# Students' Use of Second Life in Learning Spanish as a Foreign Language

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## Abstract

The affordances of Second Life provide a life-like environment for language learning. This study explores how college students learn Spanish as a foreign language in the Second Life environment. We investigated their perceptions of and experiences with Second Life in their foreign language learning, from a sociocultural perspective. Employing qualitative research methods, we collected chat logs, observations, reflective journals, and interviews. Findings include a) the advantages of authentic communication with native Spanish speakers, b) learners' motivation and anxiety, c) opportunities to practice the target language, d) the nature of their language production, and e) the participatory culture. Our discussion highlights the various ways in which Second Life can provide a good environment for language learning. We describe benefits such as opportunities for authentic conversation, and to explore the target culture, as well as increased motivation for foreign language learning in Second Life. Students did encounter a few challenges, but in general Second Life provides an excellent platform to practice language skills.

*Keywords:* Second Life; virtual world; Spanish as a foreign language; language learning

## Introduction

The rapid growth in educators' use of various instructional technologies requires us to explore more fully how technologies such as Second Life can be used in language learning and for other educational purposes (Vorobel & Kim, 2012). Second Life, a "multiuser virtual environment" (MUVE), is a general virtual world "designed to facilitate

socialization, support user creation of in-world objects, and even function as possible venues for commerce" (Wehner, Gump, & Downey, 2011, p. 279).

Downey (2012) describes virtual worlds as massive, persistent, multidimensional graphical environments in which people establish a sense of presence through avatars and interact with others. The space is shaped by its users. Within this vast and rapidly expanding place (http://secondlife.com/whatis/), users can socialize, learn, play, and customize their avatar, as well as participate in many virtual activities. For language learners, Second Life offers opportunities to interact with native speakers in a nonthreatening environment (Sykes, 2008), providing a life-like context to practice target languages.

From a sociocultural perspective (Vygotsky, 1986) language learning is facilitated by internal and external tools. Second Life provides many tools to facilitate language learning, and we can understand how these work by adopting an ecological approach. According to van Lier (2008), an ecological perspective on language learning "sees language as part of larger meaning-making resources that include the body, cultural-historical artifacts, the physical surroundings, in short, all the affordances that the physical, social, and symbolic worlds have to offer" (p. 599). Second Life offers many productive affordances for language learning, creating meaningful opportunities for the learner to use tools from the environment in naturalistic ways (van Lier, 2002). Although several studies have explored the use of Second Life for educational purposes (Kim & Blankenship, 2013; Gamage, Tretiakov, & Crump, 2011), and a handful of studies have started examining language learning in virtual worlds, there are still few studies of how teachers can integrate Second Life into class assignments and thus help students learn foreign languages more effectively. This study investigates college students' use of Second Life in learning Spanish as a foreign language, asking "How do college students who learn Spanish as a foreign language perceive and experience the use of Second Life for foreign language learning?"

## Literature Review

### Second Life and Education

Web 2.0 and Second Life have already been widely adopted for training and education because augmenting instruction with Second Life is affordable, rich in content, and positively evaluated across fields in both the academic and commercial sectors (Chen, Warden, Tai, Chen, & Chao, 2011; Connolly, Stansfield, & Hainey, 2011; De Lucia, Francese, Passero, & Tortora, 2009; Jauregia, Cantoa, de Graaff, Koenraadc, & Moonend, 2011; Sykes, 2008; Yamada, 2009). This virtual world positively influences engagement, defined in various studies as "interactivity," "representational fidelity," "immediacy of communication," "consistency," and "persistence" (Choi & Baek, 2011). De Lucia et al. (2009) investigated student interactions, perceived presence, usefulness, and motivation in a university setting. By creating a virtual campus (including virtual spaces for social interaction, 3D lecture halls, and more aspects similar to real-world universities), the researchers concluded that the incorporation of a virtual campus into their curriculum had positive effects—particularly in perceived presence, which they describe as especially advantageous in distance learning and in increasing students' motivation. DeNoyelles and Seo (2011) investigate how user identity translates into a virtual environment like Second Life and can develop in ways that are pedagogically productive. Across disciplines, Second Life has great potential for education and training purposes, particularly where distance learning and affordability are important (Kim & Blankenship, 2013; Chen et al., 2011; Cheong, 2010; Connolly et al., 2011; De Lucia et al., 2009; deNoyelles & Seo, 2012; Wehner et al., 2011).

### Second Life and Language Learning

Some recent research has investigated the roles virtual environments can play in Spanish language education and acquisition, including the acquisition of culturally specific pragmatic knowledge (Sykes, 2005, 2008) and increased student motivation (Connolly et al., 2011; Wehner et al., 2011). Immersive virtual environments facilitate language learning because "in these spaces, learners may have the opportunity to interact with native speakers in a nonthreatening environment where they already share

common ground" (Sykes, 2008, p. 59). Second Life can help students access virtual target-language communities via their avatar, the graphical representation of the user's character.

Jauregia et al. (2011) describe how instructional designs can take advantage of Second Life's affordances, showing that task-based activities in Second Life elicit dynamic communication conducive to foreign language education (FLE) and learning pragmatic aspects of language use. Interacting with target-language community members and gaining access to target-language speakers are important affordances of Second Life. The general consensus among researchers is that Second Life, as a platform with rich content and dynamic possibilities for interaction, is an effective tool for language learning (Andreas, Tsiatsos, Terzidou, & Pomportsis, 2010; Connolly et al., 2011; Jauregia et al., 2011; Sykes, 2005, 2008; Wehner et al., 2011; Yamada, 2009). Researchers have also examined Second Life's written synchronous and asynchronous chat, studying features of written discourse unique to virtual environments (Andreas et al., 2010; Jauregia et al., 2011; Yamada, 2009).

