

An Activity Theoretical Analysis of
Microblogging and Blogging by Spanish L2 Learners
in a Bridging Activities Framework

by

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ABSTRACT

The use of blogging tools in the second language classroom has been investigated from a variety of theoretical and methodological perspectives (Alm, 2009; Armstrong & Retterer, 2008; Dippold, 2009; Ducate & Lomicka, 2008; Elola & Oskoz, 2008; Jauregi & Banados, 2008; Lee, 2009; Petersen, Divitini, & Chabert, 2008; Pinkman, 2005; Raith, 2009; Soares, 2008; Sun, 2009, 2012; Vurdien, 2011; Yang, 2009) and a growing number of studies examine the use of microblogging tools for language learning (Antenos-Conforti, 2009; Borau, Ullrich, Feng, & Shen, 2009; Lomicka & Lord, 2011; Perifanou, 2009). Grounded in Cultural Historical Activity Theory (Engestrom, 1987), the present study explores the outcomes of a semester-long project based on the Bridging Activities framework (Thorne & Reinhardt, 2008) and implemented in an intermediate hybrid Spanish-language course at a large public university in Arizona, in which students used microblogging and blogging tools to collect digital texts, analyze perspectives of the target culture, and participate as part of an online community of language learners with a broader audience of native speakers. The research questions are: (1) What technology is used by the students, with what frequency and for what purposes in both English and Spanish prior to beginning the project?, (2) What are students' values and attitudes toward using Twitter and Blogger as tools for learning Spanish and how do they change over time through their use in the project during the semester course?, and (3) What tensions emerge in the activity systems of the intermediate Spanish-language students throughout the process of using Twitter and Blogger for the project? What are the underlying reasons for the tensions? How are they resolved? The data was collected using pre-, post-, and periodic surveys, which included Likert and open-ended questions, as

well as the participants' microblog and blog posts. The quantitative data was analyzed using descriptive statistics and the qualitative data was analyzed to identify emerging themes following the Constant Comparative Method (Glaser & Strauss, 1967). Finally, three participant outliers were selected as case studies for activity theoretical analysis in order to identify tensions and, through their resolution, evidence of expansive learning.

To my husband, Erik,
and my parents, Edward and Joyce.

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CHAPTER 1

INTRODUCTION

The present study is grounded in a sociocultural and activity theoretical perspective of learning. Sociocultural Theory (Vygotsky, 1978) seeks to account for the origin and process of development of human behavior and consciousness, in which learning begins at the social level and passes to the individual level. It laid the foundation for the subsequent development of Cultural Historical Activity Theory (Engeström, 1987), which endeavors to understand how systemic social activities develop and change. In this framework, learning is conceptualized as the result of acknowledging and resolving contradictions to practices, which leads to new forms of learners' activity. *Contradictions*, defined as “historically accumulating structural tensions within and between activity systems” (Engeström, 2001, p. 137), are sources of development. Thus, the transformation of activity, or *expansive learning*, accounts for how people learn and what new knowledge results. Engeström (1987) notes that “the distinctive feature of human activity is the continuous creation of new instruments that in turn complicate and change qualitatively the very structure of activity itself” (p. 114).

Given the rapid rise of digital communication technologies and the need to use these tools “to provide opportunities for students to use the language beyond the confines of their classroom walls” (21st Century Skills Map for World Languages, 2011, p. 3), the project for the present study was designed to meet the Standards for Foreign Language Learning in the 21st Century (American Council on the Teaching of Foreign Languages, 1999) and was informed by the Bridging Activities framework (Thorne & Reinhardt, 2008). The digital tools chosen for the project were a microblogging platform, Twitter,

and a blogging platform, Blogger. It is important to note that, in the digital spaces created by new media, the use of language is a social practice, which functions to build communities with community-specific genres and discourse practices. With this in mind, the Bridging Activities framework has the goal of “developing learner awareness of vernacular digital language conventions and analyzing these conventions to bridge in-class activity with the wider world of mediated language use” (Thorne & Reinhardt, 2008, p. 562). The present project adopts this goal of raising learner awareness with a focus on the products, practices, and perspectives of Spanish-speaking cultures.

CHAPTER 2

REVIEW OF LITERATURE

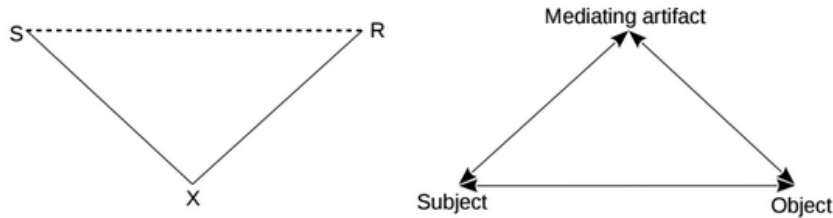
Theoretical Framework

Sociocultural Theory. Based on the work of Russian psychologist L.S. Vygotsky (1978), Sociocultural Theory (SCT) seeks to account for the origin and process of development of human behavior and consciousness. From a sociocultural perspective, learning begins at the social level and passes to the individual level, as learners construct their knowledge through the process of internalization. In this way, individual development is connected to the development of society, and both must be understood in their historical context. Development, as described by Vygotsky (1978), is “a complex dialectical process, characterized by periodicity, unevenness in the development of different functions, metamorphosis or qualitative transformation of one form into another, intertwining of external and internal factors, and adaptive processes” (p. 73). Of the central tenets in SCT, *mediation* and the *zone of proximal development* relate most closely to Cultural Historical Activity Theory, which is the framework adopted in the present study.

In his explanation of development, Vygotsky (1978) focused on the role of tools, both symbolic and material, in mediating human activity. *Mediation* refers to the use of tools to regulate mental processes and physical activity. This concept is represented in Vygotsky’s (1978) model of the mediated act, also depicted with its common reformulation. See figure 1. In the mediated act, Vygotsky (1978) explains that, “the direct impulse to react is inhibited, and an auxiliary stimulus that facilitates that completion of the operation by indirect means is incorporated” (p. 40). This forms the

basis of all higher psychological processes. As Lantolf and Thorne (2007) explain, “Vygotsky acknowledged that the human mind was comprised of a lower-level neurobiological base, but the distinctive dimension of human consciousness was its capacity for voluntary control over biology through the use of higher-level cultural tools (i.e., language, literacy, numeracy, categorization, rationality, logic)” (p. 202). Language, as a symbolic tool, plays a key role in the process of mediating human cognitive activity and shaping behavior.

Figure 1 Vygotsky’s Model of Mediated Act (Engeström, 2001, p. 134)



(A) Vygotsky's model of mediated act and (B) its common reformulation.

Another central tenet of SCT, the *zone of proximal development (ZPD)* relates to learning that occurs in social interaction which is attuned to learner readiness. Vygotsky (1978) defines the ZPD as, “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). The ZPD has proven to be a popular concept for educational researchers and practitioners, which has led to some differences of interpretation. However, it is commonly understood that social activity is vital to learning because this allows individuals to expand their ZPD by collaborating with more knowledgeable peers. This process by which the expert provides assistance tuned to the novice’s needs to

enable her to successfully complete the task is known as *scaffolding*. Engeström (1987) emphasizes the importance of an expanded conception of the ZPD, which views “the child’s development as a series of transitions from one ontogenetically leading or dominant activity to another: from play to formal learning, from formal learning to peer activity, from peer activity to work” (p. 135). Due to its forward-looking perspective on development, the ZPD can be a useful diagnostic to design optimal conditions for learning.

Vygotsky died at a relatively young age; however, the ideas that he put forth in SCT have had broad impact across various disciplines and continue to be developed by researchers around the world. Engeström (1987) notes, “the cultural-historical school founded by Vygotsky has up to the present time concentrated on the acquisition, assimilation, and internalization of the tools and sign systems of the culture” (p. 137). Yet the work of Vygotsky also laid the foundation for the subsequent development of Cultural Historical Activity Theory, which is premised on his idea that “human behavior results from the integration of socially and culturally constructed forms of mediation into human activity” (Lantolf, 2000, p. 8). Cultural Historical Activity Theory also furthers the concept of the ZPD by exploring the relationship between individual and societal development. It seeks to understand how systemic social activities develop and change because, as Engeström (1987) observes, “old and new, regressive and expansive forms of the same activity exist simultaneously in the society” (p. 137).

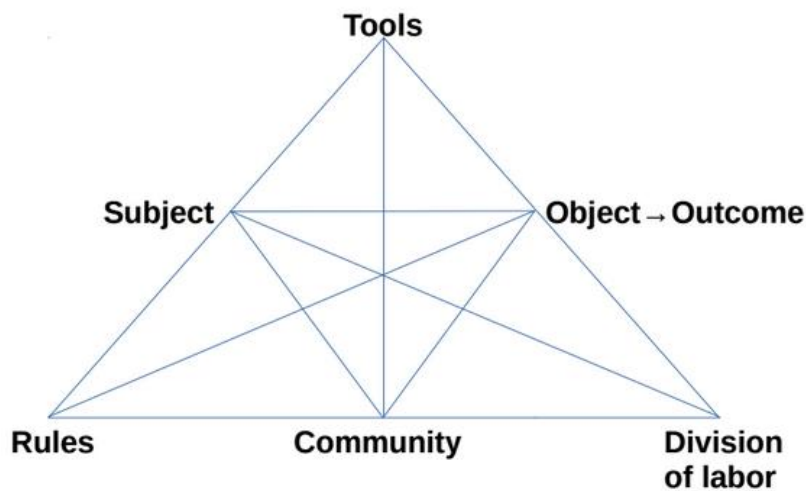
Cultural Historical Activity Theory. The origins of Cultural Historical Activity Theory (CHAT), which is also referred to simply as Activity Theory, can be traced back to the German philosophy of Marx and Hegel, as well as to the Russian cultural-historical

psychology of Vygotsky and Luria. During the last century, CHAT has evolved and is currently conceptualized as representing three distinct generations (Engeström, 2001). The first generation is characterized by Vygotsky's proposition that human actions are mediated by cultural artefacts. As Engeström (2001) notes, "objects became cultural entities and the object-orientedness of action became key to understanding the human psyche" (p. 134). The second generation was marked by the contribution of A.N. Leontiev who signaled the collective nature of activity, such as the concept of division of labor. This led Engeström (1987) to expand the model of activity by incorporating the concepts of community, division of labor and rules, which in its current form is represented as interconnected triangles (Figure 2). The third generation of CHAT expands the unit of analysis to multiple interacting activity systems.

The collective activity system, as represented in figure X below, is a "complex mediational structure" in which mutual relationships exist between each of the constituents (Engeström, 2008, p. 26). The *subject* is "an individual or group whose agency is, in the emic sense, the focus of analysis" (Lantolf & Thorne, 2006, p. 222). The goal-directed activity of the subject is oriented toward the *object* and mediated by *tools*, which can be material or symbolic. Through the activity, the object is transformed into an *outcome*, which can be conceptualized as the intended or unintended learning that occurs. The remaining social mediators represent the social structure of the activity. The *community* is the group of participants who act in the system and share the same object of the activity. The *division of labor* refers to how roles and tasks are divided among the participants, which includes vertical notions of power and status. The *rules* refer to the norms, both implicit and explicit, that guide the behavior of participants in the activity.

These rules regulate interaction and could be viewed as the formalization of language use in context. Lantolf and Thorne (2006) summarize these relationships within an activity system stating, “the actions of individuals occur at the nexus of three factors: the tools and artifacts available (for example, languages, computers), the community and its understood rules (historical and institutional ones as well as those that arise from a local set of social-material conditions), and the division of labor in these community-settings (for example, identity and social role, expected interactional dynamics” (p. 222). It is the analysis of the relationships between these elements that can account for human functioning and development, as well as lead to intervention and transformation.

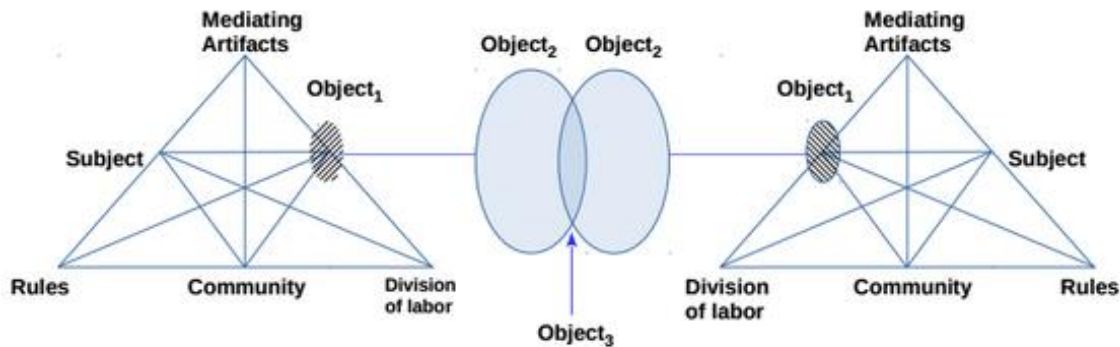
Figure 2 Activity System (Engeström, 1987, p. 78)



The third-generation of CHAT expands on the model described above to include two or more interacting activity systems. Thus, the primary unit of analysis is defined as a “collective, artifact-mediated and object-oriented activity system, seen in its network relations to other activity systems” (Engeström, 2001, p. 136). This is represented in figure 3 below. It is important to note that the object of interacting activity systems

“moves from an initial state of unreflected, situationally given ‘raw material’ (object 1) to a collectively meaningful object constructed by the activity system (object 2), and to a potentially shared or jointly constructed object (object 3)” (p. 136). In this sense, the object is a moving target.

Figure 3 Interacting Activity Systems (Engeström, 2001, p. 136)

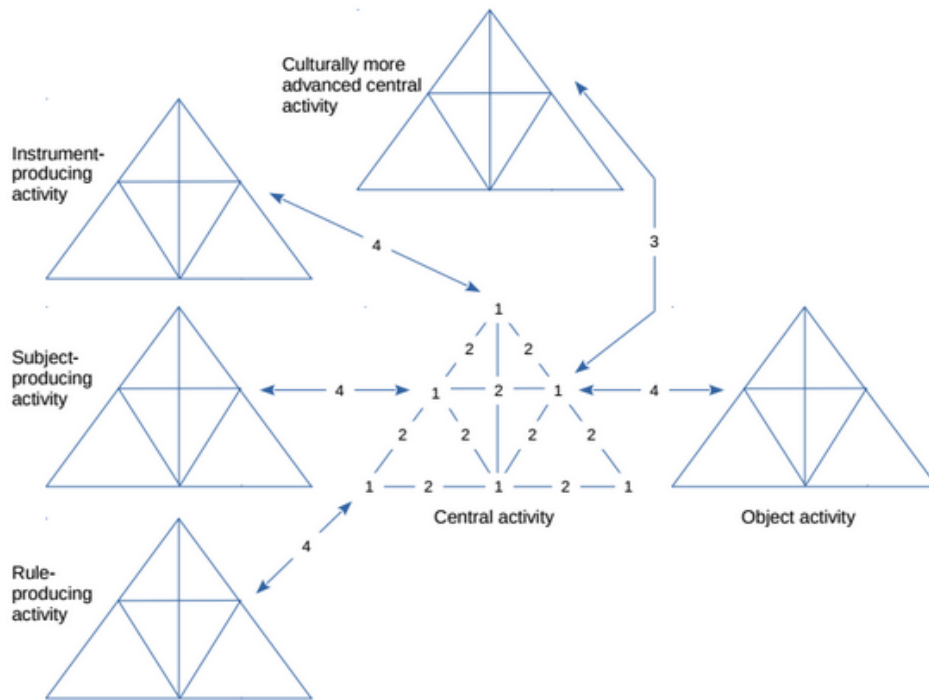


Engeström (2001) articulates five principles which define this generation of CHAT. The first principle defines the primary unit of analysis as two or more interacting activity systems. The second principle states that these systems are *multi-voiced* because the subjects occupy distinct positions in the division of labor and bring to the activity their unique histories, which cause them to orient differently to the object and the tools. Engeström (2001) notes that, “the activity system itself carries multiple layers and strands of history engraved in its artifacts, rules, and conventions” (p. 136). Thus, activity systems including the networks of systems with which they interact are also characterized by multi-voicedness. This can lead to tensions and also be a source of innovation. The third principle is *historicity*, which relates to the fact that activity systems develop and change over long periods of time. Analysis must take into account this history in order to understand the problems and potential of an activity system. The fourth and fifth

principles are developed below in order to fully describe *contradictions* and *expansive learning*, which is the focus of analysis in the present study.

The fourth principle relates to the role of *contradictions* as sources of development in the activity system. Contradictions are defined as “historically accumulating structural tensions within and between activity systems” (Engeström, 2001, p. 137). In the present study, contradictions are also referred to as *tensions*. These disturbances within or between activity systems often appear as surface-level problems, breakdowns, or conflicts. Engeström (1987) elaborates four levels of contradictions. See figure 4. Primary inner contradictions occur within a component of the central activity system. Secondary contradictions occur between components of the central activity. Engeström (2001) notes, “When an activity system adopts a new element from the outside (for example, a new technology or a new object), it often leads to an aggravated secondary contradiction where some old element (for example, the rules or the division of labor) collides with the new one” (p. 137). Tertiary contradictions occur between the object of the central activity and the object of a more culturally advanced form of the central activity. Quaternary contradictions occur between the central activity and its neighbor activities. The disturbances caused by contradictions may lead to innovative change in the activity.

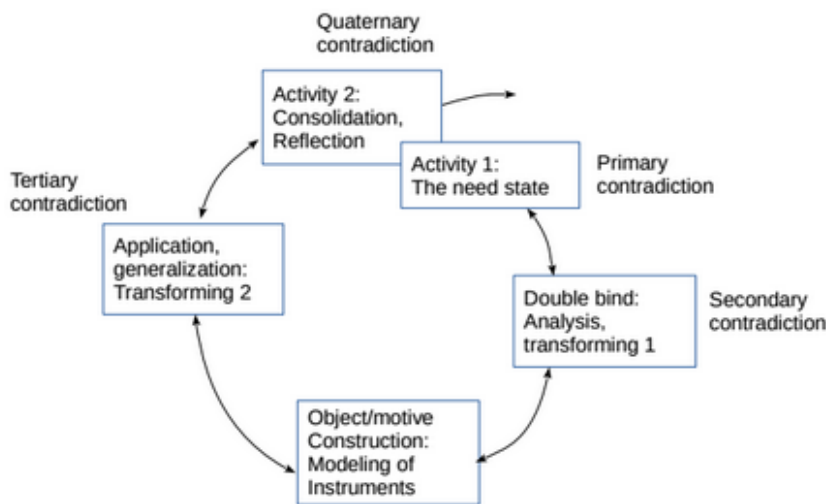
Figure 4 Four Levels of Contradictions (Engeström, 1987, p. 71)



The fifth principle relates to *expansive learning*. Activity systems are characterized by long cycles of qualitative transformations, which are brought about by the resolution of contradictions. When contradictions arise in an activity system, individual subjects may begin to question components of the activity and deviate from established norms. This may result in a deliberate collaborative effort to change the nature of the activity. As Engeström (2001) explains, “an expansive transformation is accomplished when the object and motive of the activity are reconceptualized to embrace a radically wider horizon of possibilities than in the previous mode of activity” (p. 137). The phases of a cycle of expansive transformation are depicted in figure 5. This cycle represents the zone of proximal development of the activity. Engeström (1987) reformulates the zone of proximal development as, “the distance between the present everyday actions of the individuals and the historically new form of the societal activity

that can be collectively generated as a solution to the double bind potentially embedded in every day actions” (p. 138). This transformation represents *expansive learning*, which accounts for how people learn and what new knowledge results. Thus, learning is conceptualized as the result of acknowledging and resolving contradictions to practices, which leads to new forms of learners’ activity.

Figure 5 Phases of the Zone of Proximal Development (Engeström, 1987, p. 150)



To conclude, CHAT focuses on future development and breaking with past traditions to engage in more culturally, socially, and historically developed forms of activity or learning. As Blin (2012) notes, “Activity systems are not static but constitute instable and multivoiced entities that interact with other activity systems and evolve over time in response to internal and external contradictions” (p. 84). Thus, CHAT is a useful framework for exploring how the introduction of new tools can bring about developments in education in order to create new forms of learning. Given the tremendous technological advances of recent decades, there is a natural interest in the potential of technology to transform education.

Pedagogical Framework

ACTFL Standards for Foreign Language Learning in the 21st Century. The American Council on the Teaching of Foreign Languages (ACTFL) has provided the profession with a significant framework to guide the design of instruction and assessment through the creation of national standards for foreign language learning. In 1993, federal funding was given to develop the national standards and a task force was created, composed of eleven members from diverse backgrounds and teaching contexts. The task force was charged with developing content standards that would define “what students should know and be able to do in a foreign language” (American Council on Teaching Foreign Languages, 1999, p. 13). After many stages of drafting during which feedback was solicited from the broader professional community, the *Standards for Foreign Language Learning in the 21st Century* (henceforth the Standards) were first published in 1996. The Standards consist of five goal areas: *Communication, Cultures, Connections, Comparisons, and Communities*. Subsequently, a collaborative effort between ACTFL and the Partnership for 21st Century Skills led to the creation of the 21st Century Skills Map for World Languages (2011) to assist in the integration of these skills in the second language classroom through their connection to the Standards. The present project was designed to meet many of the Standards as well as integrate various 21st Century Skills.

