

## VITA

Monica Baez-Holley

### EDUCATION

PhD. Curriculum Instruction Media Technology (Language Education)  
Indiana State University, Terre Haute, IN, August 2013

Master of Arts, Cross-Linguistics/TESOL  
Indiana State University, May 2004

Master of Sciences, Political Science  
Indiana State University, May 2002

Bachelor of Arts, Intercultural Studies,  
Saint Mary-of-the-Woods College, May 2000

### PROFESIONAL EXPERIENCE

Assistant Professor of French and Spanish (2004-present)  
Department of Literature and Languages  
Saint Mary-of-the-Woods College; Saint Mary-of-the Woods, IN, 2004-present

Assistant Professor of Political Science  
Department of Literature and Languages  
Saint Mary-of-the-Woods College; Saint Mary-of-the Woods, IN, 2008-2010

Adjunct Faculty in French and Spanish (2004- 2005)  
Department of English, Journalism and Languages  
Saint Mary-of-the Woods College; Saint Mary-of-the-Woods, IN, 2004-2005

Teaching Assistant in Spanish  
Department of Language, Literatures and Linguistics  
Indiana State University, Terre Haute, IN, 2002-2004

### AWARDS AND HONORS

Alva E. Davis Award for Outstanding Linguistics Graduate, Indiana State University, 2004  
Outstanding TESOL Master's Student, Indiana State University, 2004  
Who's Who Among Students in American Universities and Colleges, 2002  
Member of the SMWC Hispanic Advisory Board, Saint Mary-of-the-Woods College, 2001  
Saint Mary-of-the-Woods College Academic Honors, 1998  
Sigma Tau Delta International English Honor Society

FOREIGN LANGUAGE ANXIETY IN THE CLASSROOM AND IN AN ONLINE  
ENVIRONMENT

---

A Dissertation

Presented to

The College of Graduate and Professional Studies

Department of Curriculum, Instruction, and Media Technology

Indiana State University

Terre Haute, Indiana

---

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

---

by

Monica Báez-Holley

August 2013

© Monica Baez-Holley 2013

Keywords: foreign language anxiety, traditional classroom, online, student's achievement

COMMITTEE MEMBERS

Committee Chair: Susan Powers, Ed.D.

Associate Vice President for Academic Affairs and Professor Curriculum, Instruction,  
and Media Technology Department

Indiana State University, Terre Haute, Indiana

Committee Member: Susan Kiger, Ph.D.

Department Chair and Professor Curriculum, Instruction, and Media Technology  
Department

Indiana State University, Terre Haute, Indiana

Committee Member: Leslie Barratt, Ph.D.

Department Chair and Professor Languages, Literatures, and Linguistics Department

Indiana State University, Terre Haute, Indiana

## ABSTRACT

This study compared the levels of anxiety that students experienced when taking a foreign language in the classroom with those taking a foreign language at a distance. It also aimed to determine if the student's academic performance in the course could be predicted by his or her foreign language anxiety level. The sample consisted of 107 undergraduate students (57 traditional classroom students and 50 online students) enrolled in SPAN 101 at Indiana State University in the spring of 2012. Participants were asked to complete the L120 Questionnaire 2 developed by Hurd (2003). The original version of the instrument was used with the online students and a modified version with the classroom students. The results of this study indicated that there was no difference in the levels of foreign language anxiety experienced between classroom and online students. It was concluded that students' anxiety level was not a good predictor of final test scores in either environment.

## ACKNOWLEDGMENTS

One of my goals in life has been to obtain a doctoral degree, and now after many, many years of hard work and sacrifices I have finally accomplished it. However, this would not have been possible without the support, encouragement, and dedication that professors, friends, and family have given me throughout my studies. First, I would like to thank all the members of my committee: Dr. Susan Powers, Dr. Susan Kiger, and Dr. Leslie Barratt.

Dr. Susan Powers, thank you for serving as my dissertation chairperson and for all the words of encouragement and support that you have given me throughout the entire dissertation process. Your kind words helped me to jump “through all the hoops.”

Dr. Susan Kiger, thank you for being an excellent professor, advisor, and department chair. Your guidance and invaluable assistance allowed me to accomplish my education goals.

Dr. Leslie Barratt, thank you for your friendship inside and outside the classroom. Your encouragement and instruction enabled me to develop a passion for the learning and teaching of foreign languages. Also thank you for organizing and dedicating your time to the “dissertation support group” – we all need an extra push!

Dr. Eric Hampton, thank you for helping me to see the “good” side of statistics. Your infinite patience and valuable assistance in this subject helped me to overcome my fear of Chapter 4 and finish this dissertation.

Dr. Lisa Calvin, thank you for allowing me to give the survey to several of the SPAN 101 courses and for all your support.

I would also like to thank my friends and co-workers, Peggy Berry and Judy Tribble.

Peggy, mi fiel confidente. Muchas gracias por brindarme tu sincera amistad por tantos años y por creer en mí. Tus palabras de aliento al igual que toda la ayuda (a corregir mi gramática y ser mi constante diccionario) que me brindaste me ayudaron finalmente a completar este estudio.

Judy, thank you for being my “library fairy” – without your help I would never have been able to write this dissertation. Your miracle fingers and knowledge helped me to get my hands on several articles, journals, and books. Thank you very much for going beyond your work duties and taking some time to help a friend.

Thank you to my sister Dr. Daniela Baez, my husband Brian Holley, my two daughters Luna and Canela, and my “grandma” Jennie Bishop.

Dani, quiero que sepas que sinceramente no lo hubiera hecho sin ti. Tus logros me empujaron a seguir adelante y ver que si “hay luz al final del túnel.” Gracias no solamente por empujarme durante dos clases de estadística, a completar miles de papeles de IRB, a organizar toda la información de las encuestas, y con SPSS. Tu realmente eres el cerebro de la familia!

Brian, thank you for taking over the roles of dad and mom when I was working on this project as well as when I was exhausted. Your support and hard work kept this family afloat. I love you.

Luna and Canela, right now you are probably too young to understand the important role that you played in the accomplishment of this dissertation. Your patience, understanding, and unconditional love allowed me to finish it. All the sacrifices that we had to make as a family are paying off.

Grandma Jennie, there are no words to express the immense gratitude that I have for you. Through all these years you have helped me to raise and take care of my kids while I was at work or in class. Your unconditional love and unselfish actions have aided me to accomplish many of my dreams.

To my parents Monica C. Lopez de Baez y Cesar G. Baez, quiero decirles que agradezco a Dios por haberme dado padres como ustedes. Todas las enseñanzas, palabras de apoyo, y todo el amor incondicional que me han dado me ha ayudado a triunfar en la vida. Gracias a mi “mime” que me dio la oportunidad de tener una buena educación y recordarme constantemente que “dos, tres, cuatro maestrías no hacen un doctorado.”

## TABLE OF CONTENTS

ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	ix
LIST OF FIGURES.....	xi
INTRODUCTION.....	1
Statement of the Problem.....	1
Purpose of the Study.....	3
Significance of the Study.....	3
Assumptions.....	4
Research Questions.....	4
Hypotheses.....	4
Limitations.....	5
Delimitations.....	5
REVIEW OF THE LITERATURE.....	6
Foreign Language Education in the American Curriculum.....	6
The Role of Technology in Curricula.....	9
Second Language Education in an Online Format.....	14
Foreign Language Anxiety.....	15
Anxiety Among Distance Learners.....	23

RESEARCH METHODOLOGY .....	27
Sampling Procedure .....	28
Research Instrument.....	28
Survey Procedure .....	30
SPAN 101 (Online).....	30
SPAN 101 (In Classroom) .....	31
Analysis of Data.....	33
Summary.....	33
RESULTS .....	34
Organization of Data Analysis.....	35
Descriptive Characteristics of Respondents.....	36
Summary of Questionnaire .....	38
Research Questions.....	54
Research Question 1 .....	54
Research Question 2 .....	55
Summary.....	60
DISCUSSION AND RECOMMENDATIONS FOR FUTURE RESEARCH .....	62
Discussion.....	62
Differences and Similarities between Classroom and Online Students.....	63
Recommendations for Practice .....	74
Recommendations for Future Research .....	78
Summary.....	80
REFERENCES .....	81

## LIST OF TABLES

Table 1. Changes Made in L120 Questionnaire 2.....	32
Table 2. Participants' Gender .....	36
Table 3. Participants' Age.....	37
Table 4. Participants' Employment.....	37
Table 5. Level of Quality as a Language Learner.....	38
Table 6. Participants' Experience with Problems Learning Spanish.....	39
Table 7. Problems Classroom Students Experienced .....	41
Table 8. Problems Online Students Experienced.....	42
Table 9. Participants' Ratings of Specific Factors.....	43
Table 10. Participants' Anxiety about Language Learning in Comparison to Learning Other Subjects.....	45
Table 11. Situations that Cause Anxiety among Classroom Language Learners .....	46
Table 12. Situations that Cause Anxiety among Online Language Learners .....	47
Table 13. Ability to Work Out Ways of Dealing with Anxiety.....	48
Table 14. Classroom Participants' Ways of Dealing with Anxiety when Learning a Foreign Language.....	49
Table 15. Online Participants' Ways of Dealing with Anxiety when Learning a Foreign Language.....	50
Table 16. Participants' Actions to Become a Better Language Learner.....	52

Table 17. Participants' Perceptions of the Class.....	53
Table 18. Results of Chi-Square Analysis of Q5a .....	54

LIST OF FIGURES

Figure 1. Plot of Regression Standardized Residuals for Classroom .....56

Figure 2. Plot of the Residuals for Classroom .....57

Figure 3. Plot of Regression Standardized Residuals for Online.....58

Figure 4. Plot of the Residuals for Online .....59

## CHAPTER 1

### INTRODUCTION

The primary objective of this study is to compare the levels of foreign language anxiety that college students experience when taking a foreign language in class with the levels of foreign language anxiety that college students experience when taking the foreign language in an online course. Many colleges and universities currently offer online courses to their students in response to the high demand for this type of course. Online courses are very popular among students of all ages due to the flexibility, lower cost, and sometimes shorter duration of these courses.

In order to attract more students, compete at the same level with other colleges, and fulfill this new learning trend, in the last two years Saint Mary-of-the-Woods College in Terre Haute, Indiana, has shown interest in promoting foreign language courses outside the physical classroom. In fact, its newest goal is to begin offering foreign language in an online format to distance learning students (Woods Online).

#### **Statement of the Problem**

For many years, language specialists have directed their studies to the effects of foreign language anxiety on students' achievement and language acquisition (Bailey, Onwuegbuzie, & Daley, 2003; T-Y. Chen, & Chang, 2004; Frantzen & Magnan, 2005; Gregersen, 2003, 2005; Lucas, Miraflores, & Go, 2011; Marcos-Llinas & Garau, 2009; Pichette, 2009; Piniel, 2006;

Sparks & Ganschow, 2007; Tallon, 2009; K.H.Wang, Wang, Wang, & Huang, 2006). These studies not only have shown that anxiety causes negative effects on the students' language experience but also that it can cause many problems related to self-esteem (Rubio, 2007; Von Worde, 2003). Other problems related to language acquisition, language retention, and feelings and attitudes toward a foreign language can be experienced by students who suffer from foreign language anxiety (Liu & Huang, 2011; Liu & Jackson, 2008; Yan & Horwitz, 2008). Through the years, this issue has caught the attention of enough researchers to lead to the creation of scales such as the Foreign Language Classroom Anxiety Scale (FLCAS; Horwitz, 1986) to measure students' levels of language anxiety.

Another issue that has affected foreign language instruction is the recent growth in the use of technology in the classroom. One important trend has been the increased use of online learning environments as a means of delivering course work in both traditional and distance-based higher education (Ali, 2003; Compton, 2009; Murday, Ushida, & Chenoweth, 2008). The rapid growth in the use of technology has prompted many researchers to explore the benefits of using technology in instruction. Relevant to this study, a great deal of research has focused on the teaching and learning of foreign languages. There are many advantages to using new technology in the classroom, especially in the foreign language classroom. The use of technology in teaching foreign languages has given educators a more constructivist approach, and the use of the Internet and computer programs has given students a more personal, "safe," authentic, and interactive relationship with the foreign language (Aydin, 2011; Pichette, 2009; White, 2009)

### **Purpose of the Study**

This study had two main purposes. The first purpose was to compare the levels of anxiety that students experienced when taking a foreign language course in a traditional classroom to levels experienced by students taking a foreign language in an online class. The second purpose was to determine if students' success in the course could be predicted by their foreign language anxiety levels. In spite of the growth of online learning technology, little research has been conducted to ascertain the impact of foreign language anxiety in the online classroom. The purpose of this study is to determine if online foreign language courses are more proficient in reducing anxiety among students than foreign language courses offered in the traditional classroom.

### **Significance of the Study**

Globalization, the development of the Internet, and the creation of new ways to communicate have forced many people to open up to foreign cultures. Today, more and more students are interested in learning a foreign language, traveling abroad, or obtaining a job in the international arena (Grosse, 2004; Wharton, 2005). Furthermore, advances in technology have allowed colleges and universities to break school walls and take learning outside the traditional classroom. A large percentage of institutions have "embraced online learning" (Gallagher & Newman, 2002, p. 1) and implemented numerous online courses in their curricula (American Council on Education, 2004; Instructional Technology Council, 2007; Shah, 2011), including foreign language courses. According to Aydin (2011), "the Internet has opened up new dimensions and opportunities in foreign language learning in that it enhances communication and classroom interaction, and provides learners with authentic materials" (p. 46).

The findings of this study may help students to make an informed decision when choosing the appropriate learning setting for foreign language courses. For college and university personnel, it is important to examine if the levels of foreign language anxiety among students is higher, lower, or the same between the virtual and the traditional classrooms and if foreign language anxiety levels have an effect on students' final exams before investing human and monetary resources in the development of this type of course.

### **Assumptions**

The following assumptions were used to guide this study:

1. Subjects' responses on surveys truly represent their feelings toward the foreign language.
2. Students' attitudes toward computers or online classes did not interfere with their foreign language anxiety levels.

### **Research Questions**

The following research questions guided this study:

1. Is there a difference in foreign language anxiety levels between students taking a foreign language course in a traditional classroom and students taking a foreign language course in an online class?
2. Is there a relationship between anxiety levels and students' final exam scores?

### **Hypotheses**

The following hypotheses were used to guide this study:

1. There are no statistically significant differences between the levels of foreign language anxiety experienced by students between the online and the traditional classrooms.
2. There is not a significant relationship between students' anxiety levels and student's final exam scores.

### **Limitations**

This study is limited to students enrolled in Beginning Spanish (SPAN 101) during the 2012 spring semester at Indiana State University in Terre Haute, Indiana. In order to answer the research questions mentioned above, this study included online and traditional classroom classes of SPAN 101. The sample was taken from one institution; therefore, the outcome of this study should not be generalized to all institutions or to all students of SPAN 101.

### **Delimitations**

The sample for this study was limited to a specific group of students. The sections of SPAN 101 that were used in this study were randomly chosen by the researcher.

## CHAPTER 2

### REVIEW OF THE LITERATURE

The literature review for this study concentrated on four areas: (a) foreign language education in the American curriculum; (b) the role of technology on today's society, especially the increased use of online learning environments as a means of delivering course work in distance-based higher education; (c) second language education in an online format; and (d) foreign language anxiety.

#### **Foreign Language Education in the American Curriculum**

Leon Panetta (n.d.), White House Chief of Staff under President Bill Clinton, stated that throughout the history of the United States, language programs have had a difficult time occupying a space in the American curriculum, appearing in and out of the classroom depending on the “educational philosophy of the time” (p. 3), political mood, historical events (Crawford, 1992, 2000; Wiley, 2000, 2002), and the attitudes of American society toward foreign countries. Contradictions and inconsistencies in regard to bilingual education in America were clear during the 18th and 19th centuries, when the government tried to implement and increase language programs in the American classroom. However, the attempt collapsed due to the resistance of Congress and the outbreak of World War I, which brought a sense of hostility toward other cultures as well as “a push for monolingualism” (Ovando, 2003, p. 5) that resulted in the

elimination of language programs in schools as well as occasional prohibition of non-English languages.

This changed during World War II and the Korean War. The American government could not ignore the importance of knowing a foreign language when its soldiers were fighting in Asia and Europe and could not communicate with their allies. Learning foreign languages, math, and science became “a high priority in the national defense agenda during the Cold War” (Ovando, 2003, p. 7). The Army Language Method was created to help soldiers to learn a foreign language and was implemented throughout schools and universities in the United States after World War II (Panetta, n.d.). However, this program did not last long because cuts to education budgets and the allocation of resources toward other areas of study during the 1960s and 1970s caused the elimination of foreign language classes from the entire curriculum. During the late 1970s and early 1980s, Americans began to gain interest once more in the teaching of foreign languages, especially with the increasing number of immigrants entering the country (Cook, 2007).

Today, in comparison to past years, foreign language education stands on more solid ground than before. The development and implementation of foreign language immersion programs and pilot programs such as Foreign Language in the Elementary Schools and Foreign Language Exploratory (FLEX) throughout the American curriculum (from elementary school to universities) has helped foreign language learning to regain its place. Many schools are trying to implement new teaching methods to help students to become more aware of other cultures as well as to be immersed in a foreign language (Adams, 2008).

Foreign language education has fought and continues to fight a constant battle to remain in the American curriculum. However, the U.S. Department of Education is currently showing

more interest in promoting the teaching of foreign languages. According to Todd (2004), the first goal of the U.S. Department of Education Office of International Programs and Activities is “to increase U.S. knowledge and expertise about other regions, cultures, languages and international issues” (p. 1). The Office of Postsecondary Education (OPE) of the U.S. Department of Education offers a variety of domestic and overseas programs and services that encourage and promote the study of foreign languages at all levels from elementary to postsecondary education. The Undergraduate International Studies and Foreign Language Program, the Foreign Language and Area Studies (FLAS), and the National Resource Center are a few of the many programs that the OPE has to offer. These programs allocate grants to institutions that are planning to develop new programs and materials such as faculty development, curriculum enhancement, and study abroad programs intended to “improve and strengthen foreign language instruction” (U.S. Department of Education, 2011, para. 1).

Furthermore, due to globalization, increasing political and economic cooperation among countries, and the elimination of communication barriers due to technology, learning a foreign language has become a necessity. Politicians, economists, and educators believe that it is important to make the teaching of foreign language a priority so that American children are prepared for the future (Cook, 2007; Wharton, 2005). The most recent data available have shown a substantial increase in the number of students who are enrolled in a language other than English. The Modern Language Association reported in 2009 that “enrollments in foreign language courses grew by 6.6% between 2006 and 2009” (Furman, Goldberg, & Lusin, 2010, p. 3).

