Pedagogical Exchange in a Common Digital Space

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# ABSTRACT

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Language acquisition in the digital realm is currently being explored by members of the second language acquisition community. Social networks in particular are well suited to provide the modern language learner and educator with collaborative tools. This study explores the potential of the Facebook group utility in assisting university language learners from a variety of language proficiency levels in their language learning endeavors. Participants represented four different Spanish classes at the university level. The results of the study indicate that resource sharing, student collaboration, and continuous learning are among the more fascinating benefits for pedagogical exchange in the selected common digital space.

## ACKNOWLEDGMENTS

This thesis is dedicated to my grandparents who found a way to constantly encourage excellence while making me feel like a star after the occasional mediocre performance.

I express my gratitude to my thesis committee for having faith in this project and for carefully guiding it from start to finish. I would also like to a give special thanks to Jessica whose hard work as a mother and loving support as a wife made all of this possible.

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# KEYS TO TERMS AND ABBREVIATIONS

**Common Digital Space** – A common digital space (CDS) is any digital environment that allows open interaction among participants.

**Discussion Threads** – Asynchronous dialogues between users of a common digital space. These dialogues usually include a main post and then responses addressing the main post.

**Group Wall** – A space for group participants to post comments and links to resources. Posted information in the space is accessible by all group participants.

**Social Media** – Digital platforms that allow users to interact with others in order to maintain or create relationships.

**CHAPTER 1**

**INTRODUCTION**

Technology is a raging force that is constantly evolving as humans use it for daily interaction. Instead of turning to atlases, phone books, and other print resources, information seekers type terms into search engines and are directed to immediate, and often accurate, answers to their inquiries. It is this ease of access that continues to attract digital immigrants to the world of instant information (Prensky, 2001). Recent reports of time spent online demonstrate the overwhelming migration from the print to the digital world. Mashable.com reported that over the span of three months, members streamed 3,000 lifetimes worth of video from the website Netflix.com (Laird, 2012). Video game developer Jane McGonigal (2010), in her talk at the 2010 TED conference, stated that members have spent a total of 5.93 million years playing the game World of Warcraft. She goes on to explain that according to the theory of human evolution, the first ape stood up approximately 5.93 million years ago. Her argument was that World of Warcraft players have been embarking on virtual journeys in the imaginary world of Azeroth for a time period equal to the evolution of the human race. These, and other statistics like them, are extraordinary. My personal goal within the field of educational technology and language acquisition is to explore avenues which can help direct some of this time and energy to more beneficial purposes.

Imagine directing even a fraction of 5.93 million years of time into learning a language. The ability to understand and effectively use the progressive tense would be easily conquered with that much dedicated time and effort. People are spending more and more time on the internet. If society could redirect technology use to bigger and better causes, the possible outcomes could have overwhelmingly positive results.

The emergence of online universities is bringing higher education to the masses. Distance learning continues to make steps towards breaking down the traditional walls of the classroom. Digital textbooks allow for a more dynamic presentation of content. These are all steps in the right direction for educational technology and are all, in their respective spheres, avenues which can help redirect society's free time spent in the digital world. Imagine a teenager who, instead of picking up a video game controller to kill zombies with a machine gun, picks up a tablet to explore the world of anatomy by thumbing through digital maps of the human body.

Collaboration, one of the main affordances of technology, can help to accelerate an increase in knowledge. However, when collaboration is carried out in large groups, this acceleration is often logistically restricted. Take, for example, a sports arena filled with student collaborators all trying to understand the difference between the preterit and the imperfect tense. You might first think that with so many people working on the same task, the capacity to understand would also significantly increase. But when one student tries to shout to the other side of the arena to share their perspective with another, communication becomes practically impossible among the participants. This practical problem of large group communication can be addressed in a variety of ways.

One specific way to remediate this predicament is technology which has the potential to organize communication. It allows for the student sitting at the top of the stadium to express his opinion regarding something said at the bottom of the stadium. It can help with turn taking as well as organize all the information shared so that it can be easily referenced by all collaborators in the group. For the purpose of this study, a Facebook group was organized to facilitate the communication between four different classes of students. Each of these classes represents

specific language learning goals. If students from these sections were brought together into one single physical space and allowed to collaboratively explore the language, the result would be chaotic as each contributor tried to effectively communicate through the crowd. The Facebook group allows for an organized and searchable discussion of multiple language topics. It allows for pedagogical exchange in a well-organized and searchable common digital space (CDS).

## Statement of the Problem

Although this study has the potential to further the understanding of a variety of problems, the main focus will be on identifying how and for what purposes students use the CDS. The results from this study will hopefully reveal the potential for online discussions that occur beyond the physical space of the traditional classroom. This is, in part, an answer to the profession's call for a better understanding of the potential of technology for language learning purposes.

In her comprehensive text, *Teaching Language in Context*, Omaggio Hadley (2001) states that,

> although it has clearly not been a methodological revolution, technological innovation
>
> has played an important role in the recent history of language teaching and is bound to
>
> have a profound effect on the way that languages are taught in the future. (p. 89)

She later suggests that "we need to evaluate its potential for enhancing classroom learning as well as for facilitating student-centered, independent learning outside the classroom" (p. 89). A decade later, Omaggio Hadley's call for technologically-enhanced language learning continues to echo throughout the professional field of language acquisition.

Mishra and Koehler (2006), two researchers who have contributed generously to this exploration, explain that

the advent of digital technology has dramatically changed routines and practices in most arenas of human work. Advocates of technology in education often envisage similar dramatic changes in the process of teaching and learning. It has become clear, however, that in education the reality has lagged far behind the vision. (pp. 1017-1018)

I propose an exploration of digital social networks as a possible means for the enhancement of language teaching and learning. The social network site, Facebook, has undergone a meteoric rise in popularity and continues as a channel of social interaction among friends, family, and strangers. This study explores the potential of Facebook as a tool for the teaching and learning of the Spanish language. The basis for this study is a Facebook group, a common digital space created both for students enrolled in the Spanish Teaching Major Track, as well as current Spanish students at Brigham Young University.

## Purpose of the Study

This study explores the pedagogical utility of social media by bringing preservice Spanish teachers together with current language students in a CDS. The CDS is a private Facebook group where the participants are able to interact, share, teach, and learn through the use of synchronous and asynchronous communication. The space allows participants to communicate asynchronously through mini-discussion threads by posting comments on the group wall. They are also able to post multimedia sources such as links to language-related websites, pictures, and videos. Facebook's Online Help Center (2011) describes some of the functionality of the group by stating that "in groups, members receive notifications by default when any member posts in the group. Group members can participate in chats, upload photos to shared albums, collaborate on group documents, and invite all members to group events" ("How are pages different from groups," para. 4). While some direction was given to the participants

regarding conduct within the group, they were allowed the freedom to explore and utilize the technology according to their own preferences and language needs.

The Facebook group was created with the purpose of organizing student interaction and learning. It is an attempt to increase the capacity to understand various aspects of language and culture learning without sacrificing collaboration due to the confinement of physical space. It is also an attempt to define the potential of online interaction between large groups of students for the purpose of learning language and exploring culture. In general, the purpose of this study is to find out how and for what purposes students use the common digital space.

## Research Questions

The study is organized and guided by the following questions:

1) How do preservice Spanish teachers and current language students utilize technology in a common digital space?

2) Does interaction in a common digital space benefit preservice Spanish teachers and current language learners?

3) How does pedagogical exchange in the common digital space affect pedagogical exchange in the physical classroom space?

## Significance of the Study

The results from this study can be used as a reference point for any language program considering the implementation of a social media component to their classes. Both the positive and negative impact of such an implementation will be discussed so as to give administrators and teachers a clear picture of what they might expect from such an implementation. Beyond the language classroom, the field of education in general can look to this study as a resource for using social media to facilitate learning among students. Those interested in professional

development will also find pertinent information in the findings of this report. This particular study is also significant to the area of educational technology and can help professionals in that field understand how to better unite the use of pedagogy and technology for learning purposes.

## Preview of the Organization & Content of the Thesis

This report has been organized into five chapters. In addition to this introductory chapter, I have included individual chapters addressing the relevant literature, research design, findings, and discussion. Chapters Two, Four, and Five are organized according to the study's research questions.

### Chapter 2

Chapter Two of this report is dedicated to a review of the relevant literature relating to this study. The chapter is divided into three sections with each section representing one of the research questions. The three sections are further broken down into the topics that were most relevant to each section. In this chapter, I address social media in the context of language learning, credibility judgments, technology use, advantages and disadvantages of technology use, technology for professional development, the role of the instructor in connecting the learning spaces, and collaboration beyond the classroom.

### Chapter 3

Chapter Three addresses the research design and methodology decisions for the study. In this chapter, I present a justification for my decisions regarding the project. I discuss decisions I made with regard to participants, data sources, data collection, data analysis, and conclude the chapter by addressing the ethical considerations of the study.

### Chapter 4

Chapter Four contains the findings of the study. In this chapter, I present actual data from the wall post, weekly report, and follow-up survey data sources. The data are organized according to the research questions. Sample conversations from the Facebook group wall, participant comments from the weekly reports, and survey responses are presented.

**Chapter 5**

In this final chapter of the report, I discuss the implications of the findings presented in Chapter Four. This chapter contains a summary of the most important findings of the study. Within the context of the three research questions, I address sharing, collaboration, instant access, continuous learning, student interaction, and the role of the instructor and content in connecting the digital spaces. This chapter concludes with suggestions for additional research and an explanation of the limitations of this study.