The Communication goal area of the Standards recognizes the need for learners to acquire *communicative competence* in the language of study in order to be able “to convey and receive messages of many different types successfully” (American Council on Teaching Foreign Languages, 1999, p. 40). This goal area encompasses the three modes of communication: *interpersonal, interpretive, and presentational*. The

interpersonal mode, standard 1.1, is that “Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions” (p. 42). The interpretive mode, standard 1.2, is that “Students understand and interpret written and spoken language on a variety of topics” (p. 43). The presentational mode, standard 1.3, is that “Students present information, concepts, and ideas to an audience of listeners or readers on a variety of topics” (p. 45). Essentially, learners must have ample opportunities to interpret and use the target language in its cultural contexts.

The Cultures goal area addresses the need for students to “develop an awareness of other people’s world views, of their unique way of life, and of the patterns of behavior which order their world, as well as learn about contributions of other cultures to the world at large and the solutions they offer to the common problems of humankind” (American Council on Teaching Foreign Languages, 1999, p. 47). Standard 2.1 states that “Students demonstrate an understanding of the relationship between the practices and perspectives of the cultures studied” (p. 50). Standard 2.2 states that “Students demonstrate an understanding of the relationship between the products and perspectives of the cultures studied” (p. 51). In order for students to become skilled observers and analysts of other cultures, they must be provided with opportunities to interact with members of the target culture so that they develop sensitivity to the perspectives, practices, and product of others. Through personal exploration of the target culture, students develop crosscultural understanding.

The Connections goal area relates to the need for students to use the target language to “connect with other disciplines and acquire information” (American Council on Teaching Foreign Languages, 1999, p. 53). By using the target language to pursue

topics of personal interest, students may begin to cultivate life-long language learning and using skills. This recognizes the fact that students bring to the classroom a wealth of prior knowledge and experience that should be connected to their language learning. To this end, Standard 3.1 is that “Students reinforce and further their knowledge of other disciplines through the foreign language” (p. 54). Standard 3.2 is that “Students acquire information and recognize the distinctive viewpoints that are only available through the foreign language and its cultures” (p. 56). These Standards recognize the interdisciplinary and intercultural nature of language learning.

The Comparisons goal area relates to how, through the study of a new language system and the way meanings are expressed in culturally appropriate ways, “students gain insights into the nature of language, linguistic and grammatical concepts, and the communicative functions of language in society, as well as the complexity of interaction between language and culture” (American Council on Teaching Foreign Languages, 1999, p. 57). To meet this goal, Standard 4.1 states that “Students demonstrate understanding of the nature of language through comparisons of the language studied and their own” (p. 58). Standard 4.2 states, “Students demonstrate understanding of the concept of culture through comparisons of the cultures studied and their own” (p. 59). This is an experiential process in which the student learns to encode culturally appropriate meaning through comparisons of the target language with their native language and culture.

Finally, the Communities goal area articulates the need for students to “participate in multilingual communities at home and around the world” (American Council on Teaching Foreign Languages, 1999, p. 63). This goal reflects the fact that students will be

more motivated to excel in their study of the target language when they are able to use the language for real purposes in local and global communities. With a focus on applied learning, Standard 5.1 is that “Students use the language both within and beyond the school setting” (p. 64). With a focus on personal enrichment, Standard 5.2 is that “Students show evidence of becoming life-long learners by using the language for personal enjoyment and enrichment” (p. 65). Thus, students will experience the power of language through its meaningful use beyond the classroom.

The 21st Century Skills Map for World Languages. Although the main purpose of the Standards is to provide a guide for what students should know and be able to do with the target language, they also highlight seven curricular elements which should be present in a rich program of study. The final curricular element is technology. It states that use of a variety of technologies “will help students strengthen linguistic skills, establish interactions with peers, and learn about contemporary culture and everyday life in the target country” (American Council on Teaching Foreign Languages, 1999, p. 35). With this in mind, a collaborative effort was made between ACTFL and the Partnership for 21st Century Skills to map how the 21st Century Skills align with the Standards and can be integrated into a world language curriculum. The task force produced the 21st Century Skills Map for World Languages (2011), which emphasizes the importance of using digital communication technologies “to provide opportunities for students to use the language beyond the confines of their classroom walls” (p. 3).

The 21st Century Skills Map for World Languages (2011) contains two sets of skills: Information, Media, and Technology Skills, as well as Life and Career Skills. The former set includes Communication, Collaboration, Critical Thinking and Problem

Solving, Creativity and Innovation, Information Literacy, Media Literacy, and Technology Literacy. The latter set includes Flexibility and Adaptability, Initiative and Self Direction, Social and Cross Cultural Skills, Productivity and Accountability, and Leadership and Responsibility. Each skill is defined and elaborated with example student outcomes. In relation to the present project, a similar student outcome is given to meet the skill of Technology Literacy. This skill is defined as “Using digital technology communication tools and/or networks appropriately to access, manage, integrate, evaluate, and create information in order to function in a knowledge economy” (p. 14). The example outcome is for students to create social media profiles as characters from a book that they are reading in the target language and to interact in character. Similarly, the project designed for the present study harnesses the affordances of the social media tool, Twitter, to address many of the 21st Century Skills as well as the ACTFL Standards. The rise of Computer Mediated Communication tools, such as Twitter and Blogger, has clearly impacted the nature of language teaching and learning, as reflected in the 21st Century Skills Map for World Languages (2011).

Computer Mediated Communication Tools. The introduction of the internet made way for the creation and subsequent widespread use of *Computer Mediated Communication* (CMC) tools. First-generation CMC tools, such as email and discussion forums, have widely been applied in language learning contexts and increasingly second-generation tools, such as blogs and wikis, are being integrated into programs of study. Social media platforms, such as Twitter or Facebook, are also considered CMC tools, but a distinction must be made in that “social networking is an entirely more encompassing and personal activity and, consequently, is more resistant to teacher control and

integration into the foreign language curriculum” (Blake, 2013, p. 153). CMC tools are generally characterized as being asynchronous (delayed time) or synchronous (real time), although some offer both affordances (i.e. Twitter and Facebook). The present study makes use of the blogging platform Blogger and the microblogging platform Twitter, each of which will be described in turn.

There are many platforms that can be used to publish *blogs* (also referred to as weblogs), which are characterized as “online hypertext journals that others read and react to” (Blake, 2013, p. 80). Although the user interface across blogging platforms vary slightly, all share the same basic functionality of allowing users to publish text and other multimedia with friendly editing capabilities that do not require knowledge of HTML code. Additionally, readers of the blog may interact with the author or other readers by leaving comments below each post. In this way, blog authors and readers can become part of a multimodal discourse community. This type of interactive publishing platform has come to be known as “Read/Write Web,” which represents a new text genre. To this point, Raith (2009) notes that “using weblogs in the language classroom does not mean having a nice tool to practice writing, but rather is an opportunity to prepare students for communities of practice connected to the use of weblogs or other Web 2.0 tools in real life” (p. 276).

There are also several different microblogging platforms, although Twitter is the most widely used in the United States. According to the Pew Research Internet Project, 35% of adults in the U.S. between the ages of 18 and 29 use this platform as of January 2014, which is nearly triple the average rate of the other age groups (12%). Twitter can be characterized as an open platform since the majority of users maintain public profiles

and can be freely followed by other users. It is referred to as microblogging because users communicate through short 140 character posts (*tweets*) which can contain links or other attached media, such as images or videos. The tweets are searchable by the words they contain as well as through topic *hashtags* (#). When a user posts a tweet, it is sent to their followers. Users may also *retweet* the posts of others in order to send the posts to their followers. The function of retweeting is an affordance which can lead to the network effect, in which a post may “go viral” by being shared by many users. In addition to the “one-to-many” broadcast communication afforded by the tool, there can also be direct communication between users, who can address each other in a post using their *handle*, which is the “at” symbol (@) followed by their username.

It is easy to understand the appeal of harnessing technology to facilitate interaction and collaboration among students; however, Blake (2013) cautions that the “benefits do not automatically or deterministically derive from the tools themselves but rather how CMC is used in the service of promoting meaningful interactions and real intercultural reflections” (p. 105). Thus, it is important for instructors to carefully design tasks and projects to meet specific curricular goals, as well as to be flexible for the inevitability that things will not go exactly as planned. It was with this consideration in mind that the project in the present study was designed based on the Bridging Activities pedagogical framework.

Bridging Activities. Given the ever-increasing number of digital tools that have opened new spaces in which languages are being used, Thorne & Reinhardt (2008) motivate the need to target “awareness of internet-specific genres as an explicit goal of formal instruction” (p. 560). To this end, the authors propose the *Bridging Activities*

framework with the goal of “developing learner awareness of vernacular digital language conventions and analyzing these conventions to bridge in-class activity with the wider world of mediated language use” (p. 562). In these digital spaces, the use of language is a social practice, which functions to build communities with community-specific genres and discourse practices. To help learners develop an awareness of meaning making in online communities, this framework draws on the perspective of *multiliteracies* (New London Group, 1996) by recognizing the need to teach the multiple modes of communication as well as linguistic and cultural diversity present in new media, thus promoting acquisition of intercultural and symbolic competence. Internet communication is multimodal in that text is most often integrated with images and sounds, and may be presented in a non-linear manner.

Bridging Activities is a pedagogical model that is composed of a three-phase cycle of activities and centered on students’ selection of texts which are native to a given online environment, such as blogs, social media platforms, or multiplayer games. Here, text is understood in a broad sense to include all forms of media found in these environments, including posts, videos, and images, such as *memes* which also include embedded language. The purpose of having students select the texts is to increase engagement through personal relevance. Additionally, as Reinhart and Thorne (2011) note, “this affords the development of skills that will enable continued participation in personally relevant Internet text genres and practices, and the understanding of connections between language activity inside and outside of the classroom” (p. 15).

The three phases of the *Bridging Activities* cycle include: *observation* and *collection*, *exploration* and *analysis*, and *creation* and *participation*. In the first phase,

students observe the habits of target language users in the online environment, while making comparisons with their own habits, and collect texts of interest. In the second phase, students explore and analyze their collected texts with instructor guidance, while specifically being led to “notice and critically examine the linguistic and social features” (p. 566). In the third phase, students create their own texts and participate by contributing their work to the online community which has been the focus of their observation.

Describing the phases, Reinhardt and Thorne (2011) note, “the first part of each phase, observation, exploration and creation, is based on situated practice and experiential learning principles, and as such, is grounded implicitly in the Internet activities and literacy practices with which most learners are familiar from their own everyday lives, like exploring, reading, and posting. The second part of each phase is more analytical and critically oriented and requires guided learner activity and direct instructor intervention” (p. 15). Thus, following a sociocultural approach, the phases of the *Bridging Activities* framework scaffold students’ participation in digital communities.

The ACTFL Standards can also be addressed through implementation of *Bridging Activities*. In any given online community (Twitter and Blogger in the present study), students would meet the Communication standard by exchanging information (Interpersonal mode, Standard 1.1), understanding written and possibly spoken language (Interpretive mode, Standard 1.2), and publishing for a real audience (Presentational mode, Standard 1.3). In regards to the Cultures standard, students would access the perspectives of cultures through analysis of their relationship with the products (texts) and practices of target language online communities. Reinhardt and Thorne (2011) highlight the ways in which the Comparisons standard is addressed as students engage

critically with the language being used in online communities and make comparisons to their native language practices in similar communities. Students are also pushed to discover similarities and differences related to the perspectives, practices, and products of the target culture and their own. The authors note that learners have the opportunity “to experience the language by using it, but also to develop awareness *about* language as a system of patterns and practices,” as well as “to see that a culture is not just an object of analysis, but a set of meaningful social practices, and that participation in and *through* those practices is necessary to truly learn about it as a system of meaning making” (emphasis in original, p. 16). Finally, the Communities standard is addressed by “leveraging mediated spaces to empower L2 learners to move beyond the language classroom towards lifelong, multilingual membership in a variety of communities” (Sykes & Holden, 2011, p. 313).

Review of Previous Research

Studies using Microblogging in the L2 classroom. A somewhat limited body of research exists on the use of microblogging tools for language learning due to their more recent emergence. Among the first studies of microblogging for language learning, Perifanou (2009) investigated how the use of Edmodo, which is a platform specifically for educational contexts, created a space for play in a second year course of Italian as a foreign language at a private institution in Greece. The participants were 10 students, who were an average 22 years old. Although the author initially intended to use Edmodo as a “virtual announcement board”, she describes how this goal (object, in AT terms) changed during the course of the academic year. Its use evolved as students began using it for communication about daily life and later for games, which were developed with the

input of the students. Although not the focus of the study, this innovative use of the tool could be considered expansive learning from an activity theoretical perspective.

For her research question, Perifanou (2009) asked if the proposed activities can enhance motivation, participation, and collaboration. The data analyzed include messages, activities, questionnaires, and interviews. The results indicated that students overwhelmingly reported enjoying the experience, feeling more confident working with classmates, and feeling that these activities should be the main focus of the class. There are several limitations to the methodology of this study. The author does not make clear connections between the pre- and post- questionnaire data. Additionally, the methods used for analyzing the qualitative data are also not given. Although the author also mentions using wikis and blogs as part of the class, she does not indicate using these tools in conjunction with microblogging.

Borau et al. (2009) conducted another early study of microblogging in a course of English as a Foreign Language at Distant College of Shanghai Jiao Tong University. This study examined the use of Twitter by 90 students during a seven week summer program. It was a required part of course for students to follow classmates and the teacher, to post 7 tweets per week, and to read incoming messages as an assignment outside of class. The data analyzed included the tweets (5580 total) and results of a post questionnaire. The authors examined the effectiveness of this microblogging tool for developing communicative and cultural competence.

The findings of Borau et al. (2009) related to communicative competence demonstrate a large number of examples of opportunities to practice sociolinguistic competence (register, etc.), but a lack examples of communication strategies (strategic

competence) to resolve communication breakdowns. The findings related to cultural competence revealed that nearly half of the students reported communicating with a native speaker, but only a few updates contain clear evidence that updates were addressed to someone outside of class. A limitation of the study was that the method of qualitative data analysis was not specified. In addition, there was no pre-study questionnaire.

Antenos-Conforti (2009) also conducted an early investigation of microblogging in the language classroom, specifically with respect to CMC interaction theories of input and output. The research questions guiding this study included: What are students' Twitter habits? With what frequency do they tweet? What factors affect? What topics? How do students evaluate Twitter as a tool for learning? The participants in this study were 22 university students in 2 sections of Intermediate Italian at a mid-sized public university. They were required as part of the course to follow other students in their section and post 3 tweets per week (2 personal and 1 reply) throughout one semester (14 weeks). The teacher initially prompted by posing questions or offering URLs or tasks, but students were not restricted to these topics. During the fifth week, the students were introduced to NS Twitter users that the teacher had previously contacted who the students had to follow and could interact with if comfortable. Throughout the project, Twitter was used outside of class.

The data analyzed by Antenos-Conforti (2009) included the students' tweets, 2 questionnaires, as well as an open-ended follow-up questionnaire to those who tweeted regularly and interacted with the NS Twitter users. The findings showed that not all students were active users, with an average being 41.5 tweets per student, within the range of 5 to 77. The quantitative analysis of questionnaire responses indicated that

students' perceptions of the tool were generally positive and useful, but that it was less effective for reading. The students disagreed about improving language skills. The qualitative analysis revealed that students' perceived cultural value. Some unexpected findings showed that students used it to ask for help related to course (dates, assignments, technology), which could be considered an example of expansive learning although not the focus of the study. Several native speakers followed their community; one of whom was travelling to New York and asked for advice. A limitation of the study relates to relates to the task, since students were not required to follow or interact with target language accounts. Twitter was essentially used as an additional communication tool for the course, which does not represent its ecological use by native speakers.

Lomicka and Lord (2011) looked at the role of Twitter in a telecollaborative exchange to build community and to provide opportunities for practice outside of class during one semester. The participants in the study were 13 students (11 female, 2 male) in an intermediate French class at a southeastern university in the US and 12 NS French speakers in an intermediate English course in France. It was a requirement for US students to make 3 tweets per week. The research questions were: Does the microblogging medium, specifically Twitter, allow participants to develop a sense of community? How social presence is indicated in participants' tweets?

The theoretical framework used by Lomicka and Lord (2011) was that of community inquiry to investigate the role of social presence in learners' tweets. The data analyzed included the results of an attitudinal survey and discourse analysis of the students' tweets. Content analysis was used to code for indicators of presence as a means to develop community. The findings revealed that the US participants quickly formed a

collaborative community in which they were able to learn, share and reflect. Some participants found the word limit frustrating and wanted to say more, which would justify the use of another tool such as blogs in addition to Twitter. The French students did not tweet regularly since it was not required part of course. The limitations of the study include the nature of how the project was implemented, such as the fact that students were not required to follow target language accounts or use all of Twitter's capabilities like retweets. This was a common limitation across the studies using Twitter, in that none implemented a pedagogical approach, such as Bridging Activities (Thorne & Reinhardt, 2008), which requires an ecologically valid use of the tool.

Studies using Blogging in the L2 classroom. Many empirical studies have been conducted on the use of blogs in the foreign language classroom from a variety of methodological and pedagogical perspectives. Wang and Vásquez (2012) note that “the most commonly investigated Web 2.0 technologies are blogs and wikis. There were 15 studies on integrating blogs into L2 learning, covering 35% of the total empirical studies” (p. 416). Many of the studies involved the use of blogs by one class population (Alm, 2009; Armstrong & Retterer 2008; Dippold, 2008; Ducate & Lomicka, 2008; Raith, 2009; Soares, 2008; Sun, 2009; Sun & Chang, 2012; Vurdien, 2013; Yang, 2009). In these studies, the main purpose of the blogging platform was to serve as a medium for publicly publishing writing. In some cases, peers in the same class were encouraged to read and give feedback on each other's blogs (Dippold, 2008; Yang, 2009; Sun, 2009; Sun & Chang, 2012; Vurdien, 2013).

Several empirical studies have explored the use of blogs as a tool for telecollaboration between two distinct student class populations. Two of these studies

have used blogs to connect Study Abroad and At Home student populations from the same institution (Elola & Oskoz, 2008; Peterson et al., 2008). Elola and Oskoz (2008) assessed if blog interactions throughout the semester had a positive effect on the development of the intercultural communicative competence in both groups. Peterson et al. (2008) implemented one community blog to connect Study Abroad and At Home learners with the goal of promoting knowledge sharing among the students. The authors found that the blog platform lacks the functionality to promote connectedness among learners and build community; however, a limitation of the study is that they implemented one community blog instead of individual blogs forming a community.

Empirical studies have also been conducted using blogs that are inter-institutional (Jauregi & Bañados, 2008; Lee, 2009). Jauregi and Bañados (2008) implemented an intercontinental project between students learning Spanish as a second language in the Netherlands and trainee Spanish teachers in Chile using both video-conferencing and a project blog. The results showed that the use of the ICT tools for telecollaboration had a positive effect on motivation and on learning outcomes. Lee (2009) also used an Intercultural Communicative Competence framework to analyze the implementation of blogs, among other tools, that students used for a telecollaborative intercultural exchange between the United States and Spain. The author found that the project was pedagogically effective; however, future directions should include encouraging students to use other communication channels, such as Twitter, and allowing students to generate topics for posts. Although the use of blogging tools in the second language classroom has been extensively investigated from a variety of theoretical and methodological perspectives, no study has yet to use this tool within a Bridging Activities framework.

Activity Theoretical Analysis of Technology for L2 Learning. CHAT is a useful framework for exploring how the introduction of new tools can bring about developments in education in order to create new forms of learning. Given the tremendous technological advances of recent decades, there is a natural interest in the potential of technology to transform education. Researchers of second language acquisition have begun to apply the framework as a heuristic for exploring the activity systems of learners participating in tasks that require the use of CMC tools. Several studies focus on description of the components of the activity systems (Blin & Appel, 2011; Oskoz & Elola, 2014), whereas others use the CHAT framework to identify tensions¹ and opportunities for expansive learning (Murphy and Rodríguez-Manzanares, 2008; Basharina, 2007; Antoniadou, 2011; Karabulut et al., 2012; Oskoz & Elola, 2012; Ryder & Yamagata-Lynch, 2014).

Among the studies that focus on description of the components of learner activity systems, Blin and Appel (2011) utilized the CHAT framework to analyze the collaborative structure of a task designed for Computer Supported Collaborative Writing in a Second Language. The study was carried out in an English course at the Open University of Catalonia, which is an online distance university. The course consists of five assessed units of learning that progressively involve the students in team work. The activity system corresponding to the second unit was selected for analysis in the study since it involved groups of students in their first collaborative writing task. The participants were four students, all members of one group, who volunteered to participate in the study.

¹ In this section, the terms *contradiction* and *tension* are used interchangeably, according to their use in the original studies.