Sykes (2008) explicitly focuses on pragmatics in immersive virtual worlds, showing how pragmatic knowledge awareness and acquisition can help students not only gain community access but also position themselves within target-language communities. A growing population of diverse leaners with previous exposure to target-language communities may have pragmatic knowledge that they can employ within Second Life to develop meaningful connections to target-language communities, and participation in these communities can help them further develop that knowledge (Sykes, 2008; Valdés, Fishman, Chávez, & Pérez, 2006).

Second Life can also help students overcome social anxiety and shyness (Cheng, 2014). Berns, Gonzalez-Pardo, and Camacho (2013) explore the impact of game-like applications with virtual environments on language learning, teaching processes, and learner motivation. They show how environments like Second Life motivate students to

learn the target language and support them in building a self-regulated learning strategy (Berns, Gonzalez-Pardo, & Camacho, 2013; Smith et al., 2013).

## Methods

For our research exploring how college students learning Spanish as a foreign language perceive and experience the use of Second Life for foreign language learning, the most appropriate methodology was a qualitative multiple-case study (Merriam, 2009). We conducted this research in an intermediate-level Spanish class with nine students at a southeastern U.S. university during the fall semester of 2011. The course provided a blended learning environment, with 50-minute meetings four times weekly and additional online activities through Second Life. The course required three main assignments, including participating in Second Life and recording activities undertaken there, which accounted for 30% of the total grade. We recruited a purposeful sample of five students using three selection criteria: (a) students who recorded their activities in Second Life while completing their assignments, (b) students who provided chat logs from their interactions with native Spanish speakers, and (c) students who volunteered for the study.

### Participants

The participants of the study were Todd, Rachel, John, Robyn, and Ashley. The five participants came from various cultural backgrounds. Todd described himself as a 29-year-old African American male with an interest in multicultural studies. He began the study optimistic about using technology in learning Spanish and hoped to "speak, interpret, and understand more than basic Spanish" because he was raised around many Spanish-speakers. Rachel was a 22-year-old Caucasian female majoring in Mass Communications and boasted of having a social media internship at a local law and media firm. Her goals for the class were purely academic and tied to degree completion. John was a 23-year-old African American male with an interest in multicultural studies much like Todd, but his goals for the course were academic like Rachel's. Robyn, an 18-year-old White female, was majoring in business with a minor in Spanish. She was

also "very excited about using Second Life." Ashley described herself as a 19-year-old Caucasian female raised around speakers of Russian, her family's heritage language, which she loved to read and listen to. This excitement transferred as she looked forward to "exploring Español!"

**Procedure**

After completing the orientation process, students were asked to use Second Life weekly and then journal reflectively on the class-wide blog about their experiences. In our study, working collaboratively with the teacher, we created a task-based activity to promote the principles and practices of communicative language learning (Pica, 2008). The task allowed students to explore and incorporate Second Life into their Spanish learning and supplemented the in-class Spanish exposure that they received for 1 hour, 4 days a week.

Figure 1. *Second Life User Interface*
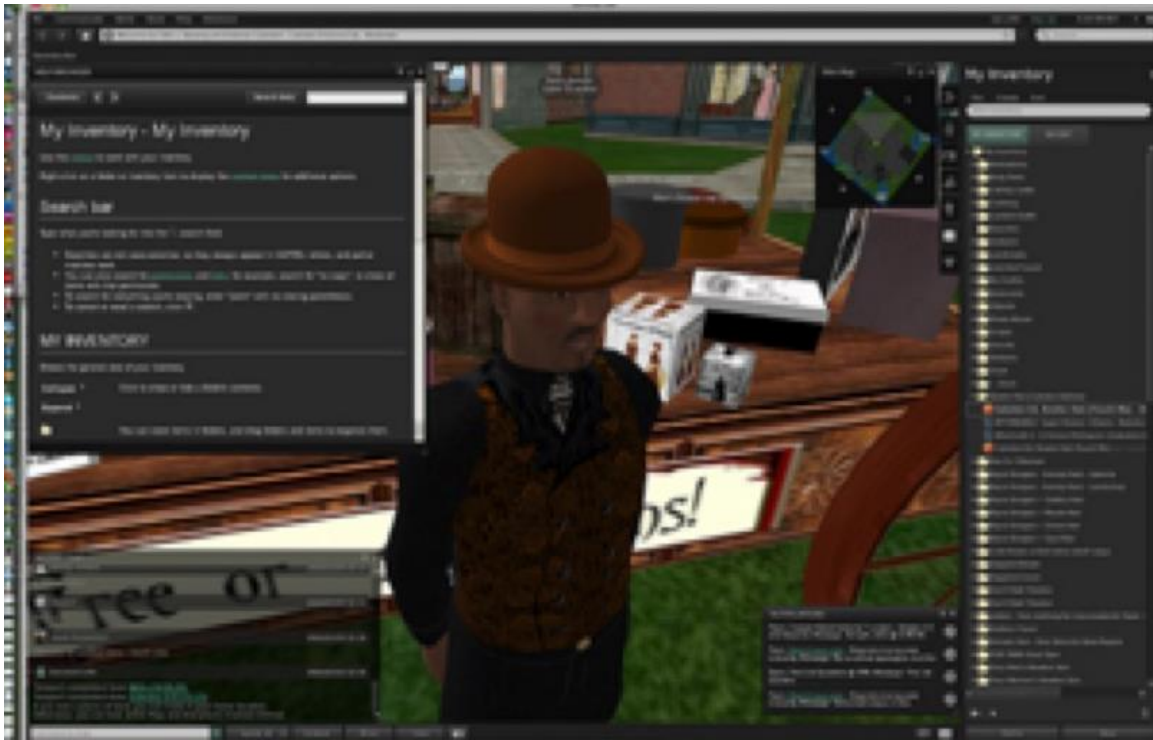
Three Second Life assignments were designed to orient users to Second Life by providing them with task-based practice related to specific course content and learning objectives (Jauregia et al., 2011). For example, students were asked to visit recommended islands (locations in the virtual world) to complete task-based goals such as discussing topics from the reading (i.e., food, sports, cultural events, traditions, and places). The instructor provided a list of important islands for the assignments. Samples of Spanish-speaking islands include Barcelona Plaza Real, Virtual Spain, Costa Rica, Guadalajara, Isla Argentina, JaliscoMexico, Mexico-Ruta Maya, and so forth. Students were required to communicate in the target language (Spanish) while completing the assignments.