# CHAPTER 2

## REVIEW OF RELEVANT LITERATURE

Because technology is constantly evolving, new research agendas must be made in order to successfully integrate emerging digital tools into language acquisition theory and practice. Although there is much research being done in this field, many researchers conclude their findings by calling for more studies to explore the use of digital technologies in the classroom (Greenhow & Robelia, 2009; Mazman & Usluel, 2010; Stevenson & Liu, 2010).

This study emerged as a contribution to the current research on the relationship between social media and language education. Language researchers are excited about the potential of social media for language learning but also recognize that it is a field that requires additional research. Mazman and Usluel (2010) specifically state that,

> future research should shed light on all aspects and dimensions of social network sites such as Facebook, especially by considering their place in college students' lives who happen to be the most active users of them. Different dimensions of learning occurring in social network sites can be examined with a shift from a structured (often traditional) environment to an informal and flexible environment in which students feel more comfortable. (p. 451)

Likewise, researchers Stevenson and Liu (2010) state that,

> the new types of social networking features seen in Web 2.0 may provide great benefits and opportunities for students and teachers in the field of foreign language education, but the relevance and quality of these collaborative learning environments for educational purposes will still need to be explored. (p. 251)

This study aims to fill this identified research gap by bringing together college-level language learners together with future language educators to observe their use of the Facebook group utility for pedagogical purposes.

The following review of the literature will be organized into three general areas of interest and related research. The first area of interest is related to interaction in common digital spaces. The research discussed in this section will help to provide context for answering the first research question of how the digital space is used by the participants. An overview of the current integration between social media and language learning will be presented. In addition, research involving credibility judgments will be discussed.

The second section of this review is dedicated to benefits received by the participants for having interacted in the CDS. In addition to benefits of technology integration, the advantages and disadvantages of such integration will be explored. This section will also address the literature that has dealt with the use of technology for professional development purposes and the benefits afforded to future language teachers.

The third area addresses the idea of connecting learning in the common digital space with learning experienced in the traditional physical space of the classroom. I will explore how the two worlds are being integrated and what is being done to effectively unite the two spaces. The ideas that will be discussed in this section include the role of the instructor and student collaboration.

## Interaction in Common Digital Spaces

The first guiding research question for this study deals with how students use the common digital space as an environment for academic interaction. In this section of the literature review, a variety of topics relating to interaction in the digital realm will be discussed.

Gillet, Helou, Yu, and Salzmann (2008), in a presentation on original software design, refer to interaction in common digital spaces as "a powerful paradigm for learning, without noticing, the skills that the knowledge society is looking for and that the traditional education system has been largely unable to develop" (p. 170). Instructors need to better understand this new digital learning environment if they are to successfully engage students in the 21$^{st}$ Century. The following discussions include several components related to common digital space interaction that need to be better understood by language instructors in general.

**Social Media and Language Learning**

Today, although the term social media conjures up an almost synchronous exchange of current trends and status updates, the definition of social media has not always been so restricted. Thomsen, Straubhaar, and Bolyard (1998) describe newsgroups, mailing lists, community networks, and electronic bulletin boards as cyber-communities that "are often a primary form of social interaction for the growing number of individuals who often spend hours of each day surfing the net" (Introduction, para. 2). Whether the communication is synchronous or asynchronous in nature, the idea of social connections maintained through digital platforms continues strongly today. One question that must be asked is: when is it appropriate to integrate a technology and for what purposes should that technology be integrated?

To answer the question of purpose for implementing a particular technology, Benkler (2006) suggests that,

> different technologies make different kinds of human action and interaction easier or harder to perform. All other things being equal, things that are easier to do are more likely to be done, and things that are harder to do are less likely to be done. (p. 17)

A digital platform that has become one of the main forums of social interaction is Facebook. Regarding the integration of Facebook into the education realm, Mazman and Usluel (2010) surveyed 606 Facebook users and found that for Facebook users, "usefulness" was the main determinant of whether they would use the social network for educational purposes. Other determinants of Facebook use identified by the researchers included ease of use, social influence, facilitating conditions, and community identity. If the technology is not useful and does not make the task easier to perform, then it is not likely to be adopted. Few would disagree that maintaining social relationships across time and distance is now easier because of Facebook. It is convenience and efficiency that prompt Facebook users to interact with their social circles in the digital space instead of pursuing exchange in the physical space. If a social media platform like Facebook is to be integrated successfully into the academic curriculum it must be done to make learning easier and not more difficult. I would argue, and the data from this study will indicate, that although tasks are made easier by the use of Facebook as an extension of the physical classroom, other tasks are made more difficult to perform.

A final study involving social media and language learning was conducted by Stevenson and Liu (2010). They designed a comprehensive exploration of three social media platforms that have been constructed specifically for language learning purposes. In observing students interact with each platform, they assessed usability and elicited student opinion about each program. Findings from their study will be discussed in the following sections of this literature review.

Although there is a good amount of literature involving education in general and social media, research specifically addressing language learning and social media is in the initial stages of exploration. At the time of writing of this report, several studies have recently explored various aspects of social language learning. Among the recently explored aspects I found

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research on the potential of Facebook groups for language learners (Blattner & Fiori, 2009), the exploration of pragmatics through Facebook group observation (Blattner & Fiori, 2011), and an open exploration of Facebook for ESOL students (Mitchell, 2012). These researchers found that the group utility was beneficial to language learners as it allowed access to actual digital communities of native speakers. As a final note on social networks and language learning, Wang and Vásquez (2012) reviewed the literature from 2005 to 2010 and found that out of 43 articles, only 9% of research studies involving Web 2.0 technologies and language learning focused on social networking and language acquisition. The majority of the research involved the use of blogs and wikis for language learning purposes. Wang and Vásquez join the previously mentioned studies in the call for additional research stating that "further research is needed to investigate the pedagogical uses of less studied Web 2.0 technologies, such as Facebook, Twitter, and Second Life"(p. 424).

**Information Judgments**

The evaluation of information is radically changing as lay sources become indistinguishable from expert sources. With the deluge of instant access information on the internet, the role of the consumer as judge of criteria has become increasingly important. Effective exchange between one participant and the next should be, whether consciously or unconsciously, accompanied by some sort of information judgment. When exchanging goods for money, cashiers will often mark large bills with a special pen to check the quality of the bill. Likewise, before purchasing a new vehicle, the consumer will examine the automobile through and through before judging that the exchange will be a fair one. These information judgments are not exclusive to the exchange of material goods but also occur with the exchange of information. In their survey of three popular social platforms for language learning, Stevenson

and Liu (2010) found that students were quite conscious of the quality of exchanged information. They write that,

> while the majority of the users were intrigued by the idea of materials created by other users and native speakers, they had concerns about the quality of the content of these materials. They were also concerned about the answers they would receive if they interacted with users within the social network. They wanted to access other learners who spoke English and had some teaching experience in a foreign language. User A described wariness for trusting the answers she would receive from other users within the social network if she asked a language learning question. (p. 249)

Regarding this increase of consumer accountability, Metzger (2007) wrote that "the Internet has made the need to critically evaluate information more important than ever before while also shifting the burden of credibility assessment and quality control from professional gatekeepers onto individual information seekers" (p. 2079). Although the exchange of pedagogy is the focus of this study, information judgments and the reception of that exchanged information play critical roles in the common digital space.

**How is the Technology Used by Students?**

One of the main guiding questions for this study is how students use digital spaces to enhance their learning. Many studies offer the perspective of the teacher or the program in implementing a new technology with a specific purpose in mind. This study reverses that paradigm and investigates how students, given sufficient freedom and direction, use the technology provided them. Many technological uses emerged in the data, some of which are also mentioned in previous studies examining how students interact with one another for educational purposes.

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The following studies focus on the teacher perspective of technology integration in the classroom. Liu, Moore, Graham, and Lee (2002) reviewed literature on the use of the computer for language learning purposes and found that technology was used to engage students in multi-modal communication. They found that from 1990 to 2000 technology use for language learning included email, video, audio, word processing, assessment, and various other uses mentioned in the reviewed articles. Recent technology use in foreign language education includes the use of mobile technologies (Abdous, Camarena, & Facer, 2009; Chinnery, 2006), collaborative writing through the use of blogs and wikis, virtual worlds, (Sykes, Oskoz, & Thorne, 2008) and accessing online language resources including dictionaries, translators, and grammar modules (Stevenson & Liu, 2010).

For the purpose of this study, I was more interested in how students use the technology provided them regardless of how the instructor uses the technology to teach language. With regard to the student perspective of technology and language learning, studies by Mazman and Usluel (2010) and Stevenson and Liu (2010) present related findings. Mazman and Usluel explored user perspective through administering a survey and Stevenson and Liu observed users as they interacted with different language learning programs. Mazman and Usluel found that a variety of factors are important when considering the educational use of Facebook. They found that the most important of these factors was usefulness as perceived by the users themselves. Stevenson and Liu found that users showed interest in using traditional language learning materials in addition to the social network language websites. They also found that users reacted negatively to the websites that resembled popular social networks like Facebook and MySpace. Although this is a difficult paradigm to investigate, once understood, it has the ability to unlock even more potential for integrating technology into language education. Given just the right

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amount of freedom students may actively explore technological tools for various language learning purposes. It appears that these discovered uses have varying degrees of benefit. The following literature relates to the positive and negative effects of technology use in the foreign language classroom.

## Benefits of Pedagogical Exchange in Common Digital Spaces

The second driving question for this study refers to possible benefits of learning in the common digital space. Following is a discussion of some of the current literature addressing both the benefits and negative results of integrating technology into the foreign language classroom. The discussion is divided into benefits perceived by the students, negative outcomes, and then a combination of the two with regard to professional development.