For Blin and Appel (2011)'s study, the group had a space within the course Virtual Learning Environment with a noticeboard for the teacher to post announcements relevant to the group, a Group Forum, and a shared folder where students could upload files. Students were also instructed to use Google Docs. However, no synchronous communication tools were made available. The authors emphasize the role that digital material-semiotic artifacts, such as forum postings, play in linking short-term actions with longer-term object-oriented activity. These artifacts provide "data not only on language use and students' interactions but also on the evolving social and communicative structure of the activity, or the hidden curriculum, as it is negotiated and possibly re-constructed by the participants as the activity unfolds" (p. 477). Thus, data collected from these artifacts was coded for the author's main focus and then assigned to the relevant element of the activity system.

Blin and Appel (2011) focused on the interactions that occurred during the third phase of the task, during which students were required to produce and revise a group essay, in order to uncover the transformations in the collaborative structure of the activity. The students' initial interactions involved co-construction of the task, but also attempts to deviate from expected procedures as one student suggests using a synchronous chat tool and another suggests uploading their individual essays to the shared folder. These attempts at deviation are resisted by another group member citing the instructions for the task, which also represents a material-semiotic artifact in the activity system. This resistance prevented a reorganization of the division of labor and an expansion of the activity system. In the end, the structure of the activity was

characterized by coordination, not collaboration, as evidenced by the outcome of the activity which was a final essay lacking cohesion.

Although Blin and Appel (2011) mention the attempts made to deviate from procedures, the authors note that space limitations prevented an in-depth analysis of the contradictions that were manifested in the activity system. A focus on contradictions could inform a redesign of the task that would create opportunities for more effective collaborative structures. While being cautiously optimistic about creating possibilities for expansive learning, the authors state, “tacit assumptions with respect to the rules and to the collaborative and communicative structures of formal education may prevent students and teachers alike departing from the planned normal procedures to expand their language teaching and learning activities” (p. 494).

Similarly, Oskoz and Elola (2014) explore the implementation of digital stories from a CHAT perspective by analyzing how learners interact among the components of an activity system within a collaborative, computer-mediated foreign language writing environment. The authors used a task-based writing process approach to integrate digital stories in a semester long advanced writing course in order to enhance students’ 21st century digital skills. Digital stories are oral multimodal narratives that integrate texts, images, and sounds.

Oskoz and Elola (2014) carried out the study at a midsize university in the United States. The participants were six Spanish majors between the ages of 19 and 21. Of the participants, four were second language learners, one was a heritage speaker and one was a Spanish native speaker. The semester was divided into six phases, in which the students completed tasks to work toward the final product of the digital story. Throughout the

writing process, learners completed 11 online journal entries as discussion board topics about completing the tasks. They also completed a final reflection assignment regarding their processes developing the digital story. Additionally, a questionnaire was administered that solicited students use of instruments and goal of the assignment, which are components of the CHAT framework. The data from the journals, questionnaire, final reflection assignment and final draft of the digital story was analyzed using content analysis in accordance with the objectives of the study.

The results of Oskoz and Elola (2014) showed that the students positively oriented to the digital story, which was the object of the activity system, since it was personally important to them. However, each student's experiences affected differently their motivation and construction of the object. For instance, Corine chose a topic for the digital story after thinking about the themes discussed in class, whereas Theresa was influenced by her personal experience in a Mexican border town to discuss immigration from the perspective of non-US citizens. The learners also approached the activity in different ways since the digital story represented a new writing genre which required additional steps such as the selection of images and sound. It also required the use of digital tools (i.e. Final Cut) with which they were previously unfamiliar. Thus, the authors note that the induction of new tasks and tools proved to be a challenge for the students. These challenges were mitigated through the discussion board journal entries, which allowed the students to give each other feedback throughout the process. This also changed the normal division of labor to allow for horizontal feedback in addition to the vertical feedback of the teacher. Finally, as the digital stories were published on YouTube, the students were aware that the community was expanded to include a

worldwide audience. The students reported that this awareness influenced their linguistic choices (i.e. register, lexicon) as well as their desire to accurately transmit the emotions of the story through images and sounds.

Concluding, Oskoz and Elola (2014) confirm that “the type of tools and artifacts employed in a foreign language writing task are not neutral, and thus, the integration of a tool such as Final Cut shaped the writing process in a distinctive manner” (p. 17).

Although learners received the same instruction in using the tools, their interpretations of the object influenced the use of these tools. The authors stress that in order for students to become proficient 21st century writers, they must be engaged with new genres and tools in a pedagogically sound manner. The study gives preliminary evidence to support the integration of these new genres and tools in the classroom, but the results are not generalizable due to the small sample size.

Other studies have used the CHAT framework to identify tensions and opportunities for expansive learning afforded through the resolution of these tensions. Murphy and Rodríguez-Manzanares (2008) reviews prior research on using the principle of contradictions to guide research in educational technology in a variety of academic disciplines. These studies analyzed contradictions that occurred within the components of one activity system and also between interacting activity systems. Among these studies, Russell and Schneiderheinze (1987) examined contradictions from the perspective of four teachers who felt isolated and were having difficulty collaborating. This contradiction was resolved through the introduction of online communication with their colleagues. Peruski (2003) also explored contradictions from the perspective of teachers who, in this case, were experienced giving face to face classes and were teaching for the first time

online. The contradictions that surfaced were related to the difference between teaching in these two environments, which helped them re-conceptualize and transform their practice. Other studies have looked at the contradictions that have occurred during the implementation of educational technology from the students' perspective. Barab et al. (2002) examined contradictions that occurred in the distribution of tasks between learners engaged in group work, which resulted in some taking a passive role and not mastering the material. Murphy and Rodríguez-Manzanares (2014) note that, "the findings of studies of contradictions have revealed the importance of considering the prior history of participants as technology users as well as their beliefs and preferences" (p. 92).

Within the field of Second Language Acquisition, several studies have analyzed tensions that developed in learner activity systems. Basharina (2007) represents an early work which uses CHAT as a framework in a foreign language context to examine the contradictions which arose in a telecollaborative project. The study examined the use of a discussion board tool by students of English from Mexico, Japan, and Russia. The research questions guiding her investigation were: What were the contradictions that emerged in the project under study? What were the underlying reasons for those contradictions? The AT framework is a synthetic approach and is used a heuristic tool in order to discover the problems that arose in the process of students participating in the bulletin board. This telecollaborative project lasted 12 weeks and involved a total 135 participants, which included 37 students from Mexico, 52 from Japan, and 46 from Russia. The data for this study was drawn from a pre-project survey on language learning and technology use, mid-project email and face-to-face interviews, and post-project individual and group interviews. The author supplemented her findings with additional

data gathered from the bulletin board protocols, interviews with instructors, written project evaluations by the Russian students, and journal entries from the Japanese students.

Before initiating the telecollaboration, Basharina (2007) had the following information posted in the bulletin board: a schedule, instructions on how to use the collaborative tools, and suggested topics and requirements, such as writing at least five messages a week. Although these guidelines were the same for all three groups, there were differences in the implementation of the project given the unique circumstances of each context. The Mexican students composed all of their posts outside of class instead of writing essays. The Japanese students made posts during lab time and were also encouraged to make posts outside of class time. The Russian students posted during lab time since many did not have internet access at home.

After analyzing the data, Basharina (2007) identified contradictions that were intra-cultural, inter-cultural, and technology-related. The two intra-cultural contradictions included the students' uncertainty about what to post or not to post at the beginning of the project, as well as whether to sound formal or informal. The inter-cultural contradictions that emerged include Russian students' complaints about unequal contributions by students in the project, and also Mexican students' complaints about genre clash or plagiarism, as well as clash of topic choice. The technology-related contradictions included the slower nature of communication using the bulletin board tool as compared to chat and message overload, which hindered community formation. The lack of visual clues offered by the bulletin board medium also led to confusion related to names and gender. The author identified the need for further research exploring the role of instructor

mediation in shaping the telecollaborative process. In addition, further limitations of the study included the broad nature of the task implemented, which appeared to lack a clear objective for the students, and also a need to communicate the different circumstances surrounding the participation of each group. Additionally, differences between the pre- and post- instruments prevented comparisons of the data collected.

Antoniadou (2011) examined the contradictions that arose during a transatlantic telecollaborative project between seven student-teachers of English as a Foreign Language at the Universitat Autònoma de Barcelona (UAB), Spain and their ten counterparts at the University of Illinois at Urbana-Champaign, United States. The objective of the project was for the pairs of student teachers to collaborate using Second Life, an online virtual world, in order to create a short podcast and follow-up exercises on their chosen linguistic structure. It was completed outside of class using the participants' personal computers and internet connection at home. Although both groups were assessed on their participation and the final podcast activities, only the students in Barcelona were required to implement the podcast in their teaching. An ethnographic method was employed for data collection, which included twenty hours of video/audio recordings of university sessions, seven transcripts of online chats, and seven final reports published using a wiki tool. This study adopted an emic perspective, and analyzed data principally from the perspective of the students in Barcelona. The data was analyzed in an Activity theoretical framework using Grounded Theory to identify recurrent emerging themes.

Antoniadou (2011) formulated the following research questions based on the preliminary findings: What were the contradictions underlying the tensions the UAB student-teachers regarded as a hindrance to the achievement of the original aims of this

activity? How did these contradictions transform the original objects of the activity? What were the learning outcomes of the activity in relation to the contradictions? The three types of contradiction identified included *technology-based*, *intra-institutional*, and *inter-institutional contradictions*. The technology-based contradictions were related to the challenge of using the new technological tools, with which they were not familiar and ended up being too difficult or not perceived as appropriate for the task. The intra-institutional contradiction for the UAB students arose from the participants' perception that telecollaboration added to their workload, while providing an opportunity for interaction. The inter-institutional contradictions were the result of American students not having experience with primary school students and that they did not have to implement the podcast. Despite these contradictions, which remained mostly unresolved, the author reported positive overall outcomes of the telecollaborative project since the participants expressed their desire to integrate similar technological tools and activities in their own classrooms. A limitation to this study is that these key contradictions related to the design of the project went unresolved, which hindered the formation of a telecollaborative community.

Karabulut et al. (2012) used a multiple-case study design to explore the contradictions between the students' and the instructor's motives for technology use in a semester-long intermediate French composition and culture course at a public university in the Midwest, United States. The participants were six undergraduate students, who were from different majors in their early twenties, and their instructor. The instructor implemented various technological tools for different purposes, including clickers, wikis, online dictionaries, as well as French websites and movies for authentic input. The

instruments used for data collection include a survey on motivational intensity and technology use for language learning and a protocol used for the four interviews. During the data analysis, the interview transcripts were reviewed and coded in several phases. The initial guiding question was refined to three specific research questions: What are the reasons for students' use of particular technological tools to connect with French language and culture? What is the teacher's rationale for using technology for teaching French? To what extent do the teacher's and students' reasons for using these technologies match?

The results of Karabulut et al. (2012) show that the students employ a variety of tools in their French learning, including YouTube videos, authentic websites, as well as grammar and verb conjugation sites. They chose to use these tools for various reasons and had their own preferences, which did not always align with the teacher's recommendations. For example, some students did not feel that it was necessary to use the online spelling and grammar checker program that the teacher recommended. Several reasons were identified for students' rejection of the teacher's tool choices (such as films, "clicker" quizzes, and wikis), including time, overall French language proficiency, and perception of their usefulness. The teacher's motives for choosing the tools included exposure to authentic input, motivational factors, and managerial benefits. In order to discover the contradictions, the authors explored the differences between the motives of the activity systems of the students and instructor. The main contradiction resulted from the differences in their perceived purposes and functions of technology. The students viewed technology simply as a tool, whereas the teacher also viewed it as a source of authentic input. Additional contradictions included the students' views regarding the

usefulness of the tools recommended by the teacher, the ease of technology use, and differences in their motivational effect. A limitation of this study is that it does not take into account the types of interactive technology that students use for non-language learning purposes; such as Twitter, which was adopted in the present project to connect students with their classmates as well as a global native speaker audience.

In another study, Oskoz and Elola (2012) examined students' synchronous and asynchronous interactions while completing a collaborative writing task in a computer-mediated writing environment. The CHAT framework was used to explore how the learners approached the process of writing using discussion boards and chat for content development, structure, and organization. The research questions posed were: (1) What are the visible interactions among components of an activity system within a collaborative, computer-mediated FL environment? and (2) What are the contradictions that emerge in this learning environment? The study was carried out in a capstone Spanish course, which met once a week for two and a half hours, at a public university in the eastern United States. There were 16 participants who were divided into groups of four to complete the discussion boards and pairs to work on an expository essay. The writing assignment spanned 3 weeks, during which they explored possible content using the discussion board and then collaboratively authored the essay using both chat and the wiki. The data analyzed included the discussion board posts, chat transcripts, as well as online journals that the students used to record their experience working with their partner.

To answer the first question, Oskoz and Elola (2012) examined the components of the activity system as demonstrated through interactions. The subjects of this system

included the groups and pairs of students, as well as the instructor. The object of the students' activity was to collaboratively write an expository essay, which was achieved through a chain of individual and group actions. The mediating tools included the CMC tools as well as the textbook. Through their interactions, the students oriented and reoriented their joint actions in relation to the object. The authors also observed that "learners projected their different perspectives and histories, not only in terms of the object to be accomplished, but also on their understanding of the action to be undertaken (i.e. the writing activity)" (p. 147). The rules of the activity system and the division of labor were interpreted differently by the learners, who demonstrated various levels of engagement.

To answer the second research question, Oskoz and Elola (2012) identified two main types of contradictions that emerged from the data. The first type was related to opposing beliefs or values that some students held, who viewed writing as an individual act. The second type was related to individual reactions to the writing experience, such as feelings of vulnerability due to the public nature of the tools. In some cases, the resolution of these tensions allowed for expansive change as students expressed their views and negotiated the task as well as their understanding of the rules and instructor feedback. The authors note that, "Despite these initial conflicts, learners successfully accomplished the object, which consequently led them towards the achievement of a wider learning outcome, that is, the improvement of their academic writing skills" (p. 149).

This study by Oskoz and Elola (2012) confirms that the resolution of tensions produced by contradictions in the activity system acts as the driving force of

development. It also informs pedagogy by suggesting the need to educate learners in the affordances of the tools and differences in task mediation by using the tools to write collaboratively. The study is limited by the relatively short duration of time in which the task was conducted. This limitation was taken into account when designing the project for the present study, which spans the entire semester.

Finally, Ryder and Yamagata-Lynch (2014) used an activity systems analysis with a focus on systemic tensions to explore the experiences of pairs of students during a sixteen-week transpacific collaboration between Northern Illinois University and Shandong Normal University, China. The design of the collaboration was informed by research on telecollaboration, particularly the *Cultura* project (<http://cultura.mit.edu/>). The research questions driving the study included: (1) how can activity systems analysis be used to identify and explain tensions in a transpacific collaboration? and (2) what are the pedagogical implications of the analysis?

The study by Ryder and Yamagata-Lynch (2014) took place in fall 2009 and involved fourteen students, who were divided into seven pairs based on their scheduling availability. The seven American students were six males and one female between the age of 20 and 32, who were learning Chinese as a foreign language. The seven Chinese students were all female between the age of 19 and 20, who were studying to become teachers of Chinese as a foreign language. The first author hosted an introduction meeting with the students for them to meet each other and to discuss expectations for the exchange, such as etiquette, reciprocity, the components of Intercultural Communicative Competence and examples of miscommunication from the literature on telecollaborative projects. Throughout the semester, participants had to respond to tasks (i.e. word

associations, sentence completion and situational reactions), post comments on Blackboard on their partner's responses, meet synchronously nine times, and write journals reflecting on the experience for each meeting. During the meetings, the pairs were expected to alternate roles as teacher of their native language and student of their target language for equal amounts of time.

The data collected by Ryder and Yamagata-Lynch (2014) included the journals, videoconference archives, and interviews, which was analyzed qualitatively following the constant comparative method (Corbin & Strauss, 2008). An activity system model was drafted using the themes that were identified in the analysis. The results indicated two different outcomes, low functionality or high functionality. Five pairs were identified as demonstrating activity marked by low functionality, which was attributed to four tensions that went unresolved. The first tension was between tools and division of labor, in that varying amount of target language knowledge prevented some participants from playing the role of a teacher. The second tension was between the rules and the object since some participant's interpretation of the tools became a barrier for improving target language proficiency. The third tension was between the tools and the object in that the level of Intercultural Communicative Competence of some participants prevented increasing awareness of the target culture. The fourth tension related to individual differences between subjects that proved to be an obstacle for attaining the object of functioning effectively as partners. The two pairs that were identified as high functioning also encountered tensions but were able to resolve them due to mutual trust, good communication skills, and higher levels of Intercultural Communicative Competence.

This study by Ryder and Yamagata-Lynch (2014) confirms existing research related to the tensions that occur in telecollaboration, such as target language proficiency gap, preconceived notions of the target culture, and varying levels of Intercultural Communicative Competence. The authors highlight the importance of the instructor in helping students to build rapport and guidance throughout the collaboration. Although the authors used an activity theoretical approach to discover tensions in the telecollaboration, no attempt was made to intervene and help students to resolve the tensions. This limitation was common across all of the activity theoretical studies reviewed above.

Justification for Present Study

Given the rapid rise of digital communication technologies and the need to use these tools “to provide opportunities for students to use the language beyond the confines of their classroom walls” (21st Century Skills Map for World Languages, 2011, p. 3), the project for the present study was designed to meet the Standards for Foreign Language Learning in the 21st Century (American Council on the Teaching of Foreign Languages, 1999) and was informed by the Bridging Activities framework (Thorne & Reinhardt, 2008). The present project adopts the goal of raising learner awareness with a focus on the products, practices, and perspectives of Spanish-speaking cultures. To this author’s knowledge, no study has yet to explore the outcomes of implementing a project designed based on the Bridging Activities framework using Twitter and Blogger in a second language course. The present study contributes to prior research by using CHAT as a framework to analyze the contradictions that emerge during the implementation of a semester-long project designed based on the Bridging Activities framework using Twitter and Blogger in an intermediate Spanish-language course at the university level.

Research Questions

The research questions guiding the study, which was conducted during the fall 2014 semester, include:

1. What technology is used by the students, with what frequency and for what purposes in both English and Spanish prior to beginning the project?
2. What are students' values and attitudes toward using Twitter and Blogger as tools for learning Spanish and how do they change over time through their use in the project during the semester course?
3. What tensions emerge in the activity systems of the intermediate Spanish-language students throughout the process using Twitter and Blogger for the project? What are the underlying reasons for the tensions? How are they resolved?

CHAPTER 3

METHODOLOGY

The present study explores the use of individual microblog and blog tools by fourth-semester students of Spanish as a foreign language at a large public university in Arizona, in which participants used microblogging and blogging tools to collect digital texts, analyze perspectives of the target culture, and participate as part of an online community of language learners with a broader audience of native speakers.

Participants

The subjects for this study were fifteen participant volunteers in two sections of a fourth semester Spanish language hybrid course at a large public university in Arizona. There were four male and eleven female participants. The average age was twenty-one years old, with a range from eighteen to thirty-one years old. Although linguistic gains were not measured in the present study, it is nonetheless important to note that the students reported a range of prior exposure to Spanish language and culture on the pre-study demographic and language background survey. All but one had studied Spanish at the junior high or high school level for an average of three years, with a range of two to six years of study. At the university level, the participants had studied an average of two semesters prior to enrolling in the present course. Six students reported some experience travelling to Spanish-speaking countries; however, none had lived in a target language country. Finally, one student was a native speaker of Portuguese from Brazil, who had come to Arizona to study part of her university program.

Of the fifteen participants, six students were also identified as heritage language learners due to their reported family background which included native speaker relatives.

However, only one of the six students reported both Spanish and English as native languages. The remaining five heritage learners considered English as their native language and reported stronger receptive than productive ability in Spanish, which they considered limited. Two of these students reported using some Spanish with their immediate family, while the remaining three reported using it with extended family. Their family backgrounds included New Mexico, Mexico, Puerto Rico, Colombia and Peru. Thus, the heritage language students brought to the project their diverse linguistic and cultural family backgrounds.

Instruments

The data collection instruments included pre- and post-questionnaires containing open-ended and Likert scale items, and also periodic surveys throughout the semester (Appendix A). The pre-study questionnaire contained a demographic and language background survey followed by a survey of students' frequency of technology use, such as social media and other websites, and general questions about the participants' feelings about using these tools in the course. The post-study questionnaire examined students' attitudes and experiences using Twitter and Blogger for language and culture learning, as well as social aspects of those tools. The periodic surveys contained questions designed to identify components of the CHAT framework, such as the participants' goals and perceptions of the project in order to identify potential patterns of problems, or tensions, as they arise. The students were also asked to report any instances of tensions, such as failed communication or other problems, which prevented them from achieving their goals using Twitter or Blogger. These instances were collected, analyzed as a class and included as part of the data, following the suggestions of O'Dowd & Ritter (2006). The

participants' microblog posts as well as blog posts and comments were included as a source of data.