The assignments were disseminated each week through the university-wide Intercambios group and posted on large billboards in our Second Life classroom. They each consisted of four parts: (a) a contextualized introduction with reading and short-question activities, (b) a specific goal for the Second Life portion of the assignment linked to the reading, (c) full student chat logs showing their navigation of Second Life and progress toward the goal, and (d) a reflective journal entry about the experience posted in a class-wide blog. Students were also provided an in-person tutorial in the general use of Second Life, covering navigation and the user interface, the intersection between a user and a computer program (see Figure 2). Although they were able to use Second Life at home without time constraints to complete activities, students were also provided class time for the first two activities. Students were offered some in-class technical support and guidance before they were asked to complete any assignments.

Figure 2. *Contextualized Orientation Activity*



**Second Life:**
**A ver la tecnología contemporánea.**

Habían muchos lugares en el pasado que gente siempre querían visitar aunque no tenían el dinero o el tiempo. Así que hoy en día tenemos la oportunidad de viajar a cualquier lugar por la computadora como turista virtual. Por ejemplo, nunca podía irme a Barcelona para ver la arquitectura del arquitecto favorito mío, Gaudí, pero anoche me fui en *Second Life* para ver La Sagrada Familia y era experiencia fenomenal. ¡Anoche pude visitar con gente que vivía allí y discutir una plétora de otras cosas!

¿Hay algún lugar turística que quieres visitar?

¿Adónde y por qué?

La Sagrada Famila de Gaudí en Barcelona del oeste, reproducción de la obra en Barcelona, España.

**¡A explorar!**

Hay muchos lugares interesantes en *Second Life* y hoy vamos a visitar a algunos.

En su menú hay la opción para "buscar". Usa esta función para encontrar a algunos de los lugares sugeridos (suggested places). Cuando te encuentras el lugar que quieres visitar, simplemente eligir "transportarse" para viajar allí.

Objetivos:
1. Visitar un lugar hispana y explorarlo.
2. Encontrarse con hispanohablantes y chatear.
3. ¡Disfrutarse!
4. Reflexionar sobre tu experiencia en "Charla"en BB.

Mexico – Ruta Maya
Mexico ~Chichen Itza~
Mexico Tenochtitlan
JaliscoMexico
Barcelona Plaza Real
El Partel Plaza-Al Andaluz
UniHispana
Virtual Spain
Costa Rica
Guadalajara
Isla Argentina
Instituto Español
Pueblo Blanco
Universidad a Distancia de Madrid

**Data Collection**

Data sources included (a) interviews, (b) classroom observations, (c) Second Life chat logs, and (d) reflective journals. Additional data collection also included an online survey (through Survey Monkey) used at the beginning of semester to gather basic demographic information about the participants' levels of technology proficiency.

**Interviews**

We interviewed each participant twice. Semi-structured interviews were conducted after the semester was over. We also interviewed them at the beginning of the semester. Each interview was conducted for 40-60 minutes. Interviews were tape-recorded, transcribed, and analyzed together with other data using ATLAS.ti.

## Observations

The instructor (also one of the researchers) observed participants' behaviors during the semester. He took notes on these observations in his reflective journal.

## Second Life Chat Logs

Students submitted written chat logs that were copied and pasted into a Word document and handed in each week. Due to the difficulty of observing their activities in Second Life, we asked students to submit written chat logs to report their interactions with native Spanish speakers. Students communicated with audio and chat logs, but we only include data from the chat logs in this study because they represent the students' activities adequately and more fully. Students also described their experiences in the interviews. Students submitted photographs of people they met with or places they visited in Second Life.

## Reflective Journals

As described above, participants submitted reflective journal entries about their experiences to a class-wide blog. Participants recorded their reflections about Second Life interactions, what they learned, what they talked about in Spanish or English, how things went, and whether or not they found the exercise helpful or interesting. The instructor, also a member of the research team, collected the reflective journals after each class session.