## **The Role of Technology in Curricula**

Technology plays an important role in today's society. In order to assist students in becoming familiar with new technology, educational institutions around the globe are implementing technology in their curricula. As of 2008, 98% of public schools in the United States had access to the Internet compared to 77% of schools in 2000 (National Center for Education Statistics [NCES], 2011). The number of computers shared by students in the classroom also decreased significantly. In 2008 there were "3 students per computer with internet access, compared to 7 students per computer with internet access in 2000" (NCES, 2011, para. 1).

Computers have become essential in the classroom as a means to enrich and improve education. First, the integration of technology in the classroom has positive effects on students' learning process and academic performance. Second, technology "helps change the student/teacher roles and relationships: students take responsibility for their learning outcomes, while teachers become guides and facilitators" ("Why Do We Need Technology Integration," 2007, para. 1). Third, thanks to technology, students can enhance their problem-solving skills, critical thinking, creativity, motivation, attitude, and interest toward learning in general are essential skills to prosper in the 21st century. It is important to mention that all these benefits take place when the technology is integrated into the curriculum and supports the classroom objectives and outcomes ("Why Do We Need Technology Integration," 2007). Furthermore, technology also influences teaching methods by "offering educators effective ways to reach different types of learners and assess student understanding through multiple means" ("Why Integrate Technology," 2008, para. 1). For the purpose of this study, it is essential to explore one important element in the area of education and technology: distance learning.

According to McIsaac and Gunawardena (1996), “distance education is not a new concept” (p. 356). The first successful correspondence program in the United States was established at the University of Chicago in the late 1800s (McIsaac & Gunawardena, 1996). This program allowed teacher and learners to be in different locations and was offered to students who could not afford to attend an educational institution on site. Even if the program did not offer the best quality education, it appealed to those who were not part of the elite. In the 1950s, the development of new mass media communication tools such as radio and television helped more students receive instruction outside the classroom. In the early 1980s, the International Council for Distance Education adopted new and improved methods to deliver information such as “state networks and telecommunication delivery systems” (McIsaac & Gunawardena, 1996, p. 357).

Today, advances in technology and an increase in the demand for distance learning have provided “more opportunities for educational institutions to deliver courses online” (Murday et al., 2008, p. 125). According to the NCES (2001), during the 12-month 2000-2001 academic year, 56% (2,320) of all two-year and four-year Title IV-eligible, degree-granting institutions offered distance education courses (online, hybrid, asynchronous, synchronous). Public institutions were more likely to offer distance education courses than were private institutions. During 2000-2001, 90% of four-year and two-year public institutions made distance learning available to their students, while 40% of four-year private institutions and 16% of two-year private institutions offered some type of distance education.

A marked increase in the number of institutions offering distance education can be seen in a survey conducted in the fall of 2007 (NCES, 2008). During the 2006-2007 academic year, more than half (66%) of Title IV degree-granting institutions offered some type of distance

education, with more than 12.2 million students enrolled in distance courses eligible for college credit. Of all the institutions that participated in this survey (4,200 Title IV-eligible degree-granting postsecondary schools), 32% stated that their students could complete a certificate or a degree completely online (NCES, 2008).

Besides reaching those students who are unable to attend on-campus classes, distance education has several advantages. According to the Distance Learning College Guide (n.d.a), a website that offers an extensive list of accredited online degrees offered by colleges nationwide, the main advantages of distance learning are flexibility and time. Students pursuing online degrees are not confined to a classroom or to a certain number of hours during the day. They can study and complete assignments as allowed by their work schedules or other commitments such as family and social networks. Most of the courses offered in distance education are asynchronous, which means the student does not have to attend a lecture at a particular time and place but can access class notes and do homework at any time and from anywhere (Distance Learning College Guide, n.d.b, para. 1). Studies conducted by the NCES in 2006-2007 showed that most of the distance courses offered used “asynchronous Internet-based technology as a medium for instructional delivery” (NCES, 2008, p. 3).

Another advantage of distance education is that students can learn at their own pace, without having to speed up or slow down the class. Students can quickly browse materials that they have already mastered and concentrate a little longer on areas that need more work. Students also have the opportunity to review classmates’ comments posted in bulletin boards at any time or join ongoing (synchronous) conversations (“The Advantages of Distance Learning,” 2007, para. 1). In other words, students are able to control their learning environment. Through distance learning, students also have the opportunity to experience individualized attention from

instructors that is impossible in many classrooms due to the number of students enrolled. This type of education is better for people who learn through visual cues and experiential exercises, as well as for those who are introverted, are language-challenged, or have restricted mobility (“The Advantages of Distance Learning,” 2007, para. 1).

Students who are disciplined and organized and who possess strong time-management skills and dedication tend to experience greater success with distance education than those who do not possess such qualities. In particular, online students who possess the characteristics of an “assimilator” and a “diverger” tend to be more successful (K.H. Wang et al., 2006, p. 216). Means, Toyama, Murphy, Bakia, and Jones (2010) compared online versus traditional classroom teaching from 1996 to 2008 in different colleges nationwide and found that online students performed somewhat better on average than those learning the same material in traditional classrooms, “with an average effect size of +0.20 favoring online conditions. The mean difference between online and face-to-face conditions across the 50 contrasts is statistically significant at the  $p < .001$  level” (p. xiv). They concluded that an average student doing some or all course work online would rank in the 59 percentile in tested performance compared to the classroom student, who would rank in the 5 percentile.

However, there are also some disadvantages to distance education. One disadvantage is that distance education relies heavily on technology, so it may not be a good choice for a student who is not familiar or does not feel comfortable with technology. In addition, technological glitches and operational problems can interrupt the learning experience (Gillies, 2008; Valentine, 2002). According to the 2007 Distance Education Survey results published by the Instructional Technology Council (ITC), administrative challenges revolve around personnel and assets. The institution needs to have enough support staff to train and give technical assistance to students

and faculty, resources (material and budget) to operate and purchase equipment and learning management systems (WebCT, Blackboard, etc.), and the time to have the faculty as well as students to adjust to all of the changes. For faculty, some of the challenges are related to workload, compensation, training, technical support, academic freedom, and intellectual property rights (ITC, 2007). Furthermore, out of 500 institutions, “sixty-seven percent of distance education classes are taught by full-time faculty and 33 percent by part-time faculty” (ITC, 2007, para. 3). This suggests that universities are directing a great deal of resources toward distance education. Moreover, “71% of the respondents indicated their college required their faculty to participate in a training program” (ITC, 2007, para. 3).

In addition, as stated in the Distance Learning College Guide (n.d.a), distance education can place some burdens in the student’s life. First, distance education can be expensive, especially when special equipment such as computers, high speed Internet, and software programs have to be purchased in order to be successful in online programs. Second, students taking online courses do not get the same personal attention as students in the traditional classroom. In the traditional classroom, students can be immediately assessed through informal testing or other classroom activities, but online students need to wait until the instructor reviews their work before they can get any feedback. This delay can cause some learning problems for those students who are used to instant reinforcement from the teacher. Third, due to the organization and nature of online courses, students need to possess certain qualities in order to be successful. Therefore, students with low levels of maturity and commitment would experience some difficulties with online courses. Fourth, there are many degree programs and certificates that students cannot complete without attending a face-to-face class such as science labs, clinical practices, foreign languages practices, and speech courses (ITC, 2007). Other disadvantages that

students face with online education are the high cost of distance education and the fact that many employers do not acknowledge online degrees.

Distance learning is a phenomenon that has revolutionized education in the United States. “Over 6.1 million students were taking at least one online course during the fall 2010 term; an increase of 560,000 students over the number reported the previous year” (Allen & Seaman, 2011, p. 4). Thanks to technological advances, the place to acquire an education is no longer limited to the classroom but may be in homes, offices, and coffee shops anywhere in the world.

### **Second Language Education in an Online Format**

The development of new technologies has caused exceptional growth in distance education, not only in the number of students registering for these classes but also in the number of universities and colleges that are adding distance education to their curricula (Gallagher & Newman, 2002; NCES, 2008, 2011). The growing interest in the use of technology to deliver education is present in all academic areas. The use of technology in the classroom has clearly affected the area of foreign language education. Since the 1990s, there has been a significant amount of literature on the benefits and potential of computer technology in teaching and learning languages more effectively (e.g., Blake, 2008; Hurd, 2007; National Council of State Supervisors for Languages, 2011; L. Wang, 2005; White, 2009).

According to L. Wang (2005), there are many advantages to using new technology in the classroom, especially in the instruction of foreign language, because it allows educators to take a more constructivist approach in which the student becomes an active learner and the teacher a facilitator. Foreign language teachers have the opportunity to incorporate into their courses a variety of activities that keep students motivated and interested in the material (Korkki, 2010; Wang, 2005). Whether the course is taught synchronously, asynchronously, or in a combination

of both, foreign language teachers can accomplish this by adding technological components to their courses such as online games (e.g., Who is Oscar Lake? <http://whoisoscarlake.com/oscar/oscar.html>), conversations in the target language with native speakers (chat rooms, discussions boards, blogs, wikis, virtual classrooms, Skype, etc.), and links to other sites where students have the opportunity to explore the language on their own. For example, Computer Assisted Language Learning (CALL) was designed specifically to promote language learning through interaction. CALL programs require the student to interact with the computer through “stimulus, response and feedback” (Davies, Walker, Rendall, & Hewer, 2011, p. xx). All of these online sources allow the student to have a more personal, authentic, and interactive relation with the foreign language. Many studies have shown that the use of technology in the classroom makes instruction in general more effective (Al-Jarf, 2004), increases the students’ knowledge about other countries, encourages them to become more open minded and accepting of other cultures (Hertel, 2003), and promotes collaborative learning (Leu, 1996).

### **Foreign Language Anxiety**

Foreign language specialists and researchers have tried to understand why some students have difficulties learning a foreign language. These individuals have conducted many studies and developed a number of theories and scales to investigate and measure this phenomenon (Horwitz, Horwitz, & Cope, 1986). The way students experience learning a foreign language varies from student to student. Some students feel eager, interested, and curious about learning a foreign language but others have more negative feelings toward it. When these students hear the words *foreign language*, they feel scared, nervous, and anxious. How well the student performs in a foreign language classroom depends on the student’s interest toward the subject, learning

style, cognitive ability, and personality (Pichette, 2009). Three aspects that influence the student's performance in a foreign language class are the student's "attitudes, motivation, and anxiety" (Tallon, 2009, p. 122). If the student has a negative attitude toward the foreign language, he or she will not want to learn; if he or she feels anxious in the classroom, the possibility of having a frustrating and bad experience with the foreign language increases (Gregersen & Horwitz, 2002). Similarly, students who have had a negative experience with a foreign language class are less likely to take more than the required number of courses.

Several studies have shown that of the three aspects, anxiety can cause the most damage not only to the student's language acquisition process but also to the student's academic performance and self-esteem (Von Worde, 2003). Early studies on the relationship between anxiety and foreign language learning have provided ambiguous and contradictory results (MacIntyre, 1999; MacIntyre & Gardner, 1991; Young, 1991). According to Scovel (1978), this finding was the result of a misunderstanding of the term *anxiety* or the lack of a clear definition of the word *anxiety* when used in relation to foreign language learning. He suggested "that researchers should specify the type of anxiety being measured and its relationship to other factors, e.g., affective or cognitive variables" (as cited in Sparks & Ganschow, 2007, p. 261). During the 1970s and 1980s, researchers concluded that levels of anxiety students experienced in foreign language classrooms were caused by other types of anxieties, such as test anxiety, trait anxiety, or even from communication anxiety (Horwitz & Young, 1991; MacIntyre, 1999; MacIntyre & Gardner, 1991). These studies only brought confusing and inconsistent results. Many researchers concluded that there was a negative correlation or incomplete correlations between language and anxiety, but others suggested the opposite (Horwitz & Young, 1991). The

lack of consistency in results served to show that foreign language anxiety was misunderstood and neglected.

During the late 1980s, a new approach was developed regarding the nature of anxiety. The anxiety felt by students in foreign language classes was thought to be not just transferred from other types of anxiety but was a new and unique type of anxiety produced by language learning itself. Horwitz et al. (1986) reported,

Foreign language anxiety is not simply the combination of these fears transferred to foreign language learning. Rather, we conceive foreign language anxiety as a distinct complex of self-perceptions, beliefs, feeling, and behaviors related to classroom language learning arising from the uniqueness of the language learning process. (p. 128)

Horwitz et al. (1986) presented new components that they believed played a crucial role in the study of foreign language anxiety: “communication apprehension, fear of social evaluation, and test anxiety” (p. 127). McCroskey (1977) defined communication apprehension as “the individual’s level of fear or anxiety associated with either real or anticipated communication with another person or persons” (p. 78). Many researchers have suggested that students in a foreign language class tend to feel anxious when asked to speak in the target language (Daly, 1991; Young, 1986). According to Horwitz (1986), difficulty in speaking in class is probably the most frequently cited concern of anxious foreign language students. Djigunovic (2006) showed the effects that language anxiety has on the language learners’ ability to communicate in a foreign language. He compared the level of anxiety experienced by the student when using the native language and the target language using the frequency of pauses, repetitions, and other characteristics of speech production that showed anxiety.

The third component is test anxiety, which is “a widely studied personality variable, in part because it provides a measure of the personal salience of one important, definable class of threatening situations, those in which people are evaluated” (Sarason, 1984, p. 929). It is important to look into this component because many language classes rely on tests to evaluate the student’s performance in the class. Test-anxious students often put unrealistic demands on themselves and feel that anything less than a perfect test performance is a failure (Horwitz, 1986).

In addition, the fear of negative social evaluation plays an important role on the production of foreign language anxiety in the student (Pichette, 2009). In contrast to speaking in the native language, foreign language students can experience anxiety, frustration, fear, and even panic when communicating in a foreign language because they cannot express themselves as they do in their native languages (Gregersen, 2005; Gregersen & Horwitz, 2002; Sparks & Ganschow, 2007). As Horwitz, et al. (1986) stated, “the language learner’s self-esteem is vulnerable to the awareness that the range of communicative choices and authenticity is restricted” (p. 128).

Previous studies on the effect of anxiety on language learning were not very successful because they generated contradictory and biased results. According to MacIntyre and Gardner (1989), the discrepancies and inconsistencies in the results were due to inaccurate and inconsistent choices of an instrument to measure anxiety. Gardner (1985) proposed that the best way to measure foreign language anxiety was by using a scale that is directly concerned with the topic instead of using more general scales. In 1985, Gardner introduced the Attitudes and Motivation Test Battery (AMTB). This scale measures “the degree to which students report feeling embarrassed or anxious in language class” (MacIntyre & Gardner, 1989, p. 253). This

scale helps the researcher to have a better understanding and a more realistic view of the negative correlations between foreign-language anxiety and academic performance because it considers attitudes and motivation (Gardner, 1985).

In order to provide investigators with a standard instrument to measure an individual's response to the specific stimulus of language learning, Horwitz et al. (1986) developed the Foreign Language Class Anxiety Scale (FLCAS). This 33-item paper and pencil questionnaire measures the levels of anxiety that students experience while studying a foreign language with questions related to test anxiety, communication apprehension, and fear of negative evaluation in the foreign language classroom. Specific situations are presented, such as making mistakes in language class, not understanding the teacher, or having to answer in the target language in front of the class, and respondents are asked to answer on a scale from *strongly agree* to *strongly disagree* (Horwitz, 1986; Pichette, 2009; Sparks & Ganschow, 2007). The main goal of this instrument is to “test an individual's response to the specific stimulus of language learning” (Horwitz, 1986, p. 559). Before FLCAS was introduced, researchers were using scales used in the area of psychology to measure foreign language anxiety (Tallon, 2009). Since the development of this instrument, studies on the relation between foreign language anxiety and achievement scores have obtained more consistent conclusions (Horwitz, 2001).

In order to have a better understanding of foreign language anxiety, it is necessary to define some key words. According to the *Encyclopedia Britannica* (“Anxiety,” 2010), anxiety is a feeling of dread, fear, or apprehension, often with no clear justification. Anxiety is distinguished from fear because the latter arises in response to a clear and actual danger, such as one affecting a person's physical safety. Anxiety, by contrast, arises in response

to apparently innocuous situations or is the product of subjective, internal emotional conflicts the causes of which may not be apparent to the person himself. (para. 1)

Sigmund Freud was the first neurologist and psychiatrist to recognize the importance of anxiety in a person:

Anxiety (or dread) itself needs no description, everyone has personally experienced this sensation. The problem of anxiety is a nodal point linking up all kinds of most important questions: a riddle of which the solution must cast flood of light upon our whole mental life. (as cited in Spielberger, 1972, p. 5)

Freud believed that when the superego and the id made conflicting demands upon the ego, the individual would feel threatened and overwhelmed. This combination of feelings is called anxiety. Freud recognized three different types of anxieties: realistic anxiety, moral anxiety, and neurotic anxiety (Boeree, 1997). Freud's extensive study of the causes and effects of anxiety served as a milestone for the development of other theories and definitions of the subject.

Several studies have been conducted on the relationships between anxiety and language learning and between anxiety and student achievement. The majority of these studies have focused on either state anxiety or trait anxiety. These two terms were first introduced by Spielberger (1972, 1983). State anxiety is defined as "an unpleasant emotional arousal in face of threatening demands or dangers," and trait anxiety reflects "the existence of stable individual differences in the tendency to respond with state anxiety in the anticipation of threatening situations" (MacArthur & MacArthur, 1999, para. 1). According to Horwitz et al. (1986), foreign language anxiety is different from other types of anxieties (trait anxiety, state anxiety, and situation-specific anxiety). Foreign language anxiety belongs to a situation in which the student responds with anxiety to a particular source; in this case, anxiety is caused by the fact

that the student is learning something that he or she has not previously experienced. Therefore, from this perspective, we can define language anxiety as “the worry and negative emotional reaction aroused when learning or using a second language” (MacIntyre, 1999, p. 27).

Since the development of the FLCAS, the majority of researchers who have explored the relationship between anxiety and language learning have concluded that there is a positive relationship between them (Horwitz, 2001; MacIntyre, 1995, 1999; MacIntyre & Gardner, 1991; Young, 1991).

In addition to having a negative impact on language acquisition, anxiety can also determine academic performance. Research on the relationship between them has had a variety of results. Foreign language anxiety has been found to have a negative effect on the student’s final scores (Bailey et al., 2000; T-Y. Chen, & Chang, 2004; Ganschow & Sparks, 1996; Ganschow et al., 1994; Horwitz, 2001; Horwitz & Young, 1991; MacIntyre, 1999; Sparks & Ganschow, 2007; Sparks, Ganschow, & Javorsky, 2000). However, there have been disagreements about the role that anxiety plays in academic performance. On one hand, Horwitz (2001) believed that the student’s academic performance is determined or caused by anxiety, but Sparks and Ganschow (1991, 1995, 2007) stated that low academic performance is caused by a combination of anxiety and poor native language skills, giving the latter the most importance (as discussed in Tallon, 2009), concluding that

(1) foreign language anxiety is likely to be related to a student’s native language learning skills, (2) foreign language anxiety is likely to be a consequence of student’s level of native language learning, (3) early native language skills even in elementary school serve as an important foundation for foreign language learning in high school. (Sparks and Ganschow, 2007, p. 279)

MacIntyre (1995) criticized Sparks and Ganschow's ideas, stating that their linguistic coding deficit hypothesis (LCDH) has relegated language anxiety to the status of an unfortunate side effect, . . . LCDH is incomplete as an explanation for individual differences in second language learning without formally considering affective variables, such as language anxiety. (MacIntyre, 1995, p. 91)

Further Tallon stated that "their theory focused exclusively on cognitive ability factors in terms of the coding of linguistic stimuli" and did not take into account "social factors involved in language learning, such as classroom interaction with teachers and other students, the degree of exposure to the language in the community, ethno linguistic vitality" (pp. 95-96).

