# TEACHER AND STUDENT FIRST LANGUAGE AND TARGET LANGUAGE USE IN THE FOREIGN LANGUAGE CLASSROOM: A QUALITATIVE AND QUANTITATIVE STUDY OF LANGUAGE CHOICE

by

Gregory Lynn Thompson

Copyright © Gregory Lynn Thompson

A Dissertation Submitted to the Faculty of the

INTERDISCIPLINARY PROGRAM IN
SECOND LANGUAGE ACQUISITION AND TEACHING

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2006

THE UNIVERSITY OF ARIZONA

GRADUATE COLLEGE

As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Gregory Lynn Thompson entitled Teacher and Student First Language and Target Language Use in the Foreign Language Classroom: A Qualitative and Quantitative Study of Language Choice and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy

_____Date: 6/13/06

Renate A. Schulz

_____Date: 6/13/06

H. Douglas Adamson

_____Date: 6/13/06

Beatrice Dupuy

_____Date: 6/13/06

Linda Waugh

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copies of the dissertation to the Graduate College.
I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

_____Date: 6/13/06

Dissertation Director: Renate A. Schulz

# STATEMENT BY AUTHOR

This dissertation has been submitted in partial fulfillment of requirements for an advanced degree at the University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this dissertation are allowable without special permission, provided that accurate acknowledgment of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the copyright holder.

SIGNED: Gregory Lynn Thompson

# ACKNOWLEDGEMENTS

I wish to acknowledge all of the people who have helped me in my endeavors toward my doctorate. First and foremost, I wish to thank my wife and daughters for their love and support which provided both perspective as well as joy to the dissertation process. I acknowledge their endless love and patience in waiting for me to finish my degree. I know that without them to help me to focus and to help to motivate me, this experience would have been much less enjoyable. I would also like to thank my family who instilled in me the importance of achieving an education as a means to do something that I truly love.

Also key to this process has been the hours put in by my dissertation director, Dr. Renate Schulz, who was always willing to provide feedback and support to help the writing process continue. She has tirelessly worked on reading version after version of my work always to have insightful comments to make me a better writer and researcher. Dr. Schulz has as been an example of hard work and dedication to the field of language acquisition and truly a person to be emulated.

Also, I would also like to thank the other members of my committee-Dr. H. Doug Adamson, Dr. Beatrice Dupuy, and Dr. Linda Waugh for their input and assistance in this process. Without their patience and help, none of this work would have been completed.

# DEDICATION

I would like to dedicate this dissertation to all of the beautiful and intelligent women in my life: Yolanda, Hannah, and Alyssa.

TABLE OF CONTENTS

TABLE OF CONTENTS - *continued*

TABLE OF CONTENTS - *continued*

LIST OF FIGURES

LIST OF FIGURES - *continued*

LIST OF FIGURES - *continued*

LIST OF FIGURES - *continued*

LIST OF TABLES

LIST OF TABLES - *continued*

LIST OF TABLES - *continued*

LIST OF TABLES - *continued*

## ABSTRACT

The importance of using the target language (TL) in the FL classroom is ingrained in the minds of most language teachers (Cook, 2001). Since the late 1800's, different teaching methods and approaches have espoused the importance of TL use in the foreign classroom e.g., the Direct Method, Audiolingualism, Sociocultural Theory, and the Communicative Method. However, few studies have examined how TL and first language (L1) are being used in the FL classroom (Duff & Polio, 1990, 1994; Macaro, 2001; Levine, 2003). Even less research has been done regarding the purpose(s) for which the L1 and TL are being used in the classroom and the types of discourse for which the L1 and TL are being employed by teachers and students. There is, however, a growing number of researchers who have begun to question the exclusion of the L1 from the classroom and there are calls for further study to discover if, when, and where the L1 should be used (Guthrie, 1984; Dickson, 1992; Hagen, 1992; Cook, 2001; Macaro, 2001; Turnbull, 2001).

This study was carried out in the Department of Spanish and Portuguese at the University of Arizona, a large university in the southwestern part of the United States. Sixteen first- and second-year classes were studied over the course of three observations. Additionally, over 500 students participated in a pre- and post-listening test as well as a survey regarding perceptions of L1 and TL use in the classroom and beliefs about language use. The current study explores not only teacher and student TL and L1 use in the FL classroom through video and audio recordings of multiple classes but also investigates in what types of discourse the TL and L1 are being employed and some of

the motivations behind this usage. Other questions that are addressed include: How do native and non-native instructors of the TL differ in their language use? Does a relationship exist between student and teacher perceptions and beliefs regarding L1 and TL use and actual use? and What are the factors (e.g., teaching experience, educational background, class level) that may influence L1 and TL use in the classroom?

The results showed that while there was a strong positive correlation between the instructors' use of the L1 and the students' use of the L1, this did not adversely affect the listening gains in the classroom. Also, it was found that both the students and the instructors were able with a high degree of accuracy to predict the L1 and TL of the instructors in the classroom. Finally, there were no significant differences between the classes with native speaking instructors of the TL and those who were non-native speaking instructors of the TL.

This study contributes to a better understanding of actual classroom language usage, the motivations behind L1 and TL use, and the students' and teachers' perceptions of the role of the L1 and TL in the classroom. Additionally, the study provides empirical data to use in teacher training regarding actual TL and L1 use and offers further information on possible role(s) of the L1 in the classroom. Through an analysis of the situations in which the L1 and TL are used, teachers can be made aware of actual language use. This consciousness-raising may assist instructors to adapt their language usage to the pedagogical goals that they have set for their and students.

# CHAPTER 1

# INTRODUCTION

The importance of using the target language (TL) in the foreign language classroom is ingrained in the minds of most language teachers (Cook, 2001). Since the late 1800's, different teaching methods and approaches have espoused the importance of TL use in the foreign classroom e.g., the Direct Method, Audiolingualism, the Natural Approach, Sociocultural Theory, and the Communicative Method. Additionally, Krashen's Monitor Model has been highly influential in the teaching profession, especially in regards to the notion of comprehensible input. Krashen (1982) states that language can be acquired only when we are exposed to comprehensible input that is a little beyond our current level of competence. However, relatively few studies have examined how TL and L1 are being used in the FL classroom.

Some initial work has been done in quantifying the amount of TL use in the classroom, with the most common method being taking a language sample every few seconds to determine the percentage of L1 and TL usage (Duff & Polio, 1990, 1994; Macaro, 2001; Levine, 2003). Few studies have, however, explored the purpose(s) for which the L1 and TL are being used in the classroom and the types of discourse for which the L1 and TL are being employed by teachers and students.

## *Proponents of L1 Use in the Classroom*

Additionally, there are a growing number of researchers who have begun to question the exclusion of the L1 from the classroom and who are calling for further study to discover if and where the L1 should be used (Guthrie, 1984; Dickson, 1992; Hagen,

1992; Cook, 2001; Macaro, 2001; Turnbull, 2001). Macaro (2001) argues that it is impractical to exclude the L1 from the classroom because it deprives learners of an important tool for language learning. Cook (2001) also states that the exclusive use of the TL is not theoretically justified and does not lead to maximum learning. Harbord (1992) points out that "many [ELT] teachers have tried to create an EO [English-only] classroom but have found they have failed to get meaning across, leading to student incomprehension and resentment" (p. 350). He further goes on to state that "translation/transfer is a natural phenomenon and an inevitable part of second language acquisition . . . , regardless of whether or not the teacher offers or 'permits' translation" (p. 351). Sharwood-Smith (1985) proposes the notion that TL input does not necessarily correlate with intake, i.e., exclusive use of the TL may expose students to language that they are unable to process and assimilate into their TL linguistic framework. Turnbull (2001) postulates that, "It is valid, therefore, to consider whether TL input might become intake more readily if teachers use L1 judiciously to catalyze the intake process in some way" (p. 533).

Cook (2001) and van Lier (1995) both observe that the idea of maximizing the TL in the classroom has been interpreted by many language teachers that this means that the L1 should be excluded entirely from the classroom. Van Lier (1995) also contends that teachers' use of the students' L1 in the classroom helps to create a more salient input that then promotes intake. He continues by stating that the quality of the input is more important than the quantity in regards to converting input into intake. Thus the use of the L1 can enhance the quality of the input. Walsh (2002) supports this position declaring:

"Put simply, the focus has been on the quantity rather than the quality of teacher talk, a position which is clearly both simplistic and unrealistic" (p. 3).

While a different setting than that of the FL classroom in the United States, Auerbach (1993), in referring to the English only policies that exist in many EFL classrooms, states that this policy "is rooted in a particular ideological perspective, rests on unexamined assumptions, and serves to reinforce inequities in the broader social order" (p. 9). In a review of an article by Antón & DiCamilla (1998), Wells (1999) supports work into understanding the role of the L1 in the classroom because it "illustrates and explicates the valuable role that interaction in the L1 can play in the collaborative performance of tasks in the L2 and, hence, in the creation of opportunities for learning L2" (p. 253). Finally, Atkinson (1993) proposes that it may not be desirable to teach only in the TL because it can create an impression of ethnocentricity.

In arguing for more use of both the L1 and the L2 for the formation of a multilingual language classroom, Levine (2004) states, "I argue that a multilingual rather than a monolingual approach to instruction is necessary because it can both maximize second language (L2) use and prompt learner autonomy and critical awareness" (p. 112). Rolin-Ianziti and Brownlie (2002) explain that research into the use of the native language (NL) needs to be conducted and in order to "identify a few potentially beneficial NL uses in our teaching practices and to generate hypotheses about the effect of these uses on FL learning" (p. 406). These authors conclude their article by stating that the use of code switching and translation may help the students to focus on form of the

TL and thus develop a better understanding of the linguistic system of the language being studied.

Coste (1997) also concurs that code-switching has a function in the language classroom if the L1 is used as a point of reference upon which to base the construction of knowledge about the TL. However, he also warns that great care must be taken so as not to give both the L1 and TL the same status in the classroom. Through the use of ideas by Vygotsky (1978), Antón and DiCamilla (1998), and Lantolf (2001) propose that when the instructor uses the L1 in the FL classroom, the students are able to scaffold using the L1 as a cognitive tool. Brooks and Donato (1994) maintain that learners are often able to use the L1 to assist in their negotiation of meaning especially when working in groups. Limited use of the L1 helps learners to maintain more complex interactions in the TL while working in groups or when interacting with the instructor. If students are limited to exclusive use of the TL, the complexity of the utterances would be restricted to just structures in the TL instead of being able to include some L1 to continue the flow of a more advanced conversation and thus this use of the L1 would thus prove to be beneficial to the students' TL acquisition.

*Proponents of L2 Use in the Classroom*

Whereas the aforementioned authors propose the notion of a multilingual classroom where the teacher can use the L1 to enhance student learning, Polio and Duff (1994) posit that the use of the L1 by the instructor, when there is a lack of comprehension, "suggests that teachers may lack the necessary experience or strategies to rephrase or otherwise modify their speech" (p. 323). Additionally, based on their research

of diverse languages at the university level, Polio and Duff state that one of the problems that exist in many foreign language classrooms is the pervasive tendency for "English to be the vehicle of meaningful communication (and supplementary metalinguistic information), with the TL reserved for more mechanical, grammatical drills" (p. 322). They also advise that allowing teachers to use the L1 in the classroom could be a very slippery slope that leads to a lessened role of the TL in the classroom.

Initial studies regarding the use of the TL in the classroom were done in the 1960's and 1970's. In a study of FL learners of French at the university level, Carroll, Clark, Edwards, & Handick (1967) concluded that the teacher's use of the TL was one of the variables that resulted in increased proficiency in that language. In working with the same population, Carroll (1975) found that the most important factor accounting for increases in proficiency was the amount of instructional time that the students received. The teacher's proficiency in the TL and the students' exposure to the TL were other key factors in proficiency gains. Wolf (1977) analyzed the same data that Carroll had used in his study and found a positive correlation between the number of activities in the TL (French) and the students' achievement in language proficiency. Interestingly, Wolf's study is one of the few that found a negative correlation in the use of the L1 (English) in the classroom and student proficiency i.e., the less English was used in the classroom, the higher the students' proficiency. In contrast to the previous studies, Macaro (2001) found teacher use of the TL and L1 not to be a factor in students' decision to use either language. In his research of secondary school teachers of French, he found that teacher use of the TL and the L1 to be independent of the whether or not the students used the TL

or the L1 i.e., if the teacher used more TL it did not correlate with increased TL use by the students and the teachers increased use of the L1 did not correlate with increased L1 use by the students.

Turnbull (2001) believes that while exclusive use of the TL does not have to be the goal, teachers need to maximize TL usage in the classroom. He concludes:

> I believe that theoretical perspectives on second language acquisition and the empirical evidence presented provide persuasive support to the argument that teachers should aim to use the TL as much as possible, and, by doing so, have a positive effect on learner's TL proficiency. However, this does not mean that there is a linear relationship between teachers' TL use and learners' TL proficiency (p. 534).

He goes on to posit that one of the ideas to consider is that of maximizing the TL usage in the classroom wherein the use of the L1 is not seen as detrimental to listening acquisition. He states, "A principle that promotes maximal teacher use of the TL acknowledges that the L1 and TL can exist simultaneously" (p. 535). In support of this idea, Stern (1992) proposes that L1 and TL use should be seen as complimentary depending highly on the situation and level in which a language is being acquired. Macaro (1997), in his research on teacher beliefs and attitudes, found that the vast majority of teachers surveyed in his study felt that exclusive use of the TL was not possible or desirable except in the most highly motivated classes.

Wong-Fillmore (1985) suggests that those students who are accustomed to hearing their instructors use the L1 in the classroom have the tendency not to pay

attention when they use the TL and thus do not benefit as much from the input that they do receive. MacDonald (1993) argues that the TL should be used at all times to motivate students into seeing that the TL language is not only immediately useful, but also that they are able to start using it immediately. He also states that students will feel success and enjoyment at seeing that they are able to understand and use the TL which will help assist in their language acquisition. He concludes by stating that relying too much on the L1 for instruction in the typical classroom setting where time is quite limited is a waste of time and actually demotivating to students.

Wells (1999) describes this problem in a situation in which L1 use would be positively encouraged. He states, "If this approach were taken to its logical conclusion, however, there would be a danger of the oral use of L2 being completely neglected—a situation that would no doubt be as unacceptable to the students as to the teacher" (p. 249). This could then lead to the use of English not only as the vehicle of meaningful communication but also the vehicle for almost all of the communication in the FL classroom. Finally, Stern (1992) declares that it makes theoretical and practical sense to have teachers teach intralingually (in the TL) because, "if any degree of L2 proficiency is to be obtained, an intralingual strategy must be used" (p. 285). In countering this notion of intralingual use, Turnbull states, "However, this does not mean to say that all crosslingual (i.e., use of both L1 and TL) procedures at all times are unhelpful in the pursuit of an intralingual proficiency objective" (p. 535).

Research has shown that TL input is crucial to second language learning (Gass, 1997; Gass & Varonis, 1994; Ellis, Tanaka & Yamazaki, 1994; Ellis, 1984). Gass (1997) comments on this topic as follows:

> The concept of input is perhaps the single most important concept of second language acquisition. It is trivial to point out that no individual can learn a second language without input of some sort. In fact, no model of second language acquisition does not avail itself of input in trying to explain how learners create second language grammars (p. 1).

Others studies have also found that the amount of input makes a difference in the learning of a TL (Larsen-Freeman, 1985; Lightbown, 1991). Long (1996) states that while input is important, language learners are able to internalize the input only after they have had the opportunity to interact with and negotiate the meaning of the input. Supporting this notion, Wong-Fillmore (1985) suggests that the negotiation of meaning between student and teacher is beneficial in the acquisition of a language. Chaudron (1985) states,

> in the typical foreign language classroom, the common belief is that the fullest competence in the TL is achieved by means of the teacher providing a rich TL environment, in which not only instruction and drills are executed in the TL, but also disciplinary and management operations (p. 21).

Even though the overriding majority of the approaches and philosophies of language teaching support exclusive or near-exclusive use of the TL in the classroom, some of the aforementioned studies of L1 and TL use in the classroom have found that the L1 is already being employed in many different situations. Researchers have

commonly found L1 use in the teaching of grammar and vocabulary, to have empathy or to establish solidarity with students, to manage the classrooms, and even for the practice of the L1 for those instructors who are not speakers of that language (Duff & Polio, 1990, 1994; Castelotti & Moore, 1997; Cambra & Nussbaum, 1997).

*Native and Non-Native Instructors*

In addition to the discussion regarding how much L1 and how much TL to use in the classroom, other issues such as the native/non-native teacher dichotomy in regards to language use in the classroom have yet to be addressed. Few studies comparing language use by native and non-native FL instructors' use of the L1 and the TL have been carried out to date, although both of these types of instructors are found at almost all levels of language teaching. A better understanding of these different types of instructors could lead to policies and practices that could be especially beneficial in teacher training of native and non-native speakers of the TL alike.

Polio and Duff (1994) limited their study to that of native speaking instructors of the TL at the university level and enumerated many reasons why the instructors employed the students' L1 (English) in the classroom. Some of these reasons, such as practicing English or misunderstanding a student's use of English and resorting to English to resolve the misunderstanding, are all issues that do not typically arise if the instructor is a native speaker of English. They also found that instructors used English in addressing questions, in teaching grammar, and in order to establish solidarity with the students. In addition, non-native speakers of the TL may cite the lack of knowledge about the TL language or a lack of ability in the TL as a reason for using the L1 in the

classroom. There tends to be a different concern with native speakers of the TL who, while unable to always explain the reason their language is structured or used a certain way, tend to know the correct forms to use in different situations. The neglect of researchers to include this important distinction between the native and non-native instructor in studying the language usage in the FL classroom provides an important component that needs to be included in future research.

In spite of these initial studies, most researchers agree that more investigation needs to be conducted not only on the amount of TL spoken in the classroom, but also on other questions regarding the instructional purposes for which the TL or the L1 are used. Duff and Polio (1990) addressed this stating, "Very little research has been conducted on the amount of target language usage in the foreign language (FL) classroom, a language learning context which has only recently received attention from applied linguistics" (p. 154). Notwithstanding this earlier call for research, over a decade later Levine (2003) maintains that, "Relatively little attention has been paid to TL and L1 use in the literature on instructed adult second language (L2) acquisition" (p. 343). Turnbull (2001) adds that more research is needed to understand "(a) factors that prompt SL and FL teachers to speak the students' L1 when guidelines clearly prescribe the opposite and (b) how and why official guidelines influence teachers' TL and L1 use" (p. 537). He continues by stating that more process-product studies need to be conducted in order to determine the relationship between the instructors' TL and L1 use and its effect on the students' overall proficiency.

*Language Beliefs in the Classroom*

Additionally, student perspectives and beliefs on the relationship between usage and target language learning have received minimal attention. In their review of the literature on the use of the L1 and TL in the classroom, Turnbull and Arnett (2002) found, "Few studies have focused on what learners feel about their teachers' TL and L1 use" (p. 211). Also, Horwitz (1988) found,

> Although students' beliefs about language learning would seem to have obvious relevance to the understanding of student expectations of, commitment to, success in, and satisfaction with their language classes, they have remained relatively unexplored (p. 283).

Davis (2003) highlights the importance of not only considering the student beliefs, but also understanding how the teachers' role is important in influencing student behavior.

> The juxtaposition of the beliefs of teachers and students may offer some illuminating and useful insights into their thinking processes and behaviours regarding language teaching and language learning. Beliefs do affect behaviour and, a fortiori, teachers' and students' beliefs influence language learning (p. 207).

Kozminsky & Kozminsky (2003) further support the opening of a dialogue between teachers and students declaring that in order to modify students' attitudes and beliefs, teachers needed to be aware of their own attitudes and beliefs regarding learning. Though some studies have explored this area of inquiry, much research is still needed to fill many of the gaps and substantiate some of the preliminary findings.

*Research Questions*

Given the established need for a better understanding of L1 and TL usage in the FL classroom and the effect that this usage has on the acquisition of listening skills, this study provide additional insights into this area by addressing the following questions. The research questions that are addressed by my study are the following:

1) How much L1 and TL are used by the instructors in the FL language classroom and how much L1 and TL are used by students in their interactions with their instructor?

2) What is the percentage of teacher talk to student talk in both the L1 and TL?

3) What factors influence gains in listening proficiency in the language classroom?

4) What are the contexts in which students and teachers use the L1 and TL?

5) What are the factors that may influence teachers' and students' L1 and TL use in the classroom e.g. class level, previous teaching or classroom experience, educational background of the instructor, training in pedagogy, teaching experience, etc.?

6) Does a relationship exist between student and teacher perceptions and beliefs regarding L1 and TL use and actual use?

7) Are there differences in L1 and TL use in the classroom between instructors who are native and non-native speakers of Spanish?

*Organization of Dissertation*

This dissertation is divided into five chapters, a bibliography, and appendixes. The first chapter includes an introduction, rationale and significance of study. In this chapter, I briefly cite some of the theoretical framework behind the use of the TL in the classroom as well as some of the proponents of a multi-lingual classroom and their research. This

chapter shows some of the gaps in the current research and areas where more research is needed as part of the impetus of this current study. The second chapter reviews in more depth the literature on the topic of L1 and TL usage in the classroom. Chapter 2 expands on the studies by discussing results and findings of previous research both in the field of FL and second language acquisition. Additionally, the topic of code-switching is briefly addressed as it has been applied to the FL classroom.

In Chapter 3, I review the design of the study in regard to the participants and to the data collection instruments and their sources. Chapter 3 also includes information regarding the data collection as well as a brief summary of the pilot of the study. The results of the study are included in Chapter 4, where I present both a quantitative analysis of the data collected as well as a qualitative analysis. Finally, in Chapter 5, I discuss my findings as well as their implications for teacher development, listening acquisition for students, and future research in this area. Chapter 5 also defines the limitations of my study and how these factors can be mitigated in future research.

# CHAPTER 2

# REVIEW OF LITERATURE

## *Introduction*

Given the various studies into the use of the TL and L1 in the classroom and the fact that very different opinions exist as to what is best for listening acquisition, this chapter addresses body of research into L1 and TL use in the language classroom. This chapter is divided into three overall sections. The first section of the literature review deals with L1 and TL use in the FL classroom and addresses classrooms where both languages are used. These studies deal with both the amount of L1 and TL use in the classroom as well as several of the studies focus on the types of situations in which the different languages are employed in the classroom.

The second section approaches the use of the L1 and TL analyzing research into these switches as code-switches. First, this section defines the process of code-switching both in general and as it relates to the language classroom. Second, the importance of addressee and how it influences the decision to code-switch or not are visited. Third, using Irvine (2002) and her approach to style as distinctiveness, code-switching is compared as a possible form of presenting a distinctive identity and personality in the language classroom. Finally, this section presents code-switching as a tool used by educators to assist students in their acquisition of the TL. This is done by positing on how the use of the L1 in the form of code-switching can assist and facilitate the students' acquisition of the TL.

The third section of the review briefly addresses the role that students' and teachers' beliefs play in how they approach language learning and what some of the expectations they have as they enter into the classroom. These beliefs can shape both the amount and type of language used in the classroom as well as the personal fulfillment that the students feel when the class meets or does not meet their beliefs about what should occur in the class. Additionally, the role that beliefs play in the instructors' teaching are analyzed as well as how the pre-established beliefs by the instructors can be a much more powerful influence on the behaviors in the classroom than teaching training and research. This is an important factor in the analysis of language use in the classroom, principally, because beliefs shape so many of the behaviors of the instructors in the language class.