## Data Analysis

As is typical in qualitative research, data analysis was conducted inductively (Lincoln & Guba, 1985). Data analysis involved three stages of coding, similar to open coding, axial coding, and relating codes to each other after open coding (Corbin & Strauss, 2007). Stage 1 coding sorted incoming data into pre-categories. At Stage 2, coding joined pieces of saturated subcategories together to form new themed categories. At Stage 3, new evolved themes were compared and contrasted. We also reviewed the chat log data using the same method, comparing and contrasting the themes and

categories with those emerging in the interviews. Possible transferability of the study's implications to other contexts was established by attending carefully to emic voices and providing thick descriptions in the study (Lincoln & Guba, 1985).

## Results

The results of this study capture the five Spanish-as-a-foreign-language college students' perceptions of and experiences with Second Life as a tool for foreign language (FL) learning. We focus on the participants' reflections and their interviews and chat logs in order to present their emic voices and show their experiences using Second Life. Five themes emerged from the data analysis: (a) authentic communication with native Spanish speakers, (b) motivation and anxiety, (c) practicing the target language, (d) language production, and (e) participatory culture.

### Authentic Communication with Native Spanish Speakers

The virtual world Second Life afforded participants opportunities for authentic communication. All participants considered the opportunity to communicate with native Spanish speakers in Second Life as the primary benefit of this virtual world in the FL classroom. During one of the interviews, John said,

> It allowed me to really engage in conversation with fluent Spanish speaking people, and just, it allowed me the experience of engaging in conversation without actually traveling anywhere.

John also noted that Second Life allowed him to experience authentic conversation with speakers of the target language without going abroad, which can be challenging because of financial limitations and time constraints.

> Ashley also enjoyed the opportunity to talk to native Spanish speakers. She said, Like the last assignment, we had to talk about Chapter 14 vocabulary, which is stuff in the city like ice-cream shop, banks, mail carriers, things like that. So you

start off talking about things like that, and then it spreads to other things because they are curious about you, you are curious about them. And it's kind of cool: you are speaking in Spanish with someone in Colombia.

Ashley notes that, in addition to having the opportunity to practice target vocabulary with native Spanish speakers in the virtual world, the nature of the conversations in Second Life and the affordances of this virtual world broadened her skills as conversations with native Spanish speakers extended to a broader range of topics.

Todd commented on the authenticity of being immersed into a Spanish-speaking context in Second Life and having an opportunity to communicate with native Spanish speakers, saying,

Like, I'm there. Especially in certain places it's all Spanish. The sign are in Spanish, everything. All the people are speaking in Spanish. So for me, it was a good way to use it without having to use my English. … It's not like, okay, I have some friends that speak Spanish, but they also speak English. Your friends are gonna be a little bit more lenient with you. These are strangers that you've never seen before. So obviously if they feel that you're wasting their time or whatever, they are not gonna be interested in talking to you. So I think for you to go on there and you find someone that you can communicate with, I think that's a very good thing that Second Life provides for you.

The usefulness of such an authentic context and the benefits of communication with native Spanish speakers were also evident in participants' chat logs. For example, Ashley learned from a native Spanish speaker about the difference between the variety of Spanish being taught to the student in the classroom (Latin American Spanish) and the one her correspondent spoke (Castilian Spanish). In particular, the native Spanish speaker [called "21zone"] explained,

21zone [Native speaker of Spanish]: no hay Latinos donde vives?

*there aren't Latinos where you live?*

21zone [Native speaker of Spanish]: por que aquí vas a aprender castellano, ya que es un sitio Español.

*because here you will learn Castilian, as it is a Spanish site.*

21zone [Native speaker of Spanish]: y es diferente al Español Latino

*and it's different from **Latino Spanish***

Ashley1991: o! no me gusta el picante. es no sabrosa por mi sabor. no es por asignaciones de mi clase...necesito hablar en chat. no se por que, pero necesito para un notas buenas.

*oh! I don't like spicy. Not it's tasty for my flavor. No it's for **assignments** from my*

*class…I need to speak in chat. I don't know why, but I need for good grade*

21zone [Native Speakers of Spanish]: jjajajaj...

*hhahahah…*

21zone [Native Speaker of Spanish]: por?

*for?*

Ashley1991: por>

*for>*

21zone [Native Speaker of Spanish]: por que este medio.

*why this medium*

Ahsley1991: es nueva cosa...tecnologia

*it's a new thing…technology*

Ashley added that this activity both allowed her to explore new technology (Second Life, in this study) and to practice language skills. Because Second Life provides opportunities for authentic communication with native Spanish speakers around the world, Ashley had a chance to learn about varieties of Spanish such as Castilian and Latin American. Such information often provoked long conversations on related topics, which shows another advantage of using Second Life in the FL classes. Second Life

provided authentic communication and located conversations within the context of a Spanish-speaking country.

**Motivation and Anxiety**

The participants also described the impact of Second Life on their motivation and anxiety. Rachel and Ashley, for example, claimed that Second Life provided them with additional motivation to learn Spanish. Rachel said,

> I think it helped my motivation. I think a lot of the online resources help with motivation because I think the idea of it is fine to reach out, and go see this virtual program, meet people from different countries, and use something that is normally more at-home tool that we use for fun … that is more motivating.

Ashley said, similarly:

> Just the fact that I was talking to people that spoke Spanish that wasn't my professor. That was kind of cool. It was cool in the sense of … it's one thing to "Yeah, I know Spanish" and to have only practiced it in a classroom setting. Versus, "Oh, yeah. I can speak Spanish" and then you've actually spoken to people that speak Spanish.