There have been several studies in the area of foreign language anxiety regarding different target languages (French, Japanese, Spanish, etc.) and comparing levels of anxiety among different language levels (Horwitz, 2001). All these studies had uniform results: there was a significant negative correlation between language anxiety and final grades among American English speakers in the target language (Aida, 1994; Gardner & MacIntyre, 1993; Saito & Samimy, 1996).

Besides having a negative effect on the student's acquisition process and academic performance, foreign language anxiety also affects the student's mental and physical wellbeing. Students with foreign language anxiety experienced the same mental and physical symptoms that are present with any type of anxiety, such as "apprehension, worry, even dread . . . difficulty concentrating, [becoming] forgetful, [sweating] and [having] palpitations" (Horwitz et al., 1986 p. 126). In order to identify students who experienced foreign language anxiety, it is important to be able to recognize "the nonverbal signals that foreign language anxious students encode and transmit" (Gregersen, 2005, p. 389). They may tend to avoid studying or over-study without any

positive results (Horwitz et al., 1986), withdraw themselves from classroom activities and try to be unnoticed, acquire negative study behaviors (Gregersen & Horwitz, 2002), or engage in negative self-talk (MacIntyre & Gardner, 1991).

Language specialists have begun to target more specific areas that cause anxiety among students such as speaking, reading, writing, and listening (e.g., Cheng, Horwitz, & Schallert 1999; Saito, Horwitz, & Garza, 1999; Sellers, 2000). The results of their studies have motivated language specialists to explore and develop new techniques in the areas of teaching, developing a positive classroom atmosphere, and refining teacher-student relations with the main purpose of reducing anxiety levels among foreign language students (see Gregersen, 2003; Horwitz et al., 1986; MacIntyre & Gardner, 1991; Pappamihel, 2002; Piniel, 2006).

### **Anxiety Among Distance Learners**

New forms of delivering knowledge as well as advances in technology have allowed students to acquire knowledge on different topics and even obtain diplomas without ever stepping inside a classroom. Today, more and more universities are offering students the possibility to learn a foreign language through distance courses. Distance language courses are delivered entirely in an online format, with extensive opportunities for interaction, feedback, and support between teacher and learners (White, 2003).

According to the Modern Language Association (2009), the number of enrollments in language courses grew 6.6% between 2006 and 2009. This recent increase in interest in foreign languages can be explained by several reasons, such as the “availability of new technologies, and pressure on language departments to increase enrollments, while cutting costs and increasing numbers of nontraditional students enrolled in tertiary education” (Bown, 2006, p. 640). It could also be that students are becoming more interested in the subject. In particular, Arabic, Japanese,

Chinese, Portuguese, and Korean courses have seen considerable increases in their enrollments. Regardless, “in terms of ranking Spanish, French and German lead as the three most studied languages followed by American Sign Language” (Furman et al., 2010, p. 3). In fact, according to this study, in 2009, the Spanish language had more than 860,000 students enrolled; French had more than 216,419 students and German had 96,349 students.

Compared to the amount of research that has been done in the area of foreign language anxiety in the classroom, the research focused on foreign language anxiety in online courses is minimal (Hurd, 2006, 2007) and less than 10 years old. Most studies of distance education have covered topics related to the development of distance learning programs (Gallagher & Newman, 2002), the increase in popularity of this type of programs (American Council on Education, 2004; NCES, 2008), the use and benefits of technology (ITC, 2007; L. Wang, 2005), and the advantages and disadvantages of distance learning programs (National Council of State Supervisors for Languages, 2011).

Other researchers have looked at more specific areas of distance learning such as the nature and views of distance learners and teachers, the development of language learning and teaching (Corda & Stel, 2004; Hurd, 2000, 2003, 2005; Murphy, 2005), the use of new computer programs in language teaching (Hampel & Hauck, 2004; Scida & Saury, 2006), and assessment of online language courses (J. Chen, Belkada, & Okamoto, 2004; Hampel & Hauck, 2004; Strambi & Bouvet, 2003). Numerous researchers (Baumann & Shelley, 2003; Bown, 2006; Catterick, 2001; Grosse, 2001; Kotter, 2001; White, 1995, 1999, 2009) have contributed enormously to the “professional background of language teachers and knowledge development within the field” (White, 2009, p. 1). The small amount of research that has been completed in the area of foreign language distance learning can be attributed to the fact that foreign language

courses are often among the last to be included in distance programs by colleges and universities (Hurd, 2006).

Anxiety among distance language learners has not been a popular topic, though there have been a few studies on it. The few studies that have been done comparing levels of foreign language anxiety between classroom and online learners had similar conclusions: no significant difference in anxiety levels between students in both types of environments (Pichette, 2009). However, Pichette (2009) found that in contrast to other studies, the levels of anxiety of classroom students are almost the same between first-year students and students in higher-level foreign language courses. These results can be explained by looking at the similarities between both teaching settings. First, “distance learning, which could have been considered a safe haven for anxious language students in need of more motivational support, is now home to students whose socio-demographic and anxiety profiles resemble more and more to those of traditional classroom students” (Pichette, 2009, p. 6). Second, online foreign language courses include new communication tools and new technology that allow students to be more active participants and require them to participate in oral exercises such as dialogues, oral drills, and pronunciation activities as well as communicate with the teacher and fellow students on a regular basis. All these requirements make online foreign language courses very interactive and inclusive (Korkki, 2010; Murday et al., 2008).

In a longitudinal study at The Open University in the UK, Hurd (2007) asked students enrolled in a lower-intermediate French distance course to complete two questionnaires (one at the beginning of the course and a second four months later) and audio record “think aloud protocols” as well as “one-to-one semi-structured telephone interviews” (p. 490). The first questionnaire collected the students’ general information as well as their reasons to take an

online course and their thoughts about learning and about “anticipated or actual problems with learning a language at a distance” (Hurd, 2007, p. 492). In the second questionnaire, the students were asked to identify what elements were causing them anxiety. Hurd concluded that online and classroom students tend to experience anxiety in the same areas, primarily “speaking, in particular when called on to speak in front of others, and fear of not being understood” (Hurd, 2007, p. 499). However,

while 21% of students overall . . . felt that learning at a distance made them more anxious than learning in a classroom, 27% of students found that the distance factor made them less anxious and 51.7% did not consider that the learning mode made any difference. (p. 500)

Hurd concluded that other elements than the “distance factor” (p. 500) caused anxiety among distance learners and called for additional observation.

Hurd & Xiao (2010) explored other important elements related to foreign language anxiety among distance learners. They looked at the origins of anxiety as well as the different methods and strategies that students use to decrease anxiety and therefore feel more comfortable when learning a foreign language in a distance format. According to Bown, 2006, (as cited in Hurd and Xiao, 2010), anxiety among distance learners can be caused by “isolation, competing commitments, absence of the structure provided by face-to-face classes, and difficulty in adjusting to the new context” (p. 642). To reduce anxiety levels, teachers should motivate and encourage their students by offering academic support (tutorials, learning strategies, keep in touch as much as possible).

## CHAPTER 3

### RESEARCH METHODOLOGY

The primary goal of this study was to examine and compare foreign language anxiety levels between students who took a foreign language course in a traditional classroom setting and those who took a foreign language course online. A second goal for this study was to examine if there was any correlation between anxiety and second language achievement in both educational settings. The subjects for this study were undergraduate English-speaking students who were taking a first-semester Spanish course (SPAN 101) at Indiana State University in two different settings (either in the classroom or online). A sample group of 107 students participated in the study. The subjects were part of a convenience sample; anyone registered in the class was allowed to participate in the study. Two different versions (original and a modified version) of the L120 Questionnaire 2 developed by Hurd (2003) were used in this study. The original version was used for students taking Spanish in the virtual classroom, and the modified version was used with students taking Spanish in the traditional classroom.

This study addressed the following research questions:

1. Is there a difference in foreign language anxiety levels between students taking a foreign language course in a traditional classroom and students taking a foreign language course in an online class?
2. Is there a relationship between anxiety levels and students' final exam scores?

### **Sampling Procedure**

The participants for this study were undergraduate students at Indiana State University taking a first-semester beginning Spanish course (SPAN 101) in the classroom and undergraduate students from the same institution taking a first- semester Spanish course (SPAN 101) online. All students registered in SPAN 101 (classroom) and in SPAN 101 (online) were invited to participate in the study. Although all the SPAN 101 courses in this study were taught by different teachers, they were structured and organized identically with the same syllabus and class policies, and the students' final grades included the same types and number of activities (participation, presentations, quizzes, exams, projects, homework, and final exam) with the same weights for each element. The majority of students taking SPAN 101 were considered traditional students regardless of the format of the class (classroom or online). The only difference between the courses was the distance element.

### **Research Instrument**

The L120 Questionnaires were developed by Hurd (2003) to measure foreign language anxiety among online students. The initial pilot study took place with 100 students at The Open University's Institute of Educational Technology (IET) in 2002. After some changes were made in the instrument based on the results of the pilot study, the questionnaires and other qualitative methods such as interviews and audio-recordings were used in a major study in 2003 that included the participation of 500 students at IET (Hurd, 2006). This instrument has been used in several studies (Hauck & Hurd, 2005; Hurd, 2006) and it is considered to be reliable. The L120 Questionnaires were originally designed for students of French in an online setting. However, with permission of the author, the instrument was adapted so it could be given to classroom students of Spanish.

For the purpose of this study, only Questionnaire 2 was submitted to distance students and to classroom students of Spanish. There were many reasons that supported this decision. First, Questionnaire 1 consists of 27 questions that provide background information about the student and the student's views on learning a foreign language, reasons for taking a foreign language in an online format, beliefs about foreign language anxiety compared to the study of other subjects, beliefs about the role of distance as an element that may cause anxiety, learning techniques, and beliefs about the roles of tutors and students during the learning process (Hurd, 2007). Second, the instrument asks the students questions about language tutors as well as their opinions on materials and resources specific to the class for which the instrument was originally developed. Third, both questionnaires ask similar questions. For example, in both questionnaires students were asked to identify any problems that they were expecting to have or had with learning a foreign language at a distance. Both questionnaires also asked the students if they felt "more anxious or less anxious learning a language at a distance than in a classroom" (Hurd, 2007, p. 492). This information is not relevant to this study. Questionnaire 2 investigates the topic of language anxiety in more depth, providing information on the nature of anxiety (what tasks make students feel more anxious) as well as strategies students implement in order to deal with anxiety in a foreign language distance course. Furthermore, Questionnaire 2 includes different types of questions, including yes/no, Likert-type questions (with answers ranging from *very good* to *unable to judge* as well as from *very important* to *not at all important* and *strongly agree* to *strongly disagree*), multiple choice questions, and open ended-questions. Permission to use this instrument for this study was granted by Dr. Hurd.

## Survey Procedure

### SPAN 101 (Online)

In order to assure confidentiality, the L120 Questionnaire was uploaded to Qualtrics®, a secure web-based survey software program. During the second week of class, I asked the instructor of SPAN101 online course to send an e-mail (written by me) to all the students registered in the course. The e-mail included a cover letter and the web address to access the survey. The cover letter provided the students with a short summary and description of the purpose of the study and the importance of the research as well as an explanation that participation was voluntary and would not affect their success in the class in any way. To increase students' participation, extra credit was offered to those who completed the entire survey by the due date. The amount and the type of extra credit were left to the discretion of the teacher. The cover letter also explained that by completing and returning the survey, students were giving their consent to participate in the study, allowing their teachers to share their final test score with me, and giving me permission to use the information collected. Students were assured that their responses would be confidential and anonymous. In order to ensure confidentiality, students were asked not to use their names but instead to use the last three numbers of their Indiana State University identification number. The cover letter also clarified that the information provided in the survey would be exposed through the publication of this dissertation. The date by which the survey needed to be completed and returned was also included. A week after the survey was sent, a reminder e-mail was sent to all participants by their instructors. The students had two weeks from the date they received the survey to complete it.

At the end of the semester, the teachers sent the final test scores of all the students who returned the survey. In order to maintain confidentiality, the students' final percentages were linked to the last three numbers of their student IDs rather than their names.

### **SPAN 101 (In Classroom)**

Two weeks into the course, I visited sections of SPAN 101 courses and invited all students taking the course to complete the modified version of the L120 Questionnaire 2 on a day that the course instructors and I had previously agreed on. The students were given a short summary and description of the purpose of the study and importance of the research and an explanation that their participation was voluntary and would not affect their success in the class in any way. To increase students' participation, extra credit was offered to those who completed the entire survey by the due date. The amount and the type of extra credit were left to the discretion of the teachers. The cover letter also explained that by completing and returning the survey, students were giving their consent to participate in the study, allowing their teachers to share their final test score with me, and giving me permission to use the information collected. Students were assured that their responses would be confidential and anonymous. In order to ensure confidentiality, students were asked not to use their names but instead to use the last three numbers of their Indiana State University identification number. The cover letter also clarified that the information provided in the survey would be exposed through the publication of this dissertation.

In the survey, students were asked to respond to yes/no questions, Likert-style questions (with answers from *very good* to *unable to judge*, *very important* to *not at all important*, and *strongly agree* to *strongly disagree*), short-answer questions, and multiple choice questions. The survey took 20 minutes or less, and I collected all completed questionnaires at the end of the

administration. At the end of the semester, the teachers sent all of the students' final test scores to me. To maintain confidentiality, the students' final test scores were linked to the last three numbers of their student IDs. The students had the right to refuse participation without any penalty.

In order to use the same instrument in both environments (online and classroom), the changes noted in Table 1 were made to the L120 Questionnaire 2.

Table 1

*Changes Made in L120 Questionnaire 2*

Question	Original instrument	Online class	Traditional classroom
Q1, Q2a, Q7a, Q8a	“as a distance language learner,” “at a distance”	same	“in the classroom”
Q7c	“L120,” “L120 Overture”	“Spanish 101”	“Spanish 101”
Q7	“in a classroom”	same	“at a distance”
Q8b	“tutor”	“instructor”	“instructor”

Besides changes in the wording, questions Q4, Q9, Q10, Q11, Q12, Q13, Q14a, Q14b, Q15, Q16, Q17, Q18a, and Q18b were not analyzed because they were not relevant to the purpose of this study. However, in order to avoid any confusion, the numeration of the rest of the questions was kept the same.

In order to fulfill the requirements of the survey research design used in this study, all documentation was sent for approval to the Indiana State University's Instructional Review Board (IRB). Permission to give the survey to students in SPAN 101 classroom and online courses was requested from the Languages, Literatures, and Linguistics Department Chair, Dr. Leslie Barratt, as well as from the instructors for those courses.

### **Analysis of Data**

In order to answer the questions formulated at the beginning of this study, the Statistical Package for the Social Sciences (SPSS), Version 21, was used for the analysis of the data. To answer Research Question 1, an independent samples *t*-test was used, with anxiety as the dependent variable and the environment as the independent variable with two levels (the traditional classroom and the virtual classroom). To determine whether the difference between the samples (traditional classroom and virtual classroom) arose by chance, an alpha level of 0.5 was set. To answer Research Question 2, a linear regression between the dependent variable Y (anxiety) and the independent variable X (final exam score) was calculated. Also, descriptive statistics (means, standard deviations, frequency distribution, and percentages) were used to analyze the socio-demographic data, problems that students experienced when learning a foreign language, situations that caused them anxiety, students' attitudes toward the foreign language, students' methods of managing anxiety, motivation, and behaviors that have helped them to become better language learners in both environments.

### **Summary**

A valid and reliable instrument developed by Hurd in 1998 and used in several studies (e.g., Hauck & Hurd, 2005; Hurd, 2006) was modified and adopted to answer the questions of this study. This chapter discussed the research methodology of the current study. It presented the research questions, described the characteristics of the participants, and provided a detailed description of the instrument used and the changes made to the instrument. This chapter also included an explanation of the research design, which included useful information on survey procedure, collection of data, as well as statistical tests that were used to analyze the data.

## CHAPTER 4

### RESULTS

This study had two main purposes. The first was to compare the levels of language anxiety that students experienced when taking Spanish in the traditional classroom to those of students taking Spanish online. The second was to determine if students' success in the course could be predicted by their foreign language anxiety levels. The sample consisted of 107 undergraduate students enrolled in SPAN 101 at ISU in the spring of 2012. The students enrolled in SPAN 101 (traditional classroom) completed a hard copy modified version of Susan Hurd's (2003) L120 Questionnaire 2, while students enrolled in SPAN 101 (online) completed an electronic version of the original questionnaire through Qualtrics®. The L120 Questionnaires consisted of two sets of surveys that were originally designed for students of French in an online setting. However, with permission of the author, the instrument was adapted so it could be given to classroom students of Spanish. The instrument had a total of 20 questions covering eight different areas (learning a language in the classroom, personality traits, anxiety, motivation, learning styles, instructor's role, your role, and becoming a better language learner). Many of the questions in the survey gave the students the option to add other elements that they thought were important. The questionnaire also included a few open-ended questions so that students could add any additional information. Students were also asked three socio-demographic questions about gender, age, and employment.



### Organization of Data Analysis

After collecting all the questionnaires, the data were organized into spreadsheets using Microsoft Excel. The quantitative data obtained from the questionnaires were transferred to SPSS. The diversity in the type of questions (yes/no, 5-point Likert scales ranging from *very good* to *unable to judge*, *very important* to *not at all important*, and *strongly agree* to *strongly disagree*) required several types of tests. Descriptive statistics such as means, standard deviations, frequency distributions, and percentages were used to analyze the socio-demographic data, problems that students have experienced when learning a foreign language, situations that cause anxiety among students, students' attitudes toward the foreign language, students' methods of managing anxiety, motivation, and behaviors that have helped them to become better language learners in the classroom as well as online. A 5-point Likert scale was used in questions Q1, Q3, and Q6. In the first question, the student had to rate herself or himself as a distance or traditional classroom language learner. The scale ranged from *very good* to *unable to judge*. In Q3, the student utilized a range from *very important* to *not at all important* to measure a series of factors that may be essential when learning a foreign language. In order to obtain an overall score of students' anxiety levels in both environments (traditional classroom and online), a 5-point Likert scale was used in question Q6 ranging from 1 = *strongly agree* to 5 = *strongly disagree*. Higher scores indicated lower anxiety levels, and lower scores referred to higher anxiety levels toward the foreign language. Some statements were reverse-scored ("I get flustered unless Spanish is spoken very slowly and deliberately," "I get upset when I read in Spanish because I have to read things again and again," "I get upset when Spanish is spoken too quickly", and "I am anxious with Spanish, because, no matter how hard I try, I have trouble understanding it").