*L2 and L1 Use in the FL Classroom*

One of the first studies to quantify the use of the L1 in the classroom and pose some initial questions regarding language choice was by Duff and Polio (1990). Before 1990, relatively little research had been conducted that both quantified the amount of language used in the classroom and also analyzed the different situation in which the L1 and TL were being used. Duff and Polio chose 13 different university language classrooms in which a different language was taught in each classroom. They observed the classes twice and then gave the students and the teachers a questionnaire. In addition, they interviewed each of the teachers after the second observation regarding their background, training, attitudes, etc. They limited their sample to second quarter classes and only chose those classes taught by native speakers of the different languages. In the

coding of their data, they chose to measure the teachers' speech every 15 seconds and used this procedure to code and determine the amount of L1 used in the classroom by the instructors.

The results of their study showed a vast variation in L1 and L2 usage in the classroom ranging from 100% L2 usage to 10% L2 usage in the classroom. They also found that students did not perceive very accurately how much TL and L1 their teachers used in the classroom. Some students in the class where the TL was used 100% of the time stated that their teacher used English "a lot", and over half of the students in the class where the TL was used 10% of the time marked that their teacher used English only "some of the time". Additionally, the authors noted that "there seems to be a lack of awareness on the part of the teachers as to how, when, and the extent to which they actually use English in the classroom" (p. 290). Another finding of the study was that over 71% of the students favored the current amount of English usage in the classroom and this was independent of the amount of TL actually used in the classroom, implying that the instructor, in the case of these students, set the precedent regarding language choice to which the students conformed and were content with in their majority. Through series of interviews with the participating instructors conducted by the researchers after having completed the study, Polio and Duff asked the instructors as to the purpose of their use of the L1 and TL in the classroom and attempted to decide reasons as to why the different ratios of L1 and TL use existed. The researchers concluded that a variety of variables contributed to the variance in this ratio, such as language type (the distance

between the linguistic systems of the L1 and TL), departmental policies and guidelines, lesson content, materials, and formal teacher education.

The authors attempted to discount the English (L1) ability of the teachers as a factor. However, they cite several examples that appear to contradict this claim. First, the instructor who spoke the target language 100% of the time was also enrolled in an ESL class that same semester to improve his English. The instructor who spoke the least amount of the TL (only 10% of the time) was fluent in English. The only other instructor mentioned grew up bilingual in both English and the TL and used the TL 96% of the time. These results seem to open up the possibility that English proficiency does play an important role in TL and L1 use in the classroom.

The principal limitation of this study was the fact that the authors did not divulge the languages that were being taught. Thus, there is no way of knowing whether the teacher who spoke the TL 100% of the time was teaching a language with some similarities to English such as Spanish, French, German, etc. or a non-roman alphabet language such as Chinese or Arabic. This information would be very useful in helping to decode some of the significance of the results. Languages that have a Latin or Germanic root would seem to facilitate the use of the TL in the classroom because of the existence of many cognates and some shared linguistics features between languages. Another limitation is the exclusive use of native speaking instructors of the TL for the study. A mixture of instructors, including both native and non-native, would help to determine if ability in either the TL or the students' L1 influences language choice in the classroom. As previously mentioned, very few foreign language programs have exclusively native

TL instructors or non-native TL instructors. This study thus is not representative of the FL teaching reality in most institutions.

Polio and Duff (1994) mitigate some of the problems and limitations of their initial study by publishing additional findings from their research but even then they only reveal 6 of the 13 languages with their percentages and discuss additional findings from the data. They categorized English usage and discovered that most of the usages fell under eight different categories: 1) classroom administrative vocabulary; 2) grammar instruction; 3) classroom management; 4) empathy/solidarity; 5) practicing English; 6) unknown vocabulary/translation; 7) lack of comprehension; and 8) interactive effect involving students' use of English. They also revisited the concept of teacher awareness of language usage and found that not only did teachers not know when and how much L1 and TL they were using, they would also mistakenly report using the L1 in situations not corroborated by the data. For instance, many of the teachers cited using English when giving instructions, but this was not corroborated by the data. These data show that the perceptions of the teachers can vary not only toward the perception that they are using more TL use in the FL classroom than is actually taking place, but also in mistakenly perceiving the use of the L1 in situations where it is not actually occurring. The teachers also misrepresented their actual language use in the classroom when interviewed after the observations. One teacher varied as much as 35% in his perception of his use of the L1 and the TL and what was actually said in the classroom according to the recording that had been made. Even though this instructor showed the greatest variation, nearly all of the other teachers also demonstrated to varying degrees an inconsistency between their

perceptions and what was recorded. These inconsistencies further support the need for research into language use in the classroom. First, a greater understanding of the motivations behind L1 and TL use, the types of language use, and a measure of language use in the foreign language classroom will be obtained from the observations and measurements. Also, through an analysis of the situations in which the L1 and TL are used, teachers can be made aware of actual language use. As seen in previous research (Polio & Duff, 1994), instructors are uninformed as to their language choice in the classroom and this consciousness–raising among instructors would help them to make changes to their use of both their L1 and TL as deemed necessary. This is especially important to those instructors whose language use in the classroom might not coordinate with the pedagogical goals that they have set for their classroom and students.

Freeman (1989) argues that in order for teachers to be able to apply knowledge that they first must be made aware of their own individual practices. Polio and Duff declare, "Some behaviors could probably be changed simply by viewing a videotape of themselves teaching and then noting their various uses of English, either alone or with the assistance of a colleague" (p. 323). Many instructors may want to change their language use in the classroom but need a greater understanding of what actually goes on in the classroom to do so.

Polio and Duff also noted the discrepancy between what teachers instructed their students to do and their own subsequent behavior, resulting in a kind of "Do as I say not as I do" philosophy. One teacher was particularly insistent on the use of the TL in small-group practices and then switched to English (the students' L1) when addressing the

small groups when they had questions. This type of behavior reinforces the instructors' own views about language usage in the classroom and sends a mixed message to students as to which language they should use. Polio & Duff also found that many instructors felt embarrassment in using the L1 in the classroom and thus behaved as if they were doing something inappropriate every time they spoke English: speaking more softly when using the L1 and stating things more quickly than in normal L1 usage demonstrated that many teachers feel almost as if they are doing something wrong by using the L1. While those who insist that the TL should be used exclusively in the classroom would applaud such embarrassment as successful training, those who support the multilingual classroom would argue that this is precisely why language use in the classroom needs to be revisited and revised in order to study and determine if limited exposure to the L1 can assist the students in acquiring the TL.

Regarding when the use of the L1 should be allowed and when it should not be employed, Atkinson (1993) divides different behaviors in the language classroom according to whether the L1 is necessary or unnecessary for carrying out the classroom activities. He limits these suggestions to the classroom where the language proficiency is low, and although he does not define what constitutes low it is safe to assume that first and second year FL students likely fall within that category. According to Atkinson, the necessary roles for L1 use are:

-- lead-ins (exploit the L1 to check that the students have understood the situation)

-- eliciting language (getting language from the students)

-- giving instructions (especially useful to clarify the written instructions on a worksheet or in a textbook)

-- checking comprehension (whether or not students understand a word or phrase)

The unnecessary roles for L1 use according to Atkinson are:

-- at listening stage (the assimilation of the meaning of the new language item takes place)

-- drills (helps students to practise the new language)

-- correction (teacher should encourage students to correct themselves)

--personalisation, creativity stage and games (the three activities to give intense practice to the L2) (pp. 25-38).

Other researchers have cited the common reason of using the L1 in the interest of saving time. If the cost of using the TL in the classroom is too great, then it is practical to use the L1 to maximize class time (Chambers 1992; Atkinson 1993).

In a smaller scale study to that of Duff and Polio (1990) involving French instructors, Turnbull (1998) observed four grade 9 French instructors over an eight-week period to determine the amount of French they were employing in the classroom. Similar to Duff & Polio (1990), he found a great deal of variation within the same language framework. The teachers varied from 9%-89% on their use of French in different activities during the class. Turnbull found that the students of the two teachers who used more of the TL (French) in the classroom outperformed the students in the other classes where less French was used. The students were measured on achievement tests and other measures of proficiency to determine their gains. The author did not conduct any

statistical analysis on the strength of the relationship between teacher's language use and test scores due to the difficulties related to sample size.

Several studies have also tried to establish what would be an acceptable amount of L1 use in the classroom. Calman and Daniel (1998) conducted a study in Canada where 95% usage of the TL was deemed by the school board to be an acceptable amount of usage for the elementary and secondary language classroom. The authors found that only 42% of the teachers in the 5$^{th}$ grade and 17% of the teachers at the 8$^{th}$ grade level fell within the recommended range of TL use. Turnbull (2000) found that instructors were using the TL between 24% and 72% of the time in the French FL classroom. He maintains that the use of the TL less than 25% of the time shows much too great a reliance on the L1. In an earlier study into language use in the elementary school FL classroom, Shapson, Kaufman, and Durward (1978) stipulated 75% usage of the TL in the classroom as an acceptable level for a classroom. However, as they studied elementary teachers in Canada, they found that 74% of the teachers used the TL less that the recommended amount Turnbull (2001) cites his own worries regarding the "license" to use the L1 stating, "I fear that licensing teachers to speak the L1 in their SL or FL classes will lead to an overuse of the L1 by many teachers" (p. 536). He cites that studies such as the aforementioned ones, wherein a limit was set on the amount of TL that the teachers were expected to use, found that the teachers overly used the L1 in spite of the limits. This again raises the concern that allowing teachers to use the L1 may lead to an unmitigated use of the L1 which most researchers and educators would agree is detrimental to TL acquisition.

Macaro (2001) approached language use in a different manner than had been attempted previously. He conducted a study with fewer participants but over a sequence of several observations. He analyzed the speech of six student teachers during a series of 14 foreign language lessons at the secondary school level to determine the amount of L1 and TL usage, as well as the motivation behind the use. Specifically, he wanted to see if the instruction that the novice teachers received over the course of their student teaching influenced their language choice. The results of his research showed that very little L1 was employed by the student teachers (a mean of 4.8%) across their different lessons.

However, these results may have been influenced by the fact that the teachers were in fact teacher trainees, and that the researcher was the supervisor of these teachers. Non-compliance with TL use recommendations during the student teaching could lead them to fail the course and thus not become teachers. In post interviews with the instructors, Macaro found that none of the instructors said that his presence had any influence on their language choice. Though the researcher claims that "the advantages of additional contextual data outweighed the disadvantages of research participants possibly modifying their practice or their responses in order to please the supervisor" (p. 536), this could be much more of a factor than he was willing to consider. The observer's paradox is always in place with any type of research wherein an observer is introduced into a setting. In this case, the additional influence of having a high-stakes observation by a supervisor in an evaluative role should not be minimized, in spite of the aforementioned comments by the researcher.

In analyzing the data he had collected, Macaro (2001) found that there was no significant correlation between the teacher use of the L1 and the student use of the L1 and there was no increase in student L2 use with an increase in teacher L2 use. Macaro responds to this result saying, "We are a long way from being able to claim that increased use of the TL leads to improved knowledge" (p. 544). In interviews with two of the student teachers, the researcher discovered that what most influenced the novice instructors' language choice in the classroom was not research and professional literature to which they had just been exposed, but rather personal beliefs and the influence of the government's national standards which stated that the L1 was to be avoided in the classroom. Macaro claims that more research needs to be conducted in this area in order to provide less experienced teachers with a framework for the use of code-switching to help instructors decide when the L1 can be used as a valuable tool and when the usage of the L1 in the classroom adversely affects the students' learning of the TL.

In contrast to some of the results obtained by Macaro (2001), Guthrie (1984) found that while instructor use of the TL was not a predictor of the amount of student talk produced in the class both in the L1 and the TL, instructors who used more of the TL had students who used more of the TL. In her study of six graduate student teachers of French at the university level, she audio-recorded six different classes twice and transcribed the data in order to determine the amount of time that both students and teachers used the TL (in this study, French), the amount of time that students spent talking both in English and French in the classroom, and the amount of non-routine, content-focused phrases that teachers used. She found a great deal of variation between the teachers' language use.

Most instructors used the TL between 83% and 98% of the time, while students varied between 72% and 93% of the time. She also found that while teachers used the TL most of the time, they also tended toward routine phrases and instructions that were very repetitive and limited in their range of actual language use. Due to the fact that most of the classes engaged in mainly mechanical types of utterances and memorized phrases, Guthrie questions whether students "engaged in processing French at all" (p. 189). She found that learners were able with very limited knowledge of the TL to understand the activities in the classroom due to their undeviating patterns. The students were required to cognitively process very small amounts of novel language that was outside of their daily classroom routine.

Guthrie (1984) also found the affective environment in the classroom to be an important component of encouraging students to interact with the instructor in both the TL and the L1. She noted that in one of the classes where student talk consisted of only 9% of the overall talk in the class, the instructor "tended to express reproval, to interrupt them, to attribute to them ideas that they had not expressed, and at times argue with them" (p. 189). She continues stating,

> What seems clear from this discussion is that the optimal classroom environment for linguistic intake cannot be characterized in terms of any simple generalization as to topics, teaching techniques, types of activities, or even language distribution (pp. 189-190).

She sums up her conclusions stating that the unique environment that is the FL classroom cannot and should not be discounted. The structure of the classroom discourse, the

limitations relating to the absolute number of interlocutors, the fact that students are forced to talk to one another, all form part of the environment wherein students are supposed to acquire a certain target language.

Several questionnaire studies have looked at opinions on language use in the classroom by both students and teachers as another way to better understand language use in the classroom. Chavez (2003) gave an extensive (158-item) questionnaire to over 330 students and teachers at the University of Madison-Wisconsin regarding both their desired L1 and TL use in the German classroom and what they observed in the classroom as a measure of actual L1 and TL usage. She found significant differences between teachers and students in both their desired use and their perceptions of actual use. A limitation to this study was the immensity of the questionnaire. A 158-item questionnaire poses a serious fatigue problem for the respondents which could cause one to question the accuracy of the results.

Crawford (2004) gave a questionnaire to 581 elementary and secondary teachers of the regions' seven priority languages in Queensland, Australia. She administered the questionnaire to teachers at all different levels (primary classes and year 8, 9, 10, 11, and 12 classes) asking the teachers about the desirability of using the TL as the main medium of instruction. She found that only 26.0% of the primary teachers agreed that the TL should be the main language of instruction, and 53.9% of these teachers had reservations about using the TL as the main language of instruction. At the highest level of the study (years 11 and 12), the teachers were more supportive, with 78.8% of them agreeing with the use of the TL as the main language of instruction, and only 12.3% having reservations.

However, even with the instructors of the years 9 and 10, only 57.5% agreed with the use of the TL as the main medium of instruction, and 33.2% had reservations about its use. Crawford declares,

Given the emphasis on using the TL by language teachers and educators for over 100 years in different teaching approaches, these levels of agreement seem surprisingly low and seriously limit levels of exposure and opportunities for interaction in the TL, thus potentially reducing the likelihood that learners will experience their L2 as a language of immediate use (p. 10). The findings by Crawford (2001) also provide additional support to the importance of teacher beliefs in regards to language learning. Though no quantitative measure was taken of the language usage in the classes surveyed, it is likely that those teachers who did not believe in the use of the TL as the main language of communication were not employing the TL in the Classroom to the degree needed for language acquisition.

Schmidt (1995) states that while these previous studies highlight how the L1 can be used in the acquisition of the TL; none of these authors suggest that the L1 be the dominant language of the classroom. He supports the hypothesis of Krashen (1994) that extensive, comprehensible input is needed in order to acquire a language. As previously mentioned, the overuse of the L1 could lead students to tune out the teacher when he or she employs the TL. Schmidt continues by saying that while translation can be used as an efficient means to help students understand the meaning of the language topic being discussed, “it is frequently just as easy and accurate to remain in the L2 and provide meaning through gesture, picture, context, example, and definition” (p. 29).

Schmidt (1995) also declares that instructors often send their students mixed messages about which language to use. Instructors often encourage their students to use the TL in all situations as much as they can and tell them to be creative, only to then switch themselves to the L1 to explain topics in the class that they felt that the students will not understand. He asks,

> Am I effectively telling the students, I told you that you could do it, but actually, I don't think you're good enough yet for me to waste my time trying. Shouldn't I, at least during certain parts of the lesson, make the same effort to communicate in English (TL) that I ask of my students? (p. 30).

Increasingly, there is a growing body of research devoted to the role of the L1 in the acquisition of the TL. Piasecka (1988), for instance, mentions that use of the L1 in helping to generate ideas and topics for discussion, writings, and activities can be very beneficial.

> Teaching bilingually does not mean a return to the Grammar Translation method, but rather a standpoint which accepts that the thinking, feeling, and artistic life of a person is very much rooted in the mother tongue. If the communicative approach is to live up to its name, then there are many occasions in which the original impulse to speak can only be found in the mother tongue… When having a conversation, we often become fully aware of what we actually mean only after speaking. We need to speak in order to sort out our ideas, and when learning a new language, this is often best done through the mother tongue (p. 97).

Thus the L1 can be seen as a motivating tool and aside from motivation and brainstorming, the L1 can "serve as one of the inputs into the process of hypothesis generation" (Ellis, 1985, p. 37). In order to better understand the language and culture, learners are constantly forming and reforming hypothesis regarding the TL. Allowing the use of the L1 may again accelerate this hypothesis formation, leading to greater understanding of the TL and greater ability to use the TL.

Lameta-Tufuga (1994) studied the effects of using Samoan (L1) or English (TL) in limited English proficiency Samoan students in the secondary level on a series of academic tasks. The students were measured after completing a task on the vocabulary that they had learned, their knowledge of the topic, and the quantity and quality of a brief writing assignment about the activity that they had just performed in English. When measured after the tasks, the students who used Samoan (L1) outperformed the learners who used English (TL) to complete the tasks in all three areas measured. It is also important to note that both groups were tested the same way using English (TL).

Other authors have found similar benefits through the use of the L1 in the learning of the L2. Friedlander (1990) found that Chinese students who used a Chinese outline and plan to write about a Chinese topic in English benefited from such a plan even though it was in the L1. He also stated that it stands to reason that if students were writing about an English topic, their writing would benefit from an English plan. Knight (1996) observed that students who are performing speaking activities could learn TL vocabulary even if they negotiate the meaning of these words in the L1. While these studies do raise some interesting questions regarding the use of the L1 in the classroom, they did not address

how the use of the L1 influenced positively or negatively the students speaking and listening skills. In order to establish the effect of using the L1 on certain tasks, it needs to be determined that success in one area of language learning does not come at a cost in another area.

After conducting research on the use of the speaker's native language to help acquire foreign language vocabulary, Rolin-Ianziti and Brownlie (2002) found translation and contrastive analysis to be beneficial both in the acquisition of vocabulary and also grammar. Causa (1996) suggests that switching between the L1 and the TL in order to compare and contrast the linguistic features between languages would help heighten student awareness of the distinctive features of each language. Rolin-Ianziti and Brownlie conducted a study investigating how four different teachers of beginning French at the University of Queensland used the L1 and TL in the French foreign language classroom. The researchers audio-taped each of the teachers' classes once in order to obtain the data used for their study. After the audio-taping, the teachers' speech was transcribed using a word count method, as opposed to previous research which used speech sample data taken at 10-15 second intervals. The students' use of the L1 and TL was not included as part of this study.

The researchers divided all of the data into three principle categories: 1) translation, 2) metalinguistic uses, and 3) communicative uses. They found limited variation across the four teachers in regards to their L1 use in the listening activity that they looked at but quite extensive variation in a grammar lesson. The teachers varied from 0%-18% L1 usage during the listening activity, which was a relatively low

percentage; however, when the researchers investigated the grammar activity they found that teachers used the L1 significantly more. One of the instructors who used the TL exclusively during the listening task was found to have used the L1 over 55% of the time in a subsequent grammar activity. This provides evidence that the type of activity may considerably change language use in the classroom. This question also needs to be addressed in regards to understanding the variation that takes place, and the teachers' motivation behind such variation. Additionally, questions regarding the teachers' awareness of the fact that they are changing so much regarding their language use need to be addressed further to find if teachers are cognizant of such wide variation in the classroom.

Regarding the types of switches between languages that the teachers used, Rolin-Ianziti and Brownlie (2002) found that while the majority of the switches were intersentential (meaning that the switch between the L1 and the TL were done between different sentences), there were also a few intrasentential (switching between the L1 and TL in the same sentence) changes that made up the larger TL discourse that was employed in the FL classroom. The majority of the switches to the L1 were found under the category of communicative uses that includes such subcategories as giving instructions, motivating students, giving feedback, teacher joking, etc. Giving instructions was found to be the most common situation in which teachers used the L1 in regards to classroom management. Surprisingly, motivating the students to use the TL was found to be the second most common use of the L1. This appears to be paradoxical in that the L1 is used to try to get the students to use more of the TL.

The results of this study support previous teacher research into the use of the L1 and TL that found that teachers use the L1 to translate, comment on forms, and manage the classroom. Rolin-Ianziti & Brownlie declare, "The contribution of translation to speech redundancy may also help vocabulary uptake: the FL word selected for translation is not only attended to by learners, but it is also reinforced by repetition" (p. 424). They continue by expressing their surprise to the relatively low use of the L1 in the classroom. However, they explain this low usage by the fact that the instructors were recorded during a listening activity in which a videotape was used during part of the activity. They also found that "teacher variables (the teacher's native/non-native status and the teacher's participation in the Honours seminars) did not lead to a significant difference in NL/FL distribution between teachers" (p. 422). The most influential factor found was the type of activity being taught. As previously mentioned, the teaching of grammar significantly changed the teachers' use of the L1 in the classroom. These authors recommend that future research control for the type of activity as a variable in determining the amount of L1 and TL use.

*L2 and L1 Use in the ESL/EFL Context*

The ESL classroom presents some interesting challenges for the teachers in that even if the desire to use the L1 were there, many classes consist of a wide variety of learners from different L1 backgrounds that make the use of the L1 very difficult. With this being said, there are many situations where the learners share a common L1 especially in the EFL setting. Auerbach (1993) states that many argue that exclusive use

of the TL is the only option in the ESL/EFL classroom. He proposes this argument in the following terms:

> The more students are exposed to English, the more quickly they will learn; as they hear and use English, they will integrate it and begin to think in English; the only way they will learn it is if they are forced to use it… No alternative except complete exclusion of the L1 from the ESL classroom is seen as valid (pp. 14-15).

Many ESL/EFL teachers around the world feel that while it is impossible to totally avoid the usage of the L1 in the classroom, it is something that they should be ashamed of and that 'English-only' policies should dominate the classroom (Auerbach, 1993; Izumi, 1995).

In a similar study to the aforementioned research by Chavez (2003), Biley (1995) used a questionnaire to determine the amount of language usage by both the instructors and the students in the language classroom. Biley, an ESL instructor, reported that ESL is often not included in discussions regarding L1 use in the classroom, in large part due to the heterogeneity of the population of students. However, as she points out, ESL classes in different regions of the world function almost as EFL, due to proximity to another country and/or the multilingual community in which the students live. The community college in California where she taught, located 10 miles from the Mexican border, consisted of almost all Spanish L1 speakers thus making the use of the L1 by the instructors possible. While this situation is not common, many communities in other parts of the world may find a relatively homogeneous ESL student population e.g., Francophones learning English in Canada, speakers of regional dialects learning English

in India, or even the high concentration of similar L1 speakers in different regions of countries where English is being learned as a second or foreign language.