### Language Learning Technologies and their Perceived Benefits

It is important to note that pedagogical benefits are not always perceived by the instructor and the student in the same way. For this reason, I chose to administer a survey that was constructed to elicit the students' personal perception of benefits for having participated in the Facebook group. In this section I will discuss some of the benefits of technology integration from the prospective of the researcher as well as from the viewpoint of the participating student.

From the perspective of the researcher, Lai and Kritsonis (2006) discuss some of the advantages and disadvantages of technology use for language acquisition purposes. In their review of some of the relevant literature, they mention benefits including independent and collaborative learning, access to authentic materials, the capturing and analyzing of student performance, multi-modal instruction, and a break from the linearity of traditional language learning. One interesting benefit noted by Kreigns, Kirschner, and Jochems (2003) is that technology can increase casual communication among learners that strengthens and supports

discussion of content by allowing a comfortable atmosphere in which students can interact. In order to explore perceived benefits from the viewpoint of the student, Stepp-Greany (2002) elicited introductory level Spanish students' reactions to a variety of technologies used during a semester. The survey showed that students perceived benefits in the areas of learner confidence, technical skills, communication skills, enjoyment, and interest for the content. In this study, I set out to see if some of these same benefits would be achieved specifically through the use of Facebook as the common digital space.

**Negative Outcomes of Technology Integration**

Discussing some of the more general disadvantages of computer assisted language learning, Lai and Kritsonis (2006) include learning curve, limitations of speech recognition software, and the inability of the computer to adapt to unexpected situations. Kreigns et al. (2003) and McGrath (1998) both found that simply providing the technology to the student seldom results in the student using that technology to accomplish the intended learning objective. These findings in particular support the need for implementing technology with an ideal amount of direction; not too much and not too little. McLoughlin and Lee (2008) highlight the fact that because effective internet use requires information consumers to be more critical of what they read, students who are not trained to sift through bad or inaccurate resources are often misdirected. Particularly relevant to this study, Stevenson and Liu (2010) observed and surveyed multiple students as they interacted with three different social networks for language learning purposes. They found that students reported "a distaste for any element within the site (design or content) that reminded them of popular social networks such as MySpace or Facebook" (p. 249). This finding in particular was concerning as the common digital space of choice for the study was Facebook.

**Professional Development**

In addition to these advantages and disadvantages, there is also discussion with respect to professional development. An artist faced with a new and unfamiliar medium will only be able to express himself successfully if he is either trained in the effective use of that medium or is allowed to experiment, explore, and discover for himself the benefits the new tool or technique has to offer. Vannatta and Fordham (2004) identify professional development in technology as being one of the key predictors of effective technology use by educators. Good professional development in the effective use of technology should grant teachers the freedom to explore the technology themselves while, at the same time, guiding them along that exploration.

The field of education is experiencing a reorganization to better accommodate technology. Teachers are being trained in and exploring these new digital media. The question that many are now asking is how technological training and professional development can be improved so that future educators will be more successful at their craft. Interested researchers are exploring a variety of areas and solutions. Many emerging professional development programs are helping future teachers to learn how to best teach with technology by learning with technology. Programs are organizing and implementing asynchronous platforms such as discussion boards (Arnold & Ducate, 2006) and social media platforms such as Twitter (Cochrane & Narayan, 2011) with the purpose of bringing future educators together into a common digital space. In further support of technological professional development, Arnold and Ducate state that "many computer applications, especially asynchronous computer-mediated communication (e.g., e-mail, electronic bulletin boards), promote interactive learning, which is central to the professional development of future and current educators" (p. 42). As teachers learn in these digital spaces, they consequently become familiarized with how to best teach

within these environments. There is great value in having a guide who has gone through the same learning process as the newcomer.

Other researchers identify the barriers of technology-oriented professional development, which include resources and administrative support. Some of these researchers are proponents of well-organized training programs as solutions to overcoming these obstacles (Brinkerhoff, 2006; Hong, 2010). My study aims to address these concerns specifically by including two sections of future language teachers in the project. In order to address the third guiding research question of this report, the following section will address the research pertaining the connection between the physical and digital spaces.

## Connecting the Digital Space to the Physical Space

There seem to be two major factors that dictate how and to what extent the digital and physical spaces are connected: the role of the instructor and student- initiated collaboration. Greenhow and Robelia (2009) examined the social network use of high school students and found that although there were cases where students used social media for learning purposes, they were not conscious of the connection between the classroom learning and learning conducted in the digital space. Researchers Stevenson and Liu (2010) explored the use of three social media websites with language learning as their main focus. Of the three websites, they found that the users preferred the website that integrated a social component of language learning with more traditional resources like grammar lessons and vocabulary lists. Their findings demonstrate the idea that social media alone cannot replace traditional language learning practices. These digital spaces must be extensions of classroom instruction and not substitutes for it.

**Role of the Instructor**

With regard to the role of the instructor in the digital space, Kreijns et al. (2003) explain that the process "requires the instructor to relinquish control and avoid dominating the discussions. Many instructors find it difficult to make the transition from complete control of the classroom to unobtrusive monitoring" (p. 348). Although the passive presence may indeed allow for better student exchange in the digital space, it appears that an active role is required of the instructor in the physical space if the two are to be effectively connected. Some discussion will naturally migrate back and forth between spaces, but this migration of pedagogical exchange has the potential to accelerate if the instructor assumes an active role in using the digital discussion interactively during their lectures in the physical space. Stepp-Greany (2008) found evidence to support this hypothesis and states that "students strongly perceived that their instructors facilitated instruction and that they [the instructors] were important to the TELL environment" (p. 170). McGrath (1998) mentions that introducing technology resources alone into students' learning experience does not automatically result in improvement. He found that both the preparation and the knowledge of teachers about technology, as well as how to integrate and refine the lesson with technology, were the key to whether it was effective or not. Kern (1996) states that "the degree to which computer-mediated communication promotes language and content learning, cultural awareness, and critical reflection depends fundamentally on the teachers who coordinate its use" (p. 118). These findings clearly indicate that the role of the instructor in connecting the two learning spaces is essential for successful pedagogical exchange. I was particularly interested in a paradigm that included several instructors whose students were in one common digital space. Given the natural diversity in instructor style, I was eager to find out more about the role of the instructor.

**Collaboration Beyond the Classroom**

Still another factor in connecting the two spaces is collaboration. Typical meetings outside the physical space of the classroom are almost always a continuation of a conversation started within the classroom itself. However, meetings and exchange in digital spaces do not seem to be restricted to extensions of classroom interaction, but instead occur in a more spontaneous fashion. Collaboration, unlike an assigned section of a grammar workbook, requires delicate orchestration by both the instructor as well as the student. If this orchestration is not given careful attention, it is possible that despite the good intentions of the instructor, collaboration might never occur. Regarding computer-supported collaborative learning environments, Kreigns et al. (2003) cautioned that "although these environments can support communication and collaboration, both research and field observations are not always positive about their working" (p. 335). The researchers further explain that when implementing digital learning environments they experienced two major pitfalls. The first is taking for granted that social interaction automatically takes place just because an environment makes it technologically possible. The second is the tendency to restrict social interaction to educational interventions aimed at cognitive processes while other non-academic processes were left neglected or forgotten.

In further support of digital collaboration, Arnold and Ducate (2006) found that,

> when students scaffold each other, they can ultimately reach higher-level understandings of tasks or solve problems they would have been unable to solve alone. When done through writing instead of speaking, as in the case in CMC [computer-mediated communication], the writing process changes from an independently performed task to one that promotes use of the input and reflection of other students. (p. 43)

I was especially interested in seeing if, provided a common digital space, students would collaborate for the sake of collaboration and not because it was a requirement of an assignment.

This review of literature was organized to support and strengthen the exploration of the three research questions for the study. Available literature on the most current topics is difficult to come by because technology evolves at such a ferocious pace.

# CHAPTER 3

## RESEARCH DESIGN AND METHODS

### Research Questions

As seen in the literature review, the themes addressed by these research questions are at the forefront of new and emerging literature.

1) How do preservice Spanish teachers and current language students utilize technology in a common digital space?

2) Does interaction in a common digital space benefit preservice Spanish teachers and current language learners?

3) How does pedagogical exchange in the common digital space affect pedagogical exchange in the physical classroom space?

In this chapter, I will describe in detail the research design and methods implemented in this study and give justification for those decisions. The selection of qualitative over quantitative analysis and design emerged primarily from the research questions and from what I as a researcher hoped to discover. Moreover, because of the textual data generated in the Facebook group, student feedback reports, and follow-up survey, triangulation through a qualitative design seemed most appropriate (Mackey & Gass, 2005). In the next chapter I will discuss my empirical decisions with regard to methodology, participants, and data. In support of a qualitative approach for exploring technology and education, Arnold and Ducate (2006) state that research has tended to "focus on those aspects of online communication that were easily measured and quantifiable" (p. 45). They further explain that these quantitative measurements often included "number of postings, threads or logons, the length of entries, and patterns of turn taking" (p. 45). The researchers conclude this observation with a call for more qualitative

analysis by stating that "these quantitative indicators provide an incomplete picture, since they do not account for the messages' content" (p. 45).

## Explanation of Methodology

To make sure that the design of the study would be successful, an informal pilot study was conducted prior to the current project. Observations from the pilot study were beneficial in that they both affirmed some of the methodological plans and shed light on other areas to be considered before the launching of the Facebook project. After careful deliberation, the research team decided to include four different Spanish language sections in one single Facebook group. Tutorial handouts were prepared and given out to each participant. These handouts provided the participants with enough information to understand their role in the group. Other documents demonstrated how participants could navigate within the Facebook group and highlighted other utilities of the digital space.