## Descriptive Characteristics of Respondents

A total of 107 students completed the survey. Fifty-seven were enrolled in SPAN 101 (traditional classroom) and 50 were enrolled in SPAN 101 (online). Descriptive statistics (frequencies, standard deviation, and percentage) were used to analyze socio-demographic data such as gender, age, and employment. Tables 2, 3, and 4 summarize the demographics of the participants (both environments).

Table 2

### *Participants' Gender*

Environment	Gender	Number	Percent
Classroom*	F	23	40.3
	M	34	59.6
Online**	F	30	60.0
	M	20	40.0

*Note.* \*  $n = 57$ , \*\*  $n = 50$

Table 3

*Participants' Age*

Environment	Age	Number	Percent
Classroom*	17-22	45	79.0
	23-28	6	10.5
	29-34	1	1.8
	35 and above	5	8.7
Online**	17-22	17	34.0
	23-28	9	18.0
	29-34	9	18.0
	35 and above	15	30.0

*Note.* \*  $n = 57$ , \*\*  $n = 50$

Table 4

*Participants' Employment*

Environment	Work Load	Number	Percent
Classroom*	Full time	4	7.0
	Part Time	31	54.4
	Unemployed	21	36.9
	No answer	1	1.7
Online**	Full Time	19	38.0
	Part Time	19	38.0
	Unemployed	11	22.0
	No answer	1	2.0

*Note.* \*  $n = 57$ , \*\*  $n = 50$

Students enrolled in the traditional SPAN 101 classroom had the following characteristics: 60% of the sample were male students while 40.3% were female students (see Table 2). The ages ranged from 17 years to 35 years and above. The majority of the participants

were in the age range between 17 years and 22 (see Table 3). In regard to employment, 7% of the sample declared they work full time, 54.4% work part time, 36% declared themselves unemployed (see Table 4).

Among the SPAN 101 online participants, 40% were male students, while 60% were female students (see Table 2). As illustrated in Table 3, 34% of the sample ranged in age from 17-22 years, while 18% ranged between 23-28 years and 29-34 years. A considerably large group of online participants ( $n = 15$ ; 34%), were 34 and older. As shown in Table 4, 38% of the sample responded that they work full-time or part-time ( $n = 19$ ), while 22% of the sample declared themselves unemployed ( $n = 11$ ).

### Summary of Questionnaire

In the first question (Q1) the participants were asked to rate themselves as classroom language learners (“Now that you are halfway through the course, how do you rate yourself as a language learner?”). The answers obtained are presented in Table 5.

Table 5

#### *Level of Quality as a Language Learner*

Environment	Rating	Number	Percent
Classroom*	Very Good	5	8.7
	Good	18	31.6
	Neither good nor bad	18	31.6
	Poor	11	19.3
	Very Poor	5	8.7
	Unable to judge	0	0.0
Online**	Very Good	5	10.0
	Good	24	48.0
	Neither good nor bad	15	30.0
	Poor	4	8.0
	Very Poor	1	2.0
	Unable to judge	1	2.0

*Note.* \*  $n = 57$ , \*\*  $n = 50$

The majority of the classroom participants ( $n = 18$ ; 31.6%) considered themselves either good classroom language learners or neither good nor bad classroom language learners, while 19.3% ( $n = 11$ ) felt that they were poor classroom language learners, and a small percentage (8.7%;  $n = 5$ ) saw themselves as very good classroom language learners or very poor classroom language learners. The majority of the online language learners ( $n = 24$ ; 48%) considered themselves good distance language learners, while 30% ( $n = 15$ ) felt they were neither good nor bad distance language learners. There was a small difference in percentages between those students who considered themselves *very good* (10%) and those who considered themselves *poor* (8%) language learners. Only one participant (2%) saw himself or herself as a very poor distance language learner.

In question Q2a, the participants were asked if they had experienced any problems so far in learning Spanish in the classroom (“Have you experienced any problems so far in learning Spanish in the classroom?”). The answers obtained are presented in Table 6.

Table 6

*Participants’ Experience with Problems Learning Spanish*

Environment	Answer	<i>n</i>	Percentage
Classroom	Yes	31	54.4
	No	26	45.6
Online	Yes	37	74
	No	13	26
Total		107	100

In this question, participants were asked if they had any problems in learning Spanish in the classroom (for those taking SPAN 101 in the classroom) or at a distance (for those taking

SPAN 101 online). Of the classroom students, 31 (54.4%) reported they had experienced some problem when learning the language at the time they completed the questionnaire, while 26 had not experienced any problems. Of the 50 online students, 37 (74%) admitted having experienced problems in learning a language at a distance, and only 13 (26%) denied having experienced any type of problems.

If the participants answered “yes” to question Q2a, they were asked to identify all the problems that they had experienced in the classroom and to select the three most serious problems (“If you answered Yes to Q2a please cross all that applied in column (a) and cross the three most serious problems in column (b)).” The answers obtained are presented in Tables 7 and 8.

Table 7

*Problems Classroom Participants Experienced*

Items	Percentage	Rank	Percent most	Rank
	All		Important	
Understanding what I hear	46	1	24	1
Remembering vocabulary and grammar	44	2	20	2
Becoming fluent	44	2	14	5
Finding opportunities to talk to others in/about Spanish	44	2	14	5
Using grammar accurately	36	3	10	6
Writing continuous text in Spanish	36	3	6	8
Finding enough time	36	3	14	5
Acquiring a good pronunciation	34	4	16	4
Speaking in Spanish in front of others	32	5	18	3
Finding the course too demanding	32	5	14	5
Maintaining motivation	26	6	18	3
Feeling that I am not doing as well as others	26	6	6	8
Worrying about failure	26	6	0	11
Increasing my vocabulary	22	7	6	8
Having enough confidence	22	7	6	8
Having enough practice	22	7	2	10
Worrying that I am not making enough effort	20	8	4	9
Having the staying power when the going gets tough	18	9	4	9
Measuring/seeing progress	18	9	6	8
Organizing my work	16	10	2	10
Assessing my strengths and weaknesses	14	11	4	9
Feeling isolated	14	11	6	8
Prioritizing	12	12	8	7
Finding the course not demanding enough	4	13	0	11
Other	2	14	4	9

When it comes to identifying all the problems that students encountered when taking SPAN 101 in the classroom, 46% of students stated they had problems “understanding what they hear,” and 44% experienced problems with “remembering vocabulary and grammar,” “becoming fluent” and “finding opportunities to talk to others in or about the target language.” Other problems that students pointed out when learning Spanish were “using grammar accurately,” “writing continuously in Spanish,” and “finding enough time” (36%). Only 4% of the

respondents found the course “not demanding enough.” When asked to rank the three most serious problems, 24% of the respondents chose “understanding what I hear,” “remembering vocabulary and grammar,” and “speaking in Spanish in front of others.” “Finding the course not demanding enough” and “worrying about failure” were ranked as the least serious problems.

Table 8

*Problems Online Participants Experienced*

Items	Percentage All	Rank	Percent most Important	Rank
Remembering vocabulary and grammar	40	1	30	1
Using grammar accurately	39	2	25	2
Writing continuously text in Spanish	35	3	16	3
Worrying about failure	33	4	5	7
Speaking in Spanish in front of others	32	5	9	5
Acquiring a good pronunciation	28	6	7	6
Becoming fluent	28	6	16	3
Understanding what I hear	28	6	14	4
Increasing my vocabulary	29	7	4	8
Maintaining motivation	26	8	2	9
Having enough practice	26	8	9	5
Having enough confidence	25	9	14	4
Measuring/seeing progress	25	9	4	8
Feeling that I am not doing as well as others	25	9	4	8
Finding opportunities to talk to others in/about Spanish	23	10	2	9
Having the staying power when the going gets tough	21	11	0	10
Finding enough time	19	12	5	7
Assessing my strengths and weaknesses	19	12	0	10
Feeling isolated	18	13	0	10
Finding the course too demanding	18	13	4	8
Worrying that I am not making enough effort	16	14	4	8
Organizing my work	14	15	5	7
Prioritizing	11	16	2	9
Other	5	17	0	10
Finding the course not demanding enough	4	18	0	10

Online students reported that “remembering vocabulary and grammar” (40%), “using grammar accurately” (39%), and “writing continuously text in Spanish” (35%) were the top

problems that they experienced when learning the target language. The same statements were ranked 1, 2, and 3 respectively as the most serious problems. Only 4% of the respondents believed that the “course is not demanding enough.”

In question Q3, the participants were asked to rate the importance of a series of factors in language learning (“At this point in your study, how would you rate the importance of the following factors?”). Their answers are presented in Table 9.

Table 9

*Participants’ Ratings of Specific Factors*

Item	<u>Classroom</u>		<u>Online</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Ability/ aptitude	11.6	17.36	9.8	13.81
Age	12.6	6.54	9.6	6.88
Gender	11.4	12.23	9.4	11.24
Intelligence	11.2	15.33	9.8	11.69
Prior experience of face-to-face learning	11.8	11.45	9.8	7.05
Attitude to study	11.8	16.22	9.8	13.97
Motivation	11.6	15.77	9.8	15.69
Personality (introvert, confident, etc.)	11.2	9.83	9.8	9.28
Learning style	11.4	11.63	9.8	11.84
Instructor	11.6	10.81	9.8	8.67
Course Materials	11.4	15.16	9.6	11.46
Other students	11.4	9.61	9.8	7.26

Table 9 indicated the means and standard deviations of students’ ratings of specific factors in both environments. For the classroom environment, the respondents scored highest on “age” ( $M = 12.6$ ,  $SD = 6.54$ ) and lowest on “intelligence” ( $M = 11.2$ ,  $SD = 15.33$ ) and “personality” ( $M = 11.2$ ,  $SD = 9.38$ ). These items were followed very closely by “gender” ( $M = 11.4$ ,  $SD = 12.23$ ), “learning style” ( $M = 11.4$ ,  $SD = 11.63$ ), “course materials” ( $M = 11.4$ ,  $SD = 15.16$ ) and “other students” ( $M = 11.4$ ,  $SD = 9.61$ ). This indicated that participants in this

particular study felt that age had a lot to do with their ability to learn a foreign language, but learning capabilities, gender, personality, course materials, and classmates were not very significant to them.

Online students, on the other hand, scored highest on “motivation” ( $M = 9.8$ ,  $SD = 15.69$ ), “ability/aptitude” ( $M = 9.8$ ,  $SD = 13.81$ ), “attitude to study” ( $M = 9.8$ ,  $SD = 13.97$ ), “learning style” ( $M = 9.8$ ,  $SD = 11.84$ ), “intelligence” ( $M = 9.8$ ,  $SD = 11.69$ ), “personality” ( $M = 9.8$ ,  $SD = 9.28$ ), “instructor” ( $M = 9.8$ ,  $SD = 8.67$ ) and “other students” ( $M = 9.8$ ,  $SD = 7.26$ ). They scored the lowest responses for “gender” ( $M = 9.4$ ,  $SD = 11.24$ ), followed very closely by “age” ( $M = 9.6$ ,  $SD = 6.88$ ), and “course materials” ( $M = 9.6$ ,  $SD = 11.46$ ). This indicates that online participants felt that their learning capabilities, attitudes toward learning, and personality played an important role when learning a target language, but age, gender, and course materials were not as important.

In question Q5a, the participants were asked if there was anything specific to language learning that caused them anxiety in comparison to other subjects whether in the classroom or at a distance (“If you compare language learning, whether in the classroom or at a distance, to learning other subjects, are you finding that there is anything specific to language learning that is causing you anxiety?”). Their answers are presented in Table 10.

Table 10

*Participants' Anxiety about Language Learning in Comparison to Learning Other Subjects*

Environment	Answer	<i>n</i>	Percentage
Classroom	Yes	23	40
	No	34	60
Online	Yes	37	74
	No	13	26
Total		107	100

Table 10 shows a difference between both environments (classroom and online) when comparing anxiety felt while studying a foreign language to learning other subjects. More than half (60%) of classroom students stated there was no difference between learning a foreign language and other subjects. This finding was in marked contrast to the results found with online students, almost three-fourths of whom stated that learning a foreign language caused them more anxiety than learning other subjects. Only 13 out of the 50 online students responded *no* to the question.

If the participants answered *yes* to question Q5a, they were asked to identify all the statements that applied to them, as well as the most important one (“If you answered **Yes**, to **Q5a** please cross all that apply in column **(a)** and cross the **one** most important in column **(b)**”). Their answers are presented in Tables 11 and 12.

Table 11

*Situations that Cause Anxiety among Classroom Language Learners*

Items	Percentage	Rank	Percent most	Rank
	All		Important	
Fear of making mistakes	33	1	11	1
Remembering vocabulary	30	2	10	2
“Freezing” when called on to speak	28	3	6	3
Realizing how much work it takes to learn a Language	26	4	2	5
Not making progress quickly enough	26	4	0	6
Fear of critical reactions from others	21	5	4	4
Getting to grips with grammar	21	5	4	4
Not matching up to the expectations of others	19	6	0	6
Wanting to translate every word but finding it does not help	17	7	0	6
Fear of not being understood	16	8	0	6
Feeling too much is expected of me	16	8	4	4
Worrying about my accent	16	8	2	5
Negative experiences of learning a language at School	16	8	2	5
Discovering that another language does not follow the same patterns as my language	14	9	0	6
Other (please give details):	0	0	0	0

When asked to identify all the situations that caused anxiety when learning a foreign language, classroom students scored highest on “fear of making mistakes” (33%), “remembering vocabulary” (30%) and “‘freezing’ when called on to speak” (28%). Not surprisingly, these three items were also ranked first, second, and third respectively as the most important factors causing anxiety among foreign language classroom students. “Discovering that another language does not follow the same patterns as my language” was ranked the lowest. “Not making progress quickly enough,” “not matching up to the expectations of others,” “wanting to translate every word but finding it does not help,” and “fear of not being understood” were not considered by classroom students as important factors causing them anxiety.

Table 12

*Situations that Cause Anxiety among Online Language Learners*

Items	Percentage	Rank	Percent most	Rank
	All		Important	
Fear of making mistakes	60	1	16	1
Not making progress quickly enough	56	2	12	3
Realizing how much work it takes to learn a language	54	3	14	2
Remembering vocabulary	50	4	14	2
Fear of critical reactions from others	46	5	10	4
Getting to grips with grammar	46	5	12	3
Worrying about my accent	44	6	4	6
“Freezing” when called on to speak	42	7	4	6
Fear of not being understood	40	8	4	6
Discovering that another language does not follow the same patterns as my same language	40	8	6	5
Wanting to translate every word but finding it does not help	38	9	4	6
Feeling too much is expected of me	32	10	10	4
Not matching up to the expectations of others	28	11	0	0
Negative experiences of learning a language at School	22	12	4	6
Other (please give details):	4	13	0	0

Students from both environments identified “fear of making mistakes” as the most important element that caused them anxiety when learning a foreign language. It was chosen by 60% of the online respondents and was also ranked as the most important factor that caused them anxiety. Fifty-six percent of the online respondents acknowledged that “not making progress quickly enough” affected their anxiety levels. “Realizing how much work it takes to learn a language” was scored and ranked much higher by the online students than by the classroom students; 54% of online students scored it as affecting anxiety levels (compared to 26% for the classroom), and this item was ranked as the second most important factor (compared to fifth among classroom students). Only 22% of the online respondents identified “negative experiences of learning a language at school” as a possible cause of anxiety. This item was also

ranked the lowest. Half of the respondents identified “remembering vocabulary” as a component that caused them to feel anxious. Both classroom and online students ranked this item second among the most important. A higher percentage of online language learners identified “fear of critical reactions from others,” “getting to grips with grammar,” and “worrying about my accent” as sources of anxiety. Forty-six percent of online students compared to 21% of classroom students worried about what their classmates would think about them as well as feeling concern about understanding the grammar of the target language. Classroom students did not worry about their accents (16%) as much as online students (44%).

In question Q8a, the participants were asked if they had managed to work out ways to deal with anxiety that they would recommend to other learners when learning a language (“Have you managed to work out ways of dealing with anxiety in learning a language that you would recommend to other learners?”). Students’ responses from both environments are presented in Table 13.

Table 13

*Ability to Work Out Ways of Dealing with Anxiety*

Environment	Answer	F	Percentage
Classroom	Yes	24	42
	No	33	58
Online	Yes	22	44
	No	28	56
Total		107	

As shown in Table 13, students in both environments have not been able to find ways to deal with or decrease the anxiety they experienced when learning a foreign language. More than

half of the respondents (58% of classroom students and 56% of online students) affirmed not being able to manage anxiety.

If the participants answered *yes* to question Q8a, then in question Q8b they were asked to cross all the statements that applied to them as well as to cross the most important (“If you answered **Yes**, to Q8a please cross **all** that apply in column (a) and cross the **one** most important in column (b)).” Responses are presented in Table 14 and 15.

Table 14

*Classroom Participants’ Ways of Dealing with Anxiety when Learning a Foreign Language*

Items	Percentage All	Rank	Percent most Important	Rank
Use positive self-talk (e.g. I can do it; it doesn’t matter if I make mistakes; others make mistakes)	30	3	16	2
Actively encourage myself to take risks in language learning, such as guessing meanings or trying to speak, even though I might make some mistakes.	37	1	23	1
Imagine that when I am speaking in front of others, it is just a friendly informal chat	25	5	2	3
Tell myself when I speak it won’t take long	17	6	0	4
Give myself a reward or treat when I do well	12	8	0	4
Be aware of physical signs of stress that might affect my language learning	32	2	0	4
Write down my feelings in a diary or notebook	10	9	0	4
Share my worries with other students	16	7	2	3
Let my instructor know that I am anxious	5	10	0	4
Use relaxation techniques (e.g., deep breathing, consciously speaking more slowly, etc.)	26	4	2	3
Other (please give details):	0	11	0	4

Table 15

*Online Participants' Ways of Dealing with Anxiety when Learning a Foreign Language*

Items	Percentage	Rank	Percent most	Rank
	All		Important	
Use positive self-talk (e.g. I can do it; it doesn't matter if I make mistakes; others make mistakes)	40	1	12	2
Actively encourage myself to take risks in language learning, such as guessing meanings or trying to speak, even though I might make some mistakes	34	2	16	1
Imagine that when I am speaking in front of others, it is just a friendly informal chat	16	5	0	7
Tell myself when I speak it won't take long	14	6	2	6
Give myself a reward or treat when I do well	6	7	0	7
Be aware of physical signs of stress that might affect my language learning	24	4	4	5
Write down my feelings in a diary or notebook	2	8	0	7
Share my worries with other students	6	7	0	7
Let my instructor know that I am anxious	16	5	6	4
Use relaxation techniques (e.g., deep breathing, consciously speaking more slowly, etc.)	32	3	8	3
Other (please give details):	0	9	0	7

Table 14 illustrates that the majority of classroom students encouraged themselves to take risks by trying to speak the target language whether they made mistakes or not (37%), used positive self-talk (30%), and noticed signs of stress that may affect their learning (32%) in order to deal with anxiety. Less common ways they practiced to decrease anxiety included treating themselves when doing well (12%), keeping a journal (10%), and talking to the instructor about their anxiety (5%). “Actively encourage myself to take risks” was ranked as the most important method to reduce anxiety, followed by “use positive self-talk.” Three factors ranked third in importance. These were “imagine that when I am speaking in front of others, it is just a friendly informal chat,” “share my worries with other students,” and “use relaxation techniques.”