Biley reports that the instructors at the Imperial Valley College found that the "limited use of the L1 permits them to tailor instruction to the specific needs of their adult students" and that "strict adherence to a policy of 'English only' is not feasible" (p. 7). Additionally, she found that 76% of the teachers reported using some Spanish (the students' L1) in the classroom. The instructors mostly employed the L1 to provide a brief explanation to save time or to provide the translation of a word. Only 10% of the teachers had policies in their classes that stated that English was the only language to be spoken in class. However when all of the teachers were asked to rate their students' language use, they reported that their students spoke the TL over 90% of the time. Though these findings contribute to a greater understanding of teachers' and students' perceptions of what occurs in the ESL classroom, the researcher did not conduct any type of observation to corroborate the data that she had collected. Using questionnaires to determine language use and linguistic behavior in the classroom is quite common, and more research needs to determine how accurate this type of data collection is in reflecting actual classroom language usage.

The limitation to both of the aforementioned studies is that no classroom observation occurred to corroborate what the students and instructors were saying regarding language use. As seen in Polio and Duff (1994), the students' and teachers' perceptions could very much be biased or inaccurate in their depiction of actual classroom language usage. This is one of the main problems when research of this type is

based exclusively on the perceptions of the parties involved, without any subsequent observations to validate the perceptions. Often there is the result of a lack of congruency between what is observed and what is perceived. Both Chavez (2003) and Biley (1995) fail to include even a third party observation of actual behavior in the classroom. Nevertheless, both of the studies do provide valuable data regarding the desired language use in the classroom by students and teachers as well as continuing research studying the perceptions of language use in classroom.

Nation (1997) found that some learners felt "forced" to use the L1 during activities when they found that their L2 proficiency was not sufficient to complete the task. Learners stated that the tasks that they were being asked to complete were difficult enough even in the L1, and these tasks became even more difficult when attempting to complete them in the TL. This point raises the question of how the difficulty of the tasks proposed for beginning and intermediate students affects their choice of the L1 or TL. Using the example of teaching ESL, Nation suggests that teachers "should also explain to the learners the benefits of using English (the TL) in activities" (p. 22). He proposes that teachers do this through giving examples of how using the TL helps learners, how using the TL can improve speaking, and also give experimental evidence of how such usage has helped older learners in their acquisition. This helps learners to feel that they are part of the process that can lead them to achieve the language goals that they have set as a class and/or as an individual language learner.

Shamash (1990) found that the use of the L1 and the TL (English) in activities involving the students writing about their lives to be successful and productive. Shamash

found that if the adult ESL students wrote about their lives with the L1 or a mixture of the L1 and TL and then these writings were translated by the teacher or some other volunteer, that this activity seemed to "provided a natural bridge for overcoming problems of vocabulary, sentence structure and language confidence" (p. 72). This author found that through starting with the L1, the students were much more confident and at ease and this helped them to fell as if they were competent adults using a language, as opposed to unskilled beginners with no functional ability in the language. Shamash found this to be true not only with more advanced learners but also with beginners.

*Code-switching in the Classroom*

While the use of both languages in the classroom is a form of code-switching, previous research cited in this study did not refer to this switching as such. The likely reason for this is that the bulk of the literature on codes-switching refers to situations outside of the FL classroom or deals with speakers whose proficiency is greater than that found in the basic language course. However, several studies do address code-switching in the classroom with the types of learners found at the beginning and intermediate levels. This section discusses some of the basic definitions of code-switching, reviews several studies investigating code-switching in the classroom, and finally discusses some of the ideological and theoretical uses of code-switching in interactions with different interlocutors and in the classroom setting.

Code switching is defined as the alternating, or switching, of two different languages at the word, phrase, clause, or sentence level (Timm, 1993, p. 94). Coste (1997) defines code-switching as alternating between two languages in either oral or written

expression. Often times the word code-switching is used interchangeably with terms such as code mixing, language switching, language alternation, etc., though each term has a slightly different meaning depending on the researcher. There are three different types of code switches that exist according to Appel and Muysken (1987),

(a) Tag-switches involve an exclamation, a tag, or a parenthetical in another language than the rest of the sentence. An example is 'OYE, when . . .' at the beginning of the text. The tags etc. serve as an emblem of the bilingual character of an otherwise monolingual sentence. That is why Poplack (1980) has named this type of switching emblematic switching.

(b) Intra-sentential switches occur in the middle of a sentence, as in 'I started acting real CURIOSA.' This type of intimate switching is often called code mixing.

(c) Inter-sentential switches occur between sentences, as their name indicates (p. 118).

Appel and Muysken refer to these different switches as the primary ones involved in code-switching, but there is also a fourth category that forms part of intersentential switches, and those are switches at the conversation or discourse level. These switches occur within the same conversation but they are influenced by the stylistic features sought after in the two individual languages at a larger level.

Cook (2001) contends that an approach to teaching wherein the teacher is able to use the L1 and TL concurrently through some form of code-switching creates an authentic learning environment where the learners acknowledges the influence of the L1

on the TL. Additionally, Cook argues that not only is it acceptable to code-switch in the classroom, but that it is the logical choice of behavior when the speakers and learners share two or more languages. Castellotti and Moore (1997) concur that code-switching can be an effective strategy to use within the classroom but that the teacher needs to make a conscious choice as to when to employ such a strategy to control the random insertion of the L1 into the classroom dialogue. Aguirre (1988) states that language alterations or code-switching are predictable because of the diverse population of language learners that are found in the FL classroom

Schmidt (1995) proposes that code-switching in the ESL/EFL classroom is not always done in order to promote some type of learning, but rather may reflect the lack of proficiency of the teacher. He concludes,

> For many of our students, their Japanese teachers are the most advanced L2 learners of English they will ever meet. If these instructors offer no evidence of having even basic communicative competence in English, what hope can our students be expected to hold for themselves (p. 30)?

Knight (1995) supports this view by stating that the reason why Japanese high school teachers are reluctant to use English in the classroom is due to their lack of confidence in their own English abilities. While both of these authors discuss the Japanese EFL setting, this concern is applicable to many non-native language teachers whose proficiency in the language they are teaching is low.

Brice (2001) cites some of the concerns as well as several strategies from studies in bilingualism that support the dual language usage in the classroom setting. He deals

mainly with children in the language classroom but states, “In our experience, parents are generally supportive of dual language use in classroom settings. When parents are told that using two languages seems to facilitate English learning, then their fears (about their child’s school success) are alleviated” (p. 13). Some of the strategies with which the L1 can be used in the FL classroom are reiteration, vocabulary checks, maintaining a flexible environment, native language appreciation, spontaneous language use, use of code-switching as economical instruction, flow of instruction, answering questions, and expanding vocabulary (pp. 13-14). Timm (1993) warns that all parents may not support the use of code-switching in the classroom, and that if the parents are against this, they “would be horrified to know that their children were also being exposed to it at school” (p. 107).

Ferguson (2003) cites three broad categories where previous research on code-switching (CS) in the classroom has occurred.

> i. CS for curriculum access. Basically, to help pupils understand the subject matter of their lessons.
>
> ii. CS for classroom management discourse. e.g. to motivate, discipline and praise pupils, and to signal a change of footing
>
> iii. CS for interpersonal relations. e.g. to humanize the affective climate of the classroom and to negotiate different identities (p. 39).

Within each of these three areas several studies have been done that support these categories. Concerning the use of code-switching for curriculum access, Martin (1999) found that the teacher in his study code-switched to “encourage and elicit pupil

participation" and to "clarify the meaning of certain sections of text" (pp. 51-51). Martin refers to this process as "unpacking the meaning" (p. 53). Üstünel and Seedhouse (2005) found that they had similar results in their study:

> Teachers code-switched from English to Turkish in order to deal with procedural trouble, clarify meaning by providing the Turkish equivalent, encourage and elicit learner participation, elicit Turkish translation, check learner comprehension, and give metalanguage information (p. 308).

Ferguson (2003) states that the common point of these studies is to illustrate "the significant role of CS in providing access to English medium text and in scaffolding knowledge construction for pupils with limited English language resources" (p. 41).

Second is the use of CS for classroom management discourse. Goffman (1974) concludes that code-switching is often used to contextualize a shift of frame. According to Ferguson (2003), this type of CS is used to shift

> away from lesson content and toward some 'off-lesson' concern — to discipline a pupil, to attend to latecomers, to gain and focus pupils' attention, for example. It may also demarcate talk about the lesson content from what we may refer to as the management of pupil learning; that is, negotiating task instructions, inviting pupil contributions, disciplining pupils, specifying a particular addressee, and so on (p. 42).

Merritt (1992) also found "the use of code-switching as an attention-focusing device" with which the teachers were able to draw the students' attention to certain important aspects of language learning or redirect the attention of the language learners from one

task to the start of a new topic. Again in support of this notion, Üstünel and Seedhouse (2005) noticed that teachers in their study did indeed code-switch in order to deal with questions regarding classroom discipline and also to give feedback to students.

The third use of code-switching mentioned is for interpersonal relations. Ferguson (1993) clarifies what he means by this as follow:

> In many classrooms, English (TL) indexes a more distanced, formal teacher-pupil relationship and the local language . . . a closer, warmer more personal one. To build rapport with individual pupils, create greater personal warmth and encourage greater pupil involvement, the teacher may, therefore, when the occasion is suitable, switch to the local language (p. 43).

Üstünel and Seedhouse (2005) commenting on the notion of interpersonal relationships in their study conducted with Turkish students learning English found the teachers in their study code-switched to "express a Turkish idiom, comment on a social event in Turkey, and pass on personal information" (p. 309). However, they did not find any cases where the students code-switched to influence interpersonal relations.

One consideration regarding the use of the TL or L1 in the classroom is that of code-switching as stylistic change. Kirschner (1984) studied both speakers who grew up with both languages, heritage learners, and second language learners of Spanish and found a correlation between code-switching and style shifting. Nevertheless, many other researchers question the notion of code-switching as style-shifting. Ramat (1995) comments, "I take CS (code-switching) as being different in nature from monolingual 'style-shifting'" (p. 46). Romaine (1989) focused on the similarities between these two

types of shifts by stating that monolingual style shifting and code-switching may be seen as equivalent with respect to the social meanings they can convey. Kirschner and Romaine conclude that code switching is a form of style shift. If this is the case, this type of style shift is common among bilingual populations where code-switching is a common practice, and in the FL classroom where the speakers share two languages with which they are able to communicate. The need to use the L1 in order to communicate with fellow members of the class then can become even more necessary with students who have a low degree of proficiency in the TL. Also, teachers may use code-switching as a form of style-shifting when dealing with varying types of interactions with their students.

Code-switching in the classroom shares many of the same features as in conversational switches, such as to clarify, to emphasize, to attract attention, to refer to a concept specific to one particular culture, or to bid for a conversational turn (Timm, 1993, p. 107). Research into code-switching has continued and authors such as Zentella (1997) have offered in-depth explanations regarding the grammar of code-switching and the rules that the majority of the speakers follow. She found that there are rules which are followed in code-switching as are in any dialect of a given language. Speakers who are more fluent are more skillful in manipulating the uses of the different languages, whereas those who are not as proficient lack the ability to employ many of the stylistic variations and manipulations that those who are skillful can. This is the case of the foreign language classroom where the learners have limited abilities in the FL and thus use fewer of the strategies available to more proficient bilinguals.

Üstünel and Seedhouse (2005) conducted a study where they investigated the use of the L1 (Turkish) and the TL (English) in the EFL classroom. They looked at six different classes of EFL learners, all taught by native Turkish speakers. They video-recorded and audio-recorded the classes in order to capture the language usage in the classroom. They identified three main areas where code-switching is used by both the students and the teachers. First, the teachers would code-switch depending on the length of the pause after they had stated a question or when they were conversing with the students. Conversational pauses of around two seconds tended to elicit code-switching from the instructor. The second case where code-switching was used was in order to prompt students to produce in the L2 either through explaining a context or helping them with a word or phrase. Finally, the third use of code-switching that the researchers found was when the teacher encouraged the students to code-switch into the L1. This teacher-induced code-switching was done when asking the students for a translation of an English word into Turkish or as a procedural use in order o help redirect the class either onto a new task or back onto the current task with which they had been working.

*The influence of addressee on code-switching.* The influence of addressee on code-switching can also be analyzed according to Bell's (1984) model of language style as audience design. "At all levels of language variability, people are responding primarily to other people. Speakers are designing their style for their audience" (Bell, 1984, p. 197). In the FL classroom, the students address a teacher who typically has some ability in the students' L1 or is a native speaker of the students' L1. Thus, this addressee model would allow students to choose which language to use with their teachers. However, students

are also cognizant of the fact that their fellow classmates have limited proficiency in the TL and so they are more likely to address them in the common L1 that is shared between them. Bell minimizes the importance of topic or setting and argues that this type of variation presupposes variation according to addressee. Bell concludes,

> Speakers associate classes of topics and settings with persons. They therefore shift style when talking on those topics or in those settings as if they were talking to addressees whom they associate with the topic or setting. The basis of all shift according to non-personal factors lies then in audience-designed shift (p. 181).

This type of addressee style shift, referred to as a responsive shift, can also manifest itself in bilinguals in their imitation of other speakers who pertain to the category that they are mimicking. If a speaker associates the L1, TL, or code-switching with a certain speaker they are imitating, he or she will use that style of speech to project what the perceived talk of the person being mimicked is. This is one of the concerns raised by those proponents of the exclusive use of the TL in the classroom. If the students associate the use of the L1 or code-switching with their instructor, then they are more likely to behave linguistically like their teacher or accommodate their speech to that of the person they are imitating. However, if the teacher always maintains the use of the TL, then the students will see their addressee as more of a monolingual speaker of the TL and try to mimic that model of language usage. Also, if the instructor always talks about certain topics or teaches certain aspects of the TL in the L1, the students are then likely to associate and use the L1 when addressing their teacher regarding those topics.

In research outside of the language classroom, Bell (2001) studied the use of Maori in New Zealand and found that two Maori speakers used their pronunciation registers as their identification with their own Maori heritage. In his study, he found that the participants expressed their ethnic identity through the use of specific linguistic features. While dissimilar to the language classroom, this research provides further support for the use of language to establish one's identity. The linguistic features present in the FL classroom vary between languages as opposed to pronunciation as in the study of Bell.

A similar theory to the Audience Design theory espoused by Bell (1984) is that of Accommodation Theory proposed by Giles (1973). In his Accommodation Theory, Giles states that speakers will converge linguistically toward the speech patterns that they believe to be characteristic of their speech partner in order to gain social approval. This can be observed in the FL classroom where students tend to use much more of the TL when addressing the instructor than they use when they address their other classmates who often share many of the TL limitations with which they are dealing. The students again would be accommodating to their teacher's use of the TL and trying to imitate that speech pattern; however, if the teacher uses the L1 or code-switches, the same problem as already mentioned arises, and students are likely to accommodate to that style of speech.

This view is further supported by the Inter-group Model of Giles and Byrnes (1982) which describes how inter-group uses of the language reflect the social and psychological attitudes of their speakers. The common notion is that speakers will converge toward their addressee but there is also the concept of divergence where

speakers will diverge from a certain group. This is often done through code-switching in order to establish an identity different from those non-code-switching individuals, monolinguals and bilinguals alike.

*Code-switching as distinctiveness*. Code-switching can be contrasted with other types of language use, making it unique from monolingual speech and bilingual speech with no code-switching. Not only can it be contrasted with other types of speech, there exists a great deal of variation within those who code-switch. Language proficiency is an important factor to consider in studying code-switching, especially in regards to the study of code-switching in the FL classroom. In monolingual speech, individuals are limited in the types of stylistic changes that they have at their disposal by their experience and language competence. This also occurs with bilinguals who may have a greater degree of proficiency in one language and this proficiency correlates with the stylistic repertoire that they have available. This is not the only factor of importance in the use of code-switching as style-shifting, but speakers must have achieved a certain level of fluency in order to effectively switch between languages.

Irvine (2002) proposes that different types of switches are ideologically mediated. Penny (2000) supports this possibility also stating, "Thus, with choosing particular features of language with which to communicate, the speaker/writer places himself or herself at a particular position in a complex social matrix" (p. 7). The use of code-switching in speech is also a way to index social formations. The language that we choose places us in certain groups or categories, gives us a type of personae, defines different activities, and can even be used to define the institutional practices of an

organization. In the FL classroom this is evident in that often times those who attempt to make exclusive use of the TL are often classified with a certain group of people within the classroom. Disappointingly, sometimes those who try to use the TL exclusively in the classroom are criticized or even ostracized by fellow classmates who have now associated with the instructor who promotes TL usage as opposed to a member of the student community. Additionally, a common practice in the FL classroom is the assignment of names that are representative of members of the TL culture. The logic behind this is supported by Penny (2000), who believes that in the context of the FL classroom, students can adopt a different persona with a new name, language, and even social dynamic. Bell (2001) refers to the type of switch where the speaker attempts to establish a new persona as an initiative switch. In this type of switch, the speaker uses code-switching to affirm their own identity or to establish a new one. This can be seen in the FL classroom where the lower level learners may not feel able to express their own persona and use the L1 in order to assert an identity that they cannot establish with the TL.

Often the value of speech is defined by the speaker based on the "social space" in which he or she is found (Penny, 2000). Bourdieu (1984) in referring to the aesthetics of social practices provides insight into how language usage in different settings may serve a very distinct purpose. He proposes,

> All practice is "conspicuous," visible, whether or not it is performed in order to be seen; it is distinctive, whether or not it springs from the intention of being "conspicuous," standing out, of distinguishing oneself or behavior with distinction.

> As such, it inevitably functions as a *distinctive sign*. . . The pursuit of distinction. . . which may be expressed in ways of speaking or the refusal of misalliances—produces separations intended to be perceived or, more precisely, known and recognized, as legitimate differences (p. 204).

Code-switching is also conspicuous whether it is purposeful or not. Not only can it be heard by those around but it also has the distinguishing ability to separate even bilingual speakers of the same two languages. Code-switching can be used to produce a separation from other speakers and is often the case as it is used in certain settings such as between two friends or in the language classroom to establish oneself as not just a novice or intermediate speaker of the TL but a fluent and competent speaker of the L1 that is often common to those members of the FL classroom. It also has the distinct characteristic of defining a group of individuals and/or a population as possessing this particular skill.

The use of language and particularly code-switching makes speakers distinct and can serve as a powerful marker of identity. Irvine (2002) comments, "I take it that style in speaking involve the ways speakers, as agents in social (and sociolinguistic) space, negotiate their positions and goals within a system of distinctions and possibilities" (pp. 23-4). Though Irvine refers to style in her statement, the same could be said for the use of code-switching as a stylistic device. Much of the linguistic behavior in bilinguals who code-switch can be seen as a manner in which they negotiate their roles and positions in a conversation and even in the classroom. Code-switching can also be used as a stylistic shift to accomplish defined goals and negotiate different relationships within the social space of the speakers.

One of the assumptions that can be made is that teachers and students who code-switch have an implicit understanding of code-switching at both a conscious and subconscious level and are aware not only when they are code-switching but also how often. As previously mentioned, teachers often behave differently when using the L1 in the classroom, such as talking in a lower tone or speaking quickly because of the current communicative methodology that condemns such behavior because it introduces the L1 into the classroom. Native and non-native speaking teachers of the TL feel that they need to portray a monolingual model for the students to emulate so as to assist them in their TL acquisition. Many teachers behave differently when using the L1 because it contradicts what they feel or have been told should be done in the ideal FL classroom. However, even though there exists the assumption that teachers and students realize when they are code-switching, it is common to find that speakers who code-switch are unaware as to both the amount switches they do and the amount of time they spend in the L1 during these switches even if they do realize that they code-switch.

This is also the case in the FL classroom where the teacher assumes that the students are predominately using the TL and are not aware of the amount of code-switching that is taking place both on the part of the students and also by the teacher. Many teachers acknowledge that code-switching forms part of their linguistic repertoire but not the degree to which it forms part of their identity or the quantity and frequency with which they code-switch. Another dimension of those that code-switch is their understanding of salient social groups, activities, and practices wherein different language use should and can occur. Specific relationships are defined by language use

and language choice forms part of how speakers express their own social position and interest. It is important in classroom research that the relationship between the teacher and the students be defined within the classroom environment so as to elicit the linguistic behavior that best reflects the goals of the teacher and institution.

*Code-switching as a tool in the classroom.* Teachers may find it more useful to accept code-switching in the classroom because this may help to relax the students and thus create an environment where the students will be better able to learn (Timm, 1993, p. 107). He goes on to declare that code-switching in the classroom shares many of the same features as in conversational switches such as to clarify, to emphasize, to attract attention, to refer to a concept specific to one particular culture, or to bid for a conversational turn. Rolin-Ianziti and Brownlie (2002) declare:

> Code switching represents another strategy teachers use to simplify their speech in order to accommodate the learner's level of proficiency. We hypothesize that a few strategic uses of NL may introduce input modifications that affect the FL learning positively" (p. 423).

While this appears to be quite simplistic, it must be understood that several factors need to be taken into account before the decision to code-switch or not to code-switch is taken by the teacher, and also whether or not the teacher will be willing to accept code-switching among the students in the class.

First, it is important that the teacher become informed as to what is code-switching, and become familiar with some of the research that has been done to explain this phenomenon. Timm (1993) posits that many teachers still view code-switching as

"random or chaotic", and yet others see it as "interference" from another language which in this case is English (p. 94). Educators should be cognizant that the more informal and casual the role relationship, the more common code-switching is, and that these switches may be either conscious or subconscious. Barkin (1981) states that often times when the switches are conscious, they are added for a humorous or dramatic effect. Rolin-Ianziti and Brownlie point out that code-switching is not always under the teacher's control. In this regard, translation in response to a student's request is significant, as the learner rather than the teacher, motivates the use of the TL (pp. 422-423).

Teachers need to also take into account their own personal attitudes. If a teacher regards code-switching in low esteem or looks at it as being wrong, they should not promote it in the classroom because their personal opinion may come through and thus negatively influence the students. Another important factor for a teacher is the way that the program and institution look upon code-switching. If a policy of exclusive use of the TL exists, then promoting code-switching in the classroom would confuse and disconcert the students.

One of the concerns brought about by code-switching is the different situations in which a teacher favors one language as opposed to the other. The choice of one language over another by the teacher in certain situations can stigmatize or cause the other language spoken to be seen as a subordinate language. Studies have shown that English is the language that is most often used to take control of the class in which code-switching is permitted. So if teachers always choose English to take control of the class or say

things that are important, they consciously or subconsciously down-play the role of the TL and its importance in the classroom.

One of possible pedagogical practice that could be included at both the basic language level and more advanced levels would be that of a session on the properties of code-switching both in the classroom and in the larger community. Marrone (1981), for instance includes, as part of a Spanish language course a segment on code-switching. She allows her students to code-switch for the first part of the course and even accepts them using a minimal amount of English if they cannot get an idea across in Spanish. During this time, she has them focus on what they are saying and what forms they are using to express themselves. Later she tells them that both languages are self sufficient and encourages the students to use just Spanish (TL) in the classroom.

Another activity that is done with this same class is that they are to listen to the Spanish on the radio, on the television, in their neighborhoods and in their homes for examples of code-switching and then write them down and identify them as loan words, calques, etc. Students share this list with their classmates and talk about why code-switching occurs and the possible reasons behind the different switches (p. 77). This helps to promote understanding of the process and can, in turn, be used in helping the students become more cognizant as to their own speech patterns. Rolin-Ianziti and Brownlie (2002) declare, "As for contrast, code switching may help learners perceive differences between the FL and NL linguistic systems, and thus avoid negative transfer" (p. 424). All of these different views on the use of code-switching and how it is mitigated in the classroom deal significantly with the beliefs of both the students and teachers in

regards to the role of language and how it is used. Additionally, as previously mentioned regarding the different motivations behind code-switching, the beliefs that both the teachers and learners have about the use of the L1 and TL in the classroom need to be identified in order to help bridge some of the possible miscommunications that may occur. The following section addresses how these beliefs influence language learning.