In launching the Facebook group, members from each class section were invited to join through a private link. Once the group was established and the member participants had joined, the data collection began. The study lasted one semester (about 12 weeks), during which time the participants posted comments and responses in the online group on a weekly basis. The main requirement for online contributions was that they continue the discussion and foster the exploration of language learning and teaching. The explicit requirement for posting with regard to quantity changed over the course of the study. This change in the original minimum number of posts (4 posts per week) turned out to be a most interesting discovery and will be explained with more detail later on in this report.

In setting up the Facebook group for the study, I was concerned with the integration of the project into the language curriculum. I wanted to provide students enough freedom to be

creative in the space while at the same time give them sufficient direction to allow for high levels of pedagogical exchange. Here again Kreijns et al. (2003) warn that "just placing students in groups does not guarantee collaboration" and that "the incentive to collaborate has to be structured within the groups" (p. 338). These incentives, Kreijns et al. explain, can be cognitive, direct, or conceptual in nature but generally include some kind of instructor-designed task to facilitate and promote group interaction. I hoped that in organizing a common digital space and by giving the students the right amount of direction I was organizing an environment that would foster collaboration beyond the classroom context.

Along with posting answers and questions to the group wall on a weekly basis, participants were asked to email a report of their participation in the group. In this report the student indicated whether they were able to fulfill the minimum requirements of posting. A section of the report allowed students to share their comments with regard to their participation in the study. Toward the end of the semester, a follow-up survey was prepared with the specific goal of eliciting more information about how each participant benefited from their online interactions. These three data sources allowed for triangulation in the analysis.

**Context for the Current Study**

As the research questions indicate, the goal of this study was not to measure any kind of quantitative increase in language or culture proficiency, but was instead an observation of how a digital space might be used effectively in a language classroom. Because I designed, conducted, and recorded the research involving real language students and instructors, the findings of this study are not simply theoretical, but have a very practical and useful application to the field of language pedagogy.

**Participants**

**Criteria for Inclusion in the Study**

The original idea for the study was to include students from different sections of the same language class. It was then expanded to include two sections of Spanish language learners, one section at the novice level (SPAN 101) and the other at the intermediate level (SPAN 206). The other two sections included students who were preparing to teach Spanish as a foreign language (SPAN 377 and SPAN 378). These selections were made mainly with the goal of observing both how language learners used the digital space for language acquisition and how future language instructors would use the space as a digital classroom to practice their craft. The idea of exploring both professional development and language acquisition in the same digital space was interesting and so the decision was finalized to include the aforementioned sections.

**Sample**

Participants for this study consisted of a convenience sample of language students at a Brigham Young University. Three instructors were involved in the project, one of whom taught two of the four sections of participants while the other two instructors taught the remaining two courses. Coordination and execution of the project was carried out primarily by the principal investigator with the help of the participating instructors. The instructors of the class sections were contacted prior to the beginning of the semester to assure that they were willing to participate and, perhaps most importantly, would integrate the project into their curriculum as a graded element of their course.

**Demographic Data on Participants**

Generally speaking, the participants of the study represented various levels of undergraduate university students enrolled in language courses. Additionally, their proficiency

level with the target language varied dramatically from the novice-low to the superior level including both native speakers of Spanish as well as heritage language learners. Students in the SPAN 377 and 378 sections have been accepted into a Spanish Teaching major or minor. Their participation in the prerequisite course of Sc Ed 276R/FLANG 276 - Exploration of Foreign Language Teaching, will have provided them with the opportunity to observe and participate in foreign language education in a variety of academic settings. SPAN 101 is designed for students with no prior language learning experience. Generally, students in SPAN 101 begin at a Novice Low proficiency level in speaking as outlined by the American Council on the Teaching of Foreign Languages. Students in SPAN 206 generally fall within the intermediate range of proficiency. It is estimated that the majority of participants fell between 17 and 25 years of age. Although some of the participants involved in this study were language majors or minors, a number of participants were majors from different areas of academia.

## Data Sources

In order to triangulate the data, three different sources were included in this study. These sources included the explicit dialogue from the members' posts to the group wall, weekly reports which were emailed to the principal investigator and contained occasional participant comments, and finally, a follow-up survey which was administered towards the end of the semester project. These data sources are largely qualitative in nature with the exception of the follow-up survey which contains additional quantitative information about the study.

**Wall Posts**

Participant posts on the group wall served as the main data source for the project as they consisted of unedited interaction as seen in the digital space. These conversations evolved over the course of the study as participants began to explore and discover different uses for the space.

This data source consisted of posts regarding questions and answers about grammar, culture, homework, and study strategies, in addition to many other themes. Participants also used this space to share videos, pictures, and other online resources about the Spanish language and culture. Some of these posts had a direct relationship with what was being studied in class and others seemed to be rooted in the participants' genuine curiosity. It was discovered that all dialogue taking place on the Facebook wall stayed on the Facebook wall for an unlimited amount of time. To access older conversations, participants could either type a search word into the group search box or scroll down until they found a particular exchange.

**Weekly Reports**

Weekly reports were implemented as an administrative tool that allowed me to track the participation of each student. These reports required students to fill out a form by checking "yes" or "no" for whether or not they completed the minimum number of posts each week. Although this element does not seem like a significant piece of data, there was an open-ended comment section of the form that proved to be very beneficial for the study. Students were told that if they had any questions or comments, either about the study itself or about their participation in the study, that they could use that space to express those thoughts. The occasional comments expressed by the participant in this section were very valuable because they were given with no other motivation than to give feedback on how things were going. Consequently, it is from these comments that I discovered that students were feeling overwhelmed with the requirement of four posts per week. As mentioned before, this number was changed later in the study and was a direct result of these voluntary student comments.

**Follow-up Survey**

The follow-up survey was the third and final data source for the study. Considering what I initially hoped to find out in this project, it became clear that I needed an additional data source which would allow me to better understand the benefit of participation in the common digital space. I therefore designed a short follow-up survey consisting of 20 total questions (see Appendix A). The survey included Likert-style questions with a six point scale ranging from "strongly disagree" to "strongly agree." Other questions were open ended in nature, allowing students to respond in their own words. Two additional questions were included in the survey, one which asked about the section the respondent was from and the other allowed respondents to mark the different ways in which they used the common digital space.

## Data Collection

Data were collected differently for each data source. The wall posts were copied and pasted into a separate Word document on a weekly basis. Because of formatting issues, only the textual exchange was recorded. The weekly reports were emailed to me and were then stored in separate digital archives. The follow-up survey was administered online through an email invitation to the participants. With respect to grading, participants were informed that they could have up to three of their missed weekly reports replaced if they participated in the online survey. The survey was designed and administered using Qualtrics Survey Software. Because the data sources were digital, there was no need for transcription.

## Data Analysis

Analysis of the data was carried out in several phases. Phase One began a few weeks after the start of the semester and consisted of a qualitative categorization of the actual participant dialogues. I would first read all wall conversations posted during the previous week

to see what themes had emerged. I would then group individual exchanges into specific categories, creating new categories when the current ones were insufficient. Many categories emerged in this phase of the data analysis, some of which included grammar discussion, resource sharing, collaboration, humor, and cultural topics. This part of the analysis provided a considerable amount of information that helped answer the first research question about how the space would be used by participants.

Phase Two of the analysis was conducted after the end of the semester and consisted of a more precise identification of the categories for the individual discussions. This revised categorization of data was divided into three main areas which directly reflected the research questions of the study. The original categories were condensed in some cases and expanded in others to better support the three research questions. Before revising the original data set, rules of inclusion were drawn up for each of the three general areas to facilitate a more organized analysis of the data. This revision allowed for a much easier analysis of the overwhelming amount of generated data. The amount of data was much more than I had initially anticipated and the process of reading each exchange, assigning it a corresponding category, and retrieving those samples to support the findings was both time and energy intensive. In addition to the dialogues found on the Facebook wall, the comments from the weekly reports were categorized in a similar fashion in a separate document.

Phase Three of the analysis involved the follow-up survey. The open-ended answers were added to the categorical qualitative analysis. The majority of data used from the follow-up survey came from the open-ended questions as well as Question 2 about the various uses of the digital space. These three data collection phases allowed for a robust analysis.

**Ethical Considerations**

One of the main concerns of the research team prior to launching the study included the ethical considerations of the project. During these discussions concerns were expressed regarding online safety and privacy and online identity in the digital realm. To address these concerns, I decided to design a starter packet which would outline in detail examples and descriptions of appropriate contributions to the common digital space. In addition to this orientation packet, I decided to meet with each participating section during the first week of the semester to explain the project in person and to stress the importance of cordiality and civility in interacting with other participants. Considering the privacy of the students and given the open-access nature of social media, I took care to select a private group for the environment of the digital space. This allowed me to restrict access to the group to selected participants only. All participants who were added to the group needed to be added individually by the group administrator..

Participation in the study made up roughly 5% of the students' total class grade. For those students who preferred not to join the Facebook group, alternative assignments were available that were similar in nature to the Facebook project. Every student enrolled in the participating classes agreed to join the Facebook group and so these alternative assignments were not implemented during the course of this study.

**Chapter Summary**

In this chapter, I have provided details about the research design, participants, and data in this study. Further detail is given regarding data collection and analysis. The chapter concludes by addressing some of the ethical considerations of the study and plans to address some of the risks of online interaction. Justification was also given regarding decisions related to the study.

Recognizing that there are many ways to approach a problem, I felt that these decisions would allow me to better answer the guiding research questions of the study.