In addition, positive feedback about the participants' proficiency in Spanish and progress in learning a FL from native Spanish speakers positively influenced participants' motivation. According to the Robyn's chat log, she and another student received some praise from native speakers from Spain whom they casually met while exploring an Argentinian island. Notably, words in bold below reflect vocabulary terms found in the text.

> Student [Robyn's classmate]: Robyn y yo somos estudiantes de Español
> *Robyn and I are Spanish **students.***

Iana Airy [Native speaker of Spanish]: de que país eres?

*What country are you from?*

Student [Robyn's classmate]: somos el EE.UU.

*we are [from] the **United States**.*

…

Iana Airy [Native Speaker of Spanish]: pues lo sabéis escribir bien

*well you both know how to write well*

RobynSPN1121[Robyn]: muchas gracias

*thank you very much*

RobynSPN1121[Robyn] : ;]

*;-)*

…

Iana Airy [Native Speaker of Spanish]: no hay de que

*you're welcome*


Rachel and Ashley found Second Life a motivating environment for learning Spanish. Rachel singled out Second Life as a virtual world that students could use at home for having fun. Getting to use it for language learning added a fun component to her formal Spanish instruction. Ashley added that she was proud of having had conversations with native Spanish speakers. Being able to explore the cultures of Spanish-speaking countries and to learn about them from native speakers of Spanish through contextual affordances of Second Life added to the participants' motivation. Occasional praise from native speakers about the participants' proficiency in Spanish also increased students' motivation. These findings complement Wehner et al.'s (2011) account of the effects of Second Life on Spanish-as-a-FL undergraduate students' motivation, in which he describes how Second Life increased Spanish-as-a-FL students' motivation because they saw it as a fun activity and felt proud to interact competently with native Spanish speakers.

One participant reported that Second Life reduced her anxiety at using Spanish. Robyn said,

> You don't have that person right there. You don't feel as intimidated when you are on Second Life. … Just have that confidence for just doing it virtually than doing it in real life.

Robyn felt more confident when communicating in Spanish in Second Life, and not as intimidated or anxious. This finding supports prior research by Deutschmann, Panichi, and Molka-Danielsen (2009), Jarmon, Traphagan, Mayrath, and Trivedi (2009), and Wehner et al. (2011). It also aligns with Dickey's (2005) finding that students felt more anonymous in a virtual world, which decreased their anxiety. Thus Second Life turned out to be a helpful tool for raising students' motivation when learning and using Spanish as a FL.

**Practicing the Target Language**

In addition to increasing students' motivation and decreasing their anxiety, Second Life also provided students with increased opportunities to practice Spanish. Rachel and Ashley pointed out that Second Life helped them improve their conversation skills. It served as a useful platform for more regular practice of target vocabulary and grammar. In her reflective journal, Rachel wrote:

> I really enjoyed using Second Life today. I was much more comfortable using it. I spoke to someone from Colombia about his apartment, its size, how many rooms it had, etc. I definitely think my Spanish conversation skills have improved and Second Life allowed me to have more practice.

During the final interview at the end of the semester, Rachel also added,

It [Second Life] definitely had a good impact. I mentioned before how I've been practicing on some things, and I've been able to use my conversational skills more, and my vocabulary more, and use of verbs, the different tenses in speaking with people, so I've had more experience with that, and it's helped, I think.

Rachel used Second Life to practice target vocabulary and grammar for her course. She said that it clearly improved her Spanish conversation skills.

When asked about the role of Second Life in her Spanish learning, Ashley pointed out its positive effect on her comprehension. She said,

Comprehension, yes, definitely, because they're using words that you've never seen before because they are fluent in Spanish. So they're using—for example, when I was talking to someone about Halloween we never learned the word for costume in class. And she threw that out there and I was like wait what? So sometimes I copy paste what they told me into Google translate because they also use—you know, how in English we have LOL or things like that. Well, they have the same things in Spanish.

She also described her challenges in producing complex grammatical sentences: "So sometimes when they would short cut their words I would have to kind of be like oh, what are they talking about? So it helped me with comprehension. And it also helped me with grammar because the vocabulary is not the hardest part. The hardest part is the grammar and stringing a sentence together that makes sense. So just kind of a verb conjugation, a direct object and pronoun placement." In spite of the challenges in learning Spanish, Ashley saw Second Life as beneficial for her language learning because she noticed improvement in her Spanish comprehension from practice with vocabulary and grammar. In several ways, then, Second Life allowed participants to practice the target language more and in this way facilitated their language learning.

**Language Production**

In addition to offering more opportunities to practice Spanish as a FL, Second Life appeared to increase students' language production. Three participants said that Second Life put them into the habit of speaking in Spanish and thus enhanced their Spanish-as-a-FL production. For example, Robyn said, "I learned to produce the language a bit more, be able to communicate … after using Second Life a few times it made it a little easier to be able to produce it." Similarly, Rachel gave an example of her increased language production:

> That's funny because I would notice when I … each Spanish class, just like when I was in Second Life, I would use not a lot of words, but little words like "oh" and "como estás" when I have to go somewhere. I think that's because I'm so used to talking in Spanish on Second Life.

Although Rachel knew the words and phrases before her use of Second Life, she progressed from knowing a word or phrase to being able to use it appropriately in context (Bruton, 2009).