Procedures and tasks

All students completed the microblog and blog tasks as a required part of the course. At the beginning of the semester, the students were informed of the study by a research assistant. Those students who volunteered to participate were asked to sign the informed consent document, approved by the Institutional Review Board. Although only the data of volunteers was analyzed for the present study, all students were required to participate in the project and complete the surveys as part of their coursework. During week 1 of the semester, students were sent a link via email containing the pre-study questionnaire. Throughout the semester, the participants were sent links to the periodic surveys about the project. During week 15, participants were sent a link to the post-study questionnaire. Google Forms was used to collect all questionnaire and survey data.

The microblog and blog tasks for the project were developed based on the Bridging Activities framework (Table 1). The project adopted the goal of raising learner awareness with a focus on the products, practices, and perspectives of Spanish-speaking cultures. During each phase, the students completed weekly microblogging tasks using Twitter, which served as a means of formative assessment (Appendix C). At the end of each phase, the students completed a blog task to synthesize their learning for that phase as a means of summative assessment (Appendix C).

Table 1 Project Adapted from Bridging Activities Framework (Thorne & Reinhardt, 2008)

Phase	Week	Objectives
1	1-5	<p style="text-align: center;"><i>“Finding Communities”</i></p> <p><u>Observation and Collection:</u></p> <ul style="list-style-type: none"> - Students reflect on their own participation in different Social Networking Sites - Students observe practices and collect texts of interest in L2 Twitter communities through topic hashtags or keyword searches <p style="text-align: center;"><i>(culminates in Blog Post #1 as summative assessment)</i></p>
2	6-10	<p style="text-align: center;"><i>“Products, Practices and Perspectives”</i></p> <p><u>Exploration and Analysis:</u></p> <ul style="list-style-type: none"> - Students select 2-3 of their collected texts to examine critically - Students examine and hypothesize about how these cultural products (texts) are connected to patterns of cultural practices (through Twitter and beyond) and the perspectives which inform them <p style="text-align: center;"><i>(culminates in Blog Post #2 as summative assessment)</i></p>
3	7-15	<p style="text-align: center;"><i>“Joining Communities”</i></p> <p><u>Creation and Participation:</u></p> <ul style="list-style-type: none"> - Students produce a blog post, which can include other embedded texts that they create, that is comparable to the texts examined in the previous phase - Students contribute their texts by sharing via Twitter to topic hashtags and reflect on the reaction <p style="text-align: center;"><i>(culminates in Blog Post #3 as summative assessment)</i></p>

Students were introduced to the microblog tool Twitter during the first week of class and made aware of the parameters for using this tool appropriately as part of the course (Appendix B). They created accounts to use only for the purposes of communicating as part of the course, as suggested by McBride (2009). Students were asked to find topics of interest in the target language using hashtags (#) and to retweet key content that they wanted to explore more in depth through blog reflection. The topics could be related to their fields of study, hobbies and pastimes, or other appropriate interests. They were also asked to follow Twitter accounts of native speakers, who tweet about their topics of interest. The topics had to be appropriate for the course according to the established parameters, or be approved by the instructor. The students chose which accounts to follow in order to grow their networks ecologically. In this way, they

familiarized themselves with the native speakers' discourse around these topics and were able to communicate with them as part of an authentic online community in addition to their L2 learner community. Additionally, the use of Twitter was incorporated during certain class activities to allow for participation by many students at once as a means of promoting active learning.

Finally, students created individual blogs using the tool Blogger and made three posts throughout the semester. The blogs allowed students to explore more in depth about topics of interest and to present their findings to a wide audience that included their classmates and other internet users. The students shared the links to their blog posts using Twitter with the appropriate topic hashtags in order to attract broader readership. In addition to the comments that students could have received on their blog posts from native speakers, the students were also required to post at least four comments to each other's blogs.

Qualitative Data Analysis

It is necessary to preface a discussion of the method of data analysis applied in the present study by establishing the philosophic underpinnings of qualitative research more broadly. Qualitative research is characterized as phenomenological, with a focus on understanding meaning from the perspective of the persons being studied. This is in contrast to quantitative research which is characterized as positivist and seeks objectivity through distancing from the participants under study. Thus, qualitative and quantitative research methods represent two distinct paradigms.

Lincoln and Guba (1985) present the philosophical perspective of qualitative research, which they argue is based on different assumptions than the traditional

positivist paradigm. The assumptions, or postulates, inform how researchers define and approach problems since they relate to the understanding of reality and knowledge. In the qualitative paradigm, reality is seen as multiple and knowledge is co-constructed by the subjects and researcher. The co-construction of knowledge must be understood as interconnected with context and shaped by values. This paradigm does not focus on causality, but rather sees events as “mutually shaped” and seeks to discover “multidirectional relationships” (Maykut & Morehouse, 1994, p. 13). Thus, the purpose of the phenomenological approach is to discover the patterns which emerge in the data through observation and careful inspection. Since this perspective seeks to understand an event as it is constructed by the participants, the data collected aims “to capture what people say and do, that is, the products of how people interpret the world” (p. 18). Rather than seek generalizability, qualitative research is characterized by context sensitivity, or “understanding a phenomena in all its complexity and within a particular situation and environment” (p. 13)

The postulates listed above have implications for the role of the researcher in the qualitative paradigm. Corbin and Strauss (2008) note that qualitative analysis requires “an intuitive sense of what is going on in the data; trust in the self and the research process; and the ability to remain creative, flexible, and true to the data all at the same time” (p. 16). Although it may not be possible to achieve complete objectivity in qualitative analysis, a researcher can develop *sensitivity*, or “insight into data”, by immersing herself in the data through its collection and analysis (p. 41). Corbin and Strauss (2008) state “Sensitivity enables a researcher to grasp meaning and respond intellectually (and emotionally) to what is being said in the data in order to be able to

arrive at concepts that are grounded in data” (p. 41). Indeed, an important reason for doing qualitative research is to enter the world of the participants and to see the world from their perspective, while making discoveries that will contribute to the development of empirical knowledge.

The postulates also highlight the central role of context and process in qualitative analysis. Context is defined as “structural conditions that shape the nature of situations, circumstances, or problems to which individuals respond by means of action, interaction, or emotions” (Corbin & Strauss, 2008, p. 87). In other words, people do not exist in a vacuum, but rather a framework of structural conditions, which range from micro to macro. Process is linked with context and is defined as “the flow of action, interaction, or emotions that occurs in response to events, situations, or problems” (p. 87). Context does not determine the response (process), but may lead to situations or problems that subjects respond to strategically, either as individuals or collective. Thus, process can be understood as patterns of strategic action, interaction or emotion, such as occur in progress toward a goal or sequences of action. Corbin and Strauss (2008) describe the importance of context and process stating, “any explanation of experience would be *incomplete* without (a) locating experience within the larger conditional frame or context in which it is embedded; and (b) describing the process or the ongoing and changing forms of action/interaction/emotions that are taken in responses to events and the problems that arise to inhibit action/interaction” (emphasis in original, p. 17). The authors present an analytic strategy for integrating contextual factors with process which involves examining *conditions* (why, where, how, and what happens), *strategies* (responses made by individuals or groups), and *consequences* (outcomes).

Constant Comparative Method. The method of qualitative analysis adopted in the present study was first proposed by Glaser and Strauss (1967). At its most basic level, the method of constant comparisons refers to “the analytic process of comparing different pieces of data for similarities and differences” (Corbin & Strauss, 2008, p. 65). Those incidents that are similar are grouped together and assigned a code. This process is known as *coding*, which refers to “deriving and developing concepts from data” (Corbin & Strauss, 2008, p. 65). *Concepts* are “words that stand for groups or classes of objects, events, and actions that share some major common property(ies), though the property(ies) can vary dimensionally” (p. 45). Finally, within-code comparisons are done “to uncover the different properties and dimensions of the code” (Corbin & Strauss, 2008, p. 74). Properties refer to the “characteristics that define and describe concepts” (Corbin & Strauss, 2008, p. 159). Dimensions are the “variations within properties that give specificity and range to concepts” (Corbin & Strauss, 2008, p. 159)

The process of coding occurs in stages. First, the data is broken down into concise pieces, or units of meaning. Then the pieces are explored and interpreted for the ideas that they represent. Finally, the ideas are given conceptual names that identify their essence or meaning. In the early stages of *open coding*, the concepts to which they are assigned are provisional and may be added to, modified, or discarded as further data is analyzed. As analysis progresses, the researcher employs *axial coding* to identify relationships between two or more concepts (Corbin & Strauss, 2008, p. 183). In the later stages of analysis as broader patterns begin to emerge, the researcher is able to reduce and combine data by grouping lower-level concepts according to shared properties under a higher-level concepts, also called categories or themes. Overall, Corbin and Strauss

(2008) summarize that “analysis involves examining a substance and its components in order to determine their properties and functions, then using the acquired knowledge to make inferences about the whole” (p. 45).

CHAPTER 4

RESULTS AND DISCUSSION

Participant technology use, frequency, and purposes

The first research question asked what technology is used, with what frequency and for what purposes by students in English and Spanish prior to beginning to project. To answer this question, the students completed the pre-study questionnaire, which contained a portion related to technology use in both languages (See Appendix A). It is important to take into account students' habits for using technology as it is part of the historicity of their activity systems. The experiences that students have using technology outside of the classroom can impact their perceptions of adopting these tools for educational purposes. These prior experiences and perceptions can also contribute to the tensions that emerge in their activity systems and, as such, it was necessary to take them into account for the activity theoretical analysis of the third research question. The results of the pre-survey questions related to technology use, frequency and purposes of use are discussed in this section.

For technology use in English, it perhaps comes as no surprise that the participants reported being daily users of a number of digital tools (See Table 2). For instance, the overwhelming majority of participants reported using Facebook either daily (80%) or monthly (13.3%) with only one student (6%) who never used the social-networking site. This is in contrast to the microblogging site Twitter which, although used by a majority of students daily (46.7%) or weekly (13.3%), had never been used by a substantial number of students (40%). The use of the photo sharing site Instagram also varied widely with a majority of students reporting daily (46.7%) or weekly (13.3%) use.

The video sharing site YouTube was also used by a majority of students either daily (33.3%) or weekly (40%). Finally, both wiki and voice tools (i.e. Skype) were used less frequently by a majority of students, either weekly (40% and 33.3%, respectively) or monthly (26.7% and 33.3%, respectively). The sites that were used much less frequently (a few times per year or never) by a majority of the students included Google+, Pinterest, LinkedIN, reddit, personal blogs, discussion boards, chat rooms, as well as the simulation SecondLife and social gaming.

Table 2 Technology Use in English (Pre-survey)

	Daily (%)	Weekly (%)	Monthly (%)	Few times per year (%)	Never (%)
Facebook	12 (80)	0 (0)	2 (13.3)	0 (0)	1 (6)
Twitter	7 (46.7)	2 (13.3)	0 (0)	0 (0)	6 (40)
Google +	2 (13.3)	2 (13.3)	0 (0)	4 (26.7)	7 (46.7)
Instagram	7 (46.7)	2 (13.3)	1 (6)	1 (6)	4 (26.7)
Pinterest	0 (0)	3 (20)	3 (20)	1 (6)	8 (53.3)
LinkedIN	0 (0)	0 (0)	3 (20)	1 (6)	11 (73.3)
reddit	2 (13.3)	0 (0)	0 (0)	1 (6)	12 (80)
YouTube	5 (33.3)	6 (40)	2 (13.3)	0 (0)	1 (6)
SecondLife	0 (0)	0 (0)	0 (0)	0 (0)	15 (100)
Social Gaming	0 (0)	3 (20)	1 (6)	2 (13.3)	9 (60)
Personal blog	2 (13.3)	1 (6)	1 (6)	3 (20)	8 (53.3)
Wiki	0 (0)	6 (40)	5 (33.3)	3 (20)	1 (6)
Voice tools	1 (6)	4 (26.7)	5 (33.3)	3 (20)	1 (6)
Dis. Boards	0 (0)	2 (13.3)	3 (20)	3 (20)	7 (46.7)
Chat rooms	0 (0)	0 (0)	0 (0)	1 (6)	14 (93.3)

The students were also surveyed regarding their purposes for using the internet in English, which permits insights in addition to the frequency of tool use described above (See Table 3). The five main purposes, which were reported by more than 80% of the participants, included: to communicate and share with friends and relatives, to get access to news and other information, to look at images or pictures, to watch videos, and to

listen to music. A majority of participants (60%) also reported using the internet to communicate and share with a broader audience, including people they do not know in person. A lower percentage (53%) reported using the internet to create and share images, while even less (33%) reported using it to create and share videos or to write a personal blog. Thus, the majority of the participants use the internet with the purpose of connecting and consuming information. It is worth noting that the majority of participants do not create content to share on the internet, but rather consume content.

Table 3 Purposes for Using the Internet in English (Pre-survey)

	Participants (%)
to communicate and share with friends and relatives	13 (86.7)
to communicate and share with a broader audience on the internet	9 (60)
to get access to news and other information	14 (93.3)
to read personal blogs	5 (33.3)
to write my own personal blog	5 (33.3)
to look at images or pictures	14 (93.3)
to create and share images	8 (53.3)
to watch videos	12 (80)
to create and share videos	5 (33.3)
to listen to music	13 (86.7)
to play online games	7 (46.7)

For technology use in Spanish, the majority of participants (more than 80%) reported that they never used any digital tools in the target language (See Table 4). There were a few exceptions. Some reported using YouTube and wikis either monthly (13% and 6%, respectively) or a few times per year (33% and 20%, respectively). There was also one student (6%) who reported using the social news website reddit on a monthly basis to read current events in Spanish. Among the heritage language learners, several reported using Facebook daily (6%), weekly (6%), or monthly (6%) to communicate with family or friends in their heritage language. Although two students (13.3%) reported using Twitter on a weekly basis in Spanish, this may have been due to the fact that they

had been recently introduced to the project. The Brazilian student (6%) used Twitter in the target language a few times per year. Finally, two students (13%) reported using voice tools a few times per year to communicate in Spanish; while one (6%) also used blogs, discussion boards, and chat rooms with the same frequency.

Table 4 Technology Use in Spanish (Pre-survey)

	Daily (%)	Weekly (%)	Monthly (%)	Few times per year (%)	Never (%)
Facebook	1 (6)	1 (6)	1 (6)	0 (0)	12 (80)
Twitter	0 (0)	2 (13.3)	0 (0)	1 (6)	12 (80)
Google +	0 (0)	0 (0)	0 (0)	0 (0)	15 (100)
Instagram	0 (0)	0 (0)	1 (6)	0 (0)	14 (93.3)
Pinterest	0 (0)	0 (0)	0 (0)	0 (0)	15 (100)
LinkedIN	0 (0)	0 (0)	0 (0)	0 (0)	15 (100)
reddit	0 (0)	0 (0)	1 (6)	0 (0)	14 (93.3)
YouTube	0 (0)	0 (0)	2 (13.3)	5 (33.3)	8 (53.3)
SecondLife	0 (0)	0 (0)	0 (0)	0 (0)	15 (100)
Social Gaming	0 (0)	0 (0)	0 (0)	0 (0)	15 (100)
Personal blog	0 (0)	0 (0)	0 (0)	1 (6)	14 (93.3)
Wiki	0 (0)	0 (0)	1 (6)	3 (20)	11 (73.3)
Voice tools	0 (0)	0 (0)	0 (0)	2 (13.3)	13 (86.7)
Dis. Boards	0 (0)	0 (0)	0 (0)	1 (6)	14 (93.3)
Chat rooms	0 (0)	0 (0)	0 (0)	1 (6)	14 (93.3)

The purposes that students reported for using the internet in Spanish reflected the overall low frequency of use of the digital tools (See Table 5). Although some participants (40%) use the internet to get access to news and other information in the target language, the majority (more than 80%) did not report using it for any purpose. Several participants (20%) use it to communicate with friends and relatives. Two participants (13.3%) reported using it to look at images or pictures, to watch videos, or to listen to music. Importantly, only one participant (6%) reported using the internet to communicate and share with a broader audience. Thus, the low percentages reported for

both frequency of technology use and purposes for using the internet in Spanish highlight the need to harness these tools for language learning.

Table 5 Purposes for Using the Internet in Spanish (Pre-survey)

	Participants (%)
to communicate and share with friends and relatives	3 (20)
to communicate and share with a broader audience on the internet	1 (6)
to get access to news and other information	6 (40)
to read personal blogs	0 (0)
to write my own personal blog	0 (0)
to look at images or pictures	2 (13.3)
to create and share images	1 (6)
to watch videos	2 (13.3)
to create and share videos	0 (0)
to listen to music	2 (13.3)
to play online games	0 (0)

Participant values and attitudes toward Twitter and Blogger

The second research question asked what students' values and attitudes were toward using Twitter and Blogger as tools for learning Spanish and how they changed over time through their use in the project during the semester course. To answer this question, participants were surveyed using a Likert scale and open-ended questions at the beginning and end of the semester. This analysis of students' values and attitudes was also used to uncover historical and emerging tensions in their activity systems in order to answer the third research question. The results of the pre-survey and post-survey data related to students' values and attitudes toward using Twitter and Blogger for the project is discussed in this section.

At the beginning of the semester, the majority of participants responded positively to the idea of using Twitter for microblogging as part of the course (See Table 6). The largest percentage of participants (40%) somewhat liked the idea, followed by those who strongly liked (20%) and liked it (13.3%). The themes that emerged in the analysis of the

open-ended answers attributed positive attitudes to the both prior use of tool or the opportunity to learn how to use the tool, as well as its affordances. Citing to her prior use of the tool, Elena², a heritage language learner, commented, “It relates to something I do in my everyday life but this time I will be doing it in Spanish which is awesome to help integrate the language in my day to day life” (Pre-survey). Other students liked the affordances made possible by the microblogging tool. Elizabeth, a second language learner, stated:

“I have never done a project that involved leaping into the Spanish-speaking online community by using the sites I already am connected to. The idea of immersing ourselves in the culture of native speakers without even studying abroad is incredible. I am so excited for this project and to see what we discover as a class” (Pre-survey).

These comments point to the opportunity to harness popular digital tools, which students may already use in their personal lives, for instructional purposes in order to help them realize their potential usefulness for language and culture learning.

While most participants liked the idea of using Twitter, a smaller percentage somewhat disliked (13.3%) or strongly disliked (13.3%) the idea of using it as part of the course. The themes that emerged in the analysis of the open-ended answers attributed negative attitudes to personal preferences, or to non-use of the tool. Related to personal preferences, Diana, a heritage language learner, commented, “I’ve never really liked when classes incorporated social media into its coursework” (Pre-survey). Another student, Susan, stated “I hate Twitter” without offering further elaboration (Pre-survey). These student attitudes support the statement made by Blake (2013) that social

² Pseudonyms have been used to identify all participants.

networking is a personal activity which is more resistant to integration into the foreign language curriculum (p. 153).

The majority of participants also responded positively to the idea of using Blogger for blogging as part of the course (See Table 6). The largest percentage of participants (46.7%) somewhat liked the idea, followed by those who liked it (20%). The themes that emerged in the analysis of the open-ended answers attributed positive attitudes to the perception of enjoying the task or its affordances for language learning. Lucia, the Brazilian student, commented, “I do not use blogs that much, but I think It's a fun way to learn Spanish and get the vocabulary that we probably want more” (Pre-survey). Related to the affordances of the blogging tool, Elizabeth, a learner with prior experience using blogs, noted, “It is an open, customizable space for us to share our findings and thoughts on Spanish speaking online culture” (Pre-survey).

While most participants liked the idea of using Blogger, a smaller percentage somewhat disliked (20%) or strongly disliked (13.3%) the idea of using it as part of the course. The themes that emerged in the analysis of the open-ended answers attributed negative attitudes again to personal preferences, or non-use of the tool. Jessica commented, “I have never used a blog or made one. I have no idea how to blog” (Pre-survey). In one case, the negative attitude arose from an uncertainty over writing ability and unclear understanding of the task. Melissa commented, “I am not good at writing about myself or my life and I am not so sure how well I will be able to write, especially in Spanish” (Pre-survey). Although the tasks would not require students to write about themselves, the requirements of the blogging portion of the project were not well understood by Melissa at the beginning of the semester.

Table 6 Participant Attitudes toward Using Twitter and Blogger (Pre-survey)

	Strongly like (%)	Like (%)	Somewhat like (%)	Somewhat dislike (%)	Dislike (%)	Strongly dislike (%)
Initial reaction to using Twitter	3 (20)	2 (13.3)	6 (40)	2 (13.3)	0 (0)	2 (13.3)
Initial reaction to using Blogger	0 (0)	3 (20)	7 (46.7)	3 (20)	0 (0)	2 (13.3)

At the end of the semester, the vast majority of participants (more than 80%) responded positively to having used Twitter for microblogging as part of the course (See Table 7). The largest percentage of participants (40%) liked having used the tool, followed by those who somewhat liked (33.3%) and strongly liked it (13.3%). The themes that emerged in the analysis of the open-ended answers attributed positive attitudes to the enjoyment of using the tool and its affordances for language and culture learning. Regarding her enjoyment of using Twitter, Melissa explained, “I really like how I was able to practice my Spanish in a real world application” (Post-survey). Related to the affordances of Twitter for language learning, Lucia stated, “It is a simple way to improve the Spanish vocabulary and also learn about some things that you like” (Post-survey). Other students highlighted its affordances for cultural learning. Elizabeth commented:

“I liked using Twitter to interact with people, because it opened up a world of information about Hispanic culture and how their culture manifests itself on social media. It didn’t really improve my Spanish fluency, but I got better at understanding social context” (Post-survey)

There were also two students who, although having somewhat liked using Twitter, expressed negative attitudes due to unresolved tensions in their explanation of the rating. Elena commented, “It was just kind of a hassle and it wasn't really used realistically or how I think Twitter is normally used, I am a lot less active on it in my personal life” (Post-survey). Jessica explained, “It is hard to remember to do it sometimes and you don't really know anyone that you follow which makes it difficult to communicate” (Post-survey). Since both participants had used Twitter as a social media tool before the course, they brought their understanding of its “culture of use” to the project.