*Student and Teacher Beliefs about Language Learning*

One important aspect to consider in understanding language learning is the role that beliefs about learning play in language acquisition and overall learning. Davis (2003) declares, "That people's beliefs are instrumental in influencing their behavior is a truism: people act on the basis of perceptions and their 'definition of the situation'" (p. 207). The author continues by stating that if people perceive some situation to be a reality then they will behave as if that were the case regardless of whether or not it is true. This is also true in teaching and learning. If teachers believe that languages are learned a certain way, their behavior will reflect that way of thinking in spite of possible research and training to the contrary. Students function in much the same way, if the teaching that is occurring does not match their beliefs then this is likely to negatively influence their acquisition. Williams and Burden (1997) found that teachers may act consistently with their beliefs but these actions may not correlate to the standards and research in their profession. Due to the powerful influence of the beliefs, more work is needed to understand which beliefs both students and teachers have that would impede their language acquisition. Some of the ways to determine the beliefs of learners and teachers is through questionnaires about different aspects of language learning and through observation. Argyris and Schön (1974)

propose the notion of reverse causality in the analysis of people's beliefs. They propose that people should be observed as to how they act and then determine their beliefs based on the observed behavior rather than on what they say they believe. Davis purports, "Espoused beliefs and beliefs-in-action are not always the same" (p. 208). Because of the fact that what is stated as a belief may not result in actual behavior that way, the use of both questionnaires and observations provide an excellent way to determine whether a relationship exists between what is said and classroom behavior.

Pajares (1992) found that teachers' beliefs had a greater influence than the teachers' knowledge on their classroom teaching, lesson plans, and pedagogical decisions in the classroom. Williams and Burden (1997) again support this declaring that even though teacher may believe that their actions are spontaneous,

> such actions are nevertheless prompted by a deep-rooted belief that may never be articulated or made explicit. Thus teachers' deep-rooted beliefs about how languages are learned will pervade their classroom actions more than a particular methodology they are told to adopt or course book they follow (p. 57).

Pierre and Kalkman (2003) further explain the origin of many of the beliefs that teachers form about learning and relate them back to previous experience that they had as students. They explain,

> Students preparing to become teachers enter their education courses with strongly entrenched bias and beliefs based on at least 12 years of experience in the classrooms. In few other programs of study are there novices who bring such firm convictions about how experts should perform" (p. 128).

This also applies to the students who are entering the classroom. They have seen both more and less effective professionals in the field of teaching and have developed beliefs either on how they best learn or how effective teaching should be done.

Much research has been done investigating both the difference between teachers' and students' views about learning as well as the importance of developing a greater dialogue between students and teachers as to how to mitigate any differences that may exist. Kinchin (2004) declares, "For students to be able to maximize their own learning, they need to have an appreciation of what is expected of them by their teacher. This will be partly determined by their teachers' implicit epistemological beliefs" (p. 301). In the classroom, there is a growing recognition of the importance of the students' voice. Fielding (2001) sums up this view:

> There is a sense in which not only the previously forbidden area of teaching and learning is becoming a legitimate focus of enquiry from the standpoint of students as well as teachers, but also that the roles of teachers and students are beginning to become less exclusive and excluding of each other (p. 49).

Hugh & Vass (2001) conclude that a disconnect between the students' approaches to learning and the teachers' classroom philosophy can have a negative affect on the quality of the learning that takes place. Kinchin (2004) supports this declaring, "A mismatch between teachers' and students' epistemological views is likely to perpetuate problems in the classroom and this must be addressed by explicit dialogue in a manner that is accessible to students" (p. 310). Harland *et al.*(2001) concludes that the voice of the learner has been largely absent from the research that has been conducted to date and

that the educational product is not aligned to the needs of the consumer, who in this case are the students. However, it is not a practical possibility to adapt all teaching to the beliefs and understanding that students have about how languages are learned because they, while experienced consumers, do not have the training or background of the teacher. Nevertheless, several studies into student perspectives have found them to be insightful, measured, intelligent, and constructive when talking about teaching and learning (MacBeath, 1999; Rudduck & Flutter, 2000; Veugelers & de Kat, 2002; Daniels & Perry, 2003; Kinchin, 2004). Davis (2003) concludes, "It would perhaps be a brave or foolish teacher who did not accommodate such student belief, working with them and maybe on them. Of course the process is not unidirectional; teachers may need to be prepared to alter their own values and beliefs about effective practice" (p. 217).

In her study of university students' beliefs about how languages are learned, Horwitz (1988) identified several common beliefs among students that she felt would be detrimental to their language learning. In her study of 241 students of Spanish, French, and German, she found that 40% of the students in her study felt it was possible to become fluent in a foreign language in two years or less. Additionally, over 60% of the Spanish and German students felt that learning a foreign language was principally a matter of translation from English to the TL. Horwitz goes on to propose that the large scale attrition that occurs in FL programs may in part be due to unrealistic beliefs and goals that students have and of which their instructors are not aware. A greater understanding of these beliefs would help the teachers to address any concerns or

misconceptions that students may have that cause them to feel unsuccessful as language learners.

In a study conducted by Kinchin (2004), he found that some secondary school student participants in London "expressed surprise at being asked to comment on teaching and learning, suggesting that this is something outside of their usual school experience" (p. 309). One of the concerns with the language classroom is that many assumptions are often made by the teachers in regards to the classroom culture. Cortazzi & Jin (1999) support this by saying that

> behaviour in the classroom is set within taken-for-granted frameworks of expectations, attitudes, values and beliefs about what constitutes good learning, about how to teach and learn, whether and how to ask questions, what textbooks are for, and how language teaching relates to broader issues of the nature and purpose of education (169).

Finally, Davis (2003) conducted a study of teachers and students at the Macao Polytenic Institute in China to determine whether or not teachers' and students' beliefs coincided or not on how they perceived that languages were learned. In the study conducted with 18 teachers and 97 students, this author used the ten dimensions of language learning in Lightbown and Spada (1993) to discover any differences and similarities between teachers' and students' beliefs. The author found that students and teachers disagreed on 60% of these dimensions of language learning and in every case the students believed much more strongly in these aspects of language learning than their teachers. These discrepancies again require more research to be better able to understand how these

beliefs are correlated into action and how these beliefs can influence learning. Davis sums up the importance of understanding beliefs in regards to learning and practice stating,

> Beliefs may be both the medium and outcome of poor practice. If we simply work with teachers' and students' beliefs and values *as they are*, then progress may be hampered; rather, those beliefs and practices, as Eisner's (1985) notion of educational connoisseurship advocates, should be exposed, challenged and defended in the interests of professional progress and improvement" (p. 220).

*Summary*

The review of literature has demonstrated both sides of the issue of using the L1 or TL in the classroom. In addition, the use of the L1 and TL has been presented in the form of an analysis of code-switching where the language classroom becomes an environment where this is accepted or not depending on the beliefs of the instructor. Finally, this chapter reviews some of the research on beliefs about language learning and teaching and how such beliefs influence both teacher and student linguistic behavior in the classroom. This review of the current body of work in L1 and TL in the classroom sets the framework upon which the subsequent study was conducted and will be elaborated on in Chapter 3.

# CHAPTER 3

# METHODS AND PROCEDURES

## *Introduction*

This chapter is divided into two main sections. The first section discusses the participants both the teachers and the students. Information about the instructors such as age, teaching experience, class level, gender are elaborated on both in the text and through the use of both tables and figures. The students' data were also gathered and described in the chapter. In order to address the questions about the various uses relevant to L1 and TL use in the classroom, the second section of the chapter defines the different instruments that were employed. A pre- and a post-test were used to determine whether or not gains had been made in listening proficiency during the course of the study. The data used for the transcriptions and subsequent data analysis were gathered using a video-camera in order to capture the details involved in the teacher and student interactions over a series of three visits to sixteen different classes. Also used in this research was a language use and belief questionnaire, adapted from previous research done by Levine (2003), this instrument was given to both the students and teachers to measure what their perceptions and beliefs about language use in the classroom were in order to compare this with the actual data collected in through the video-recordings.

## *Research Setting*

Data were collected at the University of Arizona during the fall semester of 2005. The University of Arizona is located in Tucson, Arizona in the southwestern part of the United States. The University of Arizona has approximately 37,000 students and is a

Research I institution. The classes that were chosen for the study were Spanish 102 (first-year, second semester Spanish) and Spanish 202 (second-year, second semester Spanish). These two levels were chosen to be able to better analyze the differences between levels in regards to any differences that may exist both between the students' use of the L1 and TL and the teachers' use of the L1 and TL. The Spanish Department at the University of Arizona offers masters and doctoral programs in both literature and linguistics; however, the majority of the graduate student instructors have one of several focuses within the literature program in the Spanish Department (peninsular, medieval, Caribbean, modern, etc.)

The majority of undergraduate degree programs at the University of Arizona require at least two semesters of a foreign language in order to graduate. These programs are typically BS programs. Many of the BA degree programs require students to complete four semesters of foreign language study in order to graduate. A few of the students do continue their study of Spanish after 202 but the majority takes the classes to fulfill the university's requirement. The student population for this study consisted primarily of students who were taking Spanish in order to meet the university's foreign language requirement.

*Participants*

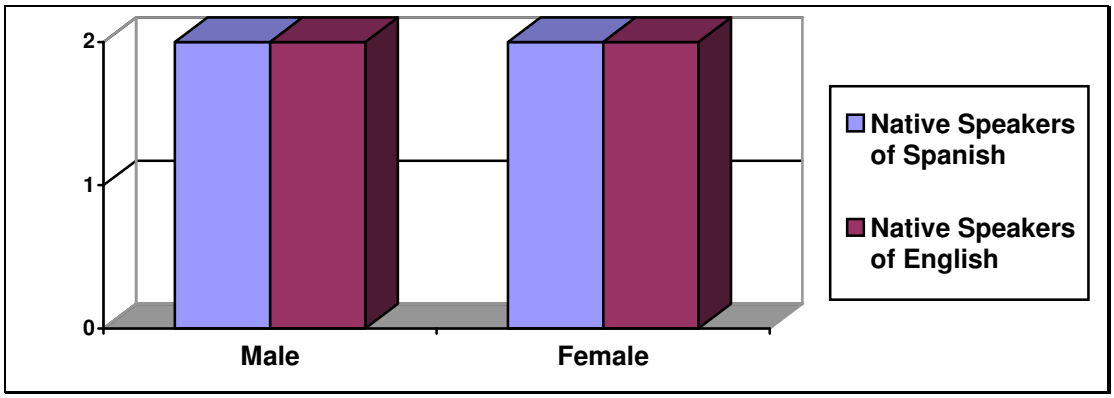
*Instructors.* The participants included eight instructors from Spanish 102 (first-year, second semester Spanish) and eight instructors from Spanish 202 (second-year, second semester Spanish). The instructors were chosen based on a stratified random sample in which all instructors were divided up into two groups: native speakers of

English and native speakers of Spanish teaching the two levels of Spanish 102 and 202.. From this division, four classes where the instructor was a native speaker of English and four classes where the instructor was a native speaker of Spanish were randomly chosen from both Spanish 102 and Spanish 202, for a total of 16 different classes. All of the instructors initially chosen in the stratified random sample agreed to participate, except for one instructor from Spanish 102 and one from Spanish 202. The native English-speaking instructor from Spanish 102 who declined to participate stated that it was due to time constraints, due to some errors in the syllabus for the class that did not give the class enough time to cover the material for the first exam and also participate in the study. Due to this concern, I randomly selected another native English-speaking instructor from the Spanish 102 level. The native English-speaking instructor who declined from Spanish 202 was hesitant about being video-taped and reluctantly agreed to participate if no other instructors accepted but expressed concern about having the class recorded. Due to this concern, I randomly selected another native-English speaking instructor from that level.

All of the instructors were given a demographic survey (see Appendix B) as part of the data collection regarding their background both in regards to their educational experience and also their language learning and teaching background. The survey also included questions concerning their first language, parents' countries of origin, language proficiency in both English and Spanish, experience abroad, teaching of other languages or disciplines, etc. Regarding the gender of the Spanish 102 instructors, four of the instructors were female and four were male. For the native Spanish-speaking 102 instructors, there were two female instructors and two male instructors. For the native

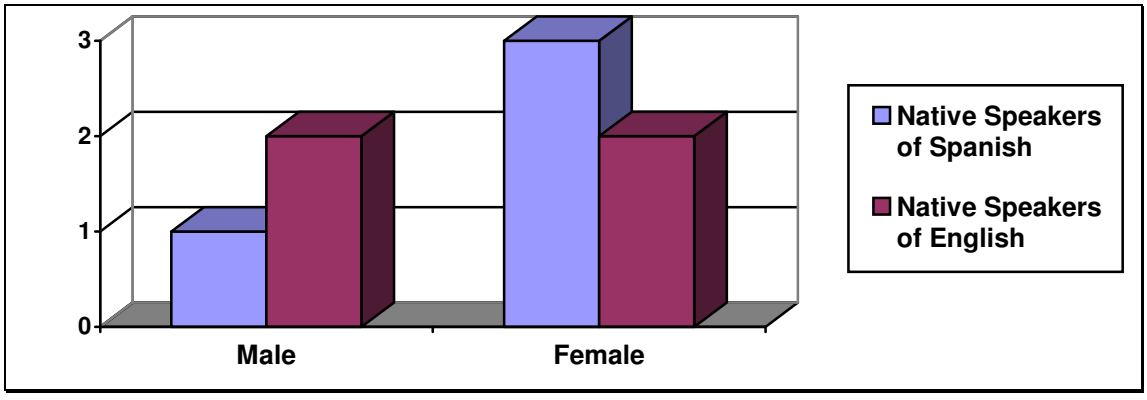
English-speaking instructors, there were also two male and two female instructors (see Figure 3.1).

**Figure 3.1 Gender of Spanish 102 Instructors**




Regarding the gender of the Spanish 202 instructors, five of the Spanish 202 instructors were female and three were male. For the native Spanish-speaking 202 instructors, there were three female instructors and one male instructor. For the native English-speaking instructors, there were two male and two female instructors (see Figure 3.2).

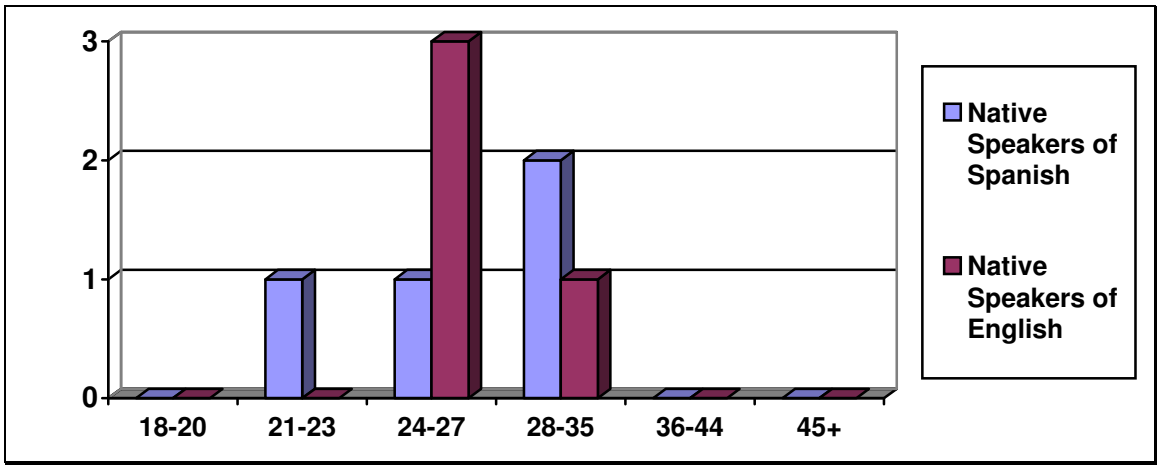
**Figure 3.2 Gender of Spanish 202 Instructors**




All of the 102 instructors were between the ages of 21-35. For the native Spanish-speaking 102 instructors there was one participant between the ages of 21-23, one

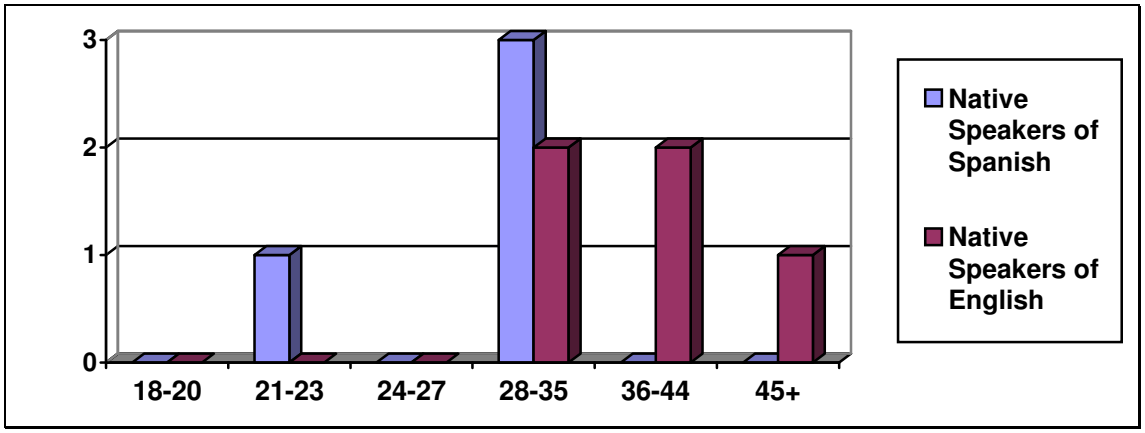
between the ages of 24-27, and two between the ages of 28-35. For the native English - speaking 102 instructors there were three participants between the ages of 24-27 and one between the ages of 24-27 (see Figure 3.3).

**Figure 3.3 Age Range of Spanish 102 Instructors**



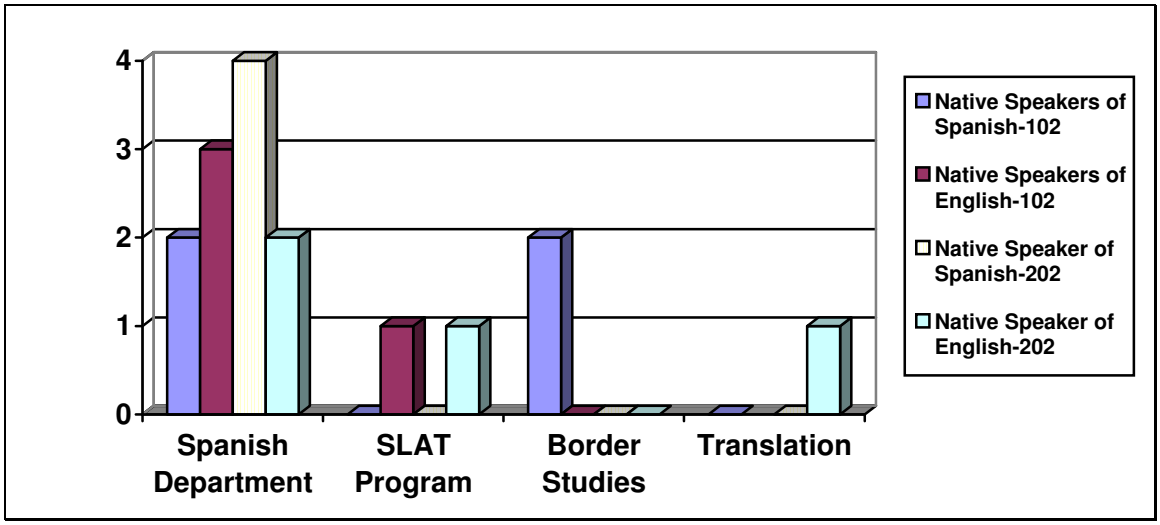

All of the 202 instructors were between the ages of 21-35 with the exception of two instructors. For the native Spanish-speaking 202 instructors there was one participant between the ages of 21-23 and three were between the ages of 28-35. For the native English-speaking 202 instructors there were two participants between the ages of 28-35, one between the ages of 36-44, and one over the age of 45 (see Figure 3.4). The Spanish 202 instructors tended to be older than the Spanish 102 instructors because the Spanish 202 classes are generally assigned to instructors who have been in the program for some amount of time.

**Figure 3.4 Age Range of Spanish 202 Instructors**



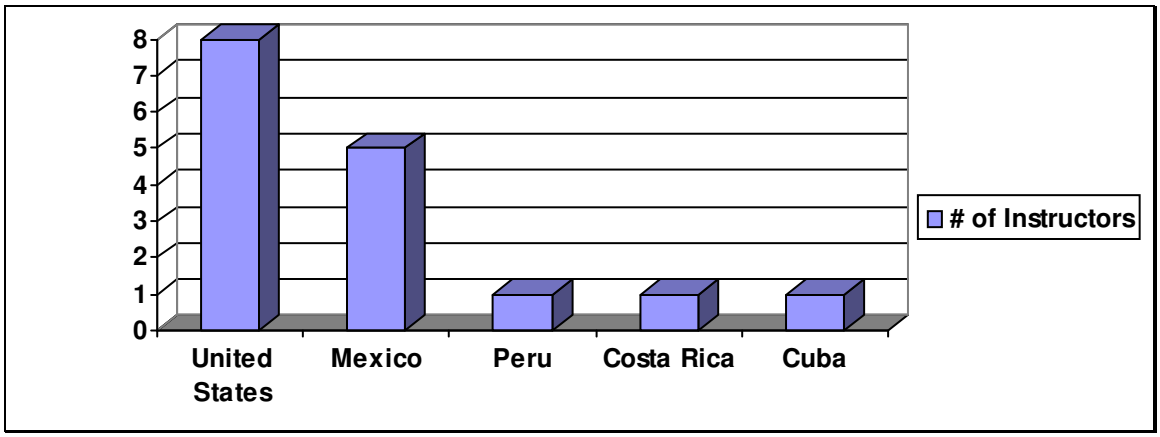

All of the participants but one had completed a BA, MA or PhD degree in Spanish (literature, linguistics, translation, or pedagogy) prior to teaching in the Fall 2005 semester at the University of Arizona. The one instructor who had not completed a degree in Spanish had completed his BA in engineering and was a native speaker of Spanish. All of the instructors of Spanish 102 and Spanish 202 were graduate students with the exception of one who had just recently graduated from a PhD program in translation and was working as an adjunct professor. Of the sixteen instructors, eleven were members of the Spanish and Portuguese Department (five of these students were MA students and the other six were PhD students); two were pursuing degrees in the interdisciplinary PhD program in Second Language Acquisition and Teaching (SLAT); two of the instructors were pursuing a PhD in Border Studies; the final instructor was the aforementioned recent graduate with a PhD in translation (see Figure 3.5).

**Figure 3.5 University Departments and Programs of Spanish 102 and 202 Instructors**




The native Spanish-speaking instructors were from a variety of countries, with five being from Mexico (one of these was from a town on the United States-Mexico border who grew-up speaking Spanish and learned English at a later date), one from Peru, one from Costa Rica, and one from Cuba. The other eight participants were from different parts of the United States (see Figure 3.6).