In order to manage anxiety, online students used positive self-talk (40%), actively encouraged themselves to take risks (34%), used relaxation techniques (32%), and recognized

that physical signs of stress might affect their learning (24%). The less common practices to decrease anxiety used by online students were writing in a journal (2%) and treating themselves after doing well (6%). Like the classroom students, online students ranked actively encouraging themselves to take risks and positive self-talk as the two most important methods to deal with anxiety. The use of relaxation techniques was ranked third in both environments. The least favored techniques to deal with anxiety among the online students were “imagine that when I am speaking in front of others, it is just a friendly informal chat,” “give myself a reward or treat when I do well,” “write down my feelings in a diary or notebook,” and “share my worries with other students.”

In question Q18c, the participants were asked to identify any particular behavior(s) that had helped them to become better language learners (“Can you point to anything in particular that you feel has helped you to become a better language learner?”). Their responses are presented in Table 16.

For this question, students from both environments had to choose which one of the six scenarios given to them had helped them to become better language learners. Out of a total of 57 respondents who took SPAN 101 in the classroom, 18 (31%) believed it was their responsibility to improve their language ability. The idea of being persistent and accomplishing their language goals was chosen by 17 students (30%). Classroom students scored the lowest responses on making good decisions about language study habits and the need to impress others ( $n = 4$ ; 7%). Among the online students, 20 out of 50 (40%) believed that persistence and determination would help them to become better language learners, and 12 (24%) believed that learning a foreign language for and by themselves required effort. The lowest scores were given to “realizing that I can make good decisions for myself about my language study” and “needing to

prove to others that I can be successful at languages.” These findings were similar in both environments. In other words, classroom and online students resorted to the same techniques in order to become better language learners.

Table 16

*Participants’ Actions to Become a Better Language Learner*

Item	<u>Classroom</u>		<u>Online</u>	
	Number	Percentage	Number	Percentage
Having to rely more on myself to improve my language proficiency	18	31	9	18
Realizing that I can make good decisions for myself about my language study	4	7	1	2
Making more of an effort because I am learning a language for and by myself	9	16	12	24
Having to develop skills to cope with fitting language learning around other commitments	5	9	5	10
Needing to prove to others that I can be successful at languages	4	7	2	4
Being persistent and determined to succeed in the language goals I have set for myself	17	30	20	40
Other	0	0	1	2

In question Q19, the participants were asked to answer with a *yes*, *no*, or *no answer* to a series of questions about SPAN 101. Their responses are reported in Table 17. When the respondents were asked their views of the class, a large portion of classroom students (70%), stated that the course was more enjoyable than they had expected, followed by 60% of respondents who declared the class to be what they expected it to be. In regard to the level of difficulty of the course, 46% of the respondents found the class not to be more difficult than expected, but not easier than expected (56%). This showed that most of the respondents considered the class to be neither too easy nor too difficult.

Table 17

*Participants' Perceptions of the Class*

Item	<u>Classroom</u>			<u>Online</u>		
	yes	no	no answer	yes	no	no answer
What you expected it to be?	60	24	16	60	32	8
More difficult than you expected?	42	46	12	72	26	2
Easier than you expected?	28	56	16	6	86	8
More enjoyable than you expected?	70	23	7	44	48	8
Less enjoyable than you expected?	17.5	65	17.5	36	40	24

On the other hand, almost half of the respondents reported that the course was neither more enjoyable (48%) nor less enjoyable than they expected (40%). In regard to the level of difficulty, the respondents considered the course to be more difficult than expected (72%). It is important to notice that the response rate for this question was higher among the online students than the classroom students.

This section presented and discussed the differences and similarities between the participants in both environments in demographics, the problems that students have when learning a foreign language, their ways of dealing with anxiety, and their perceptions of the class. Now that these differences and similarities have been elaborated, it is important to focus on the research questions.

## Research Questions

### Research Question 1

1. Is there a difference in foreign language anxiety levels between students taking a foreign language course in a traditional classroom and students taking a foreign language course in an online class?

In order to determine if there is a difference in foreign language anxiety levels between classroom students and online students, a chi-square test for goodness of fit was conducted for Question Q5a (“If you compare language learning, whether in the classroom or at a distance, to learning other subjects, are you finding that there is anything specific to language learning that is causing you anxiety?”). The results are shown in Table 18.

Table 18

*Results of Chi-Square Analysis of Q5a.*

Observation	<u>Classroom</u>		<u>Online</u>		<i>df</i>	Sig.	Chi-square
	Yes	No	Yes	No			
Observed case	23.0	34.0	37.0	13.0	3	.004	13.486
Expected	26.8	26.8	26.8	26.8			

The data show that there is a connection between being in the classroom or in the online environment and the probability of the students to answer *yes* or *no* to whether there is anything specific to language learning that causes them anxiety compared to other subjects. For students in the traditional classroom, we expected 26.8 to answer *yes* and 26.8 to answer *no*, but actually only 23 said *yes* and 34 said *no*. For students in the online environment, we expected 26.8 to answer *yes* and 26.8 to answer *no* but 37 said *yes* and 13 said *no*. According to these findings, classroom students are more likely to answer *no* to this question than chance would expect, and those students in online are more likely to answer *yes*. In sum, online students feel that learning

a foreign language causes them to feel more anxious than studying other subjects compared to the classroom students.

In order to determine if there was any difference in the level of foreign language anxiety between students from both environments (classroom and online), an independent means *t*-test was conducted for Q6 (“To what extent do you agree or disagree with the following statements?”). The three assumptions for this *t*-test were met. First, the assumption of independence was met as the two groups belong to the two different environments (classroom and online). Second, the assumption of normality was also met, as both skewness (.146) and kurtosis (.055) fell within the acceptable limits of normality. Finally, the assumption of homogeneity of variance was also met. The result of Levene’s test of equality of error variances obtained for the *t*-test shows that the sig. value of .069 that we obtained was greater than our alpha level of .05.

An independent sample *t*-test was conducted to compare levels of foreign language anxiety between both environments. The dependent variable was the level of anxiety of each student and the independent variable was the environment (traditional classroom vs. online). There was not a significant difference in the levels of foreign language anxiety that students experienced in the classroom ( $M = 47.63, SD = 9.54$ ) and the levels of foreign language anxiety that students experienced in an online environment ( $M = 44.38, SD = 9.26$ ),  $t(105) = 1.78, p > .05$ .

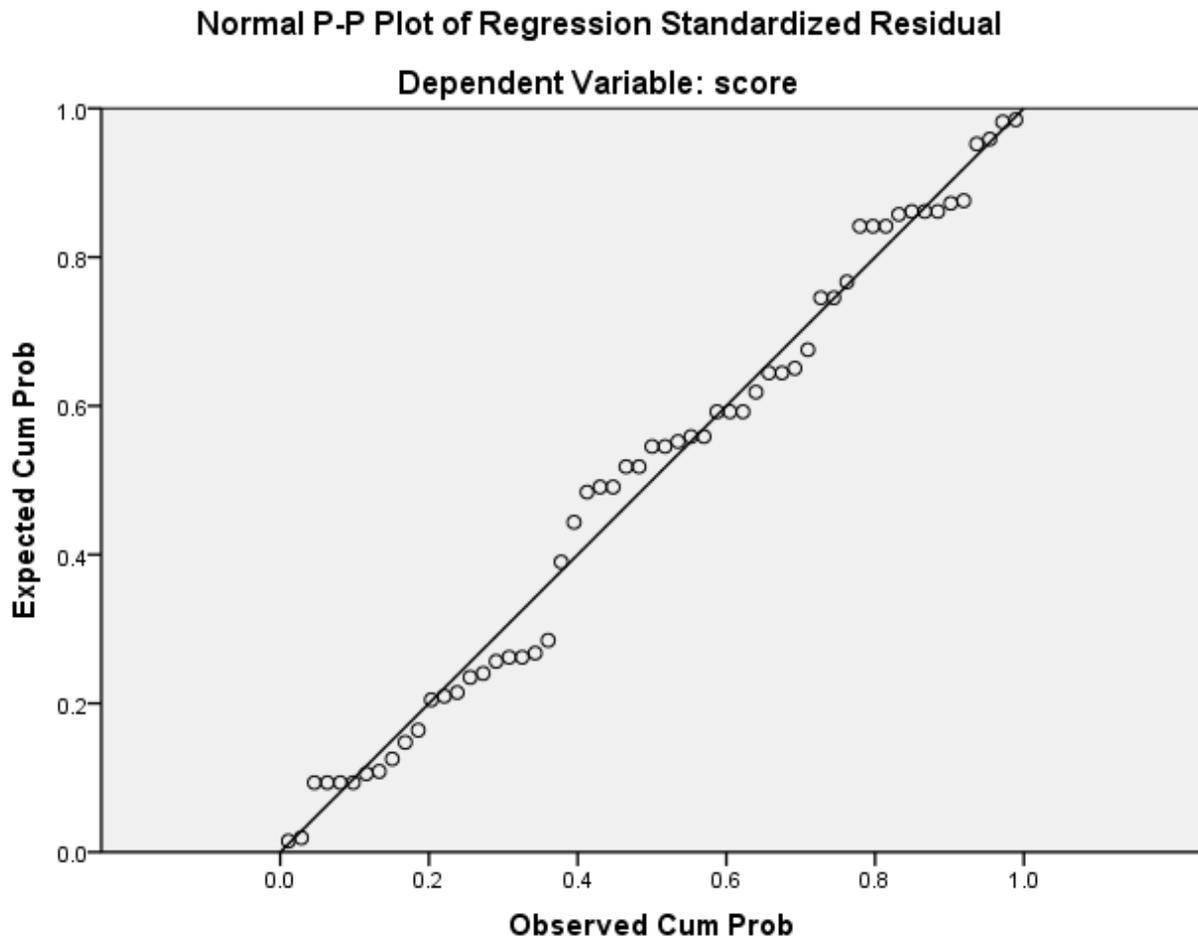
## **Research Question 2**

2. Does anxiety level predict students’ final test scores?

In order to see if the student’s anxiety level could predict the student’s final test score, a linear regression was conducted between these two variables. The predictor variable was the

student's anxiety level (the student's answer to Q7, "Are you finding learning a language in the classroom makes you more or less anxious than learning at a distance?"). The criterion variable was the student's final scores.

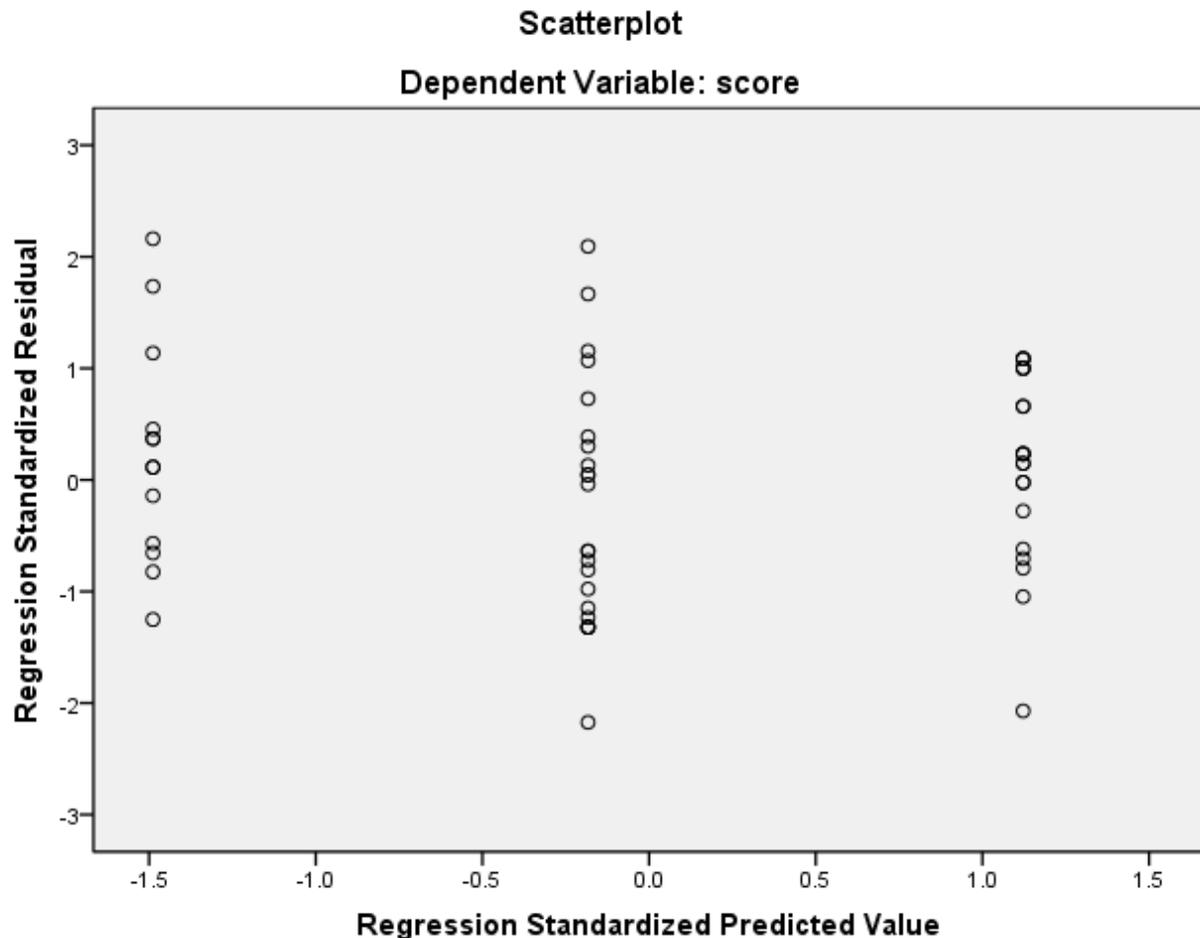
In order for the analysis to be appropriate, certain assumptions about the residuals in our data have to be true. The assumptions about independence of residuals, normality of residuals, and homogeneity of variance of residuals were met. As shown in Figure 1, all residuals are very close to the diagonal line; therefore, the assumption of normality of residuals and linearity has been met.



*Figure 1.* Linear regression results for classroom participants.

As shown in Figure 2, the assumption of independence of residuals has been met. All the residuals are stable and homogeneous and possess the same amount of variance in errors.

In this figure we can observe that all residuals are very close to the diagonal line; therefore, the assumption of normality of residuals and linearity has been met.



*Figure 2.* Assumption of independence for classroom participants.

The study showed that the level of relationship between criterion and predictor in this study was not strong ( $R = .053$ ). Only 0.3% ( $R^2 = .003$ ) of the variance of the student's final grade (criterion) is explained by the student's level of anxiety (predictor). The rest of the variance is unexplained. Moreover, the shared variance between the student's final grade and the

student's level of anxiety was not significant, meaning that the student's anxiety level is not a good predictor of the student's final grade,  $F(1, 55) = .154, p > .05$ . The standard of error of estimate (11.72) showed the error on prediction for the entire sample. In other words, when predicting the student's final grade, we are typically off 11.72 anxiety level units.

As shown in Figure 3, most of the residuals are relatively close to the diagonal line, so the assumption of normality of residuals and linearity has been met (online students).

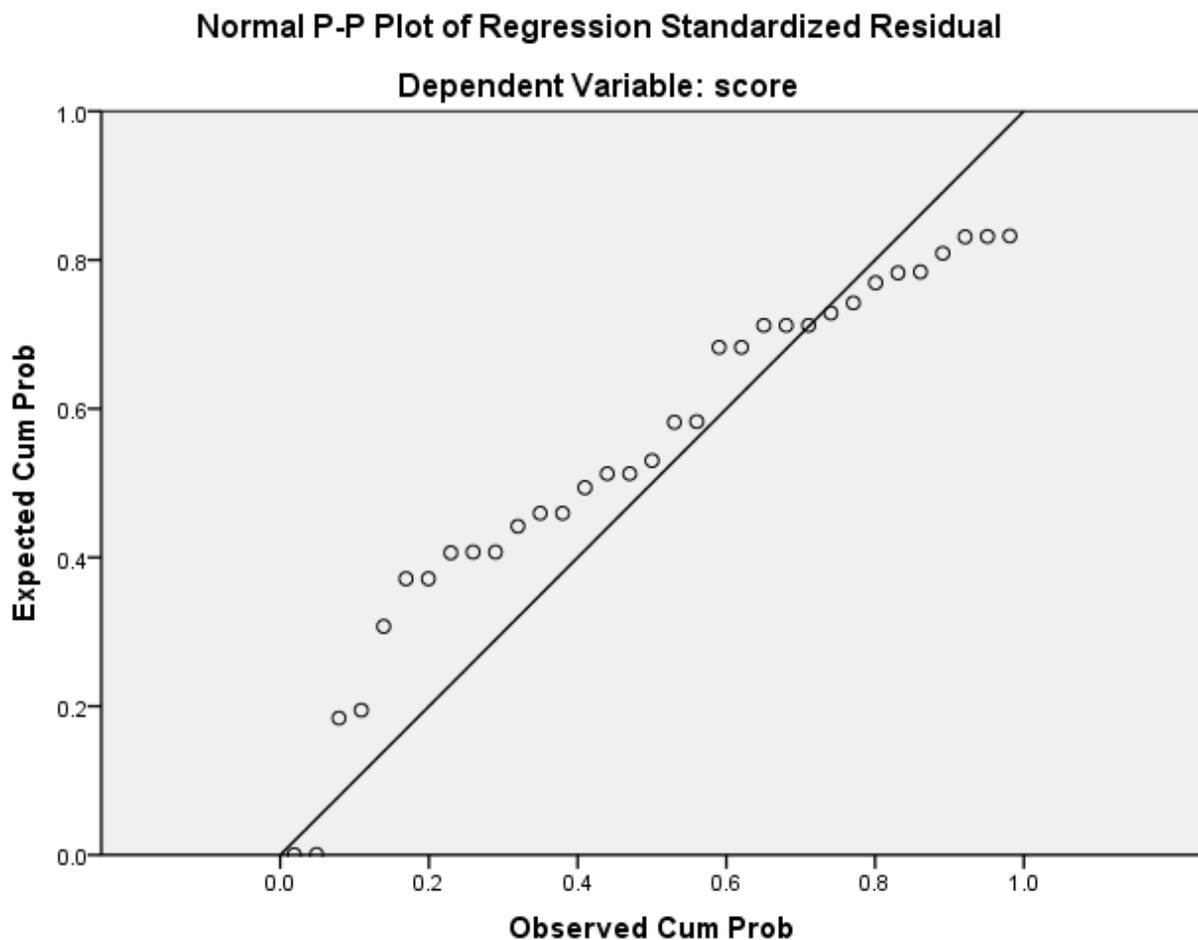


Figure 3. Linear regression results for online participants.