A smaller percentage disliked (6%) or strongly disliked (6%) having used Twitter as part of the course. The negative attitudes were attributed to personal preferences about the tool and also to the nature of the assignment. Susan's feelings were unchanged from the beginning of the semester. She commented, “I was never a big fan of Twitter in the first place and so I didn't enjoy having to tweet in Spanish” (Post-survey). Christine remarked on the nature of the assignment, stating, “The assignments were a little outrageous. I ended up following over 100 accounts whereas on my English speaking accounts I never go above maybe 70, and those 70 I have accumulated over years” (Post-survey). These comments reveal underlying tensions in the activity systems of these participants that went unresolved.

The vast majority of participants also responded positively to the idea of using Blogger for blogging as part of the course (See Table 7). The participants were evenly split between those who liked (33.3%) and somewhat liked (33.3%) the idea, followed by those who strongly liked it (13.3%). The themes that emerged in the analysis of the open-ended answers attributed positive attitudes to the enjoyment of using the tool and its

affordances as a flexible and open platform to share writing with a wide audience.

Thomas stated, “It’s difficult in Spanish, but I have a lot of random insights and blogging seems like the perfect platform to rant about whatever I feel like” (Post-survey).

Elizabeth explained:

“I like using blogger to write in Spanish, it's one more place to publish my writing in which other Spanish speakers MAY see it. I didn't like it as an inclusion to the course though, because I feel like it was too far separated from what we were learning in class. It felt like extra busy work. However, it did help me pull together what I was noticing on Twitter” (Post-survey)

Although Elizabeth responded positively overall to the use of Blogger, her comment reveals an underlying tension that went unresolved and highlights the importance of integrating projects into coursework as fully as possible.

A smaller percentage somewhat disliked (13.3%) or strongly disliked (6%) having used Blogger as part of the course. The negative attitudes were attributed to personal preferences related to the tool and also to the nature of the assignment. Christine commented, “There are many other blogging sites that are much better than Blogger” (Post-survey). Similarly, Elena stated, “It was too much work and hard to maneuver” (Post-survey). Again, these comments point to unresolved tensions, which may come about with the adoption of new tools into an activity system. The topic of tensions will be discussed further to answer the third research question.

Table 7 Participant Attitudes toward Using Twitter and Blogger (Post-survey)

	Strongly like (%)	Like (%)	Somewhat like (%)	Somewhat dislike (%)	Dislike (%)	Strongly dislike (%)
Reaction to having used Twitter	2 (13.3)	6 (40)	5 (33.3)	0 (0)	1 (6)	1 (6)
Reaction to having used Blogger	2 (13.3)	5 (33.3)	5 (33.3)	2 (13.3)	0 (0)	1(6)

Overall, the attitudes of the participants to both Twitter and Blogger improved from the beginning to the end of the semester (See Table 8). In regards to the use of Twitter, eight students held more favorable attitudes toward the tool at the end of the project in comparison with six whose attitudes were less favorable and one that remained unchanged. The most dramatic increases were evidenced by Diana, whose case will be discussed to answer the third research question, and Devon. The most dramatic decrease was evidenced by Christine, whose case will also be discussed in the following section. In regards to the use of Blogger, nine students held more favorable attitudes toward the tool at the end of the project in comparison with three whose attitudes were less favorable and three that remained unchanged. The most dramatic increase was again evidenced by Diana. The most dramatic decreases were evidenced by both Christine and Elena.

Table 8 Attitudes toward Twitter and Blogger by Participant (Pre and Post)

Participant	Twitter		Blogger	
	Pre	Post	Pre	Post
Elena	Like	Somewhat like	Somewhat like	Strongly dislike
Jennifer	Somewhat like	Like	Somewhat like	Like
Thomas	Somewhat like	Like	Somewhat like	Strongly like
Jessica	Somewhat like	Somewhat like	Somewhat dislike	Somewhat like
Lucia	Strongly like	Somewhat like	Like	Like
Diana	Somewhat dislike	Strongly like	Somewhat dislike	Strongly like
Robert	Somewhat like	Strongly like	Somewhat like	Somewhat like
Melissa	Somewhat like	Like	Somewhat dislike	Somewhat like
Elizabeth	Strongly like	Like	Like	Somewhat like
James	Strongly like	Somewhat like	Like	Like
Christine	Somewhat like	Strongly dislike	Somewhat like	Somewhat dislike
Susan	Strongly dislike	Dislike	Strongly dislike	Somewhat dislike
Beth	Somewhat dislike	Like	Somewhat like	Like
Devon	Strongly dislike	Like	Strongly dislike	Somewhat like
Tiffany	Like	Somewhat like	Somewhat like	Like

The post-survey also covered the values that participants had toward various features and affordances of the tools. There were many features of Twitter that

participants found useful for learning Spanish (See Table 9). The features of the microblogging tool that were found useful by the vast majority of the participants (more than 80%) included: being able to share links to other media and following native speakers. Other features that were selected by the majority (more than 50%) included: being able to have delayed communication, being able to reply to someone’s tweet, building a community with classmates, and becoming part of a virtual community that contains native speakers.

Table 9 Features of Twitter Useful for Learning Spanish

	Participants (%)
having a 140 character limit	1 (6)
being able to share links other media (images, videos, etc.)	12 (80)
being able to have delayed communication	8 (53.3)
being able to have instantaneous communication	5 (33.3)
being able to reply to someone’s tweet	10 (66.7)
following native Spanish speakers	12 (80)
building a community with classmates in your class	8 (53.5)
becoming part of a virtual community that contains native speakers	8 (53.3)

In relation to language and culture learning, the affordances of Twitter that were highly rated (strongly agree or agree) by the vast majority of participants included: being able to infer meaning from tweets and having the professor tweet. Other language-learning affordances that were highly rated by the majority included: contribution to knowledge of grammar and vocabulary, contribution to knowledge of Spanish-speaking cultures, and improvement in reading skills and learning through reading tweets. In relation to social aspects of Twitter, the affordances that were highly rated by the vast majority of participants included: enjoying being able to share information about personal interests, reading the tweets of native speakers, and interacting with classmates. Other social affordances that were highly rated by the majority included: sharing information

about personal lives, reading the tweets of fellow students, interacting with native speakers, and feeling a sense of community both with classmates and a broader internet audience. Thus, it is worth noting that students valued Twitter as a tool for networking with their classmates and native speakers, as well as the affordances for learning that this provided. For tables, see Appendix D.

There were also many features of Blogger that participants found useful for learning Spanish (See Table 10). The features of the blogging tool that were found useful by the vast majority of the participants (more than 80%) included: being able to express ideas without character limit and being able to add links and other media. Other features that were selected by the majority (more than 50%) included: sharing posts with their virtual community, commenting on others' blogs, reading the blog posts of classmates, and reading the comments left on their blogs.

Table 10 Features of Blogger Useful for Learning Spanish

	Participants (%)
being able to express ideas without character limit	12 (80)
being able to add links and other media (images, video, etc.)	13 (86.7)
sharing your posts with your virtual community on Blogger	9 (60)
commenting on others' blogs	8 (53.3)
reading other fellow students' blog posts	11 (73.3)
reading the blog posts of native speakers	5 (33.3)
reading the comments on my blog	10 (66.7)
reading the comments on others' blogs	5 (33.3)
other: writing	1 (6)

In relation to language and culture learning, the affordances of Blogger that were highly rated (strongly agree or agree) by the vast majority of participants included: putting more time into the class and being able to infer meaning in the blogs from context. Other language-learning affordances that were highly rated by the majority

included: contribution to knowledge of grammar and vocabulary, improvement in reading and writing skills, learning reading other students' blogs and comments, as well as having the professor comment on blog posts. In relation to social aspects of Blogger, no affordances were highly rated by the vast majority of participants. Social affordances that were highly rated by the majority included: being able to share information about their lives and personal interests, enjoying reading the blog posts of classmates and native speakers, enjoying reading the comments of classmates and native speakers on their blogs, enjoying reading the comments on other students' blogs, and feeling a sense of community with classmates. Thus, it is worth noting that students valued using Blogger as a tool to express their ideas without limit and to add links as well as other media. For tables, see Appendix D.

Activity Theoretical Analysis: Case studies

The third research question sought to identify the tensions that emerged in activity systems of the intermediate Spanish-language students throughout the process of using microblog (Twitter) and blog (Blogger) tools for the project, the underlying reasons for the tensions, and the manner in which they were potentially resolved. To answer this question, an activity theoretical analysis was carried out on the cases of three participant outliers that evidenced tensions and, in some instances, their resolution, which led to expansive learning.

James. The first case study focuses on James, a twenty-two year old male. He began studying Spanish in college and had completed three courses prior to fall 2014 semester. He is a native English speaker who did not have experience with the Spanish language through home or travel. As a language learner, he considers that he tries to

“take risks,” but is also “a bit of a perfectionist” (Pre-survey). As a technology user, James indicated that he used the internet in English to get access to news and other information, to read personal blogs, to look at images or pictures, to watch videos, and to listen to music. Although James had maintained a personal blog to share his creative writing, he had never used Twitter for microblogging before beginning the project. Curiously, he was also the only participant who did not have a Facebook profile. James explained, “Facebook is intensely personal, it is the place where you go to see your friends' faces and evaluate the content of their lives,” going on to say “I dropped Facebook because of these qualities - everything there is about you, your life, your ideas, your friends, etc.” (Blog post 1). Finally, James indicated that he used the internet in Spanish to watch videos on a monthly basis and accessed wikis several times a year (Pre-survey).

Before beginning the project, James indicated that he strongly liked the idea of using Twitter stating, “I appreciate the creativity the assignment gives me to write in Spanish about topics that I care about” (Pre- survey). James also liked the idea of using Blogger as it would similarly give him “a large amount of creative reign over what [he] wanted to do with the language” (Pre- survey). Since he felt that blogging can be a “fun task” in English, this clearly influenced his initial feelings toward the idea of blogging in Spanish. Finally, James stated, “I hope to learn how to draft an original Spanish-language work *in my own voice*, a privilege that I have not been granted in previous courses” (Emphasis added, Pre-survey). This statement reveals a historical tension that was present within the object component of James’s learning activity, which can be described as the perceived artificial use of language in his university courses versus the desire to use his

authentic voice. This primary contradiction represents a need state, which is the initial phase in the zone of proximal development of James’s learning activity (See Table 11).

Table 11 The Phase Structure of James’s Learning Activity

Contradiction	Phase	Description
Primary <i>within</i> the components of the old activity	Need state	object of language use for university courses: artificial vs. authentic (“own voice”)
Secondary <i>between</i> the components of the old activity	Double bind	new tools (Twitter, Blogger) vs. old object (artificial language use)
	Object/motive construction	(a) desire to build community based on “my interests” (b) adapt by searching for terms that reflect Hispanic culture
Tertiary between the old and the given new activity/motive (between the only understood and the effective motive)	Application, generalization; component actions of the given new activity	grade (“fulfill homework requirements”) vs. interests (“find the most interesting material I can”)
Quaternary <i>between</i> the new activity and its neighbor activities	Activity 2: reflection, consolidation	New object: “new research directions for independent study”; creation of new Spanish language blog using WordPress (anonymous)

The introduction of Twitter and Blogger for the present project created a secondary contradiction between the possibilities opened up by the new tools and the old object of artificial language use. This represents a double bind, “a contradiction that uncompromisingly demands qualitatively new instruments for its resolution” (Engeström, 1987, p. 139). This leads to the phase of object/motive construction, in which “the object is constructed through modeling it—and the model [of a *given new* activity] becomes a

general instrument for handling the object” (Engeström, 1987, p. 150). In this phase of object construction, the motive that initially James expressed was his desire to make “a community based on *my* interests” (Emphasis added, Periodic survey 1). James reflected on these interests and his initial observations related to the use of Twitter in the first blog post:

He encontrado que mis hashtags favoritos son de conceptos académicos y literarios, como #transhumanismo, #existencialismo, #ciencia-ficción, #salud #mental, y #derechos #humanos. Por lo general, usan los tuiteros estos hashtags por videos, artículos, o una cita por alguien famoso. Es mi opinión que hay la posibilidad de formando comunidades de tuiteros del mismo interés, pero la mayoría de los aportes en la red son sin recipiente: son públicos, no privados.

“I have found that my favorite hashtags are about academic and literary concepts, like #transhumanism, #existentialism, #science-fiction, #mental #health, and #human #rights. In general, Twitter users use those hashtags for videos, articles, or a quote by someone famous. It is my opinion that there is the possibility of forming communities of Twitter users of the same interest, but most are contributions in the network without a recipient: they are public, not private.” (Translated from blog post 1)

It is important to note that the rules (project parameters) influenced his actions. In the first periodic survey, James explained, “Some user accounts that I find interesting, or content that I would like to share, contains some themes or material that may be inappropriate for the purposes of this class. So I don’t publish things like that. The parameters of the assignments are required, so I follow those” (Periodic survey 1). This hints at an emerging quaternary contradiction. In addition to exploring his interests in the Spanish language, James hoped to continue building his reading and writing skills. He expressed surprise that “fluent Spanish-language articles are actually readable,” which he felt was giving him more confidence in his abilities. Finally, James expressed that “it would be helpful to have more examples of what makes a good text to retweet” (Periodic

survey 1). This can be understood as part of the process of “constructing a new general model for the subsequent activity” (Engeström, 1987, p. 150).

As the semester progressed, James continued to construct the motive of his new given learning activity according to the project parameters. For the second blog post, he began to narrow down texts of interest to analyze related to Indigenous Resistance Day (*el Día de Resistencia Indígena*). James noted, “the texts that I have found give me insight into the ways Spanish-speaking cultures perceive their complex identity as both victims and perpetrators of colonization” (Periodic survey 2). His second blog post reflects his growing understanding of the complex Hispanic identity, based on the texts that he chose to analyze:

Latinoamérica tiene una población en disonancia. Imagínate por un momento, mi amigo norteamericano, la historia de nuestros compañeros al sur: son los descendientes de conquistadores y de sus víctimas también, y los conflictos históricos entre los españoles y las indígenas han nacido un cuerpo político complicado.

“Latin America has a population in dissonance. Imagine for a moment, my North American friend, the history of our friends to the south: they are the descendants of conquistadors and their victims as well, and the historical conflicts between the Spanish and the indigenous people have given birth to a complicated political body.” (Translated from blog post 2)

It is important to note that the object of his activity becomes focused on exploring Hispanic culture more deeply, as James now hopes “to open [himself] up to new ideas and perspectives, rather than parroting on Twitter the points of view that have characterized [his] experience in the Anglophone world” (Periodic survey 2). Thus, James concludes that he is now “challenging [himself] to adapt to the new information by searching for terms that reflect Hispanic culture just as much they do [his] own” (Periodic survey 2).

In the phase of application and generalization, Engeström (1987) explains that “the subject starts to carry out certain actions that correspond to the model of the given new activity” (p. 150). A tertiary contradiction emerges between the motive of the old and the given new activity. James expresses that his main purpose for interacting on Twitter is to fulfill the requirements of the homework. This represents the motive of the old activity of “school going”, in which students are “grade makers” (Engeström, 1987, p 82). Yet James reveals that he is also motivated “to find the most interesting material [he] can,” which represents the object of the given new activity (Periodic survey 2). This contradiction makes visible the transformation underway between the old and the new activity. At the same time, James again returns to how the rules (project parameters) influence the material that he chooses to publish. He explains that the content must “satisfy numerous standards, spoken and unspoken” such that it “cannot transgress certain social norms” or “editorialize excessively on political issues” (Periodic survey 2).

As the semester came to a close, James deviated from the project parameters which led to the consolidation of his created new activity. He explained that, “Political topics were initially discouraged, and that was what I ultimately wanted to talk about. So I talked about them anyway” (Post-survey). In his third and final blog post, James took up the topic of the recent violence in Mexico and shared the link to his post to the already viral hashtag, #YaMeCansé:

El estado y la policía son sin fuerza contra los carteles, y en muchos casos son en complicidad. Un evento recién tuvo lugar el 26 de septiembre, cuando 43 estudiantes desaparecieron en la ciudad mexicana de Iguala. Es probable que ellos estuvieron arrestados y luego dado al cartel. El mayor y su esposa habrían estado responsable.

“The state and the police are without force against the cartels, and in many cases are complicit. One recent event happened September 26, when 43 students disappeared in the Mexican city of Iguala. It is probable that they were arrested and then given to the cartel. The mayor and his wife would have been responsible.”

He went on to say:

En esto, no hay algún en común entre América Latina y los EEUU, en el donde yo soy. En mi país, el gobierno está relativamente estable, aunque hay muchas problemas sociales - pero "not even close" a las de Latino América. Entonces, yo leo estas cosas y pienso que tenga que hacer algo para ayudar cambiarlas.

“In this, there is nothing in common between Latin America and the U.S., where I am from. In my country, the government is relatively stable, although there are a lot of social problems – but ‘not even close’ to those of Latin America. So, I read these things and I think that *I have to do something to help change them.*”
(Emphasis added, Translated from blog post 3)

James’s desire to “do something” reflects the emergence of the new object of his created activity. He commented, “The information that I sought out, especially for the third [blog] entry, set me on the course of enrolling in Spanish 313, and has directed me to new research directions for an independent study next semester” (Post-survey). Additionally, James mentioned that he had created a separate Spanish language blog using WordPress, since he felt it was a better site and it was not connected to his university email account. He also considered possibly continuing to use Twitter. Thus, James’s created new activity goes beyond the given activity of the project. Engeström (1987) states, “The created new aspect is that which emerges *as the new actions produce richer results than expected* and thus expand, transform, or even explode the constraints of the given new, turning into something wider and uncontrollable” (Emphasis in original, p. 147). This cycle represents expansive learning.

Diana. The second case study focuses on Diana, a twenty year old female. She had studied Spanish for two years in junior high and four years in high school, before testing in to the third semester level her freshman year at the university. Additionally, she was of Colombian heritage, and used to speak Spanish with her grandmother when she was very young. However, she reported that she did not currently speak to either family or friends in Spanish and considered English her only native language. She had limited contact with the language through travel experience, having gone on a weekend trip to Spain while studying abroad in the United Kingdom during the summer prior to the present course. As a language learner, Diana considered herself “friendly, outgoing, hard-working and ambitious” and “always willing to learn something new” (Pre-survey). As a technology user, she reported using the internet in English to communicate and share with friends and relatives, to get access to news and other information, to read personal blogs, to look at images or pictures, to watch videos, and to listen to music. Similar to the majority of the other participants, she was a daily user of Twitter, Facebook, and Instagram. Finally, she did not report using the internet in Spanish for any purpose.

Before beginning the project, Diana indicated that she somewhat disliked the idea of using both Twitter and Blogger for the present project because she “never really liked when classes incorporated social media into coursework” (Pre-survey). She accepted the assignment with the hope that the project would “boost [her] confidence level regarding her Spanish skills,” yet anticipated having difficulty because she would often second guess her language ability in order “to avoid looking silly” for saying something incorrectly (Pre-survey). Thus, there was no evidence in Diana’s case of a primary

contradiction (need state) nor secondary contradiction (double bind) at the beginning of the project (See Table 12). This may have occurred because, as Engeström (1987) notes:

“The emergence of Leont’ev’s (1981, p. 402-403) ‘only understood motive’ is a relatively late step in learning activity. It represents a phase when the contradiction is already external, *between two activities* and motives, the old one and the given new one. A forced early instructional introduction of this ‘only understood motive’ may effectively hide—perhaps also prevent—the unfolding of the initial phases of learning activity, that is, the appearance of the primary contradiction (need state) and the secondary contradiction (working out the double bind)” (emphasis in original, p. 146).

Finally, it is important to note that Diana brought to the project her history using Twitter, which influenced her understanding of the rules, or “cultures of use” as defined by Thorne (2003), around the tool. She commented, “I think since it’s the internet, there really are no rules. You can follow whoever without it being odd” (Periodic survey 1).