Robyn and Rachel perceived Second Life to be very beneficial to their target-language production. One of the reasons for the enhanced production in the target language was the time constraints students faced when communicating with native Spanish speakers in Second Life. Ashley explained,

> So you're just kind of under that time constraint. I would try to give myself a maximum of 2 to 3 minutes for each response. So you're trying to bam, bam, bam. And it kind of helps you because, you know, you're starting to- you're getting used to thinking about the language. And it got a lot easier the longer we were in the class because the very first time I tried Second Life it would take me like 7 minutes to respond to someone. Whereas, the very last time I did Second Life I was able to knock out five conversations in like an hour because it was a lot easier for me to come up with answers. … But as the Spanish course continued

and then when we did Second Life 5 months later it was easier because I was able to come up with answers quicker. But it was also Second Life helping me with that too because I got used to answering people that spoke Spanish other than my professor.

Ashley felt that Second Life helped her get used to communicating in Spanish. While practicing her Spanish in Second Life, she engaged in relatively rapid conversations with native speakers. This transferred to her production of Spanish in the classroom and had a positive influence on her language abilities.

## Participatory Culture

When communicating with native Spanish speakers in Second Life, participants often developed an interest in the culture of the Spanish-speaking countries they were visiting in the virtual world. Though they had the specific goal of completing an assignment in Second Life, all participants extended their communication beyond specific curricular topics to explore the context and get to know their interlocutors (See Figure 3).

Figure 3. *Mariachi Band in Mexico*

For example, Rachel stated:

> I asked about the culture … if it's different from other places, from other
> countries; what their specific thing about what they eat, and how they talk, and
> they have brought up that there are certain slang terms that different countries
> use, and some of the food is a little bit different amongst different cultures.

Rachel was not only concerned about completing her assignments in Second Life. The affordances of the virtual world allowed her to learn about the cultures of the countries she was visiting. She was particularly interested in cultural differences and cuisine. Participants also learned about the differences in vocabulary between Spanish-speaking countries.

Although they asked questions mostly about food and traditions in conversations with native Spanish speakers, the participants learned much more than that. Todd shared:

> I learned actually in Spanish that the tango dance actually originated in Argentina
> so I asked her if she could dance the tango and she said no, but she said that's
> only because she couldn't walk for a couple of years. Things like that. I told her
> about that, we talked about some of the sports figures in Argentina because I'm
> into sports so I told her that I knew of certain sports figures that are very popular
> in Argentina. I told her that I have only heard of the capital in Argentina. She
> didn't live in the capital, but obviously she knew about it because it's pretty much
> the most common place known.

Like Rachel, Todd learned more about the culture of the Spanish-speaking countries he visited virtually. While engaging the interlocutor in conversation, Todd activated his background knowledge and talked about the sports figures from Argentina whom he knew. In addition, he was curious to learn more about the capital of Argentina. Bringing these topics up in conversation with the woman in Argentina, the student learned about the history of the tango and about the country itself.

In addition to developing interest in other cultures, participants had an opportunity to speak in Spanish about their own country and culture. For example, in the following chat log Ashley and a native Spanish speaker express how much they enjoy being able to meet and interact with people of other cultures who are physically very far away, while sharing their culture with others.

>
> Ashley1991 [Ashley]: wow, muy interesante. lo que es un mundo, yo vivo en EEUU y tu en Ecuador y nosotros podemos habler en chat!
> *Wow, very **interesting**. It is a world, I live in the **United States** and you in **Ecuador** and we can talk [spelling error] in chat!*
> Atyhuankary [Native speaker of Spanish]: si la verdad es lo que mas admiro de Second Life el hecho de poder compartir experiencias y conocimientos con gente de culturas diferentes
> *yes the truth is that what I **admire** most **about** Second Life the fact of being able to **share** experiences and knowledge with **people** of **different cultures***

These excerpts from interviews with the participants and data from chat logs illustrate how Second Life makes the language learning process lively and engaging for students. Because of Second Life's affordances, the participants broadened their knowledge about the culture of Spanish-speaking countries and contributed to their interlocutors' knowledge about American culture.

## Discussion

The aim of this study was to explore college students' perceptions and experiences learning Spanish in Second Life. As a platform, Second Life provides rich affordances for FL learning. In this discussion section we will discuss *affordances for FL learning*, *benefits and challenges encountered*, and *pedagogical implications* from implementing Second Life for a language course.

**Affordances of Social Context and Functional Details of FL Learning in Second Life**

The five college students who took part in the study offered their perceptions and experiences while learning Spanish in Second Life. Their responses highlighted the platform's rich affordances for FL learning. Gibson (1979) defines affordances as what the environment offers an organism. Jenkins (2008) develops the meaning of the term, emphasizing "the relationship between particular environmental features and the functions (and potential performance) of an organism" (p. 43). Learning language in Second Life offers various affordances. We highlight three of them: contextual affordances, metaphoric affordances, and functional affordances.

First, Second Life offers a unique type of contextual affordance. Gamage, Tretiakov, and Crump (2011) define contextual affordances as "learning happening in a context similar to that in which it is going to be applied" (p. 2408). Second Life resembles a real-life context, offering interactivity and community (Kim & Blankenship, 2013). This unique environment offers rich contextual affordances, facilitating knowledge and skill transfer to real situations (Gamage, Tretiakov, & Crump, 2011). Participants confirmed that the habit of communicating in Spanish from Second Life transferred to face-to-face contexts. Second life's contextual affordances also allowed participants to learn about and become immersed in the cultures of Spanish-speaking countries.

Second, Second Life provided metaphoric affordances. Participants learned names for new objects using metaphors, bringing meaning to topics they wished to learn about and practicing the target language with native speakers. While engaging in the virtual environment, the students understood the concepts and ideas of artifacts and metaphors, as they practiced the target language (Kim & Blankenship, 2013).