Figure 4 shows that the assumption of independence of residuals has been met. All the residuals are independent of one another, and no systematic patterns exist. However, the middle has much less variance than both sides.

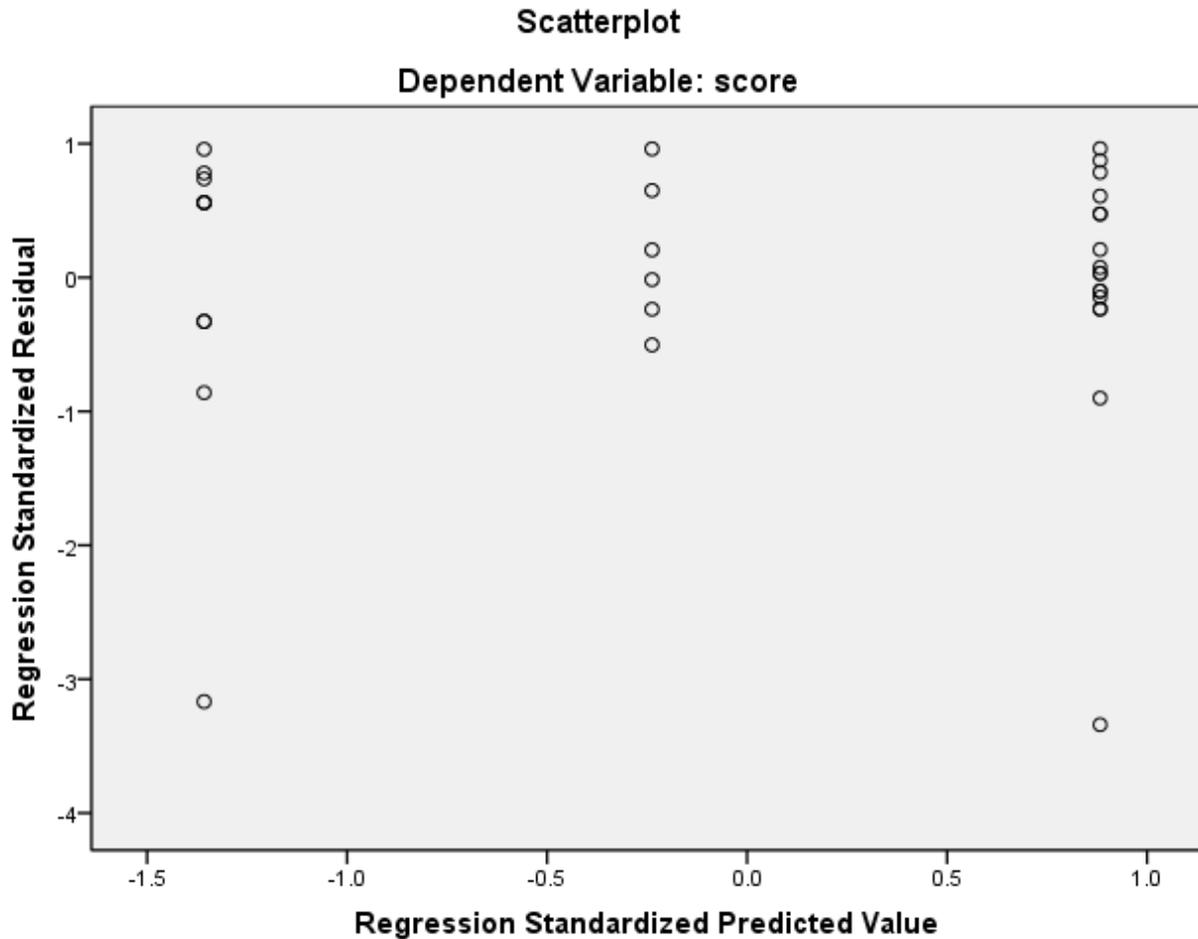


Figure 4. Assumption of independence for online participants.

The level of relationship between criterion and predictor was not strong ( $R = .078$ ); only 0.6% ( $R^2 = .006$ ) of the variance of the student's final grade (criterion) is explained by the student's level of anxiety (predictor). The rest of the variance is unexplained. Moreover, the shared variance between the student's final grade and the student's level of anxiety was not significant, meaning that the student's anxiety level is not a good predictor of the student's final

grade,  $F(1, 31) = .191, p > .05$ . Our standard of error of estimate (22.53) showed the error on prediction for the entire sample. When predicting the student's final grade, we are off 22.53 anxiety level units. In addition, for every increase of 1 anxiety unit, the student's final grade decreases by 1.95 units.

### Summary

This study was conducted to answer the following research questions:

1. Is there a difference in foreign language anxiety levels between students taking a foreign language course in a traditional classroom and students taking a foreign language course in an online class?
2. Does anxiety level predict students' final test scores?

In order to examine if there was a difference in foreign language anxiety levels between students taking a Spanish course in the classroom and students taking Spanish in an online setting, a total of 107 students (57 students enrolled in the classroom and 50 students enrolled online) were asked to complete 9 of the 19 questions on the L120 Questionnaire 2 developed by Hurd (2003) and provide basic demographic information (gender, age, and employment).

Descriptive statistics such as frequencies, percentage means, and standard deviations were used to analyze the respondents' demographic data and their answers to questions Q1, Q2a, Q2b, Q3, Q5b, Q8a, Q8b, Q18c, and Q19. The results of a chi-square test for goodness of fit for Question Q5a showed that there was a significant difference between the classroom and online environments in terms of the levels of anxiety felt when studying a foreign language compared to learning other subjects. Specifically, online students felt that learning a foreign language caused them to feel more anxious than studying other subjects as compared to classroom students. However, a *t*-test conducted on the participants' answers to Q6 revealed that there was not a

significant difference in the levels of foreign language anxiety that students experienced in the classroom ( $M = 47.63$ ,  $SD = 9.54$ ) and the levels of foreign language anxiety that students experienced in an online environment ( $M = 44.38$ ,  $SD = 9.26$ ),  $t(105) = 1.78$ ,  $p > .05$ . Finally, a linear regression conducted between the variables final test scores and levels of anxiety revealed that in both environments the student's anxiety level is not a good predictor of the student's final grade because the shared variance between these variables was not significant,  $F(1, 55) = .154$ ,  $p > .05$  (classroom) and  $F(1, 31) = .191$ ,  $p > .05$  (online).

A more detailed explanation of the results of the study as well as implications and recommendations for future studies is presented in Chapter 5.

## CHAPTER 5

### DISCUSSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

This study had two main purposes. The first was to examine and compare the levels of anxiety students experienced when learning a foreign language in the classroom with the levels of anxiety students experienced when taking the course online. A second goal for this study was to examine if there was any correlation between anxiety and second language achievement in both educational settings. This study addressed the following research questions:

1. Is there a difference in foreign language anxiety levels between students taking a foreign language course in a traditional classroom and students taking a foreign language course in an online class?
2. Does anxiety level predict students' final test scores?

#### **Discussion**

The findings of this study were based on the results obtained from the analysis of the questionnaires completed by the participants. An original version (online environment) and a modified version (classroom environment) of the L120 Questionnaire developed by Hurd (2003) were used for this study. I analyzed the quantitative data using SPSS Version 21. Descriptive statistics such as means, standard deviations, frequency distribution, and percentages as well as chi-square test for goodness of fit, independent *t*-test, and linear regression were used to answer the research questions of this study.

### **Differences and Similarities between Classroom and Online Students**

**Demographics.** The sample consisted of 107 undergraduate students enrolled in beginning Spanish (SPAN 101) during the 2012 spring semester at Indiana State University. Of the 107 students, 57 signed up for the class in the traditional classroom, and 50 students took the class online. Of the 57 classroom students, 34 (60%) were male students and 23 (40%) were women students. Seventy-nine percent of the classroom respondents were between the ages of 17-22 years and only 5% declared being 35 years and above. Lastly, more than half of the participants (54%) declared they worked part-time, 37% were unemployed and only 7% worked full-time. Of the 50 online students, 30 were women (60%) and 20 were men (40%). A large percentage of the participants (76%) declared they worked full- or part-time, and 22% declared themselves unemployed. Seventy-nine percent of classroom students and 34% of online students stated they were between 17 and 22 years old (see Tables 1, 2, 3). Demographic characteristics of the two populations were consistent with those in other studies. Online students tend to be female, older, and employed compared to traditional students (Noel-Levitz, 2011; The Distance Education and Training Council, 2007).

**Problems learning Spanish.** When asked to rate themselves as language learners, online participants rated themselves better than classroom students in this study. In fact, 48% of online students considered themselves good language learners compared to 31.6% of classroom students. Only 8% of online students rated themselves as poor and 2% as very poor language learners compared to 19.3% (*poor*) and 8.7% (*very poor*) among the classroom students (see Table 4). These findings are in agreement with those revealed by previous studies, in which

online students tended to perform better than classroom students (e.g., Inverson, Colky, & Cyboran, 2005; Means et al., 2010; Thrasher, Coleman & Atkinson, n.d.).

Despite the more positive ratings of the online students, students taking Spanish online experienced more problems in learning the language than those taking the course face to face. These difficulties could be caused by the student's study habits, personality (K.H. Wang et al., 2006), anxiety levels toward the target language (T-Y. Chen & Chang, 2004; Horwitz et al., 1986), views about the subject or previous experience with online courses, or perhaps the quality of instruction (Compton, 2009; Valentine, 2002).

Students also experienced different difficulties when learning Spanish depending on their environment. Students learning the language in the classroom reported having problems with the following activities: "understanding what I hear" (46% of the students, ranked first as the most serious problem), "remembering vocabulary and grammar" (44%, ranked second), "speaking in front of others" (32%, ranked third), and "acquiring good pronunciation" (34%, ranked fourth). On the other hand, students taking Spanish online admitted struggling with "remembering vocabulary" (40%, ranked first), "using grammar accurately" (39%, ranked second), and "writing continuous text in Spanish (35%, ranked third; see Tables 6 and 7).

The problems that students from both environments reported are not uncommon among foreign language learners (Aydin, 2011; Hurd, 2006; Tallon, 2009). Many of these problems are caused by language anxiety. Students can experience anxious feelings when asked to read (Matsuda & Gobel, 2004; Saito et al., 1999), write (Cheng, 2002), and speak in front of others (Horwitz et al., 1986; Price, 1991; Young, 1992). Students in the two environments ranked the problems mentioned above very differently. First, the majority of classroom students affirmed that understanding what they hear is the main problem they experienced in class. They ranked

this as the most important problem, but online students ranked the same statement sixth. This could be because online students have the ability to stop, rewind, and listen to the recorded dialogues as many times as they want, which classroom students are not able to do.

“Speaking in front of others” was another problem that was experienced differently in the two environments. Classroom students ranked public speaking in the top three difficulties, but online students ranked it fifth. This is very common among foreign language students, but it is not limited to them. Gregersen and Horwitz (2002) defined communication apprehension as “an individual’s discomfort in talking in front of others” (p. 562) and noted that it is one of the “three well-known anxieties associated with first language use and everyday life” (p. 562). Online students do not have this problem as much because they can complete their courses from the comfort of their own homes without having to talk in front of classmates. According to Judy Kristan, dean of Academic Affairs for DeVry University, “many students are shy about interacting within a live situation. With online courses they are somewhat anonymous. They may feel freer to communicate” (as cited in Feintuch, 2010, p. 20).

However, this anonymity is changing. Many of the software programs being used in current online language courses “facilitate CALL activities and provide students with a range of communication opportunities” (Compton, 2009, p. 78). The goal of these new programs is “to offer the distance student an experience as much like that of traditional, face-to-face instruction as possible” (Valentine, 2002), as well as to develop the learner’s language proficiency (National Council of State Supervisors for Languages, 2011). Online study is becoming “a highly interactive, personal experience for students. There is continuous and greater student participation. Students have the ability to have continual dialogue with each other and with their instructors” (Feintuch, 2010, p. 20). In many colleges that offer online courses, students have

access to their instructors at all times. For example, faculty members at DeVry University are required to answer their online students within 24 hours (Feintuch, 2010).

Furthermore, “becoming fluent” and “writing continuous text in Spanish” were not considered major problems among classroom students compared to online students. This may be because classroom students have better opportunities to practice the target language with the teacher and classmates and that they receive almost instant feedback from both. Online students appeared to experience less stress related to “finding enough time” and “acquiring a good pronunciation” than classroom students. This may be true because online students have the ability to learn at their own pace (“The Advantages,” 2007) anywhere they can access the Internet (Gallagher & Newman, 2002).

There were some similarities between groups. Both groups acknowledged having problems with “remembering vocabulary and grammar” (44% of classroom students and 40% of online students), and there was not a marked difference between students from both environments when asked to compare their progress to others (26% of classroom students and 25% of online students). Regardless of the environment, students always have problems remembering vocabulary (Lucas et al., 2011; Tallon, 2009).

This study had a different result than previous studies when dealing with finding time to do the course work. For instance, Hurd (2000) found that distance language learners identified “finding enough time” to be one of the main problems when learning a foreign language online. In this study, 36% of classroom students stated that “finding enough time” was a problem for them compared to only 19% of online students. Moreover, when asked to rank “finding enough time” among the most serious problems, the classroom students ranked it fifth and online students ranked it seventh.

**Anxiety about learning a foreign language compared to other subjects.** Students were asked if there was anything specific to language learning (regardless of the learning format) that was causing them anxiety compared to other subjects. More than half of classroom students (60%) felt there was no difference between learning a foreign language and learning other subjects. This result could be related to the fact that most of the classroom students have had previous experience in learning a foreign language or that they are familiar with the classroom environment. A large percentage of online students (74%) reported feeling more anxious about learning a foreign language than other subjects (see Table 10). This finding is similar to that of Hauck and Hurd (2005): 84% of their participants responded “yes” to the same question. This finding could also be a consequence of the students’ ages or previous experience with the language. It may also be that this course was their first time taking a course online so they did not know what to expect. As shown in Table 9, online participants felt that “prior experience with online learning” played an important role when learning a target language ( $M = 9.8$ ,  $SD = 7.05$ ). Moreover, it is important to remember that a large percentage of the online students who participated in this study stated they were 35 years of age and above (30%), so it is possible that most of these students had not taken a foreign language before or that their most recent language course was taken several years ago.

When asked to identify the situations that caused them anxiety when learning a foreign language, students from both environments gave similar answers, specifically “fear of making mistakes,” “fear of not being understood,” “fear of critical reactions,” “remembering vocabulary,” “realizing how much work it takes to learn a language,” “not making progress quickly enough,” and “getting to grips with grammar.” These results can be seen in previous studies. Gregersen (2003, 2005), Horwitz et al. (1986), Kitano (2001), Pappamihel (2002), and

Pichette (2009) observed a connection between foreign language anxiety and fear of negative evaluation. Hurd (2007) concluded that fear of not being understood was one of the main causes of anxiety among foreign language learners. Hauck and Hurd (2005) also stated that students connected anxiety to memorization of vocabulary, understanding of grammar, worries about being understood, and fears of making mistakes.

Nevertheless, there were some differences between both groups in this study when they were asked to identify elements that were causing anxiety. Classroom students ranked “freezing when called on to speak” (third) and “not matching up to the expectations of others” (sixth) fairly high, but online students ranked those two actions much lower: “freezing when called on to speak” was sixth and “not matching up to the expectations of others” was eleventh (see Tables 11 and 12). These results are to be expected because online students do not have to worry about talking in front of the class, so the lack of the face-to-face component makes these students more resistant to these types of problems. However, the downfall of this apparent advantage is that online students do not get the same personal attention or the same learning experience as classroom students. Hauck and Hurd (2005) had a different result in regard to the connection between oral communication and anxiety among online students, specifically that online students ranked “freezing when called upon to speak” as the number one cause for anxiety. One likely explanation for this important difference in results can be attributed to the organization of the course. For example, if the course includes several assignments and activities that engage the student in speaking in the target language, there is likely to be a higher level of communication anxiety among the students than in a course in which the students have a more passive role.

**Ability to deal with anxiety.** More than half of the students from both environments (58% of classroom students and 56% of online students) were not able to find ways to deal with

anxiety when learning a foreign language (see Table 13). These percentages are very similar, so it is reasonable to speculate that when it comes to managing anxiety, student characteristics play a more important role than the environment itself. Both classroom students and online students had some suggestions to offer to others in regard to managing anxiety. If we compare these numbers to those of the students who actually have found ways to deal with anxiety, we can conclude that the majority of them suffer from anxiety. The most common tactic among classroom students to deal with anxiety was encouraging themselves to take risks by “trying to speak the target language regardless if they might make some mistakes” (37%). Other frequently identified strategies included being aware of physical signs of stress that may affect their language learning (32%), positive self-talk (30%), and using relaxation techniques (26%). Among online students, on the other hand, the four most popular techniques were positive self-talk (40%), actively encouraging themselves to take risks by trying to speak the target language (34%), relaxation techniques (32%), and being aware of physical signs of stress (24%). In short, students from both environments draw upon the same techniques to deal with anxiety. When students were asked to choose the most important among all the techniques, both groups selected positive self-talk and actively encouraging themselves to take risks as the top two techniques.

Nevertheless, the data also revealed a few differences between the two groups. First, only 16% of online students compared to 25% of classroom students chose “imagine that when I am speaking in front of others, it is just a friendly informal chat” as a technique to manage anxiety. This difference can be explained by the fact that in the majority of online courses, students do not interact with a “live audience” as much as classroom students. Second, 16% of classroom students reported that they like to “share my worries with other students” and 10% to “write down my feelings in a diary or notebook” as ways to manage anxiety compared to only

6% and 2%, respectively, of online students. It is possible that these choices reflect the students' age and maturity as well as their physical ability to communicate with classmates. Overall, the data in this section are very similar to the data found by Hauck and Hurd (2005) and Hurd (2007), whose online participants chose the same techniques as in this study to manage anxiety.

