal posting frequency for the instructor.

Students had mixed reactions to the activity but, in general, they showed a positive attitude towards it; they especially appreciated the opportunity to practice Italian outside the classroom in a conversational setting. However, students lamented the length and repetitiveness of the activity and found it, at times, rather unappealing, especially towards the end of the semester. The author recommends shortening the activity and limit it to a few weeks in order to keep student interest high. We also recommend inviting students to create a new Twitter account specifically for the activity so as to expose peers only to input in the target language and not to irrelevant tweets.

Besides its limitations, this study offers important insights into

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foreign language students' production on Twitter. It suggests that Twitter can be used to foster student use of specific language items in a conversational setting and it provides directions that may be useful to foreign language instructors interested in implementing microblogging activities in their courses.

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Verbal forms	Tweet
Impersonal verbs	Qual è il ristorante dove si mangia meglio a [...]?
Present continuous	Oggi sto studiando così... http://t.co/...
<i>Imperfetto</i>	Quando ero piccolo i Litfiba erano il mio gruppo preferito http://t.co/...
Future	Quest'estate finalmente andrò in Italia per un mese.
Conditional	Sabato sera vorrei andare al Bradfordville Blues Club.
Present subjunctive	Speriamo che questo semestre finisca presto, sono troppo stanco!
Vocabulary	Tweet
Food – Eating out	Ieri sera ho cucinato melanzane alla parmigiana, erano buonissime! http://t.co/...
Leisure activities	Cosa fai nel tempo libero? A me piace correre, suonare e cucinare.
Sport	Conosci qualche squadra italiana di calcio? La mia squadra è la Sampdoria, è di Genova http://t.co/...
School	In bocca al lupo per l'esame d'italiano!
Clothes	Mi metto la giacca o non mi metto la giacca? Prendo l'ombrello o non prendo l'ombrello?

Table 1

Verbal forms and vocabulary categories that the instructor modeled for the experimental condition with examples of tweets

	Experimental condition		Control condition	
	Tweets	%	Tweets	%
Number of tweets analyzed	577		515	
Instructor-related: Verbs	69	11.4	46	8.9
Instructor-related: Vocabulary	44	7.3	52	10.1
Instructor-related: Content	108	18.2	93	18.0
Syllabus-related: Verbs	99	16.0	44	8.5
Syllabus-related: Vocabulary	93	16.2	77	15.0
Syllabus-related: Content	99	17.1	80	15.5

Table 2
Number and proportion of tweets per each coding category

WORKS CITED

- Antenos-Conforti, Enza. "Microblogging on Twitter: Social Networking in Intermediate Italian Classes." *The Next Generation: Social Networking and Online Collaboration in Foreign Language Learning*, edited by Lara Lomicka and Gillian Lord, CALICO, 2009, pp. 59-90.
- Bista, Krishna. "Is Twitter an Effective Pedagogical Tool in Higher Education? Perspectives of Education Graduate Students." *Journal of the Scholarship of Teaching and Learning*, vol. 15, no. 2, 2015, pp. 83-102.
- Blattner, Geraldine, Amanda Dalola, and Lara Lomicka. "Tweetsmarts: A Pragmatic Analysis of Well Known Native French Speaker Tweeters." *Researching Language Learner Interactions Online: From Social Media to MOOCs*, edited by Edward Dixon and Michael Thomas, CALICO, 2015, pp. 213-36.
- Bledsoe, T. Scott, Dave Harmeyer, and Shuang Frances Wu. "Utilizing Twitter and #Hashtags Toward Enhancing Student Learning in an Online Course Environment." *International Journal of Distance Education Technologies (IJDET)*, vol. 12, no. 3, 2014, pp. 75-83.
- Borau, Kerstin, Carsten Ullrich, Jinjin Feng, and Ruimin Shen. "Microblogging for Language Learning: Using Twitter to Train Communicative and Cultural Competence." *Advances in Web Based Learning—ICWL 2009*, Springer, 2009, pp. 78-87.
- Chapelle, Carol. "Multimedia CALL: Lessons to be Learned from Research on Instructed SLA." *Language Learning & Technology*, vol. 2, no. 1, 1998, pp. 22-34.
- Cook, Vivian. *Second Language Learning and Language Teaching*. Hodder Education, 2008.
- Chun, Dorothy, Bryan Smith, and Richard Kern. "Technology in Language Use, Language Teaching, and Language Learning." *The Modern Language Journal*, vol. 100, no. S1, 2016, pp. 64-80.
- DeKeyser, Robert. "Beyond Focus on Form: Cognitive Perspectives on Learning and Practicing Second Language Grammar." *Focus on Form in Classroom Second Language Acquisition*, edited by Jessica Williams and Catherine Doughty, Cambridge University Press, 1998, pp. 42-63.
- Domizi, Denise P. "Microblogging to Foster Connections and Community in a Weekly Graduate Seminar Course." *TechTrends*, vol. 57, no. 1, 2013, pp. 43-51.