Third, the Second Life environment also provides contextual cues and interactivity. Mikropoulos and Natsis (2011) found that participants across various research projects remained engaged throughout their interaction with Second Life. Andreas et al. (2010)

also describe the representational richness of the medium. Our participants' voices complement the findings by Wehner et al. (2011), describing how they engaged in Second Life while participating in game-like language learning and interacting with target-language speakers in an immersion environment (Kim & Blankenship, 2013).

Aspects of Second Life like written and audio chats provide powerful affordances for language learning, allowing students to improve their conversation skills, their grammar, and their vocabulary. Thus our study supports Sykes's (2008) findings about using Second Life as a platform for authentic communication with native speakers of the target language. Second Life also offers easy access to native Spanish speakers, enabling the FL students to practice authentic communication.

The affordances of the medium enabled the students to engage in authentic conversations (Jenkins, 2008). Second Life allowed our participants to engage in online learning, playing, and socially conscious experiences (Dede, 2005). Other researchers have considered rich content, open format, affordability, and interactivity as factors that make virtual worlds beneficial for language learning (Connolly et al., 2011; Jauregia et al., 2011; Sykes, 2008; Yamada, 2009). In addition to finding that these features were helpful, our participants were also able to use different communication modes depending on their immediate needs, including verbal, gestures, visual, and written chats, all supported by Second Life (Cheng, 2014).

**Benefits of Using Second Life in FL Learning**

The multiple benefits to language learning in Second Life carried over into the Spanish-as-a-FL classroom. Benefits included *authentic conversation*, *exploring the target culture*, and *increasing motivation.* The authenticity of conversations with native Spanish speakers was the primary benefit of this virtual world. Because of the ability to easily and cheaply move virtually from one Spanish-speaking country to another, participants could visit many Spanish-speaking countries and learn about varieties of the Spanish

language. Opportunities for authentic conversation also stimulated students to practice vocabulary, grammar, pragmatics, and other language functions.

Second Life allows easy access to ethnic communities and their cultural artifacts. Learning culture reinforces language learning, and vice versa. "Being there" and "talking to speakers of the target language" gave students positive learning experiences along with allowing "social negotiation" for collaborative knowledge building (Mikropoulos & Natsis, 2011). Students visited various places and islands, met native speakers and discussed meaningful topics with those they encountered in each particular context -- such as sports, customers, cuisine, weather, and so forth. The perception of "copresence" or "being there together" with target speakers boosted their learning experience (Gamage et al., 2011).

Because cultural practice and language learning are inseparable (Valdes, 1986), Second Life offers particularly effective and immersive FL learning. Dynamic communication with native speakers inspired the participants to explore the cultures of Spanish-speaking countries in Second Life. Learning new cultures in turn motivated students to practice the target language. Students activated their own background knowledge and engaged in emergent literacy practices such as interpreting cultural artifacts and reading and writing about culture in a FL. According to Kern (2006), online environments foster cross-cultural communication and intercultural awareness, and they help students build intercultural communication competence, a combination of communicative competence and cultural competence. We found that students practice both communication skills and cultural knowledge simultaneously in Second Life.

Our participants' voices helped us learn important lessons on how to use Second Life to stimulate students' motivation and lower their anxiety in a FL classroom (Gamage et al., 2011; Wehner et al., 2011). Without extra effort, Second Life's various affordances raise FL students' motivation and lower their anxiety (Gamage et al., 2011; Wehner et al., 2011). Motivation is essential for fostering autonomy in learning (Chan, 2001).

Traditionally, motivation facilitates self-regulatory learning. Ning and Downing (2010) confirm that reciprocal effects between motivation and self-regulation allow more effective learning. Self-regulation refers to "a process in which people organize and manage their learning, and this includes learners' control over their thoughts (e.g., their competency beliefs), emotions (e.g., anxiety experienced while learning), behaviors (e.g., how they handle a learning task), and the learning environment" (Kormos & Csizer, 2014, p. 279). As autonomous learning and effective self-regulated learning are particularly important in FL learning, using Second Life can support independent learning and should help develop self-regulation (Kormos & Csizer, 2014). Enhancing motivation is crucial to influencing students' self-regulation, and our results show how Second Life helps with this. Students develop their own ways of controlling and handling their assignments as they feel more competent, lower their anxiety and practice the target language. Getting into the habit of communicating in Spanish improves their self-regulation and transfers to the face-to-face context.

**Challenges of Using Second Life**

Our data revealed three basic challenges. As with any new software or application, Second Life has unique features that create constraints (Cheng, 2014), such as equipment, time, and skills. Participants need to have access to well-equipped computers compatible with the Second Life program. For example, most of the students reported issues with recording their Second Life activity due to limited memory on their personal computers.

Students may spend considerable time in Second Life. Our participants also reported various technical difficulties when beginning to use Second Life at home. Students need in-depth and ongoing training to fully benefit from using Second Life in a FL course. Skillful users tend to enjoy the process of learning foreign language in such a space and face few time constraints. Effective training must include instructor presentations about Second Life and interactive guides or presentations on how to create an account and

start using it. Training should also include safety in Second Life, such as how to report to the Second Life police if someone acts inappropriately. Thorough training and the instructor's continuous support are crucial for fully achieving Second Life's benefits for FL learning.