Table 12 The Phase Structure of Diana’s Learning Activity

Contradiction	Phase	Description
Primary <i>within</i> the components of the old activity	Need state	?
Secondary <i>between</i> the components of the old activity	Double bind	?
	Object/motive construction	(a) “connect with others in a way that may help professionally” (b) “more interaction”
Tertiary between the old and the given new activity/motive (between the only understood and the effective motive)	Application, generalization; component actions of the given new activity	grade (“just to complete the assignments”) vs. connection (“connect with others”)

Quaternary *between* the new activity and its neighbor activities

Activity 2: reflection, consolidation

New object: create fashion blog in English, possibly make it bilingual in the future

A few weeks into the project, Diana’s opinion of the project had begun to change, as she felt that it was “fun to see what others have posted and what others have found” (Periodic survey 1). However, several days prior to completing this survey, she had reached out for help finding accounts to follow and her instructor, the present author, suggested hashtags related to her major in Communication, such as #comunicación (“*communication*”), #relacionespúblicas (“*public relations*”) as well as the corresponding abbreviation in Spanish, #RRPP. Although she indicated she would try these suggestions, she still reported feeling discouraged because she couldn’t find the hashtags she wanted, and yet also expressed the desire to “connect with others in a way that may help [her] professionally” (Periodic survey 1). This represents the initial construction of the object of her new activity.

At the mid-point of the semester, Diana continued to voice evidence of how the rules that guided her personal use of Twitter influenced her use of the tool for the project. She stated, “When I’m using Twitter in English, I just tweet at my friends, not people I don’t know. People don’t usually answer me” (Periodic survey 2). However, there is only evidence of one prior attempt to tweet directly at a user who was not a fellow student in the project³:

³ The usernames (@User, @Diana) are not the actual accounts in order to maintain anonymity.

Table 13 Attempt by Diana to Initiate Interaction with User1

1	Diana	@User1 <i>hola! tienes consejos para mí si quiero empezar un blog de moda?</i> “@User1 hello! do you have advice for me if I want to start a fashion blog?”
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While it may appear that Diana was too easily discouraged by the fact that this particular petition for help was ignored, she continued to explain, “While it’s okay to tweet at people I don’t know, I think it’s weird to do so, so I just don’t” (Periodic survey 2). This tension between the rules that guided her use of the tool in each language caused Diana frustration due to uncertainty about how to complete the assignments. She stated, “I just don’t know what to say to people when composing tweets” (periodic survey 2). This contributed to the emergence of a tertiary contradiction between the object of her new activity (“connect with others”) and that of the old activity (grade), as she expressed her motive was “just to complete the assignments” (Periodic survey 2). This is evident in her second blog post, in which she analyzed texts on the topic of *Día de los Muertos* (“Day of the Dead”) instead of those related to her stated interests.

In the final phase, Diana expressed renewed interest in the project after successfully using additional tools to resolve earlier tensions and find topics about which to compose tweets. She explained, “I decided to think about what I enjoyed in American Internet culture. Then I just googled that, but with ‘in Spanish’. So I googled ‘blogs in Spanish’ and found a website that offered a whole slew of female bloggers, and I went for the beauty blogs” (Periodic survey 3). The website, Blogs by Latinas (www.blogsbylatinas.com), is a directory featuring Hispanic women bloggers who write in English, Spanish, or both languages. It is possible to search for blogs by keyword,

topic, or country. Diana was motivated to read posts on beauty topics and then composed tweets to share links of blogs that she liked, which is a common Twitter practice. She was also motivated by the interaction that she had with these bloggers. As she commented, “There’s one blogger that’s really good about favoriting or responding to tweets that she’s mentioned in! That was really nice” (Periodic survey 3). Thus, she simply stated that the motive of her activity was “more interaction” (Periodic survey 3). The following interactions (See Table 14 and 15) contain evidence not only of direct replies to tweets, but also the additional acknowledgement of tweets through the actions of *retweeting* (sharing the tweet) and *favoriting* (marking the tweet as a favorite).

Table 14 Interaction between Diana and User2

1	Diana	<i>yo tengo este color y me encanta!</i> http://distribelleza.com/labial-diva-mac/...#belleza#maquillaje#course via @User2 “I have this color and I love it! http://distribelleza.com/labial-diva-mac/...#beauty#makeup#course via @User2”
2	User2	FAVORITE
3	User2	@Diana <i>A mi también me encanta, es de mis favoritos :D</i> “@Diana I also love it, it’s one of my favorites :D”
4	Diana	RETWEET, FAVORITE

It is worth noting that although Diana’s stated interests were related to fashion and beauty. She shared posts related to other topics, including several on the topic of Hispanic heritage. Thus, the project provided Diana a space to explore and share her Hispanic identity and personal connection to the culture (See Table 15).

Table 15 Interaction between Diana and User3

1	Diana	<i>Me gusta este articulo. Estoy orgullosa ser Americano y Colombiana!</i> http://joannarenteria.com/blog/hispanicheritagemonth/... #HispanicHeritageMonth #course @User3 “I like this article. I’m proud to be American and Colombian!” http://joannarenteria.com/blog/hispanicheritagemonth/... #HispanicHeritageMonth #course @User3
2	User3	RETWEET
3	User3	@Diana <i>me da gusto que te haya gustado!</i> 🇺🇸 😊 “@Diana I’m glad that you liked it! 🇺🇸 😊”
4	Diana	RETWEET, FAVORITE

At the close of the semester, Diana indicated that she strongly liked using both Twitter and Blogger for the project, which represents a positive change in attitude from the beginning of the semester. Regarding the possibility of continuing to use these tools, she states, “I just started a fashion blog, and it would be really fun to eventually make it bilingual. So if I ever do that, Twitter would be very helpful” (Post-survey). This represents the object of her new created activity, which is different than the object of the given new activity of the project. Thus, Diana also demonstrated an expansive transformation in her activity, similar to that of James.

Christine. The third case study focuses on Christine, a twenty year old female. She had studied Spanish for five years in junior high and high school and had taken two semesters at the university level prior to enrolling in the present course. She was also a heritage learner, who had a grandmother and extended family from Mexico. As a child, she had learned some words from her grandmother. Her family also continued to use short phrases of “broken Spanish” and pet names with each other. Christine had also travelled to Mexico from birth until she was twelve years old. As a language learner, Christine stated, “I am reserved in all aspects. I also do not feel like I can speak very

well, but I understand about 80-90% of what's happening in the new language" (Pre-survey). As a technology user, she reported using the internet in English to communicate and share with friends and relatives as well as a broader audience on the internet, to read personal blogs, to write her own personal blog, to look at images or pictures, to watch videos, to listen to music, to play online games and to get access to news and other information. She was a daily user of Facebook, Instagram, and her personal blog (Tumblr). She used YouTube, discussion boards, and social games on a weekly basis, as well as wikis and voice communication tools on a on a monthly basis. She had her Facebook set in Spanish, but did not use the target language with another other tool or for any other purpose.

Before beginning the project, Christine indicated that she somewhat liked the idea of using both Twitter and Blogger for the project, yet expressed reservations in her explanation of the ratings. In relation to the microblogging tool, she commented, "I don't enjoy joining communities and responding to people or posting what I'm doing all the time, which is what Twitter is" (Pre-survey). For blogging, she stated, "I don't think I have the vocabulary to blog in Spanish" (Pre-survey). In regards to both tools, she brought her prior experience and understanding of their "cultures-of-use" to the present project. Similar to the previous case (Diana), there was no evidence of a need state caused by a primary contradiction in Christine's activity system (See Table 16). Nonetheless, her initial object construction at the beginning of the project involved the acquisition of "more vocabulary" (Pre-survey).

Table 16 The Phase Structure of Christine’s Learning Activity

Contradiction	Phase	Description
Primary <i>within</i> the components of the old activity	Need state	?
Secondary <i>between</i> the components of the old activity	Double bind	?
	Object/motive construction	(a) “more vocabulary” (b) “use most of my new language skills on sites like Tumblr”
Tertiary between the old and the given new activity/motive (between the only understood and the effective motive)	Application, generalization; component actions of the given new activity	?
Quaternary <i>between</i> the new activity and its neighbor activities	Activity 2: reflection, consolidation	New object: “I would rather use a website like Tumblr where I can read and reblog and learn the language”

A few weeks into the project, several tensions had emerged in Christine’s activity system, which she perceived as impeding her ability to attain the object that she had initially constructed (vocabulary acquisition). She expressed a tension between the division of labor (project tasks) and the object, stating, “Retweeting things definitely does not help. I am not forming my own words” (Periodic survey 1). Here, it should be noted that Christine’s object was not aligned with that of the project, in the sense that she does not reference the objectives of the first phase (to collect texts to analyze for products, practices, and perspectives). Similar to the first case (James), Christine also felt the rules (project parameters) were hindering her ability to communicate and use the Twitter as she wanted to engage in the topic of feminism. She commented, “It’s hard to find users that

are 100% ‘class appropriate’ that tweet what I am interested in. There’s a lot of controversy and discomfort around things I want to read about” (Periodic survey 1). In this way, she felt that she could not express her feelings in her own voice. Finally, Christine again stressed that she did not want to be part of an online community and felt forced to do so for a grade. This can be understood as a tension between community and object. At this point, she mentions a deviation from the project to resolve these tensions, stating, “I plan to continue to do the assignments, but use most of my new language skills on sites like Tumblr. On those sites, I can participate in a way which I am more comfortable while still using my new skills” (Periodic survey 1).

At the mid-point of the semester, several tensions that had emerged in Christine’s activity system remained unresolved, in spite of efforts by the instructor to modify the tasks based on students’ feedback (i.e. also counting composed original tweets toward weekly requirement). She continued to express her discontent with the project, stating “Most times I feel like it is more of a chore and homework assignment than something that is fulfilling and helping my knowledge of Spanish language and culture” (Periodic survey 2). Additionally, a new tension emerged related to the tasks, as she explained, “I think we are following too many accounts. I have discussed with some classmates that we wouldn’t even follow this many people on our personal accounts. Sometimes it is hard to keep up with so many tweets” (Periodic survey 2). This again demonstrates that students’ prior experiences shape their understanding of the “cultures of use” of tools. This also affected how Christine approached interaction on Twitter. She explained, “I like to ask questions to the Twitter community as a broad place through hashtags rather than talk to individuals” (Periodic survey 2). Although she composed six tweets with questions

directed to various hashtags (feminism, women, equality, etc.), none received a reply. For the second blog post, Christine also selected texts to analyze based on *Día de los Muertos* (“Day of the Dead”) instead of those related to her stated interests of feminism and fashion.

In the final phase, Christine continued to express her disillusion with the project, yet acknowledged that the efforts by the instructor to alter tasks based on feedback (i.e. require following fewer accounts) had made it more enjoyable. Nonetheless, Christine was still discouraged to participate in the project. She explained, “I am not comfortable using Twitter, which should not be confused with uneducated with Twitter. I understand how the website works, I just don’t like it. I’d be more interested in the assignment if we had a choice of how to branch out in Spanish” (Periodic survey 3). In order to resolve this tension, she had adopted additional tools to help complete the tasks, stating “I usually find my images that I tweet from places like Tumblr” (Periodic survey 3). Thus, she had deviated from the project requirements by choosing her preferred tool to find content in Spanish. For the final blog post, Christine wrote about her make-up procedure, which she shared to several hashtags (make-up, fashion).

At the end of the semester, Christine’s attitude toward both tools had become less favorable. She indicated that she strongly disliked having used Twitter and somewhat disliked having used Blogger. She explained:

“Some people really do not flourish on networking sites like Twitter and are forced to change their entire networking habits for a single assignment. I would switch it all over to Blogger or another blogging site that is easier to figure out how to follow people. The Blogger home page was very confusing with a lot of tabs and graphs. It was hard to find exactly what you were looking for at times, especially for such a simple assignment for simply posting” (Post-survey).

It is worth noting that, unlike James and Diana, Christine did not interact with native speakers on either platform. Finally, although some tensions were resolved by the instructor through modifications to the tasks, it was ultimately Christine's deviation from the required tools that provided the potential for expansive learning. Instead of continuing to use Twitter and Blogger, she stated, "I would rather use a website like Tumblr where I can read and reblog and learn the language" (Post-survey).

CHAPTER 5

CONCLUSIONS

Summary of Findings

The first research question examined participants' use of technology, the frequency of its use, and purposes for its use. The vast majority of participants (more than 80%) reported being daily or weekly users of a number of digital tools in English, such as Facebook, Twitter, Instagram, and YouTube. Furthermore, the majority of the participants use the internet with the purpose of connecting and consuming information. It is worth noting that the majority of participants do not create content to share on the internet, but rather consume content. This was in stark contrast to technology use in Spanish, in which the vast majority of participants (more than 80%), with a few exceptions, reported that they never used any digital tools in the target language (See Table X). The purposes that students reported for using the internet in Spanish reflected the overall low frequency of use of the digital tools. Thus, the low percentages reported for both frequency of technology use and purposes for using the internet in Spanish highlight the need to harness these tools for language learning.

The second research question examined students' values and attitudes toward using Twitter and Blogger as tools for learning Spanish and how they changed over time through their use in the project during the semester course. At the beginning of the semester, the majority of participants responded positively to the idea of using both Twitter and Blogger as part of the course. The themes that emerged in the analysis of the open-ended answers attributed positive attitudes toward using Twitter and Blogger to the prior use of tools or the opportunity to learn how to use the tools, perception of enjoying

the task, and their affordances for language learning. A smaller percentage of participants responded unfavorably to the use of the tools. The themes that emerged in the analysis of the open-ended answers attributed negative attitudes to personal preferences, or to non-use of the tools. This demonstrates the opportunity to harness popular digital tools, which students may already use in their personal lives, for instructional purposes in order to help them realize their potential usefulness for language and culture learning.

At the end of the semester, the vast majority of participants responded positively to having used both Twitter and Blogger as part of the course. The themes that emerged in the analysis of the open-ended answers attributed positive attitudes to the enjoyment of using the tools, as well as their affordances for language and culture learning and as a flexible and open platform to share writing with a wide audience. A smaller percentage disliked having used Twitter and Blogger as part of the course. The negative attitudes were attributed to personal preferences about the tools and also to the nature of the assignment. Overall, the attitudes of the participants to using both Twitter and Blogger for the project showed modest improvement from the beginning to the end of the semester. Finally, the participants reported the features and affordances of the tools that they found most valuable. For Twitter, the participants overwhelmingly valued the tool for networking and sharing with the class and native Spanish speakers, as well as the affordances for learning that this provided (i.e. contribution to knowledge of grammar and vocabulary, contribution to knowledge of Spanish-speaking cultures, and improvement in reading skills and learning through reading tweets). For Blogger, the participants valued being able to express ideas without character limit and being able to add links and other media, as well as the affordances for learning that this provided (i.e.

contribution to knowledge of grammar and vocabulary, improvement in reading and writing skills).

The third research question used the cases of three participant outliers to examine the tensions that emerged in their activity systems throughout the process of using microblog (Twitter) and blog (Blogger) tools for the project, the underlying reasons for the tensions, and the manner in which they were potentially resolved. James was the only participant to evidence a complete cycle of expansive learning through the resolution of successively emerging contradictions in his activity system. Through his participation in the project, he overcame the primary contradiction in order to find his own voice in the target language using the digital tools and, in the end, constructed the object of his new activity by creating an anonymous personal blog in Spanish and deciding to enroll in the next course as well as independent study. Diana also demonstrated expansive learning through the resolution of tensions, although the beginning phases of the cycle were not observed in the data. By the end of the project, she had also started a fashion blog, which she considered making bilingual one day. Finally, Christine also demonstrated a partial cycle of expansive learning by deviating from the tools required for the project and harnessing her preferred blogging site, Tumblr, for language learning.

Pedagogical Implications

As was seen in answering the three research questions, the experiences that students have using technology outside of the classroom can impact their perceptions of adopting these tools for educational purposes. These prior experiences and perceptions related to the “cultures of use” of a tool can contribute to the tensions that emerge in their activity systems. Thus, instructors should take into account students prior experiences

with technology when adopting new tools in the classroom. In this way, instructors can anticipate strong preference or aversion toward certain tools and design projects accordingly. Additionally, instructors should build flexibility into projects, to the extent possible, in order to resolve tensions as they emerge. For example, in the present project, the weekly tasks were modified based on the feedback of students.

Instructors must also carefully plan projects in order to reap the full potential of digital tools. As Blake (2013) points out, the “benefits do not automatically or deterministically derive from the tools themselves but rather how CMC is used in the service of promoting meaningful interactions and real intercultural reflections” (p. 105). Thus, a pedagogical framework, such as Bridging Activities (Thorne & Reinhardt, 2008), can be useful for designing projects. After a project has been implemented, it is also vital that instructors reflect on ways in which it can be improved. For example, the present project could benefit from being more fully integrated into coursework, which was a tension brought up by several students. In addition, the instructor should make sure that students fully understand the nature of the tasks by providing more models of student work. As was seen in the case of Christine, negative attitudes can arise when the objective of the project is not aligned with students’ objectives for their learning. This could possibly be mitigated by working with the project more in class instead of as a primarily out-of-class project.

Limitations

The present study was limited by several factors including the number of participants and several points related to the nature of data collection. Due to the fact that participants were solicited as volunteers from the two intact groups in which the project

was implemented, there could be a more positive bias among those who chose to participate in the study. Additionally, although not the intent of the present study, the limited number of participants (15 total) would not allow for generalizable results. Furthermore, several details related to the nature of data collection could limit the results. All students were required to complete the surveys for credit as part of the course, which may have influenced their answers. In some cases, the answers provided on the surveys were not completely clear and could have been triangulated through the use of interviews. Finally, the instruments relied primarily on self-reported data, which is not precise and may be biased.

Future Research

Future studies could verify the self-reported data with quantitative data. This could focus on linguistic gains, such as measuring lexical acquisition or targeted reading and writing skills. Additionally, the present author identified a gap in the literature around means to measure cultural learning. As language teachers work to align instruction with the ACTFL Standards, there also need to be meaningful models in the literature for measuring students' acquisition of cultural learning. The present project aimed to allow students to explore the products, practices, and perspectives of the target culture; however, it was not within the scope of the study to measure gains in cultural knowledge on the part of students.

The present study contributes to the understanding of transformation of practice in this context. With the proliferation of digital tools which are increasingly being harnessed for pedagogical purposes, Activity Theory proves to be a useful heuristic for

improving practices by situating analysis in local contexts. As Lantolf and Thorne (2006) state:

“A focus on activity unites history with dynamic transformation through an understanding of everyday human practices as mediated by symbolic, communicative, and material resources. In this sense, individual and communal practices are on the one hand articulations of historical continuance; and on the other hand, they possess revolutionary potential for individual and collective change” (p. 233)

Future research should explore the application of Activity Theory in other contexts of pedagogical change.

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APPENDIX A
DATA COLLECTION INSTRUMENTS

Pre-Survey (adapted from Antenos Conforti, 2009 and Lomicka & Lord, 2011)

Demographic and Background Information:

Name: _____

Age: _____

Gender: Male, Female

Country of birth: _____

What is/are your native language(s)? _____

What language(s) do you speak? _____

How long have you studied Spanish? _____

Please list all courses taken (any level; pre-K through university): _____

Do you speak Spanish with family and/or friends? yes, no

If yes, please describe. _____

Did you speak Spanish with family and/or friends when you were young? yes, no

If yes, please describe. _____

Have you ever traveled and/or lived abroad? yes, no

If yes, please list where you went, for how long, and at what age.

How do you describe yourself in terms of personality? How do you describe yourself as a language learner?

Technology Use

How often do you use these social media sites do you use in ENGLISH? Indicate frequency of use. *Never, A few times a year, Monthly, Weekly, Daily*

- Facebook
- Twitter
- Google+
- Instagram
- Pinterest
- LinkedIn
- reddit
- YouTube
- Second Life
- Social gaming

- a personal blog
- Wiki (any, including Wikipedia, Wikispaces, etc.)
- Voice communication tools (Skype, FaceTime, etc.)
- Discussion Boards
- Chat rooms
- Other (list all): _____

What purposes do you normally have for using the internet in ENGLISH? Select all that apply.

- to communicate and share with friends and relatives
- to communicate and share with a broader audience on the internet, including people I do not know in person
- to get access to news and other information
- to read personal blogs
- to write my own personal blog
- to look at images or pictures
- to create and share images
- to watch videos
- to create and share videos
- to listen to music
- to play online games
- Other (describe): _____

If you create content in English (images, videos, music, etc) to share, what kind & where do you share it? Describe. _____

What (English-language) online “communities” do you participate in based on your personal interests? _____

How often do you use social media sites do you use in SPANISH? Indicate frequency of use. *Never, A few times a year, Monthly, Weekly, Daily*

- Facebook
- Twitter
- Google+
- Instagram
- Pinterest
- LinkedIn
- reddit
- YouTube
- Second Life
- Social gaming
- a personal blog
- Wiki (any, including Wikipedia, Wikispaces, etc.)

- Voice communication tools (Skype, FaceTime, etc.)
- Discussion Boards
- Chat rooms
- Other (list all): _____

What purposes do you normally have for using the internet in SPANISH? Select all that apply.

- to communicate and share with friends and relatives
- to communicate and share with a broader audience on the internet, including people I do not know in person
- to get access to news and other information
- to read personal blogs
- to write my own personal blog
- to look at images or pictures
- to create and share images
- to watch videos
- to create and share videos
- to listen to music
- to play online games
- Other (describe): _____

If you create content in Spanish (images, videos, music, etc) to share, what kind & where do you share it? Describe. _____

What (Spanish-language) online “communities” do you participate in based on your personal interests? _____

General questions about using Twitter & Blogger in SPA202

As was discussed in class, you will be using the tools Twitter and Blogger this semester to communicate in Spanish with fellow students and with a wider native speaker audience related to your topics of interest.