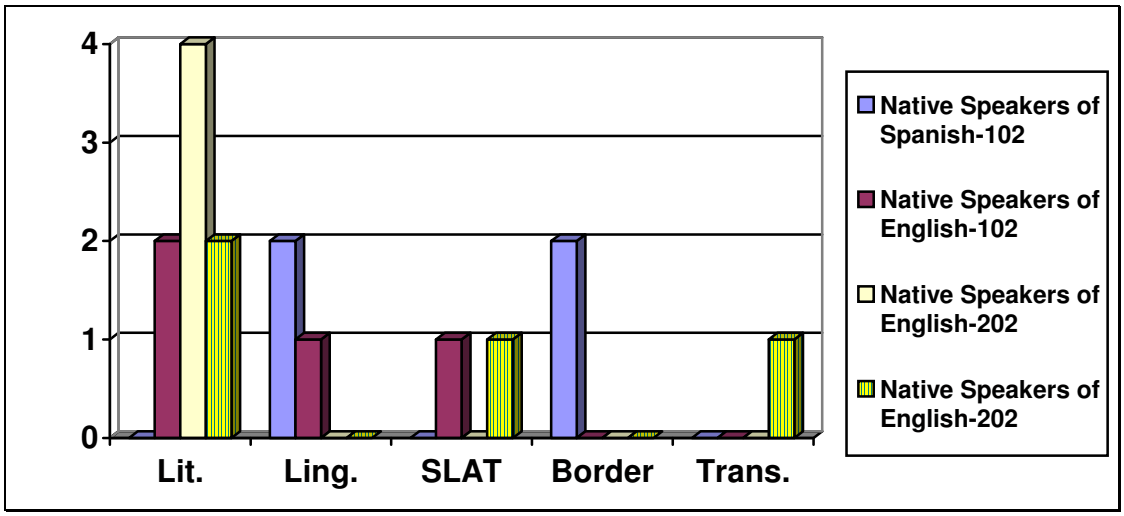
**Figure 3.6 Country of Origin of the Instructors**




The native English-speaking instructors had all learned Spanish as a foreign language with only two of the participants having begun learning Spanish before the age of 12. They had different accents in Spanish based on the region of the Spanish-speaking world where they had lived or studied i.e., Chilean, Mexican, Peninsular, etc. All of these instructors were living in Tucson at the time of the study and exposed to the majority Mexican accent of the region, due to the proximity of the university to the Mexican border.

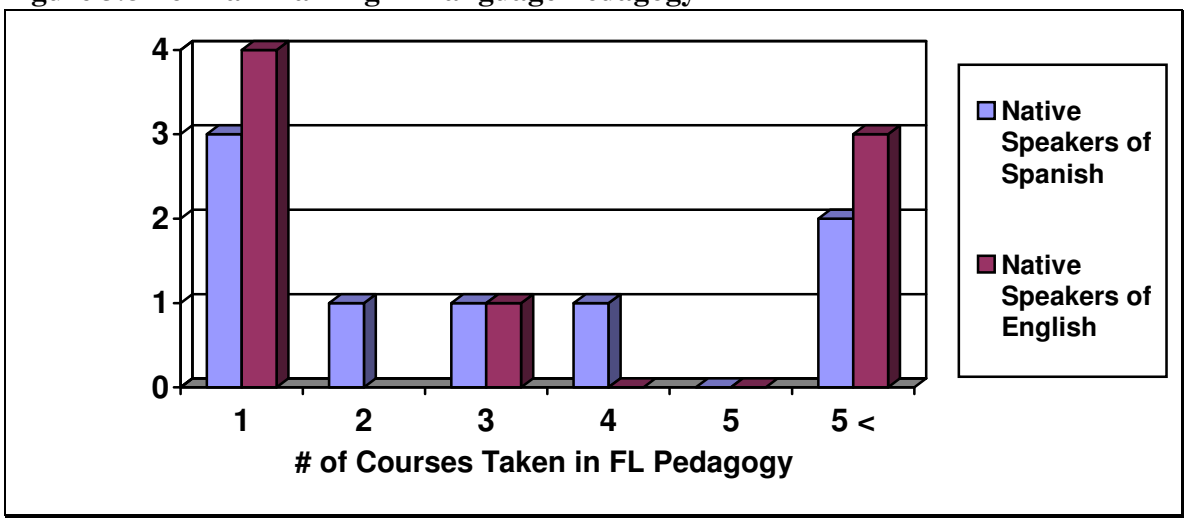
Given the literature focus of the Spanish and Portuguese Department at the University of Arizona, eight of the eleven instructors in the department chosen for this study were pursing advanced degrees in literature with only three of the instructors pursing advanced degrees in linguistics. The other instructors as previously mentioned were pursuing degrees in border studies, language acquisition, and translation.

**Figure 3.7 Fields of Study of Spanish 102 and 202 Instructors**



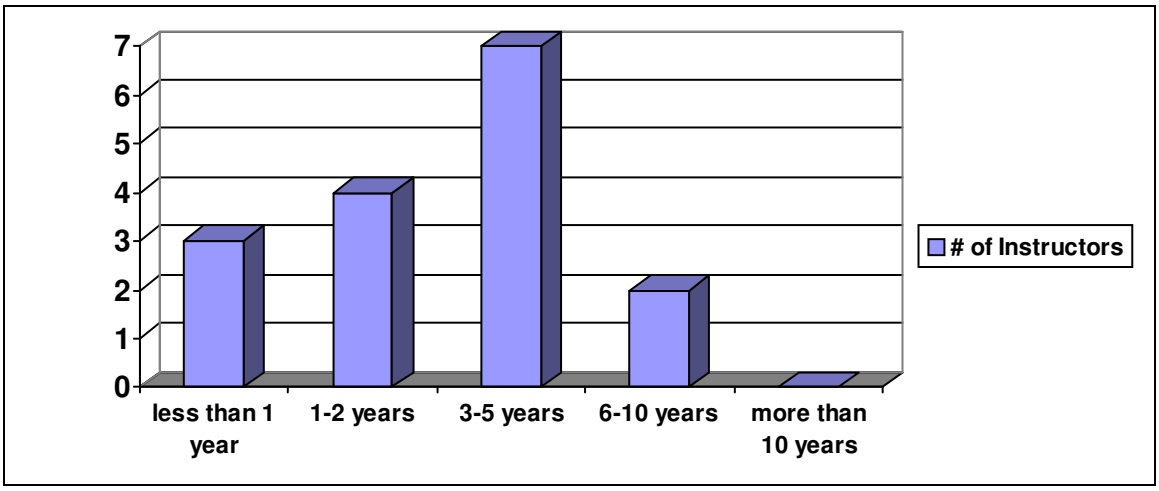

All of the instructors are required to take a course on language pedagogy during their first semester of teaching unless they can provide evidence of previous course work in classroom pedagogy. For five of the instructors, the required course was their only work in language pedagogy. The other instructors showed a great deal of variation in background ranging from two to more than five classes in language pedagogy. (see Figure 3.8).

**Figure 3.8 Formal Training in Language Pedagogy**



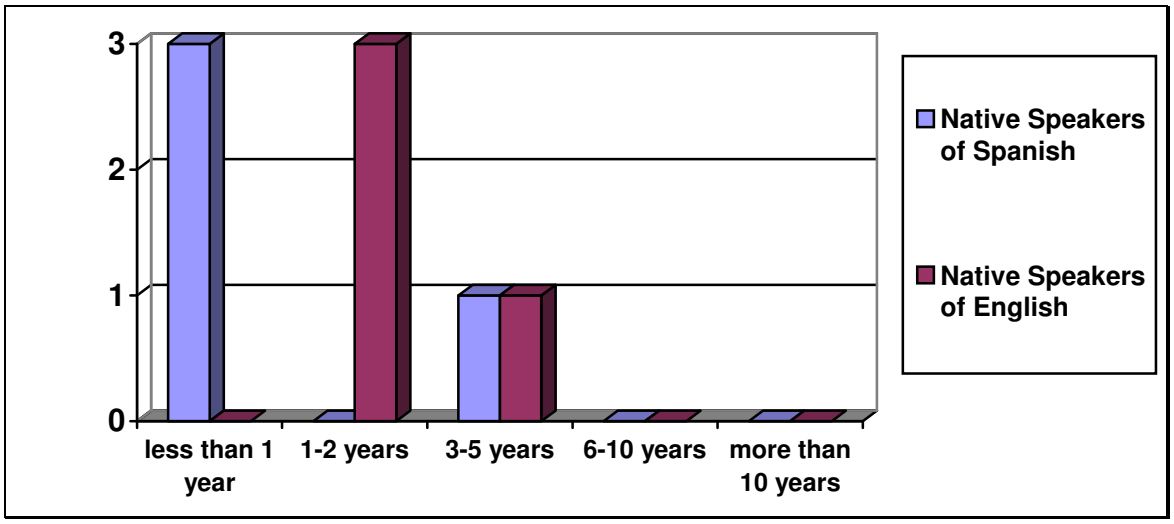

The instructors also had a wide variety of language teaching experience. As previously mentioned all of the instructors were teaching Spanish at the time of the study but seven of them had experience teaching other languages such as French and ESL. Additionally, nine of the instructors had taught subjects other than Spanish, such as theater, history, technology, linguistics, GED courses, and culture courses. Experience in teaching Spanish ranged from less than 1 year to 10 years of experience (see Figure 3.9).

**Figure 3.9 Overall Experience Teaching Spanish as a Foreign Language**



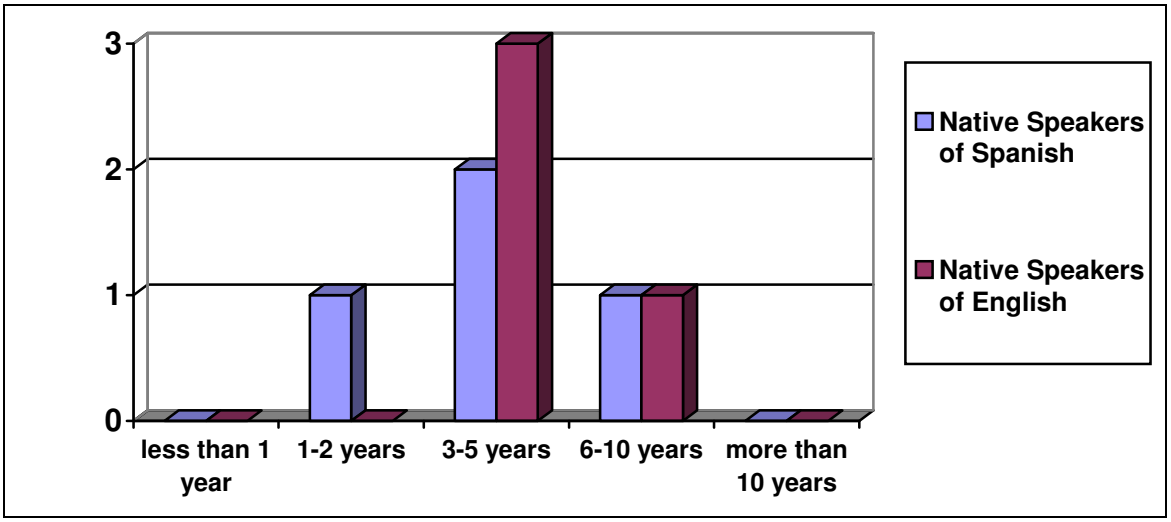
The experience teaching Spanish also varied according to level. For the native Spanish-speaking 102 instructors, one had taught Spanish for 3-5 years and the other three had taught Spanish for less than one year. For the native English-speaking 102 instructors, one had taught for 3-5 years and the other three had taught for 1-2 years (see Figure 3.10).

**Figure 3.10 Experience Teaching Spanish as a Foreign Language for Spanish 102 Instructors**



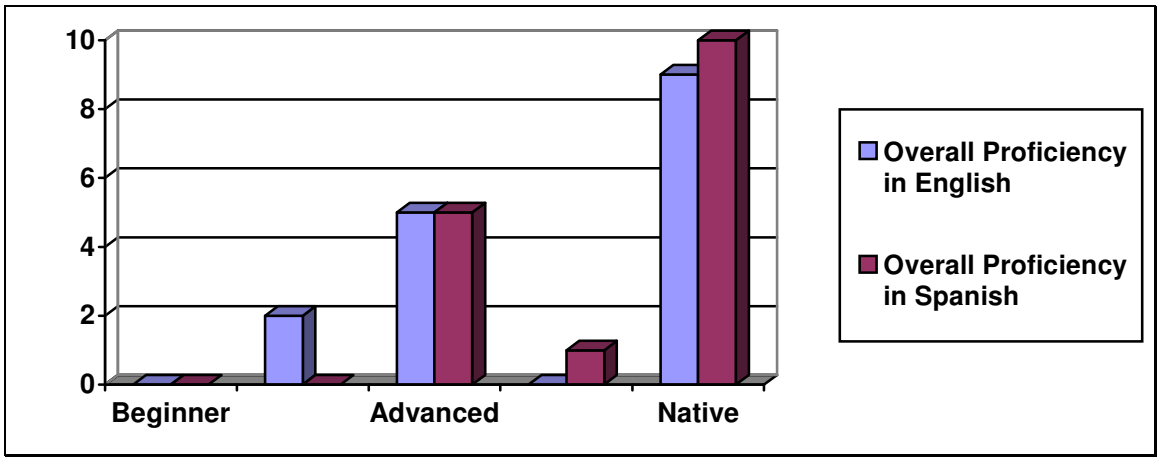

As previously mentioned, the Spanish 202 instructors tended to be older and had been in their particular programs for a greater length of time and thus had more experience teaching. For the native Spanish-speaking 202 instructors, one had taught Spanish for 3-5 years and the other three had taught Spanish for less than one year. For the native English-speaking 102 instructors, one had taught for 3-5 years and the other three had taught for 1-2 years (see Figure 3.11).

**Figure 3.11 Experience Teaching Spanish as a Foreign Language for Spanish 202 Instructors**



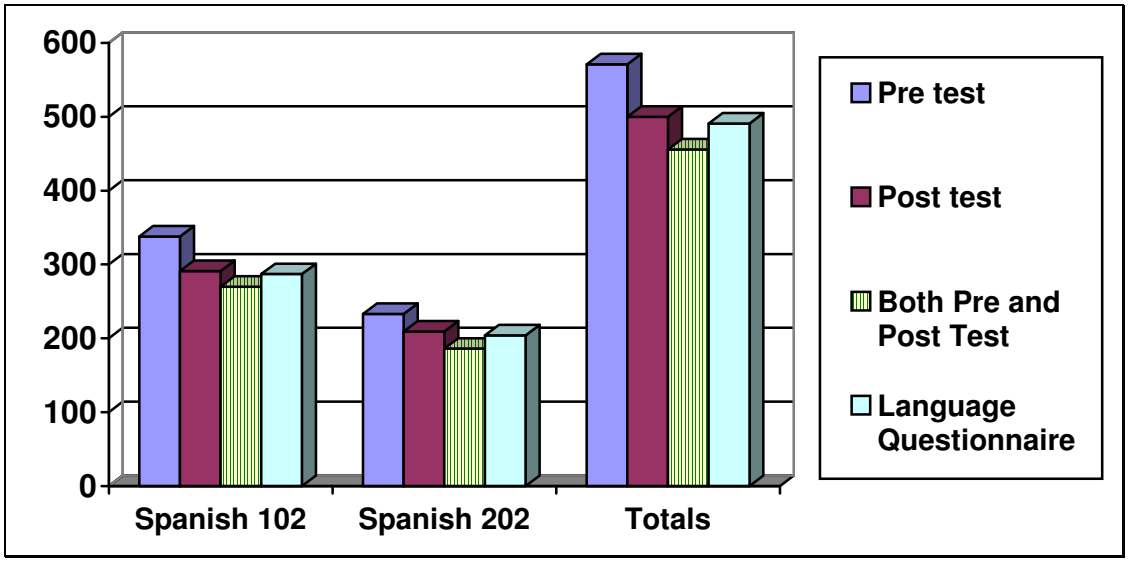

The instructors were also asked to evaluate their proficiency in both English and Spanish as part of the demographic survey that was given to them. The instructors classified themselves from intermediate to native regarding their level of overall language proficiency. The figure below shows how the instructors are divided into their self-assessed proficiency. It is important to remember that half of the instructors are native-speakers of Spanish and half are native-speakers of English and thus identify themselves as such. However, it is interesting to note that three of instructors who were not native speakers of English or Spanish classified themselves as native even though they were born outside of a country where Spanish or English is the L1 (see Figure 3.12). All of those who classified themselves as near-native, advanced, or intermediate speakers of English or Spanish were non-native speakers of that language.

**Figure 3.12 Instructors' Self-Assessed Proficiency in English and Spanish**




*Students.* A total of 29 classes participated in the study, with sixteen classes from Spanish 102, and thirteen classes from Spanish 202. A total of 571 students took the listening pre-test to measure their listening ability as they started in either Spanish 102 or 202. This listening test was administered during the first three weeks of the semester. Of those 571 initial participants, a total of 456 completed both the pre and post-tests. Of these 270 were enrolled in Spanish 102 and 186 were enrolled in Spanish 202 (see Figure 3.13). The larger numbers in Spanish 102 reflect of the University of Arizona's language requirement of two or four semesters for almost all BA and BS degrees. Each Spanish class had an average of about 20 students at the beginning of the semester, with the Spanish 102 classes showing a greater degree of attrition than the Spanish 202 classes. All of the students in Spanish 102 and 202 had taken previous courses in Spanish either at the university or at the secondary level.

**Figure 3.13 Student Participation in Pre- and Post-Tests and Language Questionnaire**

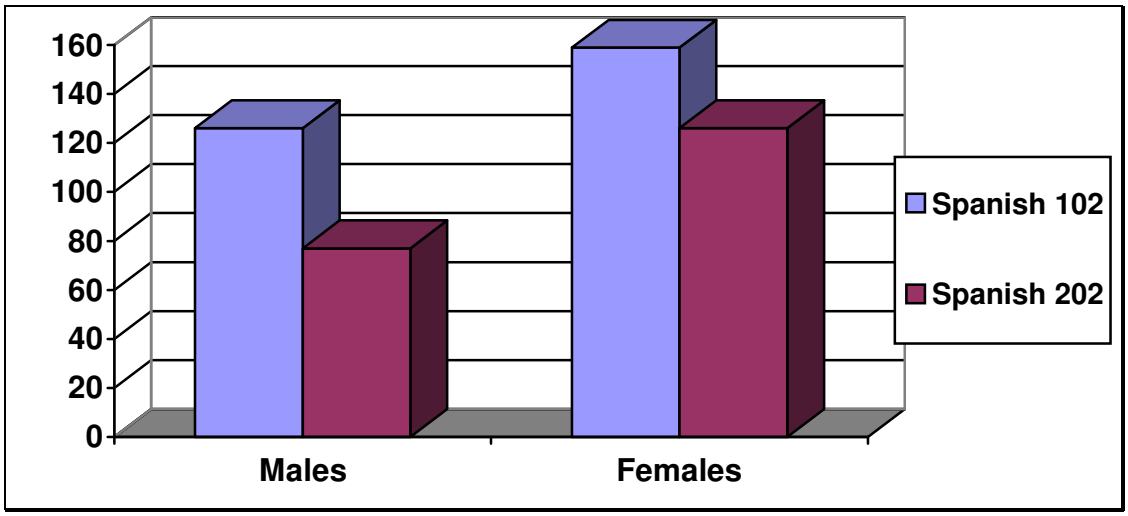



A total of 500 students took the post-test and of these 491 completed the Student Language Questionnaire which included the demographic information (see Appendix A). The discrepancy between the number who took the post-test (500) and the number who completed both the pre- and post-test (456) is due to the fact that some students were not present for the pre-test but then were present for the post-test and questionnaire. Previous Spanish experience is a requirement for the placement of students into Spanish 102 and Spanish 202. All of the incoming freshman are given a placement test where they are placed into Spanish 102 or higher if they have had any previous Spanish language learning experience.

The demographic information for the students comes from the questionnaire that was given at the end of the study for all of the students who completed the post-test. Of the 287 Spanish 102 students who completed the questionnaire, 126 were male and 159 were female; two students did not state their gender. Of the 204 Spanish 202 students

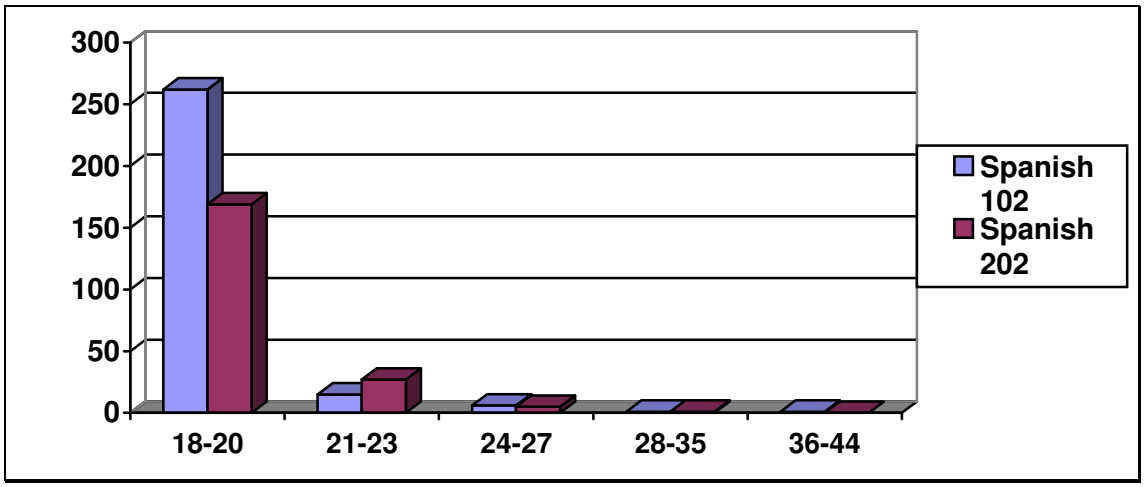
who completed the questionnaire, 77 were male and 126 were female and one student did not answer the question (see Figure 3.14).

**TABLE 3.14 Gender of Student Participants**




In regards to the age of the participants in Spanish 102, 262 (91%) of the participants were between the ages of 18-20; 15 (5%) of the participants were between the ages of 21-23; 6 (2%) between the ages of 24-27; one between the ages of 28-35; and one between the ages of 36-44 (see Figure 3.13). Two students did not give their age. For the Spanish 202 students, 169 (83%) of the participants were between the ages of 18-20; 27 (13%) of the participants were between the ages of 21-23; 5 (2%) of the participants were between the ages of 24-27; and one participant was between the ages of 28-35 (see Figure 3.15). Also, two participants did not give their age.

**Figure 3.15 Ages of Student Participants**

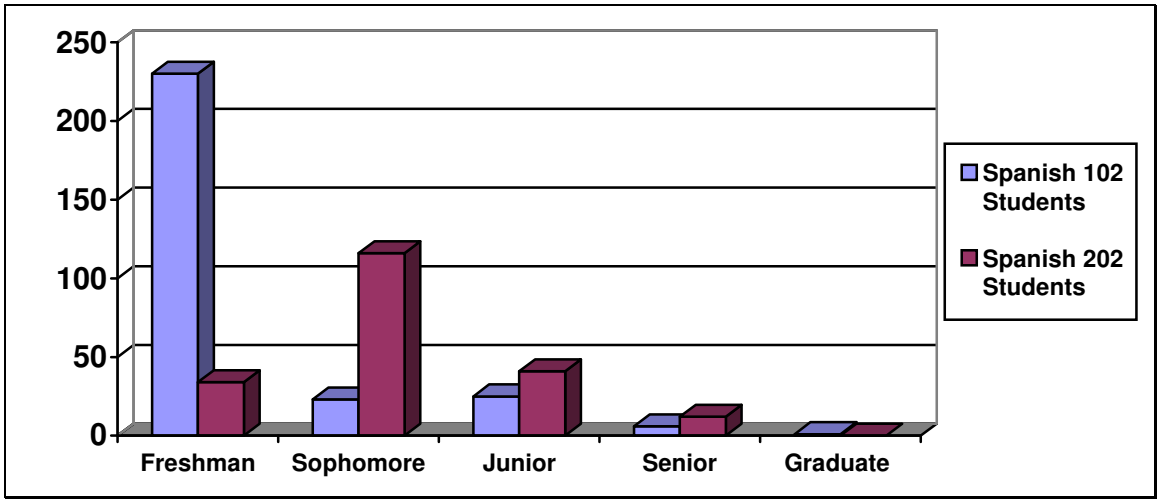



The University of Arizona has a large Spanish heritage speaker population. Because of this, the Spanish and Portuguese Department has implemented a heritage language track that corresponds more or less to the non-heritage track. The University of Arizona offers several classes at all levels specifically designed for Spanish heritage speakers so as to better address the different needs of the heritage population. Because of the Spanish heritage learner track and careful screening as students enter into the university, the classes in this study had very few students (26 total between Spanish 102 and 202) who would be classified as heritage learners. This small number was not excluded from the study, due to the fact that these students had varying language abilities and the percentage (5.7%) of those who completed both tests was relatively low.