**Behaviors to become a better language learner.** Students from both environments were asked to choose one behavior out of a list of six that had helped them to become a better language learner. As shown in Table 16, out of 57 classroom students, 31% chose “having to rely more on myself to improve my language proficiency,” 30% chose “being persistent and determined to succeed in the language goals I have set myself,” and 16% chose “making more of an effort because I am learning a language for and by myself.” The least popular items among classroom students deal with language study habits, finding time, and peer pressure. By contrast, online students relied mostly on accomplishing their personal goals (40%), making learning a language more personal (24%), and taking personal responsibility for their learning (18%).

These findings are supported by findings in the literature. When Hurd and Xiao (2010) asked their participants to identify any actions they had taken to become better language learners, the four most popular among the participants were “being persistent” (34.2%), “making more of an effort” (30.8%), “having to rely more on myself” (16.7%), and “having to develop skills to cope with fitting language learning around other commitments” (10.8%). These actions are the same ones favored by the participants in this study. The results obtained from students of both learning environments in this study showed that when learning a foreign language, most of the students relied on “self-reliance and growing autonomy” (Hurd & Xiao, 2010, p. 317). They knew that being successful in the class depended mainly on their efforts. As Murday et al.

(2008) observed, “students seemed to recognize that their progress was greatly dependent on the effort they were willing to expend” (p. 132).

**Views about the course.** In the last question, the participants were asked to answer *yes* or *no* to a series of questions about their views of the course. The majority of classroom students found the class “more enjoyable than expected” (70%) but not “easier than expected” (56%) or “no more difficult than expected” (46%). Online students found the class “more difficult than expected” (72%) but not “easier than expected” (6%), not “more enjoyable than expected” (48%), and not “less enjoyable than expected” (40%; see Table 17). It appears from these results that online students found the course more challenging and less enjoyable than classroom students.

**Foreign language anxiety levels.** There was not a significant difference in the levels of foreign language anxiety that students experienced in the classroom ( $M = 47.63$ ,  $SD = 9.54$ ) and in the online environment ( $M = 44.38$ ,  $SD = 9.26$ ),  $t(105) = 1.78$ ,  $p > .05$ . This result agrees with that of Pichette (2009), who compared “anxiety profiles of classroom and distance language learners and compared anxiety levels between first-semester and more experienced students in both learning environments” (p. 77) and found no difference between the two groups. These results in the Pichette study and this study were unexpected because classroom students would seem to have more reasons to feel anxious than online students due to the face-to-face interaction factor.

Changes in the way foreign languages are being taught in an online setting may offer a suitable explanation for these results. Pichette (2009) pointed out that due to the high number of distance courses, more and more students are choosing this option, which is resulting in a change in the demographics of distance students: “Distance learning . . . is now home to students whose

socio-demographic and anxiety profiles resemble more and more those of traditional classroom students” (p. 78). Furthermore, instructors are receiving more training in how to teach an online course so they can be more effective (ITC, 2007). In addition to having technological skills, online instructors should be able to create a learning environment where students have a sense of community and “personal” interaction with the instructor and classmates. They should be able to apply different types of teaching methods so the students can get the same learning experience as classroom students. According to Schlosser and Anderson (1994, as cited in Valentine, 2002), the main goal of distance education should be “to offer the distance student an experience as much like that of traditional, face-to-face instruction as possible” (p. 3).

Many early studies done in the area of foreign language anxiety have revealed that speaking is the language skill that causes the most anxiety among students (Daly, 1991; Gregersen & Horwitz, 2002; Hauck & Hurd, 2005; Horwitz, 1986, 2001; Woodrow, 2006; Young, 1986). Due to advances in technology, online students are no longer passive language learners. Online forums, chat rooms, and other interactive programs invite students to communicate in the target language with instructors and classmates. According to Aydin (2011), the Internet “has opened up new dimensions and opportunities in foreign language learning in that it enhances communication and classroom interaction, and provides learners with authentic materials” (p. 46). The online classroom was once considered a safe place where students did not have to interact with one another and participate verbally, but it has been transformed to become interactive, more personal, and more authentic than before. All of these changes in online education are helping online students to have almost the same experience as classroom students, which may be the reason why there was not a significant difference in the levels of language anxiety between the two environments.

**Relationship between foreign language anxiety and final test scores.** The student's anxiety level was not a good predictor of the student's final grade in either environment. The shared variance between the student's final grade and the student's level of anxiety was not significant:  $F(1, 55) = .154, p > .05$  (classroom) and  $F(1, 31) = .191, p > .05$  (online). These results are similar to the findings of Marcos-Llinas and Garau (2009), who concluded that "high levels of anxiety do not necessarily result in poor course achievement. The fact that advanced learners showed high anxiety but high final grades may be a consequence of the dynamics of the advanced courses themselves" (p. 106). The results found in this study concerning the effect of anxiety on academic achievement among classroom students do not agree with the findings from previous studies. Bailey et al. (2000), T.-Y. Chen and Chang (2004), Ganschow et al., (1994), Ganschow and Sparks (1996), Horwitz (2001), Horwitz and Young (1991), MacIntyre (1999), Sparks and Ganschow (2007), and Sparks et al. (2000) all found that anxiety could have a negative effect on academic performance whereas the current study found no such negative effect.

Many factors in foreign language learning may affect the students' performance such as "attitude, motivation and anxiety" (Tallon, 2009, p. 2). A negative attitude toward learning a foreign language can cause anxiety in the students (Gregersen & Horwitz, 2002). Achievement can also be influenced by the student's motivation (Gardner, 1985). Current studies have pointed out a series of elements that may influence the student's motivation levels, including "classroom environment, materials, teachers' communicative style and individual tasks" (Bown, 2006, p. 642).

There has been controversy about the role that foreign language anxiety plays in students' academic performance. Sparks and Ganschow (2007) believed that academic performance is not

only determined by anxiety but also by students' knowledge of their native language: "Students with the highest levels of anxiety about foreign language learning may also have the lowest levels of native language skills, especially in reading and spelling" (p. 277). In this study, the effect of anxiety on academic performance was not of concern. The focus was on whether anxiety level could predict the student's academic performance (final test score).

### **Recommendations for Practice**

One of the goals of this study was to observe if there was any difference in the levels of foreign language anxiety between students taking SPAN 101 in the classroom and students taking the same course online. No difference was found, but the L120 Questionnaire 2 developed by Hurd (2003) helped to identify differences and similarities that exist between classroom and online students in the way they experience, view, and behave in the course. The students learning a foreign language who participated in this study experienced anxiety regardless of the learning environment.

Another goal of this study was to see if students' success in the course could be predicted by their foreign language anxiety levels. The shared variance between the student's final grade and the student's level of anxiety was not significant, meaning that the student's anxiety level was not a good predictor of the student's final grade. Although the findings of this study do not represent the views and feeling of all students taking a foreign language class either in the classroom or at a distance, they do suggest some actions that can be taken to help classroom students to deal with foreign language anxiety,

In order to minimize anxiety among foreign language students, teachers should consider the following pedagogical practices. First, in order to increase confidence among classroom learners, it is important that the teacher motivate the students as much as possible. This can be

accomplished by keeping constant communication with students and reassuring them that learning a foreign language takes time and patience. Turning the classroom into an enjoyable and safe place can also decrease anxiety among students (Marcos-Llinas & Garau, 2009). Teachers should also become familiar with the elements that cause anxiety in their students and try to find ways to eliminate them (Marcos-Llinas & Garau, 2009; Piniel, 2006). Close attention to the kinesthetic behavior of the language student can help the teacher detect if a student is feeling anxious or not (Gregersen, 2005). Teachers should also provide students with positive feedback and encouragement and let them know that making mistakes is part of the learning process. Other ways that teachers can help reduce anxiety among foreign language students is by adopting new teaching techniques such as “slowed-down teaching pace, a combined auditory/visual presentation, and direct instruction of language components” (T.-Y. Chen & Chang, 2004, p. 285). The most important resource teachers have is the support they can offer the student, including “the help and friendship the teacher shows towards students; how much the teacher talks openly with students, trusts them, and is interested in their ideas” (Trickett & Moos, 1995, as cited in Horwitz, 2001, p. 119).

To help online students deal with foreign language anxiety and get the most out of the course, the following suggestions should be considered. First, courses taught at a distance should be organized in a way that allows distance students to have a similar learning experience to classroom students. For this to take place, teachers should be aware of the different programs and tools that technology has to offer in the area of interactive communication. Chat rooms, discussion boards, e-mails, podcasts, and so forth promote interaction and communication among students as well as between students and teacher. Interactive communication is so important in the distance classroom that “the major portions of class time should be devoted to meaningful

language use and practice and to authentic communication” (National Council of State Supervisors for Languages, 2011, para. 1). Another key element of communication is the teacher’s ability to give feedback in a timely manner.

Second, the role of the teacher in the distance learning format should be of a guide and facilitator who provides students with high quality learning sources that inspire them to learn and feel more confident about learning a foreign language. Both groups of students in this study reported experiencing problems when learning Spanish, but online students reported more problems than classroom students. These problems could be caused by the student’s study habits, the student’s personality (Wang et al., 2006), the quality of instruction (Compton, 2009; Valentine, 2002), the student’s anxiety levels toward the target language (T.-Y. Chen & Chang, 2004; Horwitz et al., 1986), the student’s views toward the subject, or the student’s previous experience with online courses. A way to assist the student in this area is for the teacher to discuss with the students ways to improve study habits when studying a foreign language such as recommending that the student use repetition and notecards to remember vocabulary, watch movies in the target language in order to improve pronunciation and understanding of the target language, dedicate a number of hours to the study of the language after class, and so on.

Teachers also need to learn about and apply new teaching techniques and methods when dealing with online students (Hampel & Stickler, 2005; Jones & Young, 2006). For example, Pichette (2009) recommended “using more extensive and detailed written material, using portfolios for assessment, providing more material for test preparation and including interesting and humorous content” (p. 90) to increase motivation among online students. Compton (2009) concluded that “facilitating online socializing and community building” (p. 95) are important

skills “in order to promote social cohesion that is necessary for meaningful communication interaction” (p. 95).

Third, online students realize that much of the responsibility for learning lies with themselves (Hauck & Hurd, 2005). It is up to the student to apply effective learning strategies to his or her study habits. The teacher can only provide the students with the right tools. Communication between teacher and student and between students is essential to the students’ success in both environments.

Fourth, this study also revealed that anxiety among classroom and online students is caused by similar aspects such as fear of making mistakes, not being understood, receiving critical reactions, and so forth. To decrease or eliminate these fears, the teacher can constantly remind the students that learning a foreign language is a slow process that involves making mistakes along the way. Encouraging them to use the target language as much as possible whether they make mistakes or not, reassuring them, and giving them positive feedback can also help students to relax and enjoy the class. In order to decrease the fear of critical reactions, the language teacher can establish rules from the first day of class that prohibit any negative comments toward fellow classmates.

This study also revealed that the majority of classroom students (60%) felt there was no difference between learning a foreign language and learning other subjects. This result was unexpected because most of the time one assumes students would feel a little bit anxious when learning something that is new and different to them. Here the lack of anxiety could have a negative impact on the students’ views of the course, dedication, and study habits for the class. Students may think that they do not have to dedicate a lot of time to the class because it is as easy as studying other subjects. For this reason it is important for the teacher to help the students

to increase their positive anxiety towards the foreign language. One way to accomplish this is by explaining to the class that learning a foreign language is much different than learning any other subjects. It takes a lot of work and time to learn new vocabulary, to grasp grammar, and to actually speak the language. The students need to be aware that learning a foreign language can be a positive and rewarding experience if they work hard and dedicate extra attention to the class.

### **Recommendations for Future Research**

Several areas could be further explored in future research. The instrument used in this study was completed by a total of 107 students; a larger sample size in both environments would allow for more differences or similarities among the groups to manifest. Second, it would be very interesting to see if the same results are obtained if the study is replicated with college students taking other languages, as well as with students from non-western cultures who are taking a foreign language.

Although there has been a great deal of research into foreign language anxiety among language learners, there have been few studies comparing foreign language anxiety between classroom and online students. Likewise, little attention has been paid to the effects that foreign language anxiety has on the academic performance of online students. Future researchers should investigate whether students' native language skills play an important role in their academic performance. A comparison between classroom and online students could bring new insights into this area. Furthermore, it would be very interesting to execute a study that could determine an optimal level of anxiety and its relation with the student's performance.

In order to provide the distance student with the same learning experience as the classroom student, educators are including in their courses programs such as Skype, Google talk, and online meeting rooms such as the Vyeu that allow students to interact with others visually

and in real time. These programs also allow the distance student to have a more interactive and personal experience with the instructor, which may be a cause for anxiety for certain distance language students. It will be interesting to see if the use of webcams and meeting rooms in distance language courses increases or decreases anxiety among online students. Moreover, most colleges that offer distance education pay more attention to the interaction between faculty and distance students (Feintuch, 2010) than among the students themselves. The effects that these programs have on the interaction between students would be a useful topic to explore.

Regardless of the location (online or classroom) where the language class is taking place, there will be always some students who will avoid communicating in the foreign language. Some intriguing questions related to this subject include the following: Why do certain students choose not to communicate in the target language? Does their willingness to communicate change over time or depend on the situation? Does willingness to communicate vary from language to language? Are there any teaching methods that can help to resolve this issue? It would also be interesting to compare and contrast the student's willingness to communicate in asynchronous online discussion boards where each student can reflect on the topic at his or her own pace versus synchronous in-class or online discussions where the student has to respond at a fast pace. Does a student's anxiety level differ between asynchronous and synchronous language courses? Future researchers have a rich source of topics in these questions.

### **Summary**

This study was an examination of the levels of foreign language anxiety that students experienced when learning a foreign language (beginning Spanish) in the classroom and online. A comparison of the levels of foreign language anxiety was made between both environments. Another goal of this study was to examine the relationship between foreign language anxiety and the students' final grades. There was no difference in the levels of foreign language anxiety experienced between classroom and online students in this study, and students' anxiety levels were not a good predictor of the students' final test scores in either environment. This chapter offered a discussion of the results of the study, recommendations for practice, and recommendations for future research in the areas of foreign language anxiety in the traditional and online classroom. The findings presented in this chapter contribute to the literature on the topic of foreign language anxiety in the traditional and online classroom and provide more information on the different views of students in a foreign language course. The recommendations for practice will help faculty to become more aware of students' needs in both learning environments.

## REFERENCES

- Adams, C. (2008). Teaching kids to be global citizens. *Instructor 1999*, 118(1), 28-33.  
doi: 1531846561
- The advantages of distance learning. (2007). Retrieved from the U.S. Journal of Academics  
website: <http://www.usjournal.com/en/students/help/distancelearning.html>
- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, 78, 155-168.
- Al-Jarf, R. (2004). The effects of web-based learning on struggling EFL college writers. *Foreign Language Annals*, 37, 49-57.
- Ali, A. (2003). Instructional design and online instruction: Practices and perception. *TechTrends*, 47(5), 42-45.
- Allen, E., & Seaman, J. (2011). *Going the distance: Online education in the United States, 2011*. Retrieved March 21, 2013, from <http://www.babson.edu/Academics/centers/blank-center/global-research/Documents/going-the-distance.pdf>
- American Council on Education. (2004, July). *Frequently asked questions about distance education* [Issue Brief]. Washington, DC: Author. Retrieved from <http://www.acenet.edu/news-room/Documents/IssueBrief-2004-FAQs-About-Distance-Education.pdf>
- Anxiety. (n.d.). In *Encyclopedia Britannica online*. Retrieved from <http://www.britannica.com/EBchecked/topic/29092/anxiety>
- Aydin, S. (2011). Internet anxiety among foreign language learners. *TechTrends*, 55(2), 46-55.

- Bailey, P., Onwuegbuzie, A. J., & Daley, C. E. (2000). Correlates of anxiety at three stages of the foreign language learning process. *Journal of Language and Social Psychology, 19*, 474-490.
- Bailey, P., Onwuegbuzie, A. J., & Daley, C. E. (2003). Foreign language anxiety and student attrition. *Academic Exchange, 7*, 304-308.
- Baumann, U., & Shelley, M. A. (2003). Adult learners of German at the Open University: Their knowledge of and attitudes toward Germany. *Open Learning, 18*(1), 61-74.
- Blake, R. J. (2008). *Brave new digital classroom: Technology and foreign language learning*. Washington, DC: Georgetown University Press.
- Boeree, C. G. (1997). *Sigmund Freud*. Retrieved from <http://webpace.ship.edu/cgboer/freud.html>
- Bown, J. (2006). Locus of learning and affective strategy use: Two factors affecting self-instructed language learning. *Foreign Language Journal, 39*(4), 640-659.  
doi:10.1111/j.1944-9720.2006.tb02281
- Catterick, D. (2001). An academic writing course in cyberspace. In L. E. Henrichsen (Ed.), *Distance-learning programs* (pp. 208-213). Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Chen, J., Belkada, S., & Okamoto, T. (2004). How a web-based course facilitates acquisition of English for academic purposes. *Language Learning and Technology, 8*(2), 33-49.
- Chen, T.-Y., & Chang, G. B. Y. (2004). The relationship between foreign language anxiety and learning difficulties. *Foreign Language Annals, 37*, 279-290.
- Cheng, Y. (2002). Factors associated with foreign language writing anxiety. *Foreign Language Annals, 35*, 647-656.