What is your initial reaction to the idea of using Twitter for microblogging as part of this Spanish course?

Strongly like, Like, Somewhat like, Somewhat dislike, Dislike, Strongly dislike

Explain: _____

What is your initial reaction to the idea of to using Blogger for writing a blog as part of this Spanish course?

Strongly like, Like, Somewhat like, Somewhat dislike, Dislike, Strongly dislike

Explain: _____

What do you hope to get out of using Twitter and Blogger as part of the course this semester? What goals do you have?

What do you expect to learn?

Do you anticipate having any difficulty microblogging (Twitter) or publishing your own personal blog (Blogger) in Spanish? Explain.

Post-Survey (adapted from Antenos Conforti, 2009 and Lomicka & Lord, 2011)

Twitter:

Now having used Twitter for microblogging as part of this Spanish course, what is your reaction to using it?

Strongly like, Like, Somewhat like, Somewhat dislike, Dislike, Strongly dislike

Explain: _____

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

- having a 140 character limit
- being able to share links other media (images, videos, etc.)
- being able to have delayed communication
- being able to have instantaneous communication
- being able to reply to someone's tweet
- following native Spanish speakers
- building a community with classmates in your class
- becoming part of a virtual community that contains native speakers
- other: _____

Which is most important to you? _____

Learning Spanish language and cultures through Twitter

In this section, please indicate whether you agree or disagree with these statements about learning Spanish with Twitter. Please choose response that best matches your opinion:

Strongly agree, Agree, Somewhat agree, Somewhat disagree, Disagree, Strongly Disagree

1. The tweets contributed to my knowledge of Spanish grammar and vocabulary.
2. The tweets contributed to my knowledge of Spanish-speaking cultures.
3. Because of Twitter, I put more time into this class than a regular Spanish class.
4. I was able to infer meaning from the tweets from the context/conversations.
5. My reading skills in Spanish have improved as a result of Twitter.
6. My writing skills in Spanish improved as a result of Twitter.
7. I learned a lot from the replies to my tweets.
8. I learned a lot from replying to other students' tweets.
9. I learned a lot from reading other people's tweets.
10. Having the professor tweet and reply to the tweets increased my learning potential.

Social aspects of Twitter

These next questions will ask you to agree or disagree with the social networking part of Twitter. Please choose the response that best matches your opinion.

Strongly agree, Agree, Somewhat agree, Somewhat disagree, Disagree, Strongly Disagree

1. I found myself wanting to post tweets.
2. I liked that I could share information about my life.
3. I liked that I could find and share information about my personal interests.
4. I enjoyed reading the tweets of fellow students.
5. I enjoyed reading the tweets of native speakers.
6. I enjoyed reading past conversations of others in my timeline not related to me.
7. I enjoyed interacting with my classmates through replies and mentions.
8. I enjoyed interacting with native speakers through replies and mentions.
9. I felt a sense of community with my classmates through tweeting.
10. I felt a sense of community with a broader audience, including followers not in my class.

Here are short answer questions about your experience using Twitter.

1. What did you like most about Twitter? Why?
2. What did you like least about Twitter? Why?
3. Do you think you will use Twitter for practicing Spanish in the future? Yes, No, Maybe Explain
4. Do you think you will use Twitter in Spanish or in general for your own personal use? Yes, No, Maybe Explain
5. If you did not get responses to your tweets, did that negatively shape your opinion of using Twitter to learn Spanish? Explain.

Blogger:

Now having used Blogger for writing a blog as part of this Spanish course, What is your reaction to using it?

Strongly like, Like, Somewhat like, Somewhat dislike, Dislike, Strongly dislike

Explain: _____

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

- being able to express ideas without character limit
- being able to add links and other media (images, video, etc.)
- sharing your posts with your virtual community on Blogger
- commenting on others' blogs
- reading other fellow students' blog posts
- reading the blog posts of native speakers
- reading the comments on my blog
- reading the comments on others' blogs

- other: _____
Which is most important to you? _____

Learning Spanish language and cultures through blogs

In this section, please indicate whether you agree or disagree with these statements about learning Spanish. Please choose response that best matches your opinion.

Strongly agree, Agree, Somewhat agree, Somewhat disagree, Disagree, Strongly Disagree

1. The blog posts contributed to my knowledge of Spanish grammar and vocabulary.
2. The blog posts contributed to my knowledge of Spanish-speaking cultures.
3. Because of using blogs, I put more time into this class than a regular Spanish class.
4. I was able to infer meaning in the blogs from the context.
5. My reading skills in Spanish have improved as a result of Blogger.
6. My writing skills in Spanish improved as a result of Blogger.
7. I learned a lot from the comments on my blog posts.
8. I learned a lot from commenting other students' blog posts.
9. I learned a lot from reading other people's blog posts.
10. Having the professor blog and comment on my posts increased the learning potential.

Social aspects of Blogger

These next questions will ask you to agree or disagree with the social networking part of Twitter. Please choose response that best matches your opinion.

Strongly agree, Agree, Somewhat agree, Somewhat disagree, Disagree, Strongly Disagree

1. I found myself wanting to write blog posts.
2. I liked that I could share information about my life.
3. I liked that I could share information about my personal interests.
4. I enjoyed reading blog posts of fellow students.
5. I enjoyed reading blog posts of native speakers.
6. I enjoyed reading my classmates' comments on my blog.
7. I enjoyed reading native speakers' comments on my blog.
8. I enjoyed reading the comments on other student's blogs.
9. I felt a sense of community with my classmates through writing a blog.
10. I felt a sense of community with a broader audience through writing a blog.

Here are questions your experience about Blogger.

1. What did you like most about Blogger? Why?
2. What did you like least about Blogger? Why?
3. Do you think you will use Blogger to write in Spanish in the future? Yes, No, Maybe Explain
4. Do you think you will use Blogger for your own personal use? Yes, No, Maybe Explain

5. If you did not get responses to your posts or comments, did that negatively shape your opinion of using Blogger to learn Spanish? Explain.

General questions about using Twitter & Blogger in SPA202:

Here are general questions about your experience microblogging and blogging as part of the course.

1. Did you have any difficulty or experience any frustration? What did you do to resolve it? Explain
2. What motivated/discouraged you to participate in this interaction?
3. Do you feel that you achieved your goals for using Twitter and Blogger this semester? Why or why not? Explain.
4. What did you learn? How might this be useful to you in your future?
5. Do you feel that this interaction improved your Spanish skills (if yes, specify which ones)?
6. What were some of the strengths of this experience?
7. What were some of the weaknesses of this experience?
8. What ideas do you have for improving the use of Twitter and Blogger in the course?
9. Is there anything else you would like to add?

Periodic surveys (adapted from Ryder & Yamagata-Lynch, 2014)

Twitter (week 3, 8, and 13):

1. How do you feel about microblogging (Twitter)? Explain.
2. Are you having any problems, difficulty, or experiencing any frustration? What have you done or could be done to resolve it? Explain.
3. Have you experienced any failures to communicate with other users? Explain.
4. Have you had any surprises using Twitter to interact? Explain.
5. What motivates or discourages you to participate in this interaction? Explain.
6. Can you think anything that is influencing the way you interact through Twitter? What informal rules and formal rules do you follow for interacting? Explain.
7. Do you rely on any additional resources when using Twitter? Is there anything you wish was different in terms of resources and instructions that could help you complete the tasks or achieve your goals?
8. What are you learning from using Twitter? Do you feel that this interaction is improving your Spanish skills (if yes, specify which ones)?
9. What are your goals for using Twitter for the rest of the semester?
10. Any additional comments, suggestions, concerns?

Blog (week 6 and 11):

1. How do you feel about blogging (Blogger)? Explain.
2. Are you having any problems, difficulty, or experiencing any frustration? What have you done or could be done to resolve it? Explain.
3. Have you experienced any failures to communicate with other users? Explain.
4. Have you had any surprises using Blogger to interact through comments/replies? Explain.
5. What motivates or discourages you to participate in this interaction? Explain.
6. Can you think anything that is influencing the way you interact through Blogger? What informal rules and formal rules do you follow for interacting? Explain.
7. Do you rely on any additional resources when using Blogger? Is there anything you wish was different in terms of resources and instructions that could help you complete the tasks or achieve your goals?
8. What are you learning from using Blogger? Do you feel that this interaction is improving your Spanish skills (if yes, specify which ones)?
9. What are your goals for using Blogger for the rest of the semester?
10. Any additional comments, suggestions, concerns?

APPENDIX B
PROJECT PARAMETERS

Handout for students on appropriate use of Twitter & Blogger for project:

General project parameters

- All posts (tweets, retweets, replies, blog posts, comments) must be in Spanish, appropriate and related Spanish course. Avoid topics that are political or controversial.
- Do not share any pictures/images, video, or other content that could be deemed offensive or reflect negatively upon you or the university.
- Follow the Student Code of Conduct
- Do not share any personal information

Parameters for following on Twitter

- Follow accounts of individuals or groups related to appropriate topics of interest (Ask instructor approval if unsure)
- Follow accounts of appropriate news, commercial, or non-profit entities (museums, universities, etc.)

Parameters for interacting with Native Speakers on Twitter

- Only interact with appropriate accounts that you follow
- Read and be familiar with the tweets of the account before following and engaging in interaction to be sure that it is appropriate
- Be respectful
- If someone is harassing you (“trolling”), use the *mute*, *block*, and *report* functions (<https://support.twitter.com/articles/20170408-reporting-a-tweet-or-direct-message-for-violations>). Do not reply or engage in any interaction. Please notify your instructor.

APPENDIX C
PROJECT TASKS

Twitter tasks:

Students completed the following Twitter tasks and/or discussed the following questions throughout the week using the course hashtag, as preparation to write the blog posts.

Week	Tasks:
phase 1 - Observation and Collection	
1	<u>Compose</u> 10 or more tweets to answer the following questions to introduce yourself and reflect on your use of social media: ¿De dónde eres? ¿Qué estudias? ¿Qué te interesa? ¿Qué redes sociales usas (Facebook, Twitter, etc.)? ¿Cómo participas en las redes sociales? ¿Qué compartes cuando usas esos sitios? <u>Reply</u> to at least 5 tweets of your classmates.
2	Use the search function to find appropriate Spanish-language topic <i>hashtags</i> according to your interests (#negocios, #videojuegos, etc.) and also by doing keyword searches (without hashtag). <u>Write down a list</u> of your favorite hashtags. <u>Retweet</u> at least 10 appropriate tweets that contain a link to an article/blog or attached ‘text’ (video or image with text, like a political cartoon or infographic) that may interest you to examine critically (Blog Post #2). These are cultural <i>products</i> . The retweets should be from different hashtags or users/accounts. Be sure to read their timelines (TL) to ensure that their tweets are appropriate for our course and <u>follow</u> them!
3	<u>Follow</u> at least 20 users/accounts that interest you from keyword searches or your favorite hashtags. Be sure to read their timelines (TL) to ensure that their tweets are appropriate for our course. As you begin to follow more accounts, Twitter starts to make better suggestions for you based on your interests. <u>Retweet</u> at least 10 appropriate tweets that contain a link to an article/blog or attached ‘text’ (video or image with text, like a political cartoon or infographic) that may interest you to examine critically (Blog Post #2). The retweets should be from different hashtags or users/accounts. Update your list of favorite hashtags, if necessary. Begin observing and taking notes about how these hashtags are being used. These patterns of use are cultural <i>practices</i> .
4	<u>Follow</u> at least 20 more (appropriate) users/accounts that interest you from keyword searches or your favorite hashtags. <u>Retweet</u> at least 10 appropriate tweets that contain a link to an article/blog or attached ‘text’ (video or image with text, like a political cartoon or infographic) that may interest you to examine critically (Blog Post #2). The retweets should be from different hashtags or users/accounts (<u>follow</u> them!). Update your list of favorite hashtags, if necessary. Continue observing and taking notes about how these hashtags are being used.
5	<u>Follow</u> at least 20 more (appropriate) users/accounts that interest you from keyword searches or your favorite hashtags. <u>Retweet</u> at least 10 appropriate tweets that contain a link to an article/blog or attached ‘text’ (video or image with text, like a political cartoon or infographic). The retweets should be from different hashtags or users/accounts (<u>follow</u> them!). Update your list of

	favorite hashtags, if necessary. Continue observing and taking notes about how these hashtags are being used.
phase 2 - Exploration and Analysis	
6	As you read and comment your classmates' blogs this week, continue to build your network and begin to narrow down the 'texts' that interest you to examine critically (Blog Post #2). <u>Follow</u> at least 20 more (appropriate) users/accounts that interest you from keyword searches or your favorite hashtags. <u>Retweet</u> at least 10 appropriate tweets that contain a link to an article/blog or attached 'text' (video or image with text, like a political cartoon or infographic).
7	Select the one of 'texts' that you will use for Blog Post #2 (Keep in mind that the final 2-3 texts you choose need to be about roughly the same topic to make comparisons between them). Begin to reflect and hypothesize about the role the text plays as cultural product that is connected to patterns of cultural practices (through Twitter and beyond) and perspectives. <u>Compose</u> 10 or more tweets about the selected text, using the following questions to guide your reflection: ¿Cómo interpretas el texto? ¿De qué se trata? ¿Qué perspectivas culturales refleja? (You may want to ask questions of a knowledgeable native speaker that you follow, such as the author of the text. If so, be respectful and polite. Do not be offended if they don't answer you). <u>Reply</u> to at least 5 tweets of your classmates.
8	Select another 'text' that you will use for Blog Post #2 (Keep in mind that the final 2-3 texts you choose need to be about roughly the same topic to make comparisons between them). Begin to reflect and hypothesize about the role the text plays as cultural product that is connected to patterns of cultural practices (through Twitter and beyond) and perspectives. <u>Compose</u> 10 or more tweets about the selected text, using the following questions to guide your reflection: ¿Cómo interpretas el texto? ¿De qué se trata? ¿Qué perspectivas culturales refleja? (You may want to ask questions of a knowledgeable native speaker that you follow, such as the author of the text. If so, be respectful and polite. Do not be offended if they don't answer you). <u>Reply</u> to at least 5 tweets of your classmates.
9	Follow at least 10 more appropriate users to continue to build your network. If you plan to select a third text for comparison, <u>compose</u> 10 tweets or more about it using the same reflection questions: ¿Cómo interpretas el texto? ¿De qué se trata? ¿Qué perspectivas culturales refleja? If not, compose 10 tweets or more reflecting on the two texts you have already chosen using questions posed in the task for Blog Post #2 as a guide. <u>Reply</u> to at least 5 tweets of your classmates.
10	<u>Follow</u> at least 10 more appropriate users to continue to build your network. <u>Retweet</u> 10 or more tweets of interest, OR <u>compose</u> 10 or more tweets on topics related to your selected texts.
phase 3 - Creation and Participation	
11	As you read and comment your classmates' blogs this week, <u>follow</u> at least 10 more appropriate users to continue to build your network. <u>Retweet</u> 10 or more

	tweets of interest, OR <u>compose</u> 10 or more tweets of your own which are relevant to discussions of our class or the communities you're following. For Blog Post #3, you will create a text to share with the community of interest you have observed in the previous phases. Begin to brainstorm ideas. You may want to discuss possible topics using our course hashtag.
12	<u>Follow</u> at least 10 more appropriate users to continue to build your network. <u>Retweet</u> 10 or more tweets of interest, OR <u>compose</u> 10 or more tweets of your own which are relevant to discussions of our class or the communities you're following. For Blog Post #3, you will create a text to share with the community of interest you have observed in the previous phases. Begin to brainstorm ideas. You may want to discuss possible topics using our course hashtag.
13	<u>Follow</u> at least 10 more appropriate users to continue to build your network. <u>Retweet</u> 10 or more tweets of interest, OR <u>compose</u> 10 or more tweets of your own which are relevant to discussions of our class or the communities you're following. For Blog Post #3, you will create a text to share with the community of interest you have observed in the previous phases. Continue to brainstorm ideas. You may want to discuss possible topics using our course hashtag.
14	<u>Follow</u> at least 10 more appropriate users to continue to build your network. <u>Retweet</u> 10 or more tweets of interest, OR <u>compose</u> 10 or more tweets of your own which are relevant to discussions of our class or the communities you're following.
15	<u>Follow</u> at least 10 more appropriate users to continue to build your network. <u>Retweet</u> 10 or more tweets of interest, OR <u>compose</u> 10 or more tweets of your own which are relevant to discussions of our class or the communities you're following.

Twitter rubric:

Students were scored each week based on their completion of the assigned tasks.

5 points	EXCEEDS EXPECTATIONS
	<i>Actively</i> participates by completing more than the minimum required Twitter tasks, such as making additional tweets, retweets, or replies which are appropriate and relevant to continue discussions. Consistently offers <i>excellent & insightful</i> contributions.
4	MEETS EXPECTATIONS
	Participates by completing the required Twitter tasks, which are always appropriate and relevant to continue discussions. Consistently offers good contributions.
3	APPROACHES EXPECTATIONS
	Participates by completing some of the required Twitter tasks, which are always appropriate and relevant to continue discussions. Offers some contributions.
2	MEETS FEW EXPECTATIONS
	Completes few of the required Twitter tasks, which are appropriate and relevant to continue discussions. Offers few contributions.
1	DOES NOT MEET EXPECTATIONS
	Does not complete most of the Twitter tasks. Minimal attempt to contribute.
0	NO ATTEMPT

Blog tasks:

Blog Post 1: “Finding Communities”

Objectives (Phase 1 - Observation and Collection)

- Students observe practices and collect texts of interest in L2 Twitter communities through topic hashtags or keyword searches
- Students report on observation of texts and practices of interest in the L2 Twitter communities

Description

Social media allows us to connect and participate in multilingual *communities* at home and around the world. Global citizens need to be proficient in English and in other languages in order to directly access knowledge and information generated by other countries and cultures. This depends not only on language proficiency, but also on the ability to apply knowledge of the perspectives, products and practices of a culture, and the development of insight into one’s own language and culture.

Task

1. Answer the following reflection questions in Blog Post #1:
 - ¿Cuáles son tus *hashtags* favoritos? ¿Por qué?
 - ¿Cómo usan los tuiteros estos *hashtags*? ¿Interactúan los tuiteros que mandan tuits (tweets) al *hashtag*? ¿Tienen charlas programadas? ¿Qué comparten (ligas, imágenes, videos)? ¿Piensas que forma una ‘comunidad’ o varias ‘comunidades’? Explica.
 - En general, ¿de dónde son las personas que sigues? ¿Qué edad tienen? ¿A qué se dedican (profesionista, estudiante, etc.)? ¿Tienes algún tuitero favorito?
2. Share you completed Blog Post #1 by tweeting it to our course hashtag.
3. Participate in the discussion by making *at least* four (4) comments on the blogs, which can include replies to comments left on your blog

Blog Post 2: “Products, Practices and Perspectives”

Objectives (Phase 2 - Exploration and Analysis)

- Students select 2 of their collected texts to examine critically
- Students examine and hypothesize about how these cultural products (texts) are connected to patterns of cultural practices (through Twitter and beyond) and the perspectives which inform them

Description

Cultural *practices* are patterns of behavior accepted by a society. They represent the knowledge of “what to do when and where.” Some examples of cultural practices include: rites of passage, games, sports, entertainment (music, dance, drama, etc.), celebrations (holidays, birthdays, etc.), among others including culturally specific practices related to the use of social media and other Spanish-language websites. Practices are derived from the traditional ideas, attitudes, and values (*perspectives*) of a culture.

The *products* of a culture also reflect the *perspectives* of that culture and are often related to practices. Products may be tangible (e.g., a painting, or a traditional dish) or intangible (e.g., an oral tale, or a system of education). Whatever the form of the product, its presence within the culture is required or justified by the underlying beliefs and values (*perspectives*) of that culture, and cultural practices involved in the use of that product.

For example, the following product (a “meme”/ advertisement, taken from the Facebook page for Alpura milk, a Mexican company) makes a comparison between two practices, putting *crema* (similar to sour cream) on *tacos dorados* and a *quinceañera* (girl turning 15) having *chambelanes* (boys who accompany the birthday girl for the party and dances). It is meant to be funny, but at the same time suggests the perspective that these two practices are important in Mexican culture.



In phase 2, you will examine selected texts’ (articles, blog posts, videos, or images with text, like political cartoons or memes) as cultural products and hypothesize about how they are connected to patterns of cultural practices (through Twitter and beyond) and the perspectives which inform them.

Task

1. Select 2-3 ‘texts’ (articles, blog posts, videos, or images with text, like political cartoons or memes), which relate to roughly the same topic and are not produced by the same author. They may be different types of texts.