The students in the study were at all different levels in regards to academic year in school (freshman, sophomores, juniors, etc.). The majority of students was attempting to complete their language requirement as part of their basic general education curriculum that they have to complete during their first two years and thus included a high

percentage of freshmen and sophomores. In this study, 54% (264 students from Spanish 102 and 202) of the participants were freshman, and 28% (139 students from Spanish 102 and 202) were sophomores. However, there are many students who delay the language requirement or who change majors and thus end up taking the classes at a later point in their academic careers (see Figure 3.16). Only 13% (66 students from Spanish 102 and 202) of the students were juniors and 3% (18 students from Spanish 102 and 202) were seniors, with only one graduate student enrolled in Spanish 102. There were also three students who did not indicate their academic status. They are not included in Figure 3.16.

**Figure 3.16 Students' Academic Year in School**




*Data Collection*

The data were gathered during the Fall 2005 semester at the University of Arizona. As previously mentioned, sixteen instructors were chosen for this study. All of the instructors but two were teaching two courses at the same level. The instructors were told that only one of their classes was going to be video-recorded. However, if they were

teaching two classes of the same level, then all of their students could participate in all of the other phases of the study i.e., pre-test, post-test, questionnaire, and demographic information. All eight of the Spanish 102 instructors included both of their class in all of the different parts of the study described below, and five of the Spanish 202 instructors included both of their sections. Two of the other Spanish 202 instructors only had one class at that level, and the remaining teacher chose only to include one of the classes that was being taught. A total of 29 classes participated in the study.

The data gathering consisted of several different phases. 1) The 29 different classes that agreed to participate took a listening proficiency exam at the beginning of the semester. 2) Sixteen classes were video-recorded three times during the semester. 3) After the completion of all of the video-recordings, the students in all 29 classes took a post-test listening exam. 4) After the completion of the post-test listening exam, all of the participants, both teachers and students, completed a questionnaire about their perceptions of L1 and TL use in the classroom, their beliefs about L1 and TL use in the classroom, and their demographic information. 5) Six of instructors were interviewed regarding their actual language usage in the classroom.

All of the instruments were tested and changes were made during a pilot study that took place during the summer of 2005. Students were given the instruments and asked to complete them and comment on parts that they found to be confusing or not relevant. Their considerations were considered and changes were made. Also, other instructors were consulted with on the instruments used by the teachers and they were

piloted with several teachers whose comments were again considered in the final version of the instruments.

*Instrumentation*

Several instruments were designed and used in this study in order to both measure the student listening gains and in looking at student and teacher beliefs and perceptions of language usage. Additionally, the demographic questionnaires had to be developed in order to obtain a better understanding of the educational and pedagogical background of the students and teachers in the study.

*Listening pre- and post-test.* In order to measure the students' changes in listening proficiency over the course of the semester and determine what factors influenced these changes; the students were given a pre- and post-listening test. The listening test that was used in this study was developed by the Center for Advanced Research on Language Acquisition (CARLA), located at of the University of Minnesota. This test was purchased from CARLA in order to measure the proficiency of students in this study at the beginning and end of the Fall 2005 semester. This Contextualized Listening Assessment (CoLA) is part of the Minnesota Language Proficiency Assessments (MLPA) series of tests developed for the purpose of measuring the second language proficiency of secondary and post-secondary students. The MLPA were designed to measure the proficiency of students at two different levels. The first level is aimed at the ACTFL proficiency level of Intermediate-Low. This exam was designed to measure the proficiency of students graduating from Minnesota secondary schools or for students as an exit proficiency exam after their completion of the first year at the university. The

second exam was designed and rated as a proficiency test for those students who have completed two years of university Spanish to determine if they had met the requirements set forth by their school or university. The second exam is aimed at the ACTFL proficiency level of Intermediate-Mid to Intermediate-High.

I chose to use the first exam even though the students in Spanish 202 would have been candidates for the second exam, due to the fact that they were completing their second year at the university and should have been in the ACTFL range of Intermediate-Mid to Intermediate-High. The reason for this decision was based on two factors: First, I chose the lower level exam because I felt that it was sufficiently difficult to challenge both the Spanish 102 and 202 students; second, I did not want to choose an exam that was so difficult for the Spanish 102 students as to discourage them in their language learning because they were only able to answer a few questions correctly. However, because of the choice of the lower-level exam, the range of gain in the Spanish 202 students was much narrower.

On the CARLA website, a detailed description is given of all of the proficiency tests they have designed. They refer to the exam as CoLA which stands for contextualized listen assessment. The listening test is described in the following way:

> The CoLA is a 35-item assessment in which test-takers listen to mini-dialogues organized around a story line and respond to multiple-choice questions. The characters in the story engage in a variety of real-life interactions appropriate for assessing proficiency at the Low and Intermediate-High levels. Each situation is contextualized through the use of photographs and advance organizers. It will be

available in French, German, and Spanish in a computer-administered format only (http://carla.acad.umn.edu/assessment/MLPA/CoLA.html. Retrieved on 03/06/06). Not only do pictures accompany the text, there is also a brief explanation in English of the setting to help the listener understand better the context. For each of the 35-questions, a question is given in English along with four possible answers also given in English. The test-taker simply has to listen and click on the correct response and then on another arrow to move to the next question. The listener cannot move to the next question until the dialogue has been completed. This prohibits someone from merely clicking the same answer on all of the questions and hurrying through the test. The listener must listen to each prompt at least once in order to answer the question. Each of the listening prompts is in the TL (Spanish) and lasts about 30-seconds. This is to avoid too long of a prompt where memory becomes more of a factor than comprehension. The reason English was used in the questions and possible answers was to attempt to limit the test modality to that of listening and not introduce the variable of reading in the TL into the test. Due to the fact that the test is being sold and is copyrighted, it is not possible to list the questions and answers. Sample questions can be found on the CARLA website to demonstrate the setup of each of the questions (http://carla.acad.umn.edu/assessment/MLPA/mlpa2.html). All of the questions followed the same format. Additionally, the designers were careful to incorporate several features so as to reduce test anxiety among the students and thus lower not only the affective filter but also help with the natural nervousness that surrounds the taking of most types of exams.

> Test takers control when the recorded segments are played by clicking on an icon; in this way, they have time to employ test taking strategies, such as activating schema in anticipation of what they will hear, reading the question before listening, etc. (http://carla.acad.umn.edu/assessment/MLPA/CoLA.html. Retrieved on 03/06/06.).

The test also allowed the students to listen to the test two times; however, due to the time constraints of using regular 50-minute classes, the students only had enough time to listen to each question once. This was also done in order to maintain a degree of reliability among the test takers, in that all of the students were only exposed to each item one time. If students had been allowed to choose how many times they wanted to listen to each test (one or two times), that would have introduced an element of variation, because some students would have chosen to listen to every question twice while others listened only once. In spite of the fact that students were instructed to only listen to each segment once, the possibility does exist that some of the students did listen to one or more of the questions twice because it was not possible to disable that feature. I walked around during all of the test taking to answer questions, and I did not observe anyone listen to a segment more than once.

The same test was used for both the pre-test and the post-test in this study. This does introduce the possibility of a testing effect wherein the students were able to remember the questions or information from the pre-test and thus score higher on the post-test because of this recollection. While this is a concern, I felt that because the students were given the pre-test during the first couple of weeks during the semester and

the post-test was given in the last couple weeks, sufficient time (around three months) had passed to minimize the re-call effect. Most of the students had even forgotten how the test worked, requiring me to explain the instructions again. I viewed that as a positive sign that they were unlikely to recall many of the questions from the first administration. Additionally, the students had taken as part of their normal course work many different tests, both of listening and other skills, so as to help minimize any effect from taking the same test again. I also chose to use the same test so as to measure improvement on an instrument that had been calibrated and tested as reliable and valid at the levels of the courses that I was researching. The CARLA center had already done extensive testing and calibration of the instrument thus making it an excellent choice for this study.

*The language questionnaire.* After the third and final recording of the classes, all of the students were brought back into a computer lab to take the post-test. Upon completion of the post-test, each student (see Appendix A) and teacher (see Appendix B) was given a questionnaire regarding their beliefs and perceptions about L1 and TL use in the classroom. The questionnaires also asked students and teachers to analyze not only their beliefs about the most effective way for learners to acquire listening proficiency but also to carefully evaluate what they perceived in regard to their own L1 and TL use in the classroom as well as the language use of the other members of the classroom. Additionally, students and teachers were asked to give their opinion on what purposes they thought appropriate for L1 use, and if they believed that the amount being used in different interactions in the classroom was appropriate. The language questionnaire was adapted from a questionnaire developed by Levine (2003) for a study on teacher and

students' beliefs and attitudes toward L1 and TL use in the classroom. Levine included questions on student anxiety in his original questionnaire. These questions were, however, not included in the questionnaire administered for this study. In addition, using the research finding of Macaro (2001) and Duff & Polio (1990, 1994), I adapted the questionnaire to fit the population and goals that I had established, including new questions that I needed answered for my study. This questionnaire was used to determine both students and teachers perceptions of L1 and TL in the classroom as well as their beliefs about what should be the role of the L1 and TL in the classroom. This information was used to correlate perceptions and beliefs about language teaching with actual data gathered from the classroom recordings.

The questionnaire is basically divided in two parts. The first thirteen question for the students and teachers elicited their perception of language use in the classroom in different settings and involving different activities within the classroom environment. These questions were designed on a scale of 0% to 100% and the participants checked the box that most accurately reflected the range they considered appropriate for language usage in class for each particular question. The second part of the questionnaire was a Likert-type scale from one (strongly disagree) to five (strongly agree), where the participants could express their agreement or disagreement with a statement according to some point on the scale. I purposely chose the five-point Likert-type scale to give participants the alternative of choosing a middle option i.e., more neutral choice. The final section of the questionnaire contained questions regarding situations where the

participants thought that English usage would be appropriate. Also, the instructors were asked to list the top three reasons why they used the TL (Spanish) in the classroom.

*Demographic questionnaire.* Additionally, the demographic information for both instructors (see Appendix E) and students (see Appendix D) was collected and included questions regarding educational background, gender, teaching experience (for the instructors), previous Spanish classes (for the students), etc. The demographic information requested from students was considerably shorter than the demographic information for the instructors. Other information requested from the instructors that was not requested from the students were questions regarding pedagogical training, teaching method/approach, English and Spanish proficiency, and other areas related to teacher training and language experience.

*Methods*

*Listening pre-test.* After the stratified random selection of the Spanish instructor participants, all of the 16 instructors took their classes to a computer lab for the listening pre-test. The majority of teachers had their students take the test during the second week of classes, but a few of the teachers were unable to have their students take the test until the beginning of the third week. The first week of classes was not used for pre-testing due to the enrollment changes that take place in certain classes. The test was administered during the normal class time. This was done in order to obtain the maximum number of participants possible. Even though participation in the study was optional, almost all of the students who were enrolled agreed to participate, due in large part to the fact that participation did not require additional time outside of the classroom. Also, all of the

instructors were very supportive of the research project and encouraged their students to participate fully in the study.

During the pre-test, students were brought by their instructors into a computer lab. Instructions were given to the students both orally as well as written on a white board in English. The students were not asked for any personal identifying information on the test. However, for linking their pre- and post-test later, they were asked to write in the month and day they were born, plus the first three letters of their mothers' name. This was done to maintain anonymity and still make it possible to link all parts of the study. The test took students between 30-35 minutes on average with some students taking up to 40 minutes. The main source of variation in the test was the amount of time that students took to input the requested information, read through the instruction section, and do the practice exam. Once the students started the actual listening test, they took about 25 minutes to complete it. The test was on the computer and students had individual headphones on which they were able to adjust the sound to the level that was optimal for their listening. The exam had an instruction section, a practice exam, and then 35 multiple-choice questions which formed the actual exam.

*Video-recordings.* After all of the classes had taken the pre-test, eight classes from each level of Spanish 102 and 202 (for a total of 16 classes) were video-recorded during the Fall 2005 semester. Although some of the teachers had two classes take the pre-test, only one of their classes was chosen to be video-recorded. These classes were chosen randomly. Spanish 102 and Spanish 202 are 50-minute classes, with each class being

video-recorded a total of three times during the Fall 2005 semester for a total of 48 classes and 40 hours of classroom instruction.

The three video-recordings were done during different points in the semester to measure whether or not the instructors changed in their language usage during the semester. Due to the requirements of the human subjects division at the University of Arizona, the instructors were informed that the study was looking at teacher and student interactions in Spanish and English but not anymore specific. The first recording took place during the first month of classes; the second recording during the second month of classes; and the third recording was done during the last month of classes. The instructors were informed in advance that the researcher would be recording on a given day. This was done in order to insure that the instructor was conducting a more standard class as opposed to showing a movie or writing a composition during the entire hour, making the recording of such a class useless for this study. Instructors were asked to conduct class in a normal manner, in spite of the video camera. I generally recorded classes from the back of the room in order to be out of the line of sight of the students, and also in order to distract the students to the least degree possible. A digital video-camera was used to facilitate the transfer of the data to an electronic format and to obtain the highest quality sound and picture possible. Video-recording was chosen as the method of gathering data, due to the rich nature of the interactions that can only been captured through video. The researcher personally carried out all of the recordings except one, due to a scheduling conflict.

The instructor was video-recorded during the entire class period while lecturing and in all interactions with the students, both individually and as a class. Additionally, all of the students' interactions with the instructor were recorded. The students were also recorded in their group work; however, due to the fact that twenty or more students were talking at the same time, the transcription of this data was not possible. Instead of transcribing the full data, patterns in overall language usage by selected students in groups were noted and included in the data analysis.

All of the student and teacher interactions were transcribed in their entirety in order to determine the percentages of L1 and TL usage, and for analysis of the language usage. Several of the studies previously cited in this study (Duff & Polio, 1990, 1994; Macaro, 2001; Levine, 2003) employed a sampling technique in their transcription, I chose to do complete transcription of all of the interactions between the teachers and students in order to better understand not only the percentages of language usage, but also the communicative purpose of each utterance and each interaction between student and teacher. The type of conversation analysis that was used for the transcription was based on the CHILDES Project (http://childes.psy.cmu.edu/). However, this was simply the framework that was used for this study. The data in this study were not coded for all of the features of speech that were found in the classes but rather the focus was more on the utterances and especially the code-switches of the teachers and students. Some of the conversation analysis coding that was left out involved pauses, error coding, and morphological features of the speech. These were not coded in this study due to the fact that these were not needed to answer the research questions but will be for future research.

All of the speech was transcribed exactly as it was spoken including errors in pronunciation and grammar. The information gathered from the recordings was used not only to measure the amount of L1 and TL use by both students and teachers but also to compare what the students and teachers perceived to the actual language use in the classroom.

*Listening post-test.* After the third video-recording of each class, all of the instructors brought their students back to the computer lab to take the listening post-test during a regularly scheduled class hour. The students were again given oral and written instructions. The post-test took students between 30-35 minutes to complete again with some students taking up to 40 minutes. Again, the difference in the length of time to take the exam was due mainly to the fact that some students spent longer on the instructions and sample test than others. A 50-minute time limit was given for the pre- or post-test but students did not need that long to complete the test. All of the test results were electronically recorded and compared with the initial pre-test to measure listening proficiency gains during the course of the semester.

*Students' language questionnaire.* After completing the post-test, the students were given a written questionnaire (see Appendix A) eliciting their beliefs regarding L1 and TL use in the classroom, as well as their perception regarding their teacher's and their own L1 and TL use. The questionnaire consisted of 26 questions about the aforementioned beliefs and perceptions. The questionnaire also contained a demographic information section (see Appendix D) that the students completed after the first part of the questionnaire. Completion of the questionnaire took between 5-8 minutes, with the

slower students taking up to 12 minutes to complete it. The questionnaire was given after completion of the video-recordings so as not to influence the students into acting a certain way during the recordings or perceiving that they needed to act a certain way for the study. Also, administering the questionnaire at the end of semester gave the students the whole semester to observe their instructors' linguistic behavior and help to determine an opinion regarding how languages are best learned in regards to language usage in the classroom.

*Teachers' language questionnaire.* While the students were completing the post-test and the language questionnaire, each teacher was given a similar questionnaire (see Appendix B) regarding beliefs about language learning as well as their perceptions about how the L1 and TL were used in the classroom, both by them and their students. The questionnaire was similar to the students' questionnaire, with a few additional questions. The demographic information (see Appendix E) that followed the teachers' questionnaire was much more detailed into questions regarding not only demographic information but also information on teaching experience, pedagogical training, and language proficiency. The teachers completed the questionnaire generally in around 15 minutes. Teachers completed one questionnaire for each class that participated in the pre- and post-tests. The second questionnaire (See Appendix C) elicited only the information that was different for the second class such as questions regarding the amount of the L1 or TL used in different activities, beliefs about student language use in a particular class, etc. Given that the first questionnaire that the teachers completed contained questions regarding general beliefs about language acquisition, it was not necessary to include

those same questions in the second questionnaire. Also, the demographic information section was removed, because that information remained constant for both classes.

*Summary*

In conclusion, the data have shown that there are still many discrepancies between different researchers as to not only the results of the different studies but also the conclusions as to the use of the L1 and the TL in the classroom. Most of the researchers conclude that the majority of the speech needs to be in the TL; however, the view of the exclusive use only of the TL is not supported by many researchers. In addition, the use of language choice has also been presented through the lens of code-switching and how L1 and TL use share many of the same features that are associated with variation according to addressee and the use of style as distinctiveness. The research has shown that language choice does share many of the same features as

# CHAPTER 4

# DATA ANALYSIS

## *Introduction*

The transcribed classroom data were analyzed and categorized in two different ways. First, I analyzed the usage of both English and Spanish in the classroom based on Auer's (1984, 1995, and 1998) method of bilingual conversation analysis. As this approach suggests, special attention was given to the point within the interactional episode where code-switching takes place. The events and actions prior to the switch and immediately following the switch were carefully analyzed to determine what factors appear to have influenced the code-switch. I based part of the analysis on Gumperz's (1982) notion of contextualization clues, which deals with how speakers consciously and unconsciously use code switching to advise their interlocutors of the social and situational context of the conversation.

The analysis in the classes in this study are not the same types of interactions that Gumperz (1982) and Auer (1984, 1995, and 1998) studied, due in large part to the fact that the setting in which the research took place was the FL classroom and the students had relatively limited bilingual ability. Ervin-Tripp (2001) states, "Those who study code-switching like to reserve the term for maximally bilingual speakers who are known to have parallel options in both codes" (p. 46). The instructors who participated in this current study do have high language proficiency and would more accurately represent the more proficient learners to whom Gumperz's and Auer's approaches of bilingual analysis have been applied. However, the students in this current study have a much lower

proficiency than in most of the research conducted by Gumperz and Auer who have worked with a more proficient bilingual population in a community setting. Because of the low language proficiency of the students in this study compared to those who Gumperz and Auer typically study with a much higher proficiency, their approaches to bilingual conversation analysis and description were used only as a broad framework in the data analysis. The special focus on the context before and after the switch helped to determine the proper coding of each of the switches. Merely looking at the switches in isolation from the rest of the text would not have provided the necessary information to classify each switch according to the categories that were chosen.

Additionally, I categorized the utterances in the L1 and the TL into different groups based on the preliminary classification in the aforementioned research by Polio & Duff (1994) where they divided the different usages of the L1 into eight distinct types. Finally, the questionnaires were analyzed using ANOVA and 2-sample t-tests to determine if significant differences exist between the students' and the teachers' perceptions of language usage in the classroom and actual language usage. Correlation coefficients, multivariate repeated measures, multi-variant ANOVA, and regression analysis were used to analyze the different variables that may have influenced language use in the classroom (e.g. class level, education level, experience teaching, etc.). Two-sample t-tests were also used to determine if there is a significant difference in the types of code-switches that occurred in the classroom.

The data are presented according to the different research questions that were proposed by this study in the first chapter. Each of the research questions is restated at the

beginning of the data analysis section that pertains to that question. All of the questions were answered based on the recordings, tests, and questionnaires that were completed in the fall of 2005.

Research Question #1.

*How much L1 and TL are used by the instructors in the FL language classroom and how much L1 and TL are used by students in their interactions with their instructor?*

The 16 instructors and their students showed a great deal of variation between their use of the L1 and TL according to both instructional level and also individual differences. There were also differences found between native Spanish-speaking instructors and native English-speaking instructors that will be examined. This section is divided according to both level in regards to language use and also according to native language of the instructor in order to draw attention to any differences that exist. The totals that are given are a summation of the three observations of each of the 16 teachers, including all of the spoken interactions between teachers and students that were recorded during each of the three recordings.

*Class Level.* The teachers' and students' language use was analyzed according to the different levels that they were teaching or studying in order to determine the amount of L1 and TL they were using in the classroom.

*Spanish 102.* At the Spanish 102 level, the teachers produced varying amounts of language in the L1 and TL. The sum of the three classes was used to determine the results presented in Table 4.1. It was found that the teachers varied in using Spanish in interactions with the students from almost exclusive use of the TL to only using Spanish

58% of the time. Table 4.1 displays the variation among the Spanish 102 teachers and students. The numbers given represent the quantity of words that the teachers and students used in a particular language. The students varied in the amount of L1 and TL use also, with the students producing significantly fewer words than their instructors. This finding is somewhat expected, given that the data considered reflected student and instructor interactions in whole class activities and not while the students were in small groups or pairs. Of the Spanish 102 instructors, three used the same amount or more English in the classroom than their students. For this study, each instructor received a alphanumeric code in order to maintain anonymity, such as 1NES1. This code means that the teacher's number is 1, as represented at the beginning of the code. Additionally, this instructor is a native English-Speaker (NES) and the number 1 following this code signifies that this is a Spanish 102 instructor. The native Spanish-speaking instructors (NSS) were also classified the same way. Those instructors of Spanish 202 also have a similar code with the change consisting of a 2 following the letter code to represent the Spanish 202 level. Every code is unique to each of the 16 instructors and is used throughout the remainder of this study.