# CHAPTER 4

## FINDINGS

The findings in this report have been organized by the three guiding research questions of the study. Each research question is further divided into specific subsections with each subsection representing a precise data source. This chapter contains numerous data samples that were relevant to the research questions. Discussion and interpretation of these findings can be found in Chapter 5 of this report.

### How the Digital Space was Used

General findings with regard to utilization of the digital space included a wide variety of anticipated and unanticipated pedagogical uses. Unique indications of how the space was used can be found in subsequent sections devoted to the various separate data sources included in the study. To discuss how the space was used, I will present the pertinent findings from the wall post and follow-up survey data. Some outlying data were excluded because they lacked either quantity or were not substantial enough to mention.

#### Wall Posts

The original categorization of the wall posts consisted of 61 different categories. As the wall posts were reviewed, new categories were added and old categories were expanded to better represent the many uses that were being observed. Some dialogues were included in more than one category as they may have contained multiple topics. After the conclusion of the semester, these same categories were revisited and revised to better support the answering of the research questions. Rules of inclusion were drawn up to help with the cohesiveness of each category. The revised data set consists of 21 distinct categories of use that were observed throughout the

course of the study. The following table contains the original 61 categories as well as the

condensed list of 21.

**Table 1.** *Categorization of Wall Post Dialogues: Original 61 categories.*

| Collaborative study strategies | General study strategies | Speaking strategies | Listening strategies | Translation | Conversation hours | Additional Spanish texts |
|---|---|---|---|---|---|---|
| Oral assessment | Meeting outside of class for study | Meeting for other purposes, language related | Pronunciation | Food and recipes | Humor | Offers to help |
| Typing in Spanish | Grammar term definition | Grammar explanation | Grammar resources | Homework procedure | Opinion about homework | Opinion about course |
| About the project | Vocabulary | Slang | Professional opportunities for language teachers | Professional opportunities for Spanish speakers | Regional accents | Homework help |
| Student teaching and Praxis | Seeking help | Comment on answer in target language | Homework collaboration | Learning strategies | Cultural linguistic | Cultural general |
| Cultural sports | Cultural activities | Music | University policy regarding coursework | Missed class | Travel | Study abroad |
| Resources about general language topics | Conjugation and conjugation resources | Additional target language reading | Classroom questions | Teaching strategies grammar | Teaching strategies vocabulary | Teaching activity ideas |
| Accent written and pronounced | Dictionaries | Bilingual children | Motivation language learning | Global language learning | Language learning activities | K-12 language programs |
| Textbooks | Diversity | Betty la fea | Heritage language learners | Other teaching resources | | |

**Table 2.** *Categorization of Wall Post Dialogues: Revised 21 categories.*

| Resource sharing | Learning strategies | Self-initiated collaboration | Extension of the classroom collaboration | Professional development | Linguistic culture | Other culture |
|---|---|---|---|---|---|---|
| Negative reactions | Grammar | Vocabulary | Other linguistic | Study abroad | Jobs and internships | Classroom assignments |
| Opinions about content | Motivation | Benefits of collaboration | Heritage language learners | Quick feedback | Multiple perspectives | Explicit benefits |

Several of these categories will be discussed in the following section. Selections have been made based on the research questions as well as quantity and quality of the dialogues.

   **Resource sharing and collaboration.** One popular use of the digital space to emerge was the sharing and exchange of language-related resources. The original spelling, punctuation, and capitalization of these student dialogues have been preserved. One example of this exchange includes the following:

  Student A101: Hey Spanish 101 (Especially Senor Sebastian class), I thought that I would start creating flashcards to study for each lesson. I just created the ones for leccion 6 so respond to this post if you want me to send you an invitation so you can study from them as well.

  Student B101: That would be awesome!

  Student C101: I would love you to send me one!

  Student A101: Ok, I'll try to clean it up a little bit and then I'll let you know. I need find a good way to include the pertinent vocabulary. I just realized that the ones at the end of the chapter don't include all of them. Any ideas?

  StudentD101: I usually just start at the beginning of the lesson and scan for words I'm not familiar with and include them in my flashcard set. That has helped me a lot.

This dialogue not only contains evidence of resource sharing but of collaboration for studying the assigned vocabulary. This exchange, as with every example shown here, is initiated by the students themselves with no intervention by the instructor. When sharing resources in the common digital space, group members were not only directed to new information from one informant, but were often able to get a variety of input from multiple contributors, as the following dialogue demonstrates:

StudentA206:  Does anyone know if there's a list of the Spanish films that will eventually be shown in the SWKT this semester?

StudentB378:  ic.byu.edu has all information regarding international films and what languages they are shown in.

StudentC101:  do they show foreign films or just american movies in spanish?

StudentB378:  They are all foreign films and come in a variety of languages.

StudentD101:  If you are looking to watch movies in spanish, don't forget that most DVDs have Spanish as a language you can watch it in! Makes it more convenient :)

StudentB378:  The LRC in the Library also has a decent collection of Spanish films that you can check-out and watch there.

StudentE101:  From January 24-28, International Cinema will be showing Cinco días sin Nora [Nora's Will]. They are also showing four more films throughout the semester that include Spanish, but it looks like Cinco dias din Nora is the only one that is purely Spanish.

Another use evident in the wall post data included examples of students meeting outside of the classroom setting for language-related purposes. These meetings were often initiated by the students themselves and were not requirements of the course or the study. The following student comment is a good example of how this use appeared in the data:

StudentA101:  We have been meeting monday and wednesday nights at 9:00--kind of late I know, we're all just super busy! And Saturdays around 1:00 or 2:00! Please come!! Having more people would be awesome. Let's exchange numbers in class tomorrow!

**Learning strategies from multiple perspectives.** Another recurring use found in the wall post data was discussion of learning strategies. By including Spanish language learners

from different sections and different levels of Spanish-learning experience, I was able to observe more experienced learners sharing their suggestions with new language learners, as this dialogue indicates:

StudentA378: For all those that are beginning to learn Spanish, and even those who have been speaking it for while; what are some of the best methods you have seen for increasing your ability to converse in the language?

StudentB206: For me, the more I speak the better and more natural it becomes. Just forcing people to have conversations in Spanish is the best way to learn I think. It also helps me to listen to a lot of Spanish like watching movies, listening to music, and watching the news.

StudentC378 Marry someone who speaks the language natively.... I've found that if nothing else, you get alot of practice! jaja jk

StudentD206: Like [Name redacted] said, I've also found that forcing myself to talk in Spanish really helps. It causes me to put into practice the different verb tenses and new vocabulary I've been learning.

StudentE101: Really, that is the best thing. You can study from a text book til your eyes fall out, but you won't speak it until you've practiced and practiced some more. I've also heard that going to a Spanish speaking country helps a lot because you're forced into it.

**Professional development.** Because the study involved two sections of language learners who were preparing to teach the language, there emerged several conversations about best practices. The following dialogue is initiated by a SPAN 378 student who received feedback from a current language student in a lower-division course.

StudentA378: I've been gathering new activities where you can use vocabulary to practice. For example, acting out, Jeopardy, loteria etc. any other ideas out of the ordinary that you find enjoyable and helpful to practice and learn?

Student B206: My Spanish teacher used to put up a ton of our vocab words on the board and split the class into 2 teams and then she would say the word in English and the first person to hit it would get the point. Then she would give the winning team at the end of the game some sort of reward. This worked well because it motivated students to learn their words so they wouldn't let their team down and also because they would get a little prize!

StudentC378: "opposites" is always fun, and I found that learning the vocabulary in pairs helped me. The teacher says one word, the first person to hit the 'buzzer' and say the opposite gets a point

**Culture.** Still another category of pedagogical exchange that occurred in the digital space included discussion about various aspects of culture. Participants used the space to discuss music, dance, food, humor, sports, and language as it relates to the target culture. One participant asked the question, "Why do you think it is important to teach/learn culture when learning a language?" Responses to this question included many interesting student perspectives:

StudentA101: Learning the culture helps with word usage. For example it can help prevent you from insulting someone of that culture when speaking to them. Like who to talk to formally or what words are for a serious setting etc. Certain things are not talked about publicly. Like in the US, it is considered offensive to straight up tell someone they

are large or are sweating, but in some Asian cultures that is a normal statement to make to someone's face. That is all that comes to mind for now :)

Student B206: Also certain words are considered swear words in some Spanish-speaking countries but are perfectly common in others. Being familiar with those kind of cultural differences could save you from an embarrassing mistake!

StudentC377: It is incredibly important to learn the culture of the language because by learning what the people who speak it value, you gain a greater capacity to want to understand them more. Knowing and loving the people gives you a greater sense of purpose as you continue to advance in the language. It brings a depth to communication that just isn't there if you know nothing about who you're trying to communicate with.

StudentD206: Learning the language without learning the culture defeats the purpose of learning the language in the first place--to really understand the people who speak it.

StudentE206: I think a lot of the language depends on the culture. For example Spanish from Spain is totally different from Spanish in Chile or Argentina. Even though it is the same language, the culture determines how you speak.

StudentF378: It is so much more fun to learn the language when you are able to gain a greater understanding of the culture, as well. In addition, an individual is useless in communicating with others from the culture, unless they are aware of their values and traditions. (I am speaking from personal experience.) If the purpose of language is to communicate, then we ought to have a basic understanding of those we want to communicate with. Further, you are better able to form friendships with those you understand. I once heard a quote that stated that the people we love most are those we understand. Kind of funny, but I have found it to be true. :)

**Grammar.** The most common use of the digital space was to discuss grammar. An large number of participant dialogues are available to support this finding. According to the wall post data, answers to grammar questions, in particular, represented a varying degree of accuracy and clarity. In one particular exchange, I observed a natural co-construction among group participants:

StudentA101: Hey, does anyone know a quick way of explaining, or like some kind of trick they ever used to remember when to use por/para? I remember a friend that had some kind of acronym and was wondering if anyone else knew it...