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- Duggan, Maeve. "Mobile Messaging and Social Media 2015." Pew Research Center, 19 Aug. 2015. <http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/>. Accessed 11 June 2018.
- Duggan, Maeve, Nicole B. Ellison, Cliff Lampe, Amanda Lenhart, and Mary Madden. "Social Media Update 2014." Pew Research Center, 9 Jan, 2015. <http://www.pewinternet.org/2015/01/09/social-media-update-2014/>. Accessed 11 May 2016.
- Dunlap, Joanna C., and Patrick R. Lowenthal. "Tweeting the Night Away: Using Twitter to Enhance Social Presence." *Journal of Information Systems Education*, vol. 20, no. 2, 2009, pp. 129-35.
- Ebner, Martin, Conrad Lienhardt, Matthias Rohs, and Iris Meyer. "Microblogs in Higher Education – A Chance to Facilitate Informal and Process-Oriented Learning?" *Computers & Education*, vol. 55, no. 1, 2010, pp. 92-100.
- Egbert, Joy, Chin-chi Chao, and Elizabeth Hanson-Smith. "Computer-Enhanced Language Learning Environments: An Overview." *CALL Environments: Research, Practice, and Critical Issues*, edited by Joy, Egbert, and Elizabeth Hanson-Smith, TESOL, 1999, pp. 1-13.
- Ellis, Nick C. "Frequency Effects in Language Processing." *Studies in Second Language Acquisition*, vol. 24, no. 2, 2002, pp. 143-88.
- Ellis, Rod. *Learning a Second Language Through Interaction*. Vol. 17, John Benjamins Publishing, 1999.
- . "Principles of Instructed Language Learning." *System*, vol. 33, no. 2, 2005, pp. 209-24.
- Gao, Fei, Tian Luo, and Ke Zhang. "Tweeting for Learning: A Critical Analysis of Research on Microblogging in Education Published in 2008–2011." *British Journal of Educational Technology*, vol. 43, no. 5, 2012, 783-801.
- Hattem, David. "The Practice of Microblogging." *Journal of Second Language Teaching & Research*, vol. 1, no. 2, 2012, pp. 38-70.
- Hattem, David. "Microblogging Activities: Language Play and Tool Transformation." *Language Learning & Technology*, vol. 18, no. 2, 2014, pp. 151-74.
- Hubbard, Philip. "Learner Training for Effective Use of CALL." *New Perspectives on CALL for Second Language Classrooms*, edited by Sandra Fotos and Charles M. Browne, Lawrence Erlbaum Associates, 2004, pp. 45-68.
- Junco, Reynol, Greg Heiberger, and Eric Loken. "The Effect of Twitter on College Student Engagement and Grades." *Journal of Computer Assisted Learning*, vol. 27, no. 2, 2011, pp. 119-32.

- Kassens-Noor, Eva. "Twitter as a Teaching Practice to Enhance Active and Informal Learning in Higher Education: The Case of Sustainable Tweets." *Active Learning in Higher Education*, vol. 13, no. 1, 2012, pp. 9-21.
- Kennedy, Claire, and Mike Levy. "L'italiano al telefonino: Using SMS to Support Beginners' Language Learning." *ReCALL*, vol. 20, no. 03, 2008, pp. 315-30.
- Krashen, Stephen. *Principles and Practice in Second Language Acquisition*. Vol. 2, Oxford University Press, 1982.
- Lafford, Barbara A. "Toward an ecological CALL: Update to Garrett (1991)." *The Modern Language Journal*, vol. 93, no. s1, 2009, pp. 673-96.
- Lomicka, Lara, and Gillian Lord. "A Tale of Tweets: Analyzing Microblogging Among Language Learners." *System*, vol. 40, no. 1, 2012, pp. 48-63.
- "Introduction to Social Networking, Collaboration, and Web 2.0 Tools." *The Next Generation: Social Networking and Online Collaboration in Foreign Language Learning*, edited by Lara Lomicka and Gillian Lord, CALICO, pp. 1-11.
- Meskill, Carla, and Natasha Anthony. "Form-Focused Communicative Practice via CMC: What Language Learners Say." *CALICO Journal*, vol. 25, no. 1, 2007, pp. 69-90.
- Mompean, José Antonio, and Jonás Fouz-González. "Twitter-Based EFL Pronunciation Instruction." *Language Learning and Technology*, vol. 20, no. 1, 2016, pp. 166-90.
- Perifanou, Maria A. "Language Micro-Gaming: Fun and Informal Microblogging Activities for Language Learning." *Best Practices for the Knowledge Society. Knowledge, Learning, Development and Technology for All*, edited by Miltidais D. Lytras et al., Springer, 2009, pp. 1-14.
- Rinaldo, Shannon B., Suzanne Tapp, and Debra A. Laverie. "Learning by Tweeting: Using Twitter as a Pedagogical Tool." *Journal of Marketing Education*, 2011, pp. 193-203.
- Stockwell, Glenn. Introduction. *Computer-Assisted Language Learning: Diversity in Research and Practice*, edited by Glenn Stockwell, Cambridge University Press, 2012, pp. 1-13.
- Stockwell, Glenn, and Nobue Tanaka-Ellis. "Diversity in Environments." *Computer-Assisted Language Learning: Diversity in Research and Practice*, edited by Glenn Stockwell, Cambridge University Press, 2012, pp. 71-89.

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- Ullrich, Carsten, Kerstin Borau, and Karen Stepanyan. "Who Students Interact With? A Social Network Analysis Perspective on the Use of Twitter in Language Learning." *Sustaining TEL: From Innovation to Learning and Practice*, edited by Paul A. Kirschner et al., Springer, 2010, pp. 432-37.
- Veletsianos, George. "Higher Education Scholars' Participation and Practices on Twitter." *Journal of Computer Assisted Learning*, vol. 28, no. 4, 2012, pp. 336-49.
- Warschauer, Mark. "Computer-Mediated Collaborative Learning: Theory and Practice." *The Modern Language Journal*, vol. 81, no. 4, 1997, 470-81.