- Cheng, Y. S., Horwitz, E. K., & Schallert, D. L. (1999). Language writing anxiety: Differentiating writing and speaking components. *Language Learning*, 49, 417-446.
- Compton, K. L. (2009). Preparing language teachers to teach language online: A look at skills, roles, and responsibilities. *Computer Assisted Language Learning*, 22(1), 73-99.
- Cook, J. (2007). *History of foreign language studies in America*. Retrieved from [http://www.associatedcontent.com/article/222377/history\\_of\\_foreign\\_language\\_studies.html?cat=37](http://www.associatedcontent.com/article/222377/history_of_foreign_language_studies.html?cat=37)
- Concha, A., & Stel, M. (2004). Web-based CALL for Arabic: Constraints and challenges. *CALICO Journal*, 21, 485-496.
- Crawford, J. (1992). *Hold your tongue: Bilingualism and the politics of "English Only."* Reading, MA: Addison-Wesley.
- Crawford, J. (2000). Anatomy of the English-only movement. In J. Crawford (Ed.), *At war with diversity: U.S. language policy in an age of anxiety* (pp. 4-30). Clevedon, England: Multilingual Matters.
- Daly, J. (1991). Understanding communication apprehension: An introduction for language educators. In E. K. Horwitz & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 3-14). Englewood Cliffs, NJ: Prentice Hall.
- Davies, G., Walker, R., Rendall, H., & Hower, S. (2011). Introduction to Computer Assisted Language Learning (CALL). Module 1.4. In G. Davies (Ed.), *Information and communications technology for language teachers (ICT4LT)*. Retrieved from [http://www.ict4lt.org/en/en\\_mod1-4.htm#anchor182947](http://www.ict4lt.org/en/en_mod1-4.htm#anchor182947)

- The Distance Education and Training Council. (2007). *Distance Education Survey. A report on course structure and educational services in distance education and training council member institutions*. Retrieved from <http://detc.org/downloads/publications/2007DESurvey.pdf>
- Distance Learning College Guide. (n.d.a). *Advantages and disadvantages of distance learning*. Retrieved from <http://www.distance-learning-college-guide.com/advantage-and-disadvantage-of-distance-learning.html>
- Distance Learning College Guide. (n.d.b). *Distance learning benefits in online education. What are the benefits of distance learning?* Retrieved from <http://www.distance-learning-college-guide.com/distance-learning-benefits.html>
- Djigunovic, J. M. (2006). Language anxiety and language processing. *EUROSLA Yearbook*, 6(1), 191-212.
- Feintuch, H. (2010). Keeping their distance. *Diverse Issues in Higher Education* 27(3), 20.
- Frantzen, D., & Magnan, S. (2005). Anxiety and the true beginner-false beginner dynamic in beginning French and Spanish classes. *Foreign Language Annals*, 38, 171-190.
- Furman, N., Goldberg, D., & Lusin, N. (2010). *Enrollments in languages other than English in United States institutions of higher education, Fall 2009*. New York, NY: Modern Language Association. Retrieved from [http://www.mla.org/pdf/2009\\_enrollment\\_survey.pdf](http://www.mla.org/pdf/2009_enrollment_survey.pdf)
- Gallagher, S., & Newman, A. (2002). *Distance learning at the tipping point: Critical success factors to growing fully online distance learning programs*. Boston, MA: Eduventures.
- Ganschow, L., & Sparks, R. L. (1991). A screening instrument for the identification of foreign language learning problems. *Foreign Language Annals*, 24, 383-398.

- Ganschow, L., & Sparks, R. L. (1996). Anxiety about foreign language learning among high school women. *Modern Language Journal*, 80, 199-212.
- Ganschow, L., Sparks, R. L., Anderson, R., Javorshy, J., Skinner, S., & Patton, J. (1994). Differences in language performance among high-, average-, and low-anxious college foreign language learners. *The Modern Language Journal*, 78, 41-55.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London, England: Edward Arnold.
- Gardner, R. C., & MacIntyre, P. D. (1993). On the measurement of effective variables in second language learning. *Language Learning*, 43, 157-194.
- Gillies, D. (2008). Student perspectives on videoconferencing in teacher education at a distance. *Distance Education*, 29(1), 107-118. Retrieved from <http://www.mdecgateway.org/olms/data/resource/6313/Student%20Perspectives%20on%20Videoconferencing%20in%20Teacher%20Education%20at%20a%20Distance.pdf>
- Gregersen, T. (2003). To err is human: A reminder to teachers of language-anxious students. *Foreign Language Annals*, 36, 25-32.
- Gregersen, T. (2005). Nonverbal cues: Clues to the detection of foreign language anxiety. *Foreign Language Annals*, 38, 388-401.
- Gregersen, T., & Horwitz, E. (2002). Language learning and perfectionism: Anxious and non-anxious language learners' reactions to their own oral performance. *Modern Language Journal*, 86, 562-570.
- Grosse, C. U. (2001). "Show the baby," the Wave, and 1,000 thanks: Three reasons to teach via satellite television and the Internet. In L. E. Henrichsen (Ed.), *Distance-learning*

- programs* (pp. 39-50). Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Grosse, C. U. (2004). The competitive advantage of foreign languages and cultural knowledge. *Modern Language Journal*, 88, 351-373.
- Hampel, R., & Hauck, M. (2004). Towards an effective use of audio conferencing in distance language courses. *Language Learning and Technology*, 8(1), 66-82. Retrieved from <http://ilt.msu.edu/vol8num1/hampel/default.html>
- Hampel, R., & Stickler, U. (2005). New skills for new classrooms: Training tutors to teach languages online. *Computer Assisted Language Learning*, 18, 311-326.
- Hauck, M., & Hurd, S. (2005). Exploring the link between language anxiety and learner self-management in open language learning contexts. *European Journal of Open, Distance and E-Learning*, 2. Retrieved from <http://oro.open.ac.uk/3542/1/Hurdeurodl>
- Hertel, T. (2003). Using an e-mail exchange to promote cultural learning. *Foreign Language Annals*, 36, 386-396. doi:10.1111/j.1944-9720.2003.tb02121.x
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20, 559-562.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112-126.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 70(2), 125-132.
- Horwitz, E. K., & Young, D. (1991). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. In E. Horwitz (Ed.), *Language anxiety: From theory and research to classroom implications* (pp. 37-39). Englewood Cliffs, NJ: Prentice Hall.

- Hurd, S. (2000). Distance language learners and learner support: Beliefs, difficulties, and use of strategies. *Links and Letters*, 7, 61-80.
- Hurd, S. (2003). *Learner difference in independent language learning contexts*. Retrieved from <http://www.llas.ac.uk/resources/gpg/1573>
- Hurd, S. (2005). Autonomy and the distance language learner. In B. Holmberg, M. A. Shelley, & C. J. White (Eds.), *Languages and distance education: Evolution and change* (pp. 1-19). Clevedon, UK: Multilingual Matters.
- Hurd, S. (2006). Towards a better understanding of the dynamic role of the distance language learner: Learner perceptions or personality, motivation, roles, and approaches. *Distance Education*, 27(3), 303-329.
- Hurd, S. (2007). Anxiety and non-anxiety in a distance language learning environment: The distance factor as a modifying influence. *System*, 35, 407-508.
- Hurd, S., & Xiao, J. (2010). Anxiety and affective control among distance language learners in China and the UK. *RELC Journal*, 41, 183-200.
- Instructional Technology Council. (2007). *2007 Distance Education Survey results. Tracking the impact of e-learning at community colleges*. Retrieved from [http://www.immagic.com/eLibrary/ARCHIVES/GENERAL/AACC\\_US/I080318L.pdf](http://www.immagic.com/eLibrary/ARCHIVES/GENERAL/AACC_US/I080318L.pdf)
- Inversion, K. M., Colky, D. L., & Cyboran, V. (2005). E-learning takes the lead: An empirical investigation of learner differences in online and classroom delivery. *Performance Improvement Quarterly*, 18(4), 5-18.
- Jones, C. M., & Young B. L. (2006). Teacher preparation for online language instruction. In P. Hubbard & M. Levy (Eds.), *Teacher Education in CALL* (pp. 267-280). Amsterdam, Holland: John Bejamins.

- Kitano, K. (2001). Anxiety in the college Japanese language classroom. *Modern Language Journal*, 85, 549-566.
- Korkki, P. (2010, August 25). Foreign language courses: Brushing up or immersion. *The New York Times*. Retrieved from [http://www.nytimes.com/2010/08/26/education/26LANGUAGE.html?\\_r=0](http://www.nytimes.com/2010/08/26/education/26LANGUAGE.html?_r=0)
- Kotter, M. (2001). Developing distance learners' interactive competence—Can synchronous audio do the trick? *International Journal of Educational Telecommunications*, 7(4), 327-353.
- Leu, D. J. (1996, October). Sarah's secret: Social aspects of literacy and learning in a digital information age. *The Reading Teacher*, 50(2), 162. Retrieved from <http://www.readingonline.org/electronic/rt/sarah.html>
- Liu, M., & Huang, W. (2011). An exploration of foreign language anxiety and English learning motivation. *Education Research International*, 2011. doi:10.1155/2011/493167
- Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal*, 92(1), 71-86. doi:10.1111/j.1540-4781.2008.00687.
- Lucas, R. I., Miraflores, E., & Go, D. (2011). English language learning anxiety among foreign language learners in the Philippines. *Philippines ESL Journals*, 7, 94-119. Retrieved from <http://philippine-esl-journal.com/V7-A5.pdf>
- MacArthur, T., & MacArthur, J. D. (1999). *Anxiety*. Retrieved from <http://www.macses.ucsf.edu/research/psychosocial/anxiety>

- MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *The Modern Language Journal*, 79, 90-99.
- MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere* (pp. 24-45). Boston, MA: McGraw-Hill.
- MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language Learning*, 39, 251-275.
- MacIntyre, P. D., & Gardner, R. C. (1991). Investigating language class anxiety using the focused essay technique. *Modern Language Journal*, 75, 296-304.
- Marcos-Llinas, M., & Garau, M. J. (2009). Effects of language anxiety on three proficiency-level courses of Spanish as a foreign language. *Foreign Language Annals*, 42, 94-112.
- Matsuda, S., & Gobel, P. (2004). Anxiety and predictors of performance in the foreign language classroom. *System*, 32, 21-26.
- McCroskey, J. C. (1977). Oral communication apprehension: A summary of recent theory and research. *Human Communication Research*, 4, 78-96.
- McIsaac, M. S., & Gunawardena, C. N. (1996). *Distance education*, 355-395. Retrieved from <http://ocw.metu.edu.tr/file.php/118/Week10/Gunawardena-McIsaac-distance-ed.pdf>

- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices on online learning. A meta-analysis and review of online learning studies*. Washington, DC: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. Retrieved from <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
- Modern Language Association. (2009). *New MLA survey shows significant increases in foreign language study at U.S. colleges and universities*. Retrieved from [http://www.mla.org/pdf/release11207\\_ma\\_feb\\_update.pdf](http://www.mla.org/pdf/release11207_ma_feb_update.pdf)
- Murday, K., Ushida, E., & Chenoweth, A. (2008). Learners' and teachers' perspectives on language online. *Computer Assisted Language Learning*, 21(2), 125-142.
- Murphy, L. (2005). Critical reflection and autonomy. In B. Holmberg, M. A. Shelley, & C. J. White (Eds.), *Languages and distance education: Evolution and change* (pp. 20-39). Clevedon, UK: Multilingual Matters.
- National Center for Education Statistics. (2001). *Distance education at degree-granting postsecondary institutions: 2000-2001*. Retrieved from <http://nces.ed.gov/surveys/peqis/publications/2003017>
- National Center for Education Statistics. (2008). *Distance education at degree-granting postsecondary institutions: 2006-2007*. Retrieved from <http://nces.ed.gov/pubs2009/2009044.pdf>
- National Center for Education Statistics. (2011). *Digest of education statistics: 2011*. Retrieved from <http://nces.ed.gov/programs/digest/d11/>

- National Council of State Supervisors for Languages. (2011). *NCSSFL position statement on distance learning in foreign languages*. Retrieved from <http://www.ncssfl.org/papers/index.php?distancelearning>
- Noel-Levitz. (2011). *National online learners priorities report*. Retrieved from [https://www.noellevitz.com/upload/Papers\\_and\\_Research/2011/PSOL\\_report%202011.pdf](https://www.noellevitz.com/upload/Papers_and_Research/2011/PSOL_report%202011.pdf)
- Ovando, C. J. (2003). Bilingual education in the United States: Historical development and current issues. *Bilingual Research Journal*, 27(1), 1-24.
- Panetta, L. E. (n.d.). *Foreign language education: If “scandalous” in the 20<sup>th</sup> century, what will it be in the 21<sup>st</sup> century?* Retrieved from <http://www.stanford.edu/dept/lc/language/about/conferencepapers/panettapaper.pdf>
- Pappamihel, N. E. (2002). English as a second language students and English language anxiety: Issues in the mainstream classroom. *Research in the Teaching of English*, 36, 327-355. Retrieved from [http://lhc.ucsd.edu/mca/Mail/xmcamail.2004\\_09.dir/att-0070/01-RT0363English.pdf](http://lhc.ucsd.edu/mca/Mail/xmcamail.2004_09.dir/att-0070/01-RT0363English.pdf)
- Pichette, F. (2009). Second language anxiety and distance language learning. *Foreign Language Annals*, 42, 77-94.
- Piniel, K. (2006). Foreign language classroom anxiety: A classroom perspective. In M. Nikolov & J. Horvath (Eds.), *UPRT 2006: Empirical studies in English applied linguistics* (pp. 39-58). Budapest, Hungary: Pecs Lingua Franca Csoport. Retrieved from <http://www.pte.hu/uprt/1.3%20Piniel.pdf>

- Price, M. (1991). The subjective experience of foreign language anxiety: Interviews with highly anxious students. In E. Horwitz & D. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 37-39). Englewood Cliffs, NJ: Prentice Hall.
- Rubio, F. (2007). Self-esteem and foreign language learning. New Castle, UK: Cambridge Scholars Publishers. Retrieved from <http://www.c-s-p.org/flyers/9781847182159-sample.pdf>
- Saito, Y., Horwitz, E. K., & Garza, T. J. (1999). Foreign language reading anxiety. *The Modern Language Journal*, 83, 202-218.
- Saito, Y., & Samimy, K. (1996). Foreign language anxiety and language performance: A study of learning anxiety in beginning, intermediate, and advanced level college students of Japanese. *Foreign Language Annals*, 29, 239-251.
- Sarason, I. G. (1984). Stress, anxiety and cognitive interference: Reactions to tests. *Journal of Personality and Social Psychology*, 46, 929-938.
- Scida, E. E., & Saury, R. E. (2006). Hybrid courses and their impact on student and classroom performance: A case study at the University of Virginia. *CALICO Journal*, 23, 517-531.
- Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. *Language Learning*, 28, 129-142.
- Sellers, V. (2000). Anxiety and reading comprehension in Spanish as a foreign language. *Foreign Language Annals*, 33, 512-521.
- Shah, N. (2011). E-Learning access for special needs. *Education Week*, 31(1), 2-3.
- Sparks, R. J., & Ganschow, L. (1991). Foreign language learning differences: Affective or native language aptitude. *Modern Language Journal*, 75, 2-16.

- Sparks, R. J., & Ganschow, L. (1995). A strong inference approach to causal factors in foreign language learning: A response to MacIntyre. *Modern Language Journal*, 79, 235-244.
- Sparks, R. J., & Ganschow, L. (2007). Is the Foreign Language Classroom Anxiety Scale measuring anxiety or language skills? *Foreign Language Annals*, 40, 260-287.
- Sparks, R. J., Ganschow, L., & Javorsky, J. (2000). Déjà vu all over again: A response to Saito, Horwitz, and Garza. *The Modern Language Journal*, 84, 251-255.
- Spielberger, C. D. (1972). Anxiety as an emotional state. In C. D. Spielberger (Ed.), *Anxiety: Current trends in theory and research* (pp. 23-49). New York, NY: Academic Press.
- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory (Form Y)*. Palo Alto, CA: Consulting Psychologists Press.
- Strambi, A., & Bouvet, E. (2003). Flexibility and interaction at a distance: A mixed-mode environment for language learning. *Language Learning and Technology*, 7(3), 81-102.
- Tallon, M. (2009). Foreign language anxiety and heritage students of Spanish: A quantitative study. *Foreign Language Annals*, 42, 112-138.
- Thrasher, E. H, Coleman, P. D., & Atkinson, J. K. (n.d.). *Web-based versus classroom-based instruction: An empirical comparison of student performance*. Retrieved from <http://www.aabri.com/manuscripts/11916.pdf>
- Todd, A. (2004). *The role of foreign language study in campus internationalization*. Retrieved from [http://www.accreditation2006.msu.edu/internationalization/documents/ForeignLanguageStudy\\_000.pdf](http://www.accreditation2006.msu.edu/internationalization/documents/ForeignLanguageStudy_000.pdf)

- U.S. Department of Education, Office of Postsecondary Education. (2011). *OPE – International and foreign language education*. Washington, DC: Author. Retrieved from <http://www2.ed.gov/about/offices/list/ope/iegps/index.html#programs>
- Valentine, D. (2002). Distance learning: Promises, problems, and possibilities. *Online Journal of Distance Learning Administration*, 5(3), 1-11. Retrieved from <http://www.westga.edu/~distance/ojdla/fall53/valentine53.html>
- Von Worde, R. (2003). Students' perspectives on foreign language anxiety. *Inquiry*, 8(1). Retrieved from <http://www.vccaedu.org/inquiry/inquiry-spring2003/i-81-worde.html>
- Wang, K. H., Wang, T. H., Wang, W. L., & Huang, S. C. (2006). Learning styles and formative assessment strategy: Enhancing student achievement in Web-based learning. *Journal of Computer Assisted Learning*, 22, 207-217.
- Wang, L. (2005). The advantages of using technology in second language education. *The Journal*, 32(10), 38-42. Retrieved from [http://www.funkphd.net/7741\\_tech/esol%202.pdf](http://www.funkphd.net/7741_tech/esol%202.pdf)
- Wharton, G. (2005). Language learning interest at a new management university in multilingual Singapore. *Foreign Language Annals*, 38, 544-554.
- White, C. (1995). Autonomy and strategy use in distance foreign language learning: research findings. In A. Wenden & L. Dickinson (Eds.), *Autonomy* [Special issue]. *System*, 23, 207-221.  
doi: 10.1016/0346-251x9500009-9
- White, C. (1999). Expectations and emergent beliefs of self-instructed language learners. In A. Wenden (Ed.), *Metacognitive knowledge and beliefs in language learning* [Special issue]. *System*, 27(4), 443-457.

- White, C. (2003). *Language learning in distance education*. Cambridge, UK: Cambridge University Press.
- White, C. (2009). *Towards a learner-based theory of distance language learning. The concept of the learner-context interface*. Retrieved from <http://mro.massey.ac.nz/bitstream/handle/10179/1876/white%20Learner-based%20theory%202009.pdf?sequence=3>
- Why do we need technology integration? (2007). Retrieved from <http://www.edutopia.org/teaching-module-technology-integration-why>
- Why integrate technology into the curriculum? The reasons are many. (2008). Retrieved from <http://www.edutopia.org/technology-integration-introduction>
- Wiley, T. G. (2000). Continuity and change in the function of language ideologies in the United States. In T. Ricento (Ed.), *Ideology, politics and language policies: Focus on English* (p. 67-85). Amsterdam, The Netherlands: John Benjamins.
- Wiley, T. G. (2002). Accessing language rights in education: A brief history of the U.S. context. In J. W. Tollefson (Ed.), *Language policies in education: Critical issues* (pp. 39-64). Mahwah, NJ: Lawrence Erlbaum.
- Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELC*, 37(3), 308-328.
- Yan, J. X., & Horwitz, E. K. (2008). Learners' perceptions of how anxiety interacts with personal and instructional factors to influence their achievement in English: A qualitative analysis of EFL learners in China. *Language Learning*, 58(1), 151-183. doi:10.1111/j.1467-9922.2007.00437.

- Young, D. J. (1986). The relationship between anxiety and foreign language oral proficiency ratings. In E. K. Horwitz & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 57-64). Englewood Cliffs, NJ: Prentice Hall.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *Modern Language Journal*, 75, 426-439.
- Young, D. J. (1992). Language anxiety from the foreign language specialist's perspective: Interviews with Krashen, Omaggio, Hadley, Terrell and Rardin. *Foreign Language Annals*, 25, 157-172.