StudentB378: SO one that I have found to be ok is PERFECT for por and the rest for para. PERFECT stands for Purpose ,like in order to, Effect, of one thing on another, Recipient, of a gift or something similar, Future, dates deadlines and events, Employment, you work for..., Comparison, between two things, and Toward a specific place. and the rest is para I would say look at the rules and understand them then this acronym just becomes a helpful reminder.

StudentA101: that's nice! thanks!!

StudentC378: I think you got it reversed! All of those are for para, and the rest is for por!

**Missed class and homework questions.** Another common use of the digital space was to ask fellow group members about missed class or to clarify course assignments and homework. A brief but helpful exchange between two students highlights this particular use:

StudentA206: SPAN 206 Question: Where can I find el ejemplo para "La Hoja de Vida"

StudentB206: It is under course documents and then just click on Hoja de Vida-modelo!

With respect to missed class the following exchange is also representative:

Student101A:  Hey Spanish 101 I am out of town and missed the lecture yesterday, did we go over any new material?

StudentB101:  In our class we just briefly went over conjugations for verbs that end in ar, so we went over hablar and a couple other words. But I wouldn't stress to much, I have a feeling they're going to be covering this a lot.

StudentC101:  Yes, we went over the beginning of chapter 2. The conjugation of infinitives.

Student101A:  ok sweet, thanks so much!

StudentD101:  Ya, it was just on regular "ar" conjugations  :)

The amount of data generated in wall posts alone was staggering.  The samples included here represent just a small percentage of the exchanges that occurred throughout the course of the study.  The first categorization of wall posts consisted of 231 pages of student exchange.  The samples included in this section of the report were most representative of the more popular uses of the Facebook group.  In the following section, I will discuss evidence of use found in the follow-up survey.

**Follow-up Survey**

In effort to fully understand the way students used the digital space provided them, evidence of use was sought out in all three data sources.  The third source to investigate use was a follow-up survey administered towards the end of the study ($n = 41$).  Question 2 in particular revealed a telling portrayal of participant use of the digital space (see Figure 1).  Responses indicate that grammar was the most common use of the space followed by discussion of culture, learning resources, conversation topics in Spanish, and music.  Respondents were asked to select the options that reflected their own personal use of the digital space.

**Figure 1. Ways in which Participants Used the Digital Space.**



| # | Answer | | Response | % |
|---|--------|---|---------|---|
| 1 | learning strategies. | | 19 | 45% |
| 2 | pronunciation. | | 7 | 17% |
| 3 | culture. | | 30 | 71% |
| 4 | music. | | 24 | 57% |
| 5 | what I missed in class. | | 8 | 19% |
| 6 | study abroad. | | 13 | 31% |
| 7 | learning resources. | | 28 | 67% |
| 8 | teaching resources. | | 14 | 33% |
| 9 | online dictionaries. | | 12 | 29% |
| 10 | homework. | | 21 | 50% |
| 11 | typing in Spanish | | 8 | 19% |
| 12 | vocabulary. | | 20 | 48% |
| 13 | food. | | 22 | 52% |
| 14 | meeting outside of class for language related purposes. | | 8 | 19% |
| 15 | conversation topics in Spanish. | | 27 | 64% |
| 16 | grammar. | | 35 | 83% |
| 17 | study strategies. | | 16 | 38% |
| 18 | professional opportunities for Spanish speakers. | | 3 | 7% |
| 19 | other class assignments. | | 11 | 26% |
| 20 | other | | 0 | 0% |
| 21 | humor. | | 22 | 52% |

This table supports the other data source findings about how the common digital space was used by the participants. Together, the findings from all three data sources paint a clear picture of how the space was utilized by the students.

    **Information judgments.** Another survey question about use asked respondents to report the criteria they used when considering the accuracy of a given answer in the Facebook group. Question 15 asked, "What sort of criteria did you use to judge the value and accuracy of the information shared by others?" Responses were varied, but there seemed to be a common thread in two main criteria. One student stated, "Because they were in a higher class than me, I trusted

their advice." A number of students' answers suggested that information given by higher-level Spanish students was perceived as being more accurate. Other common responses to this question included looking up additional resources to cross-reference the information given.

## Benefits of Participation

Positive and negative effects are presented here as they are found in the data sources of the study. The majority of data regarding these effects were found in the follow-up survey. In the survey, students were able to elaborate in detail about what they thought were the benefits of participation. I anticipated that through participation in the Facebook group, students would profit in a variety of ways, including an increase in collaboration and motivation to learn autonomously. As I reflect on the data from the study, it is interesting to see that although some of the anticipated benefits were affirmed, others were not as evident. The two data sources that contained the best examples of benefits included the weekly reports and the follow-up survey.

### Weekly Reports

Although not as explicit as examples found in the follow-up survey, student comments collected from the weekly reports gave some insight with regard to positive and negative effects of participation in the Facebook group. For example, early on in semester, one student stated, "I think this is a great resource for those who are trying to improve their study of Spanish language and culture. I'm very excited to watch this progress over the course of the semester." Two more specific comments indicate that the space was beneficial in that it allowed students to check with their classmates about assignments and other classroom procedures. A student from the 206 section wrote, "I missed a day of class and used an initiating task to ask about what I missed. This was very helpful because I didn't feel behind." Similarly, a student from the 378 section commented, "The Facebook group has helped me contact other members of my class several

times when I've had doubts about assignments, etc. For this reason, this tool has been very useful."

With regard to quick feedback about language-related topics, there were mixed results. One 206 student explained, "It's actually kind of nice to have somewhere to ask all of those Spanish grammar questions that I've had for a while." Another student stated that "the FB informe project has been useful in asking emergency questions to classmates about how to do assignments." However, a third student commented the following:

I find if I have a question about Spanish, I ask one of my friends via text or my study partner for conversation hours. I don't know if it is because the group is a new thing or I get a quicker response from friends, but asking the FB group isn't my first thought at this point when I have a question.

Although these comments give us an idea of how the students benefitted from their participation, the follow-up survey data allowed for a more accurate interpretation of positive and negative outcomes.

**Follow-up Survey**

A number of benefits were apparent in participant responses to Question 16 of the survey, "What did you like most about your experience in the Facebook group this semester?" One specific benefit was being able to ask questions about the language at their own convenience. One respondent wrote, "I could ask questions that I wasn't necessarily going to ask in class." Similarly, another stated, "I was able to receive quick answers to questions I had with the language outside of class." In support of quick feedback, another student explained, "When I was doing my own personal study and I had a question, I didn't have to worry about forgetting before I had the chance to ask my professor, because I could just post it on the Facebook page.

Also, it was a much quicker response!" Several comments mentioned that they enjoyed being in a group with a mix of Spanish language learners. One student wrote, "It was easy to ask questions about anything. There were students who were a lot more advanced than I who were willing to answer and explain my questions." Another student responded, "It provided a means for experienced spanish speakers and those with little experience to support each other in learning and mastering the language." Other responses to this same question indicated that some students benefitted with regard to professional development. One student simply wrote, "I liked that I got to help people learn." Another student stated, "It was nice to see students from the younger classes sharing their difficulties about learning the language. This helped me feel better prepared to know what I need to teach well."

Another survey question shed additional light with regard to benefits of participation. Question 18 asked, "In what ways did you benefit from your participation in the Facebook group this semester? Several students mentioned culture as a benefit of participation. One student wrote in general terms, "I was able to learn more about the Spanish culture outside of the classroom." Another student stated, "I did like learning about little cultural things that other students shared." In additional support to benefits regarding professional development one student wrote, "It was good to see what things students struggle with as they learn Spanish so that I can keep those difficulties in mind better when I am teaching spanish myself." Also in support of having a variety of perspectives from language learners at different proficiency levels, one student explained, "I learned that studying a language is best when you can get input regarding whatever it is you're studying from a lot of different sources at multiple proficiency levels."

Although the large majority of feedback to these survey questions was positive and favorable, there were also responses that indicated negative feelings. In response to Question 18 addressing benefits of participation, one student wrote, "None, really." This same student stated that what they liked least about the project was "being required to participate in it."

More concerns emerged in answers to survey Question 17, "What did you like least about your experience in the Facebook group this semester?" With regard to the large amount of exchange early on in the study, one student commented, "I felt overwhelmed at times reading the posts in the group." A number of students mentioned that being required to post a minimum number of contributions caused participation to feel contrived. As a reflection of these sentiments, one student wrote, "At first I did not like that we had to comment a certain amount of times each week because it felt fake. I felt like I needed to make things up to ask or comment." Other students stated that they did not "remember to check" the Facebook group. Despite these common concerns with the study, the large majority of feedback was both positive and constructive.

<div align="center">Connection Between Spaces</div>

Other survey questions addressed the connection between the digital and physical learning spaces. Many of the findings already presented in this chapter lend support to understanding the connection between the digital and physical learning spaces. The numerous student comments about being able to ask questions in the Facebook group indicate that the digital space served as an extension of the classroom environment. More specific examples of the connection between the environments were found in the follow-up survey data including discussion about the role of the instructor and extension by content, It is important to remember that three different instructors were involved in the project and that the connection between

spaces may have changed because of the instructor variable. This variation could be due to the instructors showing different levels of excitement for the project as well as the degree to which they make reference to the digital interactions.