**Table 4.1 Spanish 102 Teachers' and Students' Use of Spanish and English**

| Instructor | Teachers' Word Total of Spanish | Teachers' Word Total of English | Percentage of English Use | Students' Word Total of Spanish | Students' Word Total of English | Percentage of English Use |
|---|---|---|---|---|---|---|
| 1NSS1 | 3655 | 1045 | 22% | 1220 | 283 | 19% |
| 1NES1 | 5469 | 56 | 1% | 706 | 355 | 33% |
| 2NSS1 | 5436 | 182 | 3% | 864 | 193 | 18% |
| 2NES1 | 8817 | 1181 | 12% | 1123 | 224 | 16% |
| 3NSS1 | 7533 | 27 | 0.3% | 1409 | 109 | 7% |
| 3NES1 | 3044 | 1445 | 32% | 970 | 439 | 31% |
| 4NSS1 | 5352 | 3879 | 42% | 1411 | 1391 | 50% |
| 4NES1 | 3031 | 403 | 12% | 1339 | 187 | 12% |
| Average | 5292.13 | 1027.25 | 16% | 1130.25 | 397.63 | 23% |

Key: NES = Native English Speaker; NSS = Native Spanish Speaker; 1 at the end of instructor code = Spanish 102 level; the initial number = number of the participant

*Spanish 202.* At the Spanish 202 level, the teachers also produced varying amounts of language in regard to the number of words in the L1 and TL and the percentages of usage of the L1 and TL. Table 4.2 shows that the teachers varied from using Spanish in interactions with the students from almost exclusive use of the TL to only using Spanish 45% of the time. The students varied in the amount of L1 and TL use also, with the students again producing significantly fewer words than the instructors. As previously mentioned, this finding is somewhat expected, given that the interactions that were considered reflected student and instructor interactions in whole group instruction together and not while the students were in small groups or pairs.

The students varied from as little as 3% English usage in the class to as much as 72% English usage. Of the Spanish 202 instructors, only one of the instructors (1NSS2) used the same amount of English in the classroom as the students. This instructor and the students only used English 3% of the time. Each Spanish 202 instructor received a similar alphanumeric code to those of the Spanish 102 instructors. The identifying code of 1NES2 means that the teacher is native English-Speaker (NES) and the 2 that follows the descriptor means that this is a Spanish 202 instructor. The number at the beginning of each of these identifiers is the individual teacher's number, in this example the teacher's number is 1. The native Spanish-speaking instructors of Spanish 202 (NSS) were also classified the same way.

**Table 4.2 Spanish 202 Teachers' and Students' Use of Spanish and English**

| Instructor | Teachers' Word Total of Spanish | Teachers' Word Total of English | Percentage of English Use | Students' Word Total of Spanish | Students' Word Total of English | Percentage of English Use |
|---|---|---|---|---|---|---|
| 1NES2 | 2853 | 3517 | 55% | 1130 | 2864 | 72% |
| 1NSS2 | 6376 | 189 | 3% | 1817 | 60 | 3% |
| 2NES2 | 3283 | 63 | 2% | 922 | 94 | 9% |
| 2NSS2 | 7955 | 287 | 3% | 1065 | 664 | 38% |
| 3NES2 | 8738 | 92 | 1% | 3749 | 145 | 4% |
| 3NSS2 | 9160 | 67 | 1% | 1602 | 522 | 25% |
| 4NES2 | 6243 | 1212 | 16% | 2568 | 1130 | 31% |
| 4NSS2 | 11521 | 229 | 2% | 2062 | 173 | 8% |
| Average | 7016.125 | 707 | 10% | 1864.375 | 706.5 | 23.64% |

Key: NES = Native English Speaker; NSS = Native Spanish Speaker; 2 at the end of instructor code = Spanish 202 level; the initial number = number of the participant

When the Spanish 102 teachers and students and the Spanish 202 students and teachers were analyzed all together in their class units, several salient and statistically significant differences were found. The Spanish 202 classes produced more speech than the Spanish 102 classes. Of the total number of words produced by the teachers and students combined, the Spanish 202 classes produced 24% more language (Spanish and English combined) than the Spanish 102 classes. The Spanish 202 teachers produced over 25% more Spanish in the classroom and almost exactly the same amount of English as the Spanish 102 teachers. The average English use of the Spanish 102 teachers was 16% of their total word production, and the average English used in the Spanish 202 classroom represented 10% of the total speech production. Both the Spanish 102 instructors and the Spanish 202 instructors produced significantly more Spanish than their students. Using a repeated measures multivariate analysis, these factors resulted in a significant difference with $p = .007$.

Additionally, the Spanish 202 students produced significantly more Spanish than the 102 students with $p = .05$ using a two-sample t-test. The Spanish 202 students produced 39% more Spanish than their 102 counterparts. This may be expected due to the fact that the Spanish 202 students have a much more ample vocabulary to draw on in their speech. The Spanish 102 students used fewer words in English (44%) than the 202 students. However, because the Spanish 102 students also used less Spanish than the Spanish 202 students, they ended up using about the same percentage of English when compared to their Spanish usage. The total number of English words used by the Spanish 102 students represented 23% of their speech and the total number of English words used

by the Spanish 202 students represented 24% of their speech. Table 4.3 provides a summary of the language use of both the teachers and the students at both the Spanish 102 and 202 levels.

**Table 4.3 Spanish 102 and 202 Teachers' and Students' Use of Spanish and English in the Classroom**

| Level | Total Words | Total Words Spanish | Total Words English | Teachers' Use of Spanish | Teachers' Use of English | % of English Use Teachers | Students' Use of Spanish | Students' Use of English | % of English use Students |
|---|---|---|---|---|---|---|---|---|---|
| Span. 102 Total | 62778 | 51379 | 11399 | 42337 | 8218 | 16% | 9042 | 3181 | 23% |
| Span. 202 Total | 82352 | 71044 | 11308 | 56129 | 5656 | 10% | 14915 | 5652 | 24% |
| % ± Difference of Span. 102/Span. 202 | -24% | -28% | +1% | -25% | +45% | +49% | -39% | -44% | -1% |

*Native Language.* Another important consideration in this study was the effect of the instructors' native language on language usage in the classroom. The data in Table 4.4 highlight some of the differences that exist between both teacher and student use of Spanish and English where the teacher is a native speaker of English or where the teacher is a native speaker of Spanish. When analyzing data of the instructors who are native Spanish-speakers, the percentage of English use in the classroom varied from less than 1% to 42%. The students' with a native Spanish-speaking instructor use of English varied from 3% to almost 50%. It is also interesting to notice that the teacher (4NSS1) who used

the most English in the classroom had the students who also used the most English in the classroom. Table 4.4 provides a summary of the total number of words used in English and Spanish by the instructors and students.

**Table 4.4 Native Spanish-Speaking Teachers' and their Students' Use of Spanish and English**

| Teacher | Teachers' Word Use in Spanish | Teachers' Word Use in English | % of English Word Use Teachers | Students' Word Use in Spanish | Students' Word Use in English | % of English Word Use Students |
|---|---|---|---|---|---|---|
| 1NSS1 | 3655 | 1045 | 22.23% | 1220 | 283 | 18.83% |
| 2NSS1 | 5436 | 182 | 3.24% | 864 | 193 | 18.26% |
| 3NSS1 | 7533 | 27 | 0.36% | 1409 | 109 | 7.18% |
| 4NSS1 | 5352 | 3879 | 42.02% | 1411 | 1391 | 49.64% |
| 1NSS2 | 6376 | 189 | 2.88% | 1817 | 60 | 3.20% |
| 2NSS2 | 7955 | 287 | 3.48% | 1065 | 664 | 38.40% |
| 3NSS2 | 9160 | 67 | 0.73% | 1602 | 522 | 24.58% |
| 4NSS2 | 11521 | 229 | 1.95% | 2062 | 173 | 7.74% |
| Average of NSS | 7123.5 | 738.125 | 9.61% | 1431.25 | 424.375 | 20.98% |

When analyzing those instructors who were native English-speakers and their students, the percentage of English use in the classroom varied from 1% to up to 55%. The students' use of English with a native English-speaking instructor varied from about 4% to almost 72%. It is also interesting to note that the teacher who used the most English in the classroom had the students who also used the most English in the classroom. Instructor (1NES2) used English more than all the students in all of the

classes and also had the students who used English in the class more than any of the classes regardless of native language of the teacher. While this relationship between the teachers' use of the L1 and the students' use of the L1 can be seen in several of the cases (e.g. 2NES2, 3NES2, and 4NES2), a few classes do not reflect this relationship as consistently (see Table 4.5).

**Table 4.5 Native English-Speaking Teachers' and their Students' Use of Spanish and English**

| Teacher | Teachers' Word Use in Spanish | Teachers' Word Use in English | % of English Word Use Teachers | Students' Word Use in Spanish | Students' Word Use in English | % of English Word Use Students |
|---|---|---|---|---|---|---|
| 1NES1 | 5469 | 56 | 1.01% | 706 | 355 | 33.46% |
| 2NES1 | 8817 | 1181 | 11.81% | 1123 | 224 | 16.63% |
| 3NES1 | 3044 | 1445 | 32.19% | 970 | 439 | 31.16% |
| 4NES1 | 3031 | 403 | 11.74% | 1339 | 187 | 12.25% |
| 1NES2 | 2853 | 3517 | 55.21% | 1130 | 2864 | 71.71% |
| 2NES2 | 3283 | 63 | 1.88% | 922 | 94 | 9.25% |
| 3NES2 | 8738 | 92 | 1.04% | 3749 | 145 | 3.72% |
| 4NES2 | 6243 | 1212 | 16.26% | 2568 | 1130 | 30.56% |
| Average of NES | 5184.75 | 996.13 | 16.39% | 1563.38 | 679.75 | 26.09% |

In considering all of the classes, the total number of words used in the classroom by the native English-speaking instructors was compared with the total number of words used in the classroom by the native Spanish-speaking instructors. The total number of words reveal that there was more production of Spanish from the native Spanish-speaking

instructors overall, with these classes producing almost 30% more Spanish than the classes with native English-speaking instructors. Additionally, when measuring the English use by native English-speaking instructors and their students, these classes were found to use almost 46% more English than their counterparts with instructors who had native Spanish-speaking instructors. The native English-speaking teachers used 35% more English than the native Spanish-speaking teachers. However, one of the findings of interest is that the students who had a native English-speaking instructor did use 10% more Spanish in the classroom than those who had a native Spanish-speaking instructor. This may be the result of less intimidation on the part of the students that comes from the realization that their instructors learned Spanish as a second or foreign language also. In spite of the fact that the students of the native English-speaking instructors used more Spanish, they also produced 60% more English than those who had native Spanish-speaking instructors (see Table 4.6).

**Table 4.6 Native Spanish and Native English Speaking Teachers' and Their Students' Use of Spanish and English in the Classroom**

| Classes Taught By | Total Words | Total Words Spanish | Total Words English | Teachers' Use of Spanish | Teachers' Use of English | % of English Use Teachers | Students' Use of Spanish | Students' Use of English | % of English Use Students |
|---|---|---|---|---|---|---|---|---|---|
| NES Total | 66998 | 50904 | 13407 | 41478 | 7969 | 16.39% | 12507 | 5438 | 25.45% |
| NSS Total | 77592 | 71964 | 9199 | 56988 | 5905 | 9.61% | 11450 | 3395 | 20.98% |
| % ± Difference of NES / NSS | -13.6% | -29.3% | +45.74% | -27.22% | +34.95% | +70.57% | +9.23% | +60.18% | +21.34% |

Research questions #2.

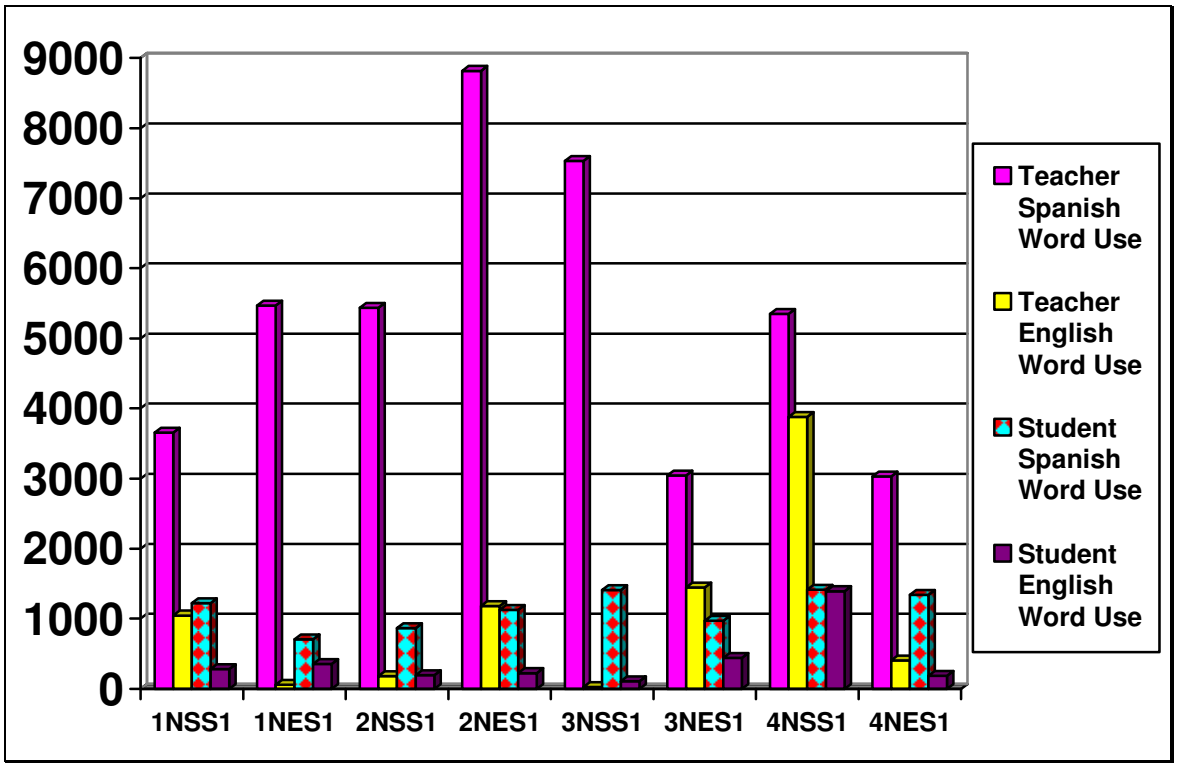
*What is the percentage of teacher talk to student talk in both the L1 and TL?* As described in the previous section, the teachers produced significantly more speech than the students regardless of level and native language. As already mentioned, this is due in large part to the fact that the role of the instructors at the basic language level is slightly different than it would be at the more advanced level, and students are more limited by their proficiency. The students in this study confirmed this in that they used much less language than their instructors. This question regarding the percentage of student talk to teacher talk was also addressed according to both course level and the native language of the instructors, in order to measure whether the influence of either of these factors played a role in the amount of teacher use of the L1 and the TL.

An important consideration in the design of this study was to measure instructors as they were addressing and interacting with their students as a class rather than when the students were working together in pairs or small groups. In spite of the group work not forming part of the transcription due to the nature of multiple people speaking at once in the classroom, all of the class time was recorded to see not only the amount of time that different classes spent in groups, but also to see how this compared with the overall time spent by the instructor addressing and working with the class. This measure was taken by combining all of the minutes that each class consisted of in every one of the three observations and then adding up the total amount of time spent in pairs or groups to see what percentage of the class actually consisted of the instructor interacting with the students, and what amount of time the students spent working together in small groups or pairs. When the teacher addressed individual students as they worked in pairs or small groups, those interactions were not transcribed because many students could not be heard due to the increased noise from working in small groups or pairs.

*Class level.* Table 4.7 shows the percentage of student talk and teacher talk. In the Spanish 102 level, the percentage of student talk in Spanish to teacher talk in Spanish varied from 12.74% to 44.18% of that of their instructors. The average in the Spanish 102 classroom was 24.50% meaning that the teachers used over 75% more Spanish than the students or that the student production of Spanish was about 25% of that of their instructors. Using a 2-sample t-test, the instructors used significantly more Spanish than their students ($p < .0001$). The percentage of English use by students and instructors resulted in a much greater range than the use of Spanish. The lowest percentage of

instructor use to student use was 18.97% by 2NES1, indicating that this instructor used over 80% more English than the students in the class. However, using 2-sample t-test to compare the difference between teachers' and students' English, the L1 use was not statistically different (p = .20). The other extreme case was 1NES1 where the students used more than 530% or 6 times more English than their instructor. It should be noted that the total overall words produced in English by both 1NES1 and the students of that class was quite low, thus causing the numbers to be deceptive when looking at percentages. The students in this class only produced 355 words in English and the instructor only produced 56 words in English. This finding accents some of the risks of only including percentages when analyzing data (see Figure 4.1).

**Figure 4.1 Spanish and English Usage by Instructors and Student in Spanish 102**



The average of the percentages of the Spanish 102 classes showed that the students used about 63% more English than their instructors. This result is again deceptive because of the use of percentages. If the average number of English word usage by the students is divided by the average number of English words used by the teachers, this gives a total of 38.71% meaning that the teachers used almost 62% more English words on average than the students. This discrepancy is due to the fact that the number of words used by the instructors in both English and Spanish was so much greater in most cases than the three cases where the students used more English (1NES1, 2NSS1, and 3NSS1), represent a large percentage but very small numbers in terms of word use. The average of the percentages of Spanish use (24.5%) is much closer to percentage of the overall average number of words in Spanish by the students, 1131, when compared to the overall number of words used by the instructors, 5293, which gives a percentage of 21.36%.

**Table 4.7 Spanish and English Usage by Instructors and Student in Spanish 102**

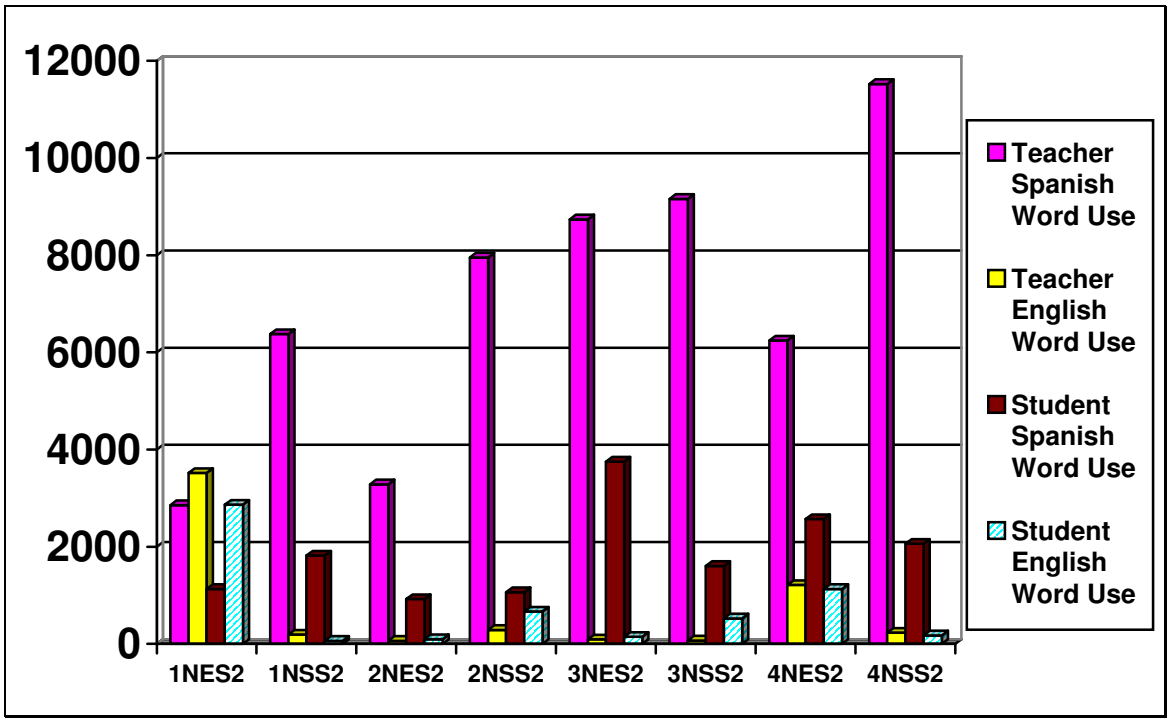
| Instructor | Teacher Spanish Word Use | Teacher English Word Use | Student Spanish Word Use | Student English Word Use | % ± Difference of Spanish Words of Student/Teacher | % ± Difference of English Words of Student/Teacher |
|---|---|---|---|---|---|---|
| 1NSS1 | 3655 | 1045 | 1220 | 283 | -66.62% | -72.92% |
| 1NES1 | 5469 | 56 | 706 | 355 | -87.09% | +533.93% |
| 2NSS1 | 5436 | 182 | 864 | 193 | -84.11% | +6.04% |
| 2NES1 | 8817 | 1181 | 1123 | 224 | -87.26% | -81.03% |
| 3NSS1 | 7533 | 27 | 1409 | 109 | -81.30% | +303.70% |
| 3NES1 | 3044 | 1445 | 970 | 439 | -68.13% | -69.62% |
| 4NSS1 | 5352 | 3879 | 1411 | 1391 | -76.64% | -64.14% |
| 4NES1 | 3031 | 403 | 1339 | 187 | -55.82% | -53.60% |
| Average | 5293 | 1028 | 1131 | 398 | -75.87% | +62.80% |

In the Spanish 202 level, the percentage of student talk in Spanish to teacher talk in Spanish varied from 13.39% of the teachers' use of Spanish to 42.90% (see Table 4.8). The average percentage of student use of Spanish to teacher use of Spanish in the classroom was 28.63% meaning that the teachers used about 71% more Spanish than the students or that the student production of Spanish was about 29% of that of their instructors. This result indicates a slightly higher percentage (4%) of student Spanish use than the Spanish 102 level. However, using a 2-sample t-test, this difference was statistically significant ($p = .0003$). The percentage of English use by students and instructors resulted in a much greater range than the use of Spanish. The lowest student

usage of English was 31.75% of that of their instructor (1NSS2), meaning that 1NSS2 used almost 70% more English than the students in the class. The other extreme was the class of 3NSS2 where the students used over 679% more English than their instructor (see Table 4.8).

It should be noted that the reason this is 679% more than their instructor and not 779% is because a total of 100% would indicate the same amount of usage by both students and teachers. Additionally, similar to the results in Spanish 102, the total number of words produced in English by both the teacher, 3NSS2, and the students of that class was quite low with the instructor using only 67 words and the students using only 522 words. These low numbers in this class skewed the percentage whereas for the instructor 1NES2, the percentage of 81.43% student to teacher English use does not represent the large amount of English words used by the students (2864 words) and instructor (3517 words) of the class (see Figure 4.2).

**Figure 4.2 Spanish and English Usage by Instructors and Students in Spanish 202**




The average of the percentages of the Spanish 202 classes showed that the students used about 100% more English words than their instructors. This result is again deceptive because of the use of percentages. If the average number of English words usage by the students is divided by the average number of English words used by the teachers, this gives a total of 100% or a ratio of 1:1 meaning that the teachers used the same number of English words on average as their students. This discrepancy is due to the fact that the number of words used by the two instructors whose students used the highest amount of English (3NSS2 and 2NSS2) represented a large percentage but a very small number of words. The average of the percentages of Spanish use (28.63%) is much closer to the percentage given by taking the overall average number of words in Spanish by the students, 1865, and comparing it to the overall number of words used by the

instructors, 7017, for a percentage of 26.58%. This total percentage is very similar to the Spanish 102 level average (21.36%).