2. Answer the following reflection questions in Blog Post #2:
 - ¿Qué textos escogiste? ¿Cómo encontraste esos textos (a través de cuál hashtag o tuitero)? (Link or embed these texts in your post*)
 - ¿De qué se tratan esos textos? Da un resumen breve de tu interpretación de cada texto. ¿Qué perspectivas culturales reflejan? Tomando en cuenta que la interpretación depende mucho de las perspectivas culturales, ¿piensas que hay algo cultural que te impida una comprensión total de los textos? Explica. (Puedes incluir preguntas para tus lectores).
 - Compara y contrasta los dos textos. ¿En qué se diferencian? ¿En qué se asemejan? Explica.
 - ¿De dónde es el autor de cada texto? ¿Quién lo va a leer (el público)?
 - ¿Cuál es la función de cada texto dentro de la ‘comunidad’ donde lo encontraste (informar, persuadir, opinar, influenciar, enseñar, etc.)? ¿Qué te hace pensar eso?
 - ¿Qué tipo de lenguaje usan (formal vs. informal, etc.)? ¿Por qué?
 - ¿Existen textos semejantes en inglés? ¿En qué se diferencian? ¿En qué se asemejan? Explica. (You may want to link to examples of similar texts in English to compare and contrast*)

** Be sure to attribute the original source. Do not embed copyrighted material, link to it instead.*

3. Share you completed Blog Post #2 by tweeting it to our course hashtag. (You may also share it to relevant hashtags you’ve been following to reach a wider audience)
4. Participate in the discussion by making *at least* four (4) comments on the blogs, which can include replies to comments left on your blog

Blog Post 3: “Joining Communities”

Objectives (Phase 3 - Creation and Participation)

- Students produce blog post (which can include other embedded texts that they create) that is comparable to the texts examined in the previous phase
- Students contribute their texts by sharing via Twitter to topic hashtags and reflect on the reaction

Description

In the previous phases, you observed and examined the *products, practices,* and *perspectives* of Twitter communities of interest. Now it is your turn to create a text to contribute to your selected community.

Task

1. Create your own original text in Spanish to post to your blog by choosing ONE of the following options or get instructor approval for your own idea:
 - An original blog post about a topic that would be of interest to the community based on your observations. The blog post can pull together your thoughts based on other articles/blogs you have read in Spanish or English (include links), or other experience/knowledge that you have.
 - An original video about a topic that would be of interest to the community based on your observations.
 - An original infographic about a topic that would be of interest to the community based on your observations.

Be creative! What unique insights do you have to share with this community?
2. Share you completed Blog Post #3 by tweeting it to our course hashtag AND to the community hashtag for which you created it.
3. Participate in the discussion by making *at least* four (4) comments on the blogs, which can include replies to comments left on your blog.

Blog Post Rubric:

25 points	EXCEEDS EXPECTATIONS
	<i>Thorough & extended</i> response to the reflection questions / task. Post is enhanced by the <i>excellent</i> use of quotes, links or other embedded media* (photos, video).
20	MEETS EXPECTATIONS
	Responds to the reflection questions / task. Post is enhanced by the use of quotes, links or other embedded media* (photos, video).
15	APPROACHES EXPECTATIONS
	Responds to some of the reflection questions / task. Post is somewhat enhanced by the use of quotes, links or other embedded media (photos, video).
10	MEETS FEW EXPECTATIONS
	Responds to few of the reflection questions / task. Post is enhanced little by the use of quotes, links or other embedded media (photos, video). Some elements may be missing.
5	DOES NOT MEET EXPECTATIONS
	Minimal attempt to respond to reflection questions / task and use quotes, links or other embedded media (photos, video). Many elements may be missing.
0	NO ATTEMPT

Participation in Discussion through Comments:

10 points	EXCEEDS EXPECTATIONS
	<i>Actively</i> participates by making 4 or more <i>thoughtful & extended</i> comments and replies to comments left on blog, or replies to comments left on classmates' blogs in order to continue the discussion. Offers <i>excellent & insightful</i> contributions.
8	MEETS EXPECTATIONS
	Participates by making at least 4 comments and replies to comments left on blog, or replies to comments left on classmates' blogs in order to continue the discussion.
6	APPROACHES EXPECTATIONS
	Participates by making at least 3 comments and/or replies to comments left on blog, or replies to comments left on classmates' blogs in order to continue the discussion.
4	MEETS FEW EXPECTATIONS
	Participates by making at least 2 comments and/or replies to comments left on blog, or replies to comments left on classmates' blogs in order to continue the discussion.
2	DOES NOT MEET EXPECTATIONS
	Participates by making at least 1 comment or reply to comments left on blog or to comments left on other blogs.
0	NO ATTEMPT

APPENDIX D
DATA TABLES

Table 17

Learning Spanish Language and Culture through Twitter

	Strongly agree (%)	Agree (%)	Somewhat Agree (%)	Somewhat disagree (%)	Disagree (%)	Strongly disagree (%)
The tweets contributed to my knowledge of Spanish grammar and vocabulary.	2 (13.3)	8 (53.3)	4 (26.7)	0 (0)	1 (6)	0 (0)
The tweets contributed to my knowledge of Spanish-speaking cultures.	6 (40)	5 (33.3)	3 (20)	0 (0)	0 (0)	1 (6)
Because of Twitter, I put more time into this class than a regular Spanish class.	3 (20)	4 (26.7)	5 (33.3)	1 (6)	2 (13.3)	0 (0)
I was able to infer meaning from the tweets from the context/conversations.	2 (13.3)	12 (80)	1 (6)	0 (0)	0 (0)	0 (0)
My reading skills in Spanish have improved as a result of Twitter.	3 (20)	6 (40)	4 (26.7)	0 (0)	1 (6)	1 (6)
My writing skills in Spanish improved as a result of Twitter.	4 (26.7)	3 (20)	5 (33.3)	1 (6)	1 (6)	1 (6)
I learned a lot from the replies to my tweets.	1 (6)	3 (20)	7 (46.7)	1 (6)	3 (20)	0 (0)
I learned a lot from replying to other students' tweets.	1 (6)	4 (26.7)	6 (40)	1 (6)	3 (20)	0 (0)
I learned a lot from reading other people's tweets.	5 (33.3)	5 (33.3)	4 (26.7)	0 (0)	1 (6)	0 (0)
Having the professor tweet and reply to the tweets increased my learning potential.	8 (53.3)	4 (26.7)	2 (13.3)	0 (0)	1 (6)	0 (0)

Table 18

Social Aspects of Twitter

	Strongly agree (%)	Agree (%)	Somewhat Agree (%)	Somewhat disagree (%)	Disagree (%)	Strongly disagree (%)
I found myself wanting to post tweets.	2 (13.3)	5 (33.3)	4 (26.7)	1 (6)	1 (6)	2 (13.3)
I liked that I could share information about my life.	2 (13.3)	7 (46.7)	4 (26.7)	0 (0)	1 (6)	1 (6)
I liked that I could find and share information about my personal interests.	6 (40)	6 (40)	1 (6)	1 (6)	1 (6)	0 (0)
I enjoyed reading the tweets of fellow students.	4 (26.7)	6 (40)	3 (20)	2 (13.3)	0 (0)	0 (0)
I enjoyed reading the tweets of native speakers.	6 (40)	6 (40)	2 (13.3)	1 (6)	0 (0)	0 (0)
I enjoyed reading past conversations of others in my timeline not related to me.	2 (13.3)	5 (33.3)	2 (13.3)	2 (13.3)	2 (13.3)	2 (13.3)
I enjoyed interacting with my classmates through replies and mentions.	4 (26.7)	8 (53.5)	0 (0)	1 (6)	1 (6)	1 (6)
I enjoyed interacting with native speakers through replies and mentions.	5 (33.3)	4 (26.7)	4 (26.7)	0 (0)	1 (6)	1 (6)
I felt a sense of community with my classmates through tweeting.	5 (33.3)	5 (33.3)	4 (26.7)	0 (0)	1 (6)	0 (0)
I felt a sense of community with a broader audience, incl. followers not in my class.	5 (33.3)	4 (26.7)	4 (26.7)	0 (0)	1 (6)	1 (6)

Table 19

Learning Spanish Language and Culture through Blogger

	Strongly agree (%)	Agree (%)	Somewhat Agree (%)	Somewhat disagree (%)	Disagree (%)	Strongly disagree (%)
The blog posts contributed to my knowledge of Spanish grammar and vocabulary.	4 (26.7)	7 (46.7)	2 (13.3)	0 (0)	1 (6)	0 (0)
The blog posts contributed to my knowledge of Spanish-speaking cultures.	3 (20)	4 (26.7)	4 (26.7)	2 (13.3)	1 (6)	0 (0)
Because of using blogs, I put more time into this class than a regular Spanish class.	5 (33.3)	8 (53.3)	1 (6)	0 (0)	1 (6)	0 (0)
I was able to infer meaning in the blogs from the context.	2 (13.3)	11 (73.3)	2 (13.3)	0 (0)	0 (0)	0 (0)
My reading skills in Spanish have improved as a result of Blogger.	5 (33.3)	6 (40)	3 (20)	0 (0)	1 (6)	0 (0)
My writing skills in Spanish improved as a result of Blogger.	8 (53.3)	3 (20)	3 (20)	0 (0)	1 (6)	0 (0)
I learned a lot from the comments on my blog posts.	3 (20)	4 (26.7)	4 (26.7)	1 (6)	3 (20)	0 (0)
I learned a lot from commenting other students' blog posts.	3 (20)	5 (33.3)	2 (13.3)	2 (13.3)	3 (20)	0 (0)
I learned a lot from reading other people's blog posts.	4 (26.7)	7 (46.7)	2 (13.3)	1 (6)	1 (6)	0 (0)
Having the professor blog and comment on my posts increased the learning potential.	3 (20)	5 (33.3)	6 (40)	0 (0)	1 (6)	0 (0)

Table 20 Social Aspects of Blogger

	Strongly agree (%)	Agree (%)	Somewhat Agree (%)	Somewhat disagree (%)	Disagree (%)	Strongly disagree (%)
I found myself wanting to write blog posts.	1 (6)	3 (20)	5 (33.3)	2 (13.3)	1 (6)	3 (20)
I liked that I could share information about my life.	3 (20)	6 (40)	4 (26.7)	0 (0)	1 (6)	1 (6)
I liked that I could share information about my personal interests.	3 (20)	8 (53.3)	3 (20)	0 (0)	0 (0)	1 (6)
I enjoyed reading blog posts of fellow students.	2 (13.3)	7 (46.7)	2 (13.3)	2 (13.3)	1 (6)	1 (6)
I enjoyed reading blog posts of native speakers.	3 (20)	5 (33.3)	5 (33.3)	0 (0)	1 (6)	1 (6)
I enjoyed reading my classmates' comments on my blog.	4 (26.7)	7 (46.7)	2 (13.3)	1 (6)	0 (0)	1 (6)
I enjoyed reading native speakers' comments on my blog.	5 (33.3)	5 (33.3)	3 (20)	0 (0)	0 (0)	1 (6)
I enjoyed reading the comments on other student's blogs.	1 (6)	8 (53.3)	2 (13.3)	3 (20)	0 (0)	1 (6)
I felt a sense of community with my classmates through writing a blog.	2 (13.3)	7 (46.7)	3 (20)	1 (6)	1 (6)	1 (6)
I felt a sense of community with a broader audience through writing a blog.	2 (13.3)	5 (33.3)	3 (20)	2 (13.3)	0 (0)	3 (20)

APPENDIX E
HUMAN SUBJECTS IRB APPLICATION

SOCIAL BEHAVIORAL INSTRUCTIONS AND TEMPLATE

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HRP-503a	8/1/14	121 of 135

Instructions and Notes:

- Depending on the nature of what you are doing, some sections may not be applicable to your research. If so, mark as "NA".
- When you write a protocol, keep an electronic copy. You will need a copy if it is necessary to make changes.

1 Protocol Title

Include the full protocol title: **An Activity Theoretical Analysis of Blogging and Microblogging by Spanish L2 Learners in a Telecollaborative Community**

2 Background and Objectives

Provide the scientific or scholarly background for, rationale for, and significance of the research based on the existing literature and how will it add to existing knowledge.

- Describe the purpose of the study.
- Describe any relevant preliminary data.

This semester-long action study will examine the results of implementing microblogging (Twitter) and blogging (Blogger) tools in a lower-division Spanish course, using Cultural Historical Activity Theory as a theoretical framework. This framework will allow the teacher-researcher to take an emic (student) perspective to identify potential areas of opportunity for improving the use of technology in the course. The research questions guiding this study are: (1) What tensions emerged in the process of using microblog (Twitter) and blog (Blogger) tools by intermediate Spanish students to communicate as part of a community of L2 learners and with a native speaker internet audience? What were the underlying reasons for the tensions? How were they resolved? (2) How do students evaluate Twitter and Blogger as tools for learning Spanish as used in the hybrid intermediate Spanish course? (3) Are the students able to demonstrate meeting the selected Cultures, Comparisons and Communities standards and progress indicators of the ACTFL Standards through the tasks implemented using Twitter and Blogger?

The tasks that the students will carry out throughout the semester using the microblogging and blogging tools were adapted from the "Bridging Activities" framework (Thorne & Reinhardt, 2008). The microblogging tool, Twitter, facilitates short posts which can be tagged to topic hashtags. It will serve as a weekly formative assessment as the students gather Spanish language texts (articles, infographics, video) to analyze. As a summative assessment at the end of each phase, students will make blog posts guided by reflection questions of their selected texts. The blogging tool (Blogger) allows students to have individual webpages where they make text posts that may include other media, like pictures or video.

All students will complete the microblogging and blogging tasks, as well as the surveys, as part of their normal coursework. The surveys provide a valuable student (emic) perspective, which will allow the teacher to be able to identify and help struggling students, or to identify the need to make any modifications to the project throughout the semester. The teacher will also take notes if any students report having problems with the project during the semester, such as failed communication attempts with native speakers. The teacher will provide help, unless the students are able to resolve the issue on their own.

At the beginning of the semester, students will be informed of the study and asked for their permission to use their microblogging and blogging content as data for the study, as well as the answers they provide to the surveys.

Although all students will complete the tasks discussed above as part of their class assignment, only data from students who have consented to have their responses used by the researcher will be analyzed for this study.

This investigation was designed based on prior studies such as:

Basharina, O. (2007). Activity theory perspective on student-reported contradictions in international telecollaboration. *Language Learning & Technology*, 11(2), 82-103.

Lomicka, L., & Lord, G. (2011). A tale of tweets: Analyzing microblogging among language learners. *System*, 40(1), 48-63.

Lee, L. (2009). Promoting Intercultural exchanges with blogs and podcasting a study of Spanish-American telecollaboration. *Computer Assisted Language Learning*, 22(5), 425-443.

3 Inclusion and Exclusion Criteria

Describe the criteria that define who will be included or excluded in your final study sample. If you are conducting data analysis only describe what is included in the dataset you propose to use.

Indicate specifically whether you will target or exclude each of the following special populations:

- Minors (individuals who are under the age of 18)
- Adults who are unable to consent
- Pregnant women
- Prisoners
- Native Americans
- Undocumented individuals

Participants will be solicited from students in two hybrid sections of Spanish 202 (total of 56, max). All participants will be older than 18 and able to consent; prisoners will not be included. Some individuals in the two hybrid SPA 202 classes may happen to be pregnant, Native Americans, or undocumented, but they will not be specifically targeted or excluded from this study.

Throughout the semester, students will interact with native speaker internet users who post online publicly through Twitter (tweets) and Blogger (comments). This data from online users who interact through public tweets/comments with the students would be included in the corpus to be analyzed. The public tweets will be recorded and reported in a de-identified manner.

4 Number of Participant

Indicate the total number of participants to be recruited and enrolled: Total recruited will be 56 (max.) from ASU and those who consent to participate will be enrolled.

5 Recruitment Methods

- Describe when, where, and how potential participants will be identified and recruited.
- Describe materials that will be used to recruit participants. (Attach copies of these documents with the application.)

At the beginning of the semester (upon IRB approval), all 56 students (at ASU) will be read the recruitment script in class and sent by email for those who may be absent.

6 Procedures Involved

Describe all research procedures being performed and when they are performed. Describe procedures including:

- Surveys or questionnaires that will be administered. (Attach all surveys, interview questions, scripts, data collection forms, and instructions for participants.)
- What data will be collected including long-term follow-up?
- Lab procedure and tests and related instructions to participants
- The period of time for the collection of data.
- Describe the amount and timing of any compensation or credit to participants.
- If the research involves conducting data analysis only, describe the data that that will be analyzed.

Data will be collected using surveys and will include the students' microblogging and blogging content posted during the Fall 2014 semester (August 2014 to December 2014). Survey data will be gathered electronically.

The total amount of time will be approximately 2 hours 15 minutes throughout the semester as part of regular course activities. No compensation will be given.

7 Risks to Participants

List the reasonably foreseeable risks, discomforts, or inconveniences related to participation in the research. Consider physical, psychological, social, legal, and economic risks.

There are no foreseeable physical, psychological, social, legal, or economic risks. If students consent to allow their public blog posts or comments to be used in data collection, the research team cannot guarantee complete confidentiality of their data, should the participant publish any self-identifying information. It may be possible that others will know what they have reported.

8 Potential Benefits to Participants

Realistically describe the potential benefits that individual participants may experience from taking part in the research. Indicate if there is no direct benefit. Do not include benefits to society or others.

There is no direct benefit to the participant, apart from their learning by carrying out the project as part of the course.

9 Prior Approvals

Describe any approvals – other than the IRB - that will be obtained prior to commencing the research. (e.g., school, external site, or funding agency approval.)

The Spanish department has approved implementation of the microblogging and blogging tools in the course.

10 Privacy and Confidentiality

Describe the steps that will be taken to protect subjects' privacy interests. "Privacy interest" refers to a person's desire to place limits on with whom they interact or to whom they provide personal information.

Describe the following measures to ensure the confidentiality of data:

- Where and how data will be stored?
- How long the data will be stored?
- Who will have access to the data?
- Describe the steps that will be taken to secure the data (e.g., training, authorization of access, password protection, encryption, physical controls, certificates of confidentiality, and separation of identifiers and data) during storage, use, and transmission.

All information obtained in the surveys of this study is strictly confidential. The results of this research study may be used in reports, presentations, and publications, but the researchers will not identify participants. In order to maintain confidentiality of participant records, Margaret Alvarado, under the supervision of Dr. Lafford, will use subject codes to identify participants. There will be a master list of participants that will be used to link them to their subject code until the data is matched at the end of data collection, at which point the master list will be destroyed. After the names have been linked to the subject codes, the names will be removed from the survey. The data may be kept for a period of up to five years at which point it will be deleted. The corpus of microblogging and blogging content may be used for future analyses by the researcher during the five year period. During this period the data will be stored on the password protected hard drives on the personal computers of the PI and student investigator.

Due to the nature of the study, if participants choose to allow their microblog or blog posts or comments to be used in data collection, the research team cannot guarantee confidentiality of data that is published publically online. If they publish any self-identifying information, it may be possible that others will know what they have reported.

11 Consent Process

Indicate the process you will use to obtain consent. Include a description of:

- Where will the consent process take place
- How will consent be obtained

Non-English Speaking Participants

- Indicate what language(s) other than English are understood by prospective participants or representatives.
- If participants who do not speak English will be enrolled, describe the process to ensure that the oral and/or written information provided to those participants will be in that language. Indicate the language that will be used by those obtaining consent.

Waiver or Alteration of Consent Process (written consent will not be obtained, required information will not be disclosed, or the research involves deception)

- Review the "CHECKLIST: Waiver or Alteration of Consent Process (HRP-410)" to ensure you have provided sufficient information for the IRB to make these determinations.

Participants who are minors (individuals who are under 18)

- Describe the criteria that will be used to determine whether a prospective participant has not attained the legal age for consent to treatments or procedures involved in the research under the applicable law of the jurisdiction in which the research will be conducted.

Two graduate students (Rebecca Foster and Steven Flanagan), who are not involved in the study or instructors of the participants, will assist in the consent process. They will come to the classes to read the recruitment script and collect signed consent forms from students who are interested in participating. They will deliver signed consent forms to the PI, Dr. Lafford, who is not an instructor or involved in grading the participants. The instructor (Margaret Alvarado) will not have access to the consent forms until after she has posted final grades at the end of the semester (Dec 2014). If any students are absent, Rebecca and/or Steven will email them the recruitment script and consent form, so that they are aware of the study. If absent students wish to participate, they can turn in the signed consent form directly to Dr. Lafford's locked mailbox. All consent forms will be stored in a locked file cabinet in the PI's office (LL414D) for a five year period. All participants will be native English speakers, or have near-native proficiency.

12 Process to Document Consent in Writing

If your research presents no more than minimal risk of harm to participants and involves no procedures for which written documentation of consent is normally required outside of the research context, the IRB will consider a waiver of the requirement to obtain written documentation of consent.

(If you will document consent in writing, attach a consent document. If you will obtain consent, but not document consent in writing, attach the short form consent template or describe the procedure for obtaining and documenting consent orally.)

13 Training

Provide the date(s) the members of the research team have completed the CITI training for human participants. This training must be taken within the last 3 years. Additional information can be found at: <http://researchintegrity.asu.edu/training/humans>

Margaret Alvarado, Co-I, 2/25/12, #7521994
Barbara Lafford, PI, 4/23/13