**Follow-up Survey**

Many of the findings regarding the connection between learning spaces were found in the student responses to Question19 of the follow-up survey. The question asked, "In what ways was the Facebook group integrated into the classroom?" Responses to this question varied greatly. Answers ranged from, "Topics discussed in class were often discussed in the Facebook group" to "We didn't integrate it at all in our class." This disparity of integration was not restricted to the difference in instructors' teaching styles but seemed to exist among students with the same instructor as well.

Other students mentioned that the only connection between the Facebook group and the classroom was that participation in the digital space was reflected in their course grades. Apart from the findings included in the follow-up survey, comparatively very little support emerged in the data with regard to the connection between the learning spaces. Further discussion of the connection between spaces will be included in Chapter 5.

<div align="center">

**Chapter Summary**

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The most representative samples of data were included in this chapter and I have presented the findings as they relate to each of the research questions for the study. It is evident that different data sources were better suited to elicit specific kinds of information. All efforts have been made to include an unbiased presentation.

If the information seems overwhelmingly positive it is because the large majority of participant feedback was favorable and constructive. Participant concerns and complaints were

included to achieve a more accurate representation of the results. Interpretations of these findings will be presented in the following chapter of this report.

# CHAPTER 5

## DISCUSSION AND IMPLICATIONS

In this chapter, I will discuss the findings from the study, offering my conclusions with respect to my initial research agenda. This section of the report is a direct result of findings mentioned in the previous chapter and builds on the textual evidence offered by the participants themselves. It has been organized into three main sections with each section representing a different research question. To conclude, I will address areas of further research and provide my final thoughts on the study.

### How did Students Utilize the Common Digital Space?

Answering how the students utilized the common digital space was much easier than answering the other two research questions given the results from my data sources. With hundreds of pages of dialogue to sift through, I was able to reconstruct a good representation of how the students used the space provided them. Given the findings, I have identified two main uses of the space that encompass most of what I observed in the data. I have chosen to characterize these as sharing and collaboration. According to Question 2 of the follow-up survey, the top five uses of the digital space, as reported by the students themselves, were to discuss grammar, culture, learning resources, conversation topics, and music. Some of this discussion could be classified as sharing while other exchanges were more collaborative in nature. Although sharing could be considered a subdivision of collaboration in general, I chose to keep the two terms separate for the purpose of this discussion. For the purpose of this study, sharing will refer to information and resources provided by one participant to other participants. Collaboration refers to two or more participants communicating together to solve a problem or to better understand a given language concept. I conclude by discussing the relationship between

student perception and use as well as incentivization and how it might be considered by any department wishing to implement a similar component in their language program.

**Sharing**

A large amount of pedagogical exchange occurring in the digital space can be summarized as some form of sharing. Social networks are platforms built for sharing, whether it is of textual information, family pictures, video, or links to interesting articles. The sharing that I observed in the Facebook group was similar in some aspects to what would be found in a typical Facebook exchange. The difference was that everything seemed to be rooted in language learning and cultural exploration.

The findings indicate that students used the space to share resources, learning strategies, teaching strategies, and information about culture, grammar, and vocabulary. They shared insights directly related to the course content but also discussed intellectually-stimulating topics that had no connection to the course. Students who missed class would ask their classmates to share with them what they had missed and what they should study to be prepared for the next day. From a pedagogical point of view, it was rewarding to see how students from different classes came together to contribute their knowledge and understanding of language and culture with their fellow classmates.

These contributions were all filtered through each participant's set of information judgments. Not all shared information was automatically accepted as completely accurate or helpful. As indicated in the findings chapter of this report, students thought about several factors before accepting the veracity and value of a posted answer. Among these factors they mentioned the level of Spanish of the respondent, the inclusion of sources, and the repetition or support of answers as all being important when judging a particular exchange.

Students were able to enter the group and immediately begin sharing in the digital space. Each social platform has a unique code of conduct which sets the tone for social exchange in that specific environment. Because most of the participants were already acclimated to the sharing nature of Facebook, they were able to transition to using the program for pedagogical exchange.

**Collaboration**

Another exciting use of the digital space was for collaboration. As seen in the findings chapter, participants used the group wall like a message board to post meeting times for study groups and other gatherings. They reached out to one another to explore the language of their own initiative. This collaboration was sometimes an extension of a classroom assignment, but was also carried out detached from any sort of course requirement. In this way, students were allowed to stay connected and to continue their learning long after the end of class.

I envision the Facebook group being used as a digital space that can be referenced for language learning years after the students have left the university setting. Depending on how a department wishes to integrate social networking into the language curriculum, this tool has the potential to be an ever-growing community of collaborating language learners who have passed through the ranks of an institution throughout the years.

It is important to note that findings from the follow-up survey with regard to collaboration were not as convincing as those from the wall post data. Multiple dialogues consisting of several pages' worth of data were found in the wall post data as strong evidence of collaboration. It is my belief that this evidence lacked support from the follow-up survey because of the response limitation of Question 2 of the survey. Question 2 consisted of a discrete point design where specific options were given from which students chose their responses. Although only 19% of respondents selected "meeting outside of class for language related

purposes," 67% indicated "learning resources" and 45% selected "learning strategies" as uses of the digital space. There was no response option that explicitly stated collaboration as a use of the space. It is my assumption that in selecting "learning resources" and "learning strategies," respondents collaborated to some extent with regard to these two uses. Stronger data could have been found had collaboration been included as a single response option in the survey question.

**Usage that Reflects Perception**

After reflecting on the data, it appears that students used the digital space in accordance with their perception of the most important aspects of the course. Students in the 101 and 206 classes, for a variety of reasons, generally perceive grammar to be the most important aspect of a language class. The fact that students chose this as the most important element of the course is interesting because assessment for the two lower-division courses included speaking, writing, reading, and listening, taught primarily within a communicative setting. This leads me to think that students entered the university setting with preconceived notions of how language is taught and learned. These ideas may be a result of their K-12 education or other settings where language learning was experienced. Also of interest is the fact that students did not use the synchronous group chat function of the group. This function was highlighted for all participants at the beginning of the study and, although they were encouraged to be creative and explore additional uses of the space, they chose not to communicate with each other via chat. This again seems to be a result of students perceiving the value of the space to be discussion of discrete point topics instead of communicative exchange among participants. Because of this perception, they used the digital space to ask questions and to further explore discrete topics relating to grammar and vocabulary. This echoes findings by Mazman and Usluel (2010) who reported that usefulness was a key consideration in technology adoption. I would argue that if students

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perceived the more important aspect of the course to be communication, then exchange in the digital space would represent a more communicative set of uses.

Additionally, use of the digital space may have been defined in part by a social component. It appears that the majority of questions asked came from the two lower-division courses and that the majority of the questions answered were provided by students in the upper-division classes. This may have been due to students at the upper levels being embarrassed to ask questions about the language for fear of being exposed as having a lack of linguistic knowledge for their respective class level. Likewise, students at the lower divisions may have been hesitant to suggest answers believing that their knowledge of the language was far inferior to that of the upper-division students.

**Incentivization**

To generate ample amounts of dialogue, I initially set the minimum number of wall posts at four per week. This minimum requirement quickly generated a substantial amount of data. After just a few weeks into the semester, I received multiple participant comments saying that the four posts per week minimum was too high and that their contributions were beginning to feel forced and inauthentic. Arnold and Ducate (2006) found that "requiring my students to post three times during the week and providing them with specific questions and grading guidelines may have been significant factors in promoting dialogue" (p. 56). I chose not to use weekly conversation topics for the purpose of maintaining an open creative environment that would allow students to participate in the space without any instructional restraints or direction. Additionally, whereas Arnold and Ducate found the ideal minimum post number to be three, my ideal number was in fact lower. It might be useful to negotiate with the participating courses at the beginning of the semester a comfortable and beneficial number requirement for weekly posts.

I found that posting two comments per week generated a good amount of dialogue and was not overly burdensome for the students. These elements of technology integration proved to be essential in creating a successful learning environment in the digital realm.

The findings support those of Stevenson and Liu (2010) in that participants used the space to explore online language resources. However, I did not find evidence to support their claim that students preferred traditional language learning materials in addition to the digital resources mentioned in the Facebook group. This may be due to the fact that this study focused solely on the Facebook platform where the work by Stevenson and Liu allowed for a side-by-side comparison of multiple social network platforms for language learning.

### What were the Benefits?

Benefits seemed to vary greatly among participants. This may be due to the fact that participants represented four different language courses. Perhaps because of the difference in research design, there was somewhat of a mismatch between benefits found in the reviewed literature and what was found in this study. Stepp-Greany (2002), for example, mentioned that students reported learner confidence, technical skills, and communication skills as benefits for having participated in the digital space. Although these may have been benefits experienced by this study's participants, they were not found in the data analysis. This difference seems to be a result of incongruence between data collection from this study and that of Stepp-Greany. Whereas my survey focused on general benefits through asking open-ended questions, it appears that the survey questions used by Stepp-Greany were more specific in nature. For this study, three general benefits have been identified including instant access, continuous learning, and interaction with learners at multiple proficiency levels.

**Instant Access**

A number of students mentioned the ability to receive prompt feedback from peers as a benefit for participation in the digital space. The group allowed students to ask questions at any moment instead of waiting until the next class period to voice their inquiry. This idea of instant access changes the traditional model of a single knowledge resource and 25 knowledge seekers to 100 knowledge seekers who also act as a collective body of resources. One student's comment was representative of this benefit as she writes, "I liked having other students as an easily accessible resource.." Another student appreciated, "being able to ask a question whenever it popped into my head." This same instant access might not be seen in a smaller group of participants but may be a benefit unique to a larger organization of sections because of the number of participants available to respond to posted inquiries. Along the lines of instant access, students were able to be more continuously involved in the learner process. This may also have played a factor in collaboration because, as Martinsen and Miller (2012) indicate, having instant access to the group project better facilitates collaboration.