**Pedagogical Implications**

The study suggests effective ways of using Second Life in language teaching to enrich students' learning. In such an environment, students focus more on the virtual environment and less on pedagogical concerns (Mikropoulos & Natsis, 2011). Second Life offers language students communication tools, a sense of immersion, and opportunities for knowledge construction (Girvan & Savage, 2010). To effectively implement this tool in education, Andreas et al. (2010) emphasize that when Second Life instructional activities are well planned and integrated into the core course content, using Second Life can facilitate project-based experiential learning. Affordances of Second Life can be used to design effective learning experiences (Gamage et al., 2011; Girvan & Savage, 2010).

To effectively implement Second Life in FL learning, preparation and careful implementation are crucial. Teachers must create authentic tasks and assignments within the virtual world. First, the instructor must develop clear learning objectives for the course. After setting objectives, the instructor should incorporate Second Life as a tool to help reach those objectives. Gradually, the instructor should refine activities using Second Life and develop more detailed guidelines, expectations, regulations, rubrics, and other necessary methods depending on the course and the students (Kim & Blankenship, 2013; Mikropoulos & Natsis, 2011).

Second, an innovative tool such as Second Life brings new discourse dynamics and allows students to participate in new communities. Second Life enables new forms of discourse such as communicating with audio and written chats, as well as rich contextual cues. The life-like interaction generates authentic communication. Those

affordances lead to interactivity, flexibility, and persistence (Berns et al., 2013). Third, Second Life's various features motivate students to learn the target language and feel less anxious. Students may also overcome social anxiety and shyness (Cheng, 2014), which are important for language learning. Second Life also allows students to "express themselves through avatars" (Cheng, 2014, p. 110). Teachers should attend to these benefits and encourage students' motivation.

Fourth, Second Life provides an opportunity to engage in the target culture. By participating in virtual communities, students practice language as well as culture. With no cost, they can experience genuine interaction with target-language speakers. Participants visit various places and enjoyed co-presence with target speakers. The interactivity and flexibility to engage in conversations enriches language learning experiences, and teachers should facilitate this. Fifth, students require well-equipped computers (Kim & Blankenship, 2013), and well-developed training sessions for students should be conducted at the beginning of the semester. Thinking about students' time constraints and their lack of skill in using Second Life is important, and teachers should develop on-going training to facilitate the language-learning experience. In particular, recording students' interactions with target speakers was challenging for us in this
study, as it required considerable storage on the students' computers.

**Using Second Life to Practice Language Skills**
Language learning is a complex process, in Second Life and in real life. Teachers may integrate task-based learning into their use of Second Life (Pica, 2008). While incorporating Second Life into classroom activities and assignments, it is important to maintain focus on the course objectives. The instructor should organize task-based activities in course modules aligned to specific course readings (Pica, 2008), accomplishing the course objectives by providing instructional activities that promote language development and authentic use of the language. Task-based computer-

mediated communication offers several benefits through verbal or written interaction (Smith, 2009).

Focusing on language objectives, the instructor should create task-based activities in Second Life based the four skills of speaking, listening, reading, and writing. Once the instructor implements the activities in the course curriculum, the students can practice the foreign language while completing assignments in Second Life. Participants confirmed that they practiced the target language actively and shared the methods they used in Second Life. The following ideas would be helpful for designing such activities.

- *Speaking*: Students are able to practice speaking to complete the assigned task. The topics of assignments can be diverse each week (e.g. simply asking about such topics as artifacts or more complicated tasks of using metaphors and discussing various topics). Students should practice oral language in context.
- *Listening*: Listening skills can be practiced at the same time as practicing oral language. Students are able to experience listening to diverse speakers of the language from different countries, and teachers should encourage this through their assignments.
- *Reading*: Students are able to read all signs, directions, and information while engaging in tasks (e.g., bulletin boards, information center, etc.). Students should also practice various words and engage with different events by identifying artifacts and developing metaphors to communicate their experiences.
- *Writing*: Students are able to practice writing through written chat. They learn grammar and vocabulary through these activities, and teachers should build assignments that demand engagement in this medium.

Creating proper task-based activities using Second Life can be cost effective, easy and give the student access to engaging FL practice.

## Conclusion

Second Life opens doors to creativity and imagination, providing enormous opportunities for transforming language education. The five college students we worked with all appreciated the opportunities Second Life provided to learn Spanish as a FL, through engaging and authentic communication with native Spanish speakers. Our study demonstrates the benefits of integrating Second Life into the Spanish-as-a-FL classroom: it provides rich and authentic communication, as well as participatory cultural experiences (Kim & Blankenship, 2013). Students were motivated to learn the language and experienced lower anxiety in FL learning. It is important to remember, however, that despite the benefits of employing Second Life in language learning the instructor will likely be challenged by technological issues, a need for training and adequate equipment, time constraints, and the need to prepare carefully for task-based activities.

Second Life offers a powerful life-like environment for language learning. In this unique context, which offers multiple channels (e.g., audio chats, video chats, written chats), intuitive interactivity, and immersion, students engage in authentic conversation and practice speaking, listening, reading, and writing simultaneously. More research on this promising medium is needed to investigate further the impact of Second Life and other virtual worlds on language learning, teaching, and students' motivation. It would be interesting, for example, to conduct a quantitative study and measure language learners' motivation to learn a target language before, during, and after the use of a virtual world. We must expand our vision of language education to include new domains such as Second Life. As educators, we must be better prepared to implement such technologically enriched curricula for students in this digital society.

## Biodata

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