**Continuous Learning**

It is a common idea that student learning is often turned off when students exit the door of the classroom. Interaction in the digital space was one benefit that helped the students to continue learning after the end of the class period. Additionally, the majority of students did not perceive participation in the Facebook group as a traditional homework assignment and were excited about interacting with others in the space. One student from an upper-division class wrote, "Any Span 101/102 or 205/206 students who have Spanish questions feel free to message me for help! I don't have time to tutor this semester but I can answer questions here and there!"

Here it is evident that the space provided a convenient gathering place for learning detached from time and space limitations.

Also, because many students would check their personal Facebook accounts on a daily basis, it was not too hard to click on the group to see what kinds of conversations were taking place there. One student stated that they benefited from the project because of "the simplicity and integration with something I already use." The countless exchanges regarding grammar, vocabulary, culture, and numerous other topics discussed in the digital space suggest that students were teaching and learning long after the end of daily classroom instruction. In the follow-up survey one student responded, "The Facebook group was enjoyable because it kept me thinking in Spanish when I wasn't in class."

**Multi-proficiency Level Interaction**

A third and final general benefit had to do with interaction among the four different Spanish sections. The findings indicate that another of the benefits for participation was the ability to interact with Spanish language learners at different proficiency levels. Students in the lower-division courses mentioned that having the upper-division teacher-track students in the group was beneficial. For instance, one student commented, "I learned that studying a language is best when you can get input regarding whatever it is you're studying from a lot of different sources at multiple proficiency levels." Likewise, students in the teacher-track courses mentioned that seeing what kinds of questions actual language students had and being able to suggest answers was beneficial to them as future language professionals. One student wrote, "I liked how everyone was sharing different ideas on what helped them study better, you don't usually have that opportunity during or after class.". Although the original idea for the study was to combine multiple sections of the same course, by combining different courses into the same

group, students were able to offer different perspectives and learning experiences when approaching a problem or question.

**Opposition**

One student in particular expressed feelings of frustration for having to participate in the study. This student suggested that the Facebook group would be a good idea for the lower-division Spanish courses but was not beneficial to the teacher-track courses. Other students suggested possible changes to the study, but were more constructive in their feedback. These changes included implemented weekly prompts and lowering the number of required posts. This is important to take into account when considering implementing a similar project for a course. This opposition might be alleviated by encouraging the students to be open and honest about their participation not only at the end of the semester but on a weekly basis as well. I found that a good way to hear feedback from students was by using the weekly reports and allowing students to comment on their participation as the project progressed. Although no student refused to participate in the project, alternative tasks that are similar in nature could be arranged for those wishing to avoid social networking for educational purposes. These difficulties are different from those mentioned by similar research. For instance, Stevenson and Liu (2010) found that when learning language through online websites, students reported a dislike for programs that resembled other popular social networks. The findings from my study produced no evidence to support their claim, possibly because whereas Stevenson and Liu focused on comparing multiple digital spaces to one another, my study only included one digital platform, the Facebook group.

**What was the Connection between Learning Spaces?**

In setting up the common digital space, my objective was to extend the physical space of the classroom. I hoped to create an environment that would allow students an informal meeting place to exchange ideas and strategies about learning. Although the extension into the digital space was an explicit goal, I wondered about how the two spaces would be connected and more specifically, what would be the factors keeping them or preventing them from being connected. After sorting through the data from the study, it is evident that the connection between the physical and digital learning spaces was the most difficult to understand of the three research questions. The aspects that did emerge include role of instructor and content.

## The Role of the Instructor

I anticipated that one of the key factors in determining the connection between learning spaces would be the role of the instructor. Although instructors were not encouraged to participate in the Facebook group, I was interested to see how they would bring the digital dialogues into their classrooms. When asking the participants about how the spaces were connected, a small number of them mentioned that their instructor deliberately made mention of the Facebook group on a regular basis while others stated that the spaces were not connected at all. Because of the contradicting responses with regard to connection between the learning spaces, it is difficult to determine what factors influenced the connection. Stepp-Greany (2002) measured student perception of the role and importance of the instructor in technology-enhanced language learning and found that students did find the instructor role to be important. Despite a lack of active instructor roles in uniting the two spaces, participants were still successful in using the digital space for effective pedagogical exchange. This success could very well be increased

if the participating instructors were also involved in the project by actively drawing from both learning spaces to present and enhance learning opportunities.

**Extension Through Content**

The second factor which played a part in the connection between spaces was course content. Course content seemed to be a natural connector of learning spaces. Assignments and other activities which required collaboration were often mentioned in the digital space. Group members also elicited opinions from other participants regarding grammar, vocabulary, and cultural topics that were discussed first in the class. This exchange also flowed from the Facebook group to the classroom as one student noted:

> Sometimes we would discuss things in class that had been posted on the Facebook page. For instance, one time someone asked a question on the page, and no one seemed to be able to answer it correctly, so we discussed it the next day in class because our teacher was a part of the group and checked it regularly as well.

The connections between spaces could be strengthened if weekly or even bi-weekly discussion topics were used as prompts for group members to discuss. This would be particularly beneficial for a group consisting of different sections of the same course, but was problematic when involving four different courses in the same group. Upon conclusion of this study, there are several areas, including the connection between learning spaces, that I feel could be explored as the main focus of separate studies.

## Implications

For anyone considering using a social network as a digital extension of the learning classroom, the following considerations should be given attention. This study found that pedagogical exchange in the common digital space reflects student perception of the course

objectives. This phenomenon could be altered if strict guidelines for usage were provided to the student with regard to how the space should be used. Given the design of the study, sharing and collaboration are two uses that can be achieved in extending the physical space into the digital realm.

As Benkler (2006) suggested, technology is adopted only when the task at hand is made easier by using a particular program or machine. Therefore, instructors may want to define potential benefits as goals for participation in the digital space. The study found that benefits included instant access, continuous learning, and language learning from multiple perspectives.

Finally, the role of the instructor needs to be clearly defined prior to establishing a digital learning space. It seems that the role of the instructor is a pivotal factor in the successful extension of the physical learning space, but additional research is needed to support that hypothesis.

## Suggestions for Future Research

This study attempted to identify some of the key purposes for which students use a common digital space when given sufficient freedom to be creative. I feel that the questions of how students benefit and how digital spaces are connected with physical classrooms could be two areas which would profit greatly from future research. Measuring benefits would be easier to accomplish if the sections included in the Facebook group represented the same course instead of four different courses because the project would consist of participants with similar language learning goals. Future research might want to also consider the benefits received or perceived by the instructors involved in the Facebook project. The connection between learning spaces could also be explored more efficiently if Instructor roles were manipulated as variables.

**Limitations**

This study was slightly limited by the lack of diversity in participant population. The majority of participants were university students between the ages of 17 and 26. Findings would no doubt be different if a larger percentage of the participants were non-traditional students representing a wider age range and background. This study also restricted its analysis to Spanish courses, but could be replicated for other languages or even other academic subjects. Another limitation of this study was the short duration of one semester. It would be interesting to see how the results of the study might change after several semesters of implementation.

**Conclusions**

In this report I have presented my study of pedagogical exchange in a common digital space. Given the constant evolution of educational technology, many more reports are sure to emerge regarding this topic. I consider this to be one of the first steps in assessing the potential of social networking for language learning purposes. It is not hard to believe that time spent online is ever increasing. The purpose of this study is to go beyond answering research questions by showing the public that some of that online time can be spent learning and progressing.

**Appendix A – Follow-up Survey**

1) Please select the class in which you are enrolled.
❑ SPAN 101
❑ SPAN 206
❑ SPAN 377
❑ SPAN 378


2) Please mark ALL that apply. I used the Facebook group to discuss...
❑ learning strategies.
❑ pronunciation.
❑ culture.
❑ music.
❑ what I missed in class.
❑ study abroad.
❑ learning resources.
❑ teaching resources.
❑ online dictionaries.
❑ homework.
❑ typing in Spanish
❑ vocabulary.
❑ food.
❑ meeting outside of class for language related purposes.
❑ conversation topics in Spanish.
❑ grammar.
❑ study strategies.
❑ professional opportunities for Spanish speakers.
❑ other class assignments.
❑ other _____
❑ humor.


3) I found myself checking the Facebook group more than the minimum requirement.


4) Through interacting with my classmates in the Facebook group I found out information about them that I would not have found out otherwise.


5) In the Facebook group I was able to ask questions that I felt uncomfortable asking in class.


6) The Facebook group was a benefit to me this semester.

7) I learned more about Spanish language and culture by participating in the Facebook group than I would have in a language class without a Facebook component.

8) By participating in the Facebook group I was able to explore the language at my own pace.

9) I would participate in the Facebook group even if it were not a graded component of the course.

10) Because of my participation in the Facebook group I continued to learn about language even when I was not in class.

11) I found it helpful to interact with students from different Spanish classes.

12) Having participated in the Facebook group I feel better prepared to teach language.

13) Participation in the Facebook group enhanced our experience in the classroom.

14) Ideas discussed in the classroom emerged in the Facebook group.

15) What sort of criteria did you use to judge the value and accuracy of the information shared by others?

16) What did you like most about your experience in the Facebook group this semester?

17) What did you like least about your experience in the Facebook group this semester?

18) In what ways did you benefit from your participation in the Facebook group this semester?

19) In what ways was the Facebook group integrated into the classroom?

20) What changes in the project would you implement to better meet the needs of language students?

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