**Table 4.8 Percentage of Spanish and English Usage by Instructors and Students in Spanish 202**

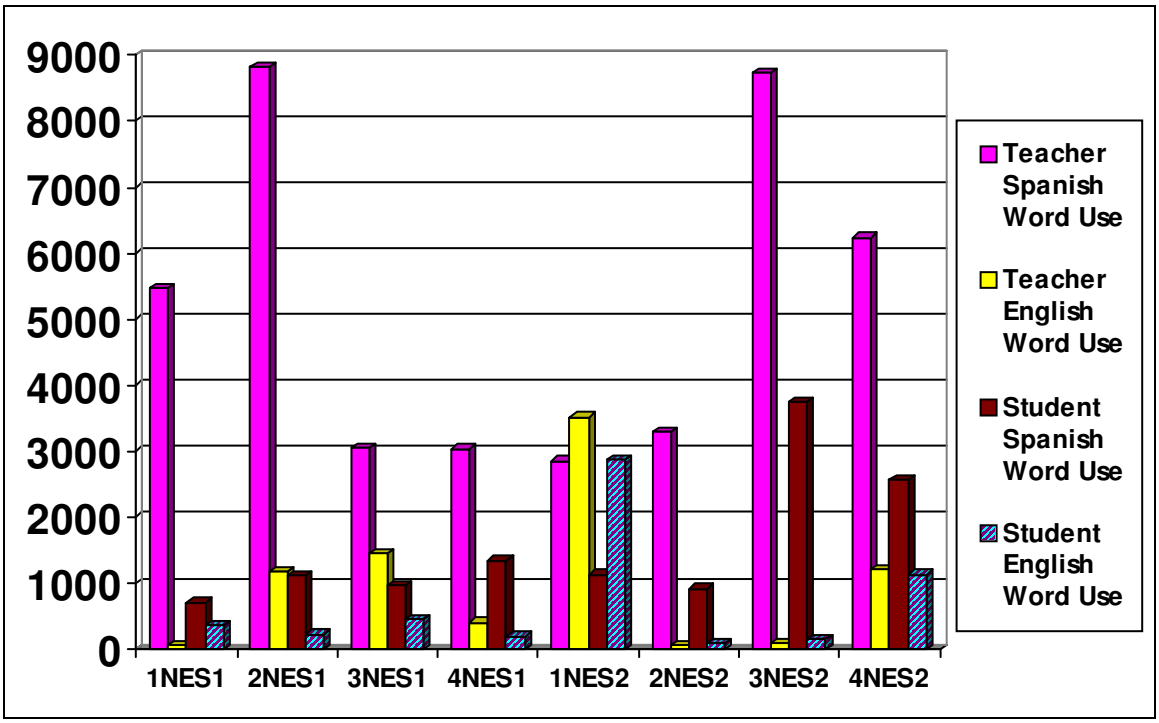
| Instructor | Teacher Spanish Word Use | Teacher English Word Use | Student Spanish Word Use | Student English Word Use | % ± Difference of Spanish Words of Student/Teacher | % ± Difference of English Words of Student/Teacher |
|---|---|---|---|---|---|---|
| 1NES2 | 2853 | 3517 | 1130 | 2864 | -60.39% | -18.57% |
| 1NSS2 | 6376 | 189 | 1817 | 60 | -71.50% | -68.25% |
| 2NES2 | 3283 | 63 | 922 | 94 | -71.92% | +49.21% |
| 2NSS2 | 7955 | 287 | 1065 | 664 | -86.61% | +131.36% |
| 3NES2 | 8738 | 92 | 3749 | 145 | -57.10% | +57.61% |
| 3NSS2 | 9160 | 67 | 1602 | 522 | -82.51% | +679.10% |
| 4NES2 | 6243 | 1212 | 2568 | 1130 | -58.87% | -6.77% |
| 4NSS2 | 11521 | 229 | 2062 | 173 | -82.10% | -24.45% |
| Average | 7017 | 707 | 1865 | 707 | -71.37% | +99.90% |

*Native Language.* When using the native language as a point of comparison for the percentage of Spanish to English use, several distinctions are salient as to some of the differences between native Spanish-speaking instructors and native English-speaking instructors. With the native English-speaking instructors the percentage of student talk in Spanish to teacher talk in Spanish varied from 12.91%, with the instructor 1NES1, of the teachers' use of Spanish to 44.18%, with the instructor 4NES1 (see Table 4.9). The average in the native English-speaking instructor classroom was 31.68%, meaning that

the teachers used about 69% more Spanish than the students or that the student production of Spanish was about 31% of that of their instructors. This result is 10% higher than the native Spanish-speaking instructors' classes, meaning that in the classes of the native English-speaking instructors students produced a higher percentage of Spanish when compared to their instructors; however, the difference between instructor Spanish use and student Spanish use was greater for the instructors in all cases.

The percentage of English use by students and instructors varied much more than the percentage of their use of Spanish. The lowest usage was 18.97% of that of their instructors, meaning that instructor 2NES1 used over 80% more English than the students in the class. The other extreme was a class where the students used 563% more English than their instructor 1NES1. It should be noted again that, as was already mentioned, the total overall number of words produced in English by both the teacher and the students was quite low in this class thus skewing the percentage. The average of all Spanish classes with native English-speaking instructors showed that the students used about 51% more English than their instructors.

**Figure 4.3 Spanish and English Usage by Native English-Speaking Instructors and their Students**




The averaged of the percentages of the native English-speaking instructors' classes showed that the students used about 51% more English than their instructors. This result is again deceptive because of the use of an average of the percentages. If the average number of English words usage by the students is divided by the average number of English words used by the instructors, this gives a total of 68.20% meaning that the teachers used almost 22% more English words on average than their students. This discrepancy is due to the fact that the number of words used by the three instructors whose students used the highest amount of English (1NES1, 2NES2, & 3NES2) represented a large percentage but a very small number of words. The average of the percentages of Spanish use is much closer to the percentage given by comparing the overall average number of words in Spanish by the students, 1564, to the overall number

of words used by the instructors, 5185, for a percentage of 30.16% which is very similar to the average given in Table 4.9.

**Table 4.9 Percentage of Spanish and English Usage by Native English-Speaking Instructors and Their Students**

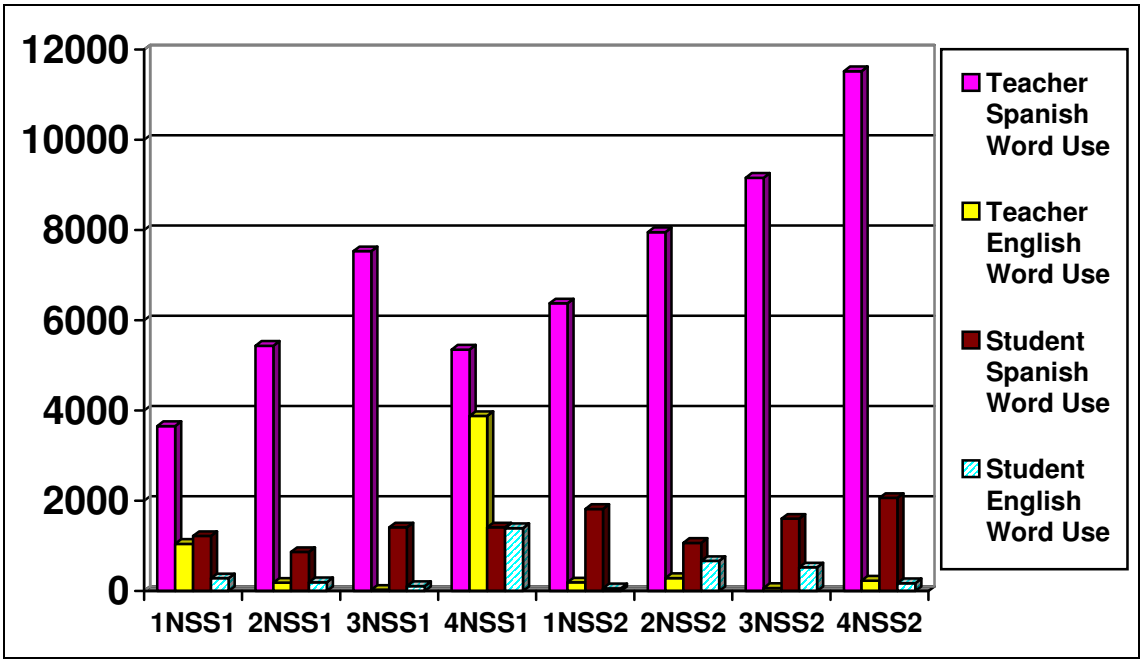
| Instructor | Teacher Spanish Word Use | Teacher English Word Use | Student Spanish Word Use | Student English Word Use | % ± Difference of Spanish Words of Student/Teacher | % ± Difference of English Words of Student/Teacher |
|---|---|---|---|---|---|---|
| 1NES1 | 5469 | 56 | 706 | 355 | -87.09% | +533.93% |
| 2NES1 | 8817 | 1181 | 1123 | 224 | -87.26% | -81.03% |
| 3NES1 | 3044 | 1445 | 970 | 439 | -68.13% | -69.62% |
| 4NES1 | 3031 | 403 | 1339 | 187 | -55.82% | -53.60% |
| 1NES2 | 2853 | 3517 | 1130 | 2864 | -60.39% | -18.57% |
| 2NES2 | 3283 | 63 | 922 | 94 | -71.92% | +49.21% |
| 3NES2 | 8738 | 92 | 3749 | 145 | -57.10% | +57.61% |
| 4NES2 | 6243 | 1212 | 2568 | 1130 | -58.87% | -6.77% |
| Average | 5185 | 997 | 1564 | 680 | -68.32% | +51.40% |

With the native Spanish-speaking instructors, the percentage of student talk in Spanish to teacher talk in Spanish varied from 13.39% of the teachers' use of Spanish with instructor 2NSS2 to 33.38% of that of their instructors' use of Spanish with instructor 1NSS1 (see Table 4.10). The average in the native Spanish-speaking instructors' classroom was 21.45% meaning that the teachers used about 79% more Spanish than the students or that the student production of Spanish was about 21% of that of their instructors. As previously mentioned, this result is 10% lower than the native

English-speaking instructors' classes, meaning that in the classes taught by native English-speaking instructors, the students produced a higher percentage of Spanish when compared to their instructors.

The percentage of English use by students and instructors varied considerably more than the use of Spanish. The lowest usage was 27.08% of that of their instructors, meaning that instructor 1NSS1 used over 72% more English than the students in the class. The other extreme was instructor 3NSS2 where the students used more than 679% more English than their instructor (see Figure 4.4).

**Figure 4.4 Spanish and English Usage by Native Spanish-Speaking Instructors and their Students**




The average of the percentages of the native Spanish-speaking instructors' classes showed that the students used about 111% more English than their instructors. It should be noted again that, as was already mentioned, the total overall words produced in English by instructor 3NSS2 and the students was quite low in this class thus skewing the

percentage. This result is deceptive because of the use of an average of the percentages. If the average number of English words used by the students is compared to the average number of English words used by the students, this gives a total of 57.51% meaning that the teachers used almost 43% more English words on average than their students. This discrepancy is due to the fact that the number of English words used by the three instructors whose students used the highest amount of English (3NSS1, 2NSS2, & 3NSS2) represented a large percentage but a very small number of words. The average of the percentages of Spanish use is much closer to the percentage given by comparing the overall average number of words in Spanish by the students, 1432, to the overall number of words used by the instructors, 7124, for a percentage of 20.08%.

**Table 4.10 Percentage of Spanish and English Usage by Native Spanish-Speaking Instructors and Their Students**

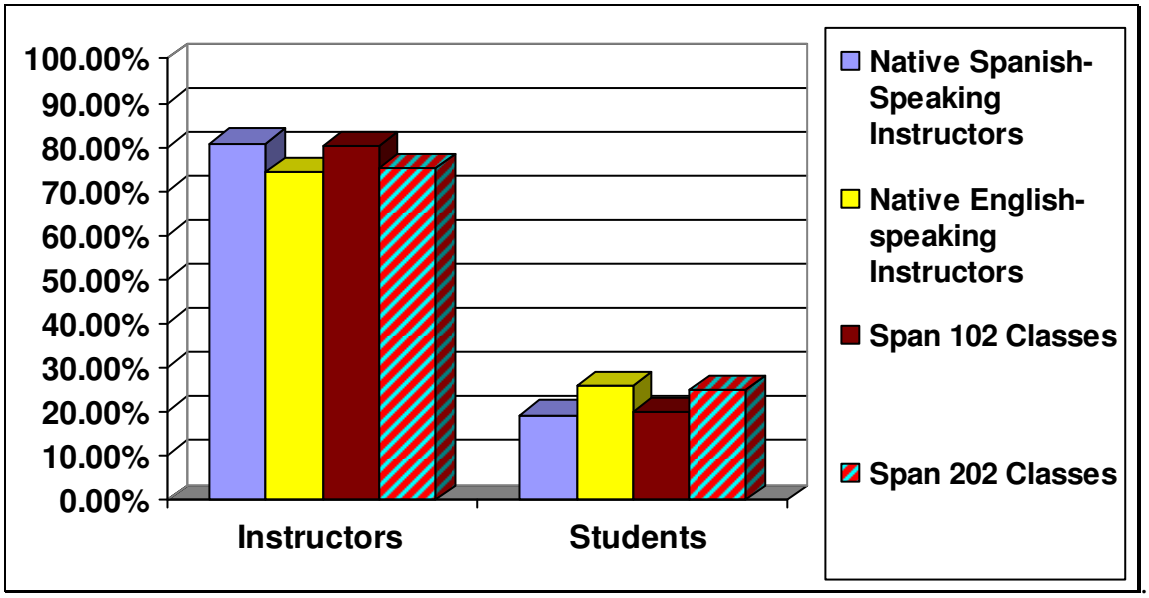
| Instructor | Teacher Spanish Word Use | Teacher English Word Use | Student Spanish Word Use | Student English Word Use | % ± Difference of Spanish Words of Student/Teacher | % ± Difference of English Words of Student/Teacher |
|---|---|---|---|---|---|---|
| 1NSS1 | 3655 | 1045 | 1220 | 283 | -66.62% | -72.92% |
| 2NSS1 | 5436 | 182 | 864 | 193 | -84.11% | +6.04% |
| 3NSS1 | 7533 | 27 | 1409 | 109 | -81.30% | +303.70% |
| 4NSS1 | 5352 | 3879 | 1411 | 1391 | -73.64% | -64.14% |
| 1NSS2 | 6376 | 189 | 1817 | 60 | -71.50% | -68.25% |
| 2NSS2 | 7955 | 287 | 1065 | 664 | -86.61% | +131.36% |
| 3NSS2 | 9160 | 67 | 1602 | 522 | -82.51% | +679.10% |
| 4NSS2 | 11521 | 229 | 2062 | 173 | -82.10% | -24.45% |
| Average | 7124 | 739 | 1432 | 425 | -78.55% | +111.31% |

One of the final considerations in understanding the use of Spanish and English in the FL classrooms explored in this study is how the class time is spent between both pair and small-group activities and in which language the instructor addresses students when he or she is working with the entire class. During the observations, I noted that the classes appeared to be very much teacher centered and the data obtained support that notion. Of the total number of words produced in the class during student and teacher interactions in whole class activities both in Spanish and English, the Spanish 102 instructors accounted for 80.07% of the speech produced, meaning that the students accounted for only 20% of the speech produced in the classroom. For the Spanish 202 instructors, the results were

similar with the instructors producing 75% of the total production of Spanish and the Spanish 202 students producing 25% of the total speech in the class (see Figure 4.5).

When the classes were divided along the lines of native language of instructor, very similar numbers were found with the native Spanish-speaking instructors producing 80.82% of all of the words in the classroom interactions, and the students producing less than 20% of the speech uttered in the classroom. The native English-speaking instructors produced 74.37% of their speech in the classroom and their students produced a little over 25% of the English and Spanish spoken in the classroom (see Figure 4.5). This again shows that the students with a native English-speaking instructor produce more of the TL.

**Figure 4.5 Percentage of Language Use (Spanish and English) in the Classroom**




*Class Level.* The Spanish 102 classes were observed three times, and during each observation the total time spent by the instructors interacting with the class as a whole was recorded, along with the total amount of time spent in pair or small-group activities. The classes all met for 50 minutes, with the total possible class time being 150 minutes.

All of the recordings were, however, less than the maximum, total because classes would either start a few minutes late or the students would be allowed to leave a few minutes early. The maximum amount of time spent in groups by the students for the Spanish 102 level was almost 50% or 66 minutes over the three classes taught by instructor 2NSS1. The minimum time spent in groups was 9.14% or 13.35 minutes over the three classes with instructor 4NSS1. The average amount of time for the Spanish 102 classes spent on whole class teacher and student interactions was about 94 minutes or 31 minutes per class, and the average time spent in groups over the three observations was 42 minutes or 14 minutes per class (see Table 4.11).

**Table 4.11 Total Spanish 102 Class Time When Working as a Whole Class and in Small-Groups or Pairs over Three Observations**

| Instructor | Total class time (min.) | Time in Pair or Small-Group Activities (min.) | Time (min.) in Whole Class Activities | % of Time in Groups |
|---|---|---|---|---|
| 1NSS1 | 141.23 | 57.61 | 83.62 | 40.79% |
| 1NES1 | 134.74 | 37.45 | 97.29 | 27.79% |
| 2NSS1 | 133.37 | 65.65 | 67.72 | 49.22% |
| 2NES1 | 140.13 | 33.89 | 106.24 | 24.18% |
| 3NSS1 | 144.98 | 40.13 | 104.85 | 27.68% |
| 3NES1 | 126.97 | 50.45 | 76.52 | 39.73% |
| 4NSS1 | 146.13 | 13.35 | 132.78 | 9.14% |
| 4NES1 | 122.71 | 40.55 | 82.16 | 33.05% |
| Averages | 136.28 | 42.39 | 93.90 | 31.45% |

The Spanish 202 classes were observed three times and during each of the observations, the total time spent by the instructors interacting with the class was recorded along with the total amount of time spent in pair or small-group activities. The

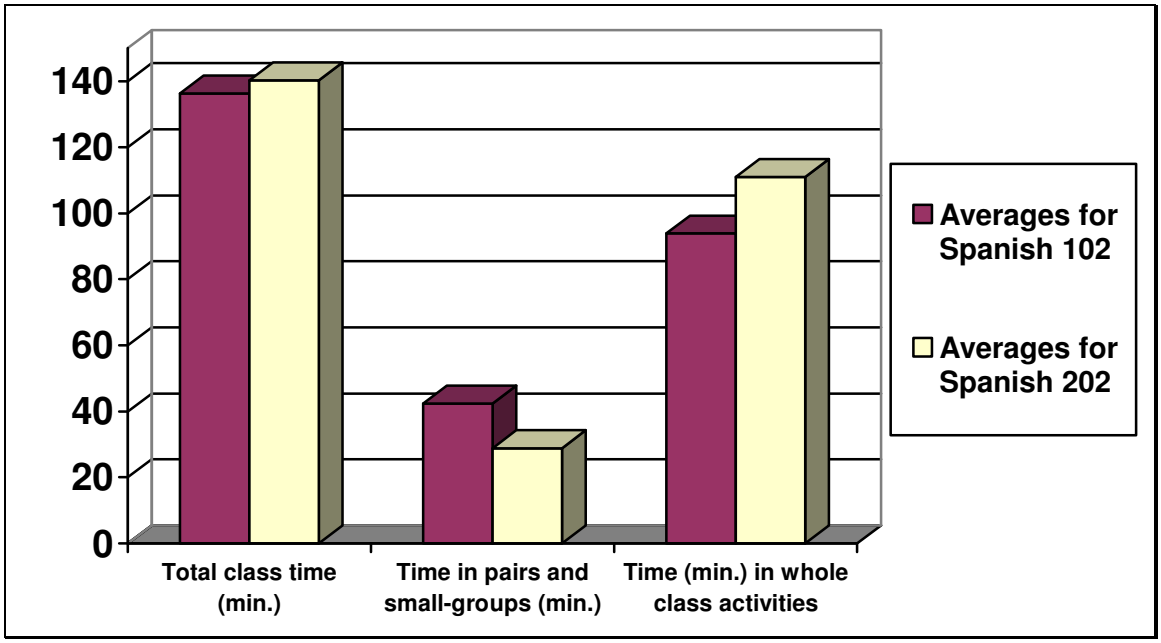
classes all met for 50 minutes with the total possible class time being 150 minutes. All of the recordings were, however, for less time, in this case an average of 140.27 minutes per class, than the maximum total, because the classes would either start a few minutes late or the students would be allowed to leave a few minutes early. The maximum amount of time spent in pairs or small-groups by the students for one of the Spanish 202 classes was almost 59% or 82 minutes over the three classes by instructor 2NES2. The minimum time spent in pairs or small-groups was 0% or 0 minutes over the three classes. There were two classes (1NES2 and 3NSS2) that did not spend any time in small groups or pairs in any of the three observed classes. The average time for the Spanish 202 classes in whole classroom interaction between teachers and students was about 111 minutes or 37 minutes per class, and the average time spent in pairs or small-groups over the three observations was about 29 minutes or about 10 minutes per class. The Spanish 202 classes spent less time in groups, about 5 minutes less than the Spanish 102 classes. Also, there was much more variation between the Spanish 202 classes regarding the amount of time spent in pairs or small-groups than in the Spanish 102 classes. The standard deviation was 16 minutes for the Spanish 102 classes and 31 minutes for the Spanish 202 classes (see Table 4.12).

**Table 4.12 Spanish 202 Class Time When Working as a Whole Class and in Small-Groups or Pairs over Three Observations**

| Instructor | Total Class Time (min.) | Time in Pair or Small-Group Activities (min.) | Time (min.) in Whole Class Activities | % of Time in Groups |
|---|---|---|---|---|
| 1NES2 | 132.71 | 0 | 132.71 | 0.00% |
| 1NSS2 | 137.08 | 60 | 77.08 | 43.77% |
| 2NES2 | 141.69 | 82.83 | 58.86 | 58.46% |
| 2NSS2 | 134.64 | 34.62 | 100.02 | 25.71% |
| 3NES2 | 154.75 | 25 | 129.75 | 16.16% |
| 3NSS2 | 133.2 | 0 | 133.2 | 0.00% |
| 4NES2 | 147.91 | 11.27 | 136.64 | 7.62% |
| 4NSS2 | 140.18 | 3 | 137.18 | 2.14% |
| Averages | 140.27 | 28.79 | 111.04 | 19.23% |

A comparison of all of the averages of the instructors according to level helps give a better idea of what is happening in the classroom and helps to emphasize many of the differences found individually, between instructors, and between levels. Figure 4.6 shows the different instructors' total time use according to level of class taught.

**Figure 4.6 Average Time Spent as a Whole Class and in Small-Groups and Pairs by Spanish 102 and Spanish 202 Instructors**




*Native Language.* The classes with native English-speaking instructors and native Spanish-speaking instructors showed much less variation than the variation found across levels. It appears that native language status of the instructor has little influence on the decision to work in groups or as a class. The average length of the classes with native English-speaking instructors was 137.70 minutes. The maximum amount of time spent in pairs or small-groups by the students with a native English-speaking instructor was almost 59% or 82 minutes over the three classes by instructor 2NES2. The minimum time spent in groups was 0% or 0 minutes over the three classes by instructor 1NES2.

For classes with native English-speaking instructors the average time for classroom interaction in a whole class setting was about 103 minutes or 34 minutes per class, and the average time spent in pairs or small-groups over the three observations was

about 35 minutes or about 12 minutes per class. The standard deviation for these classes was 25 minutes (see Table 4.13).

**Table 4.13 Native English-Speaking Instructors' Class Time When Working as a Whole Class and in Small-Groups or Pairs over Three Observations**

| Instructor | Total Class Time (min.) | Time in Pair or Small-Group Activities (min.) | Time (min.) in Whole Class Activities | % of Time in Groups |
|---|---|---|---|---|
| 1NES1 | 134.74 | 37.45 | 97.29 | 27.79% |
| 2NES1 | 140.13 | 33.89 | 106.24 | 24.18% |
| 3NES1 | 126.97 | 50.45 | 76.52 | 39.73% |
| 4NES1 | 122.71 | 40.55 | 82.16 | 33.05% |
| 1NES2 | 132.71 | 0 | 132.71 | 0.00% |
| 2NES2 | 141.69 | 82.83 | 58.86 | 58.46% |
| 3NES2 | 154.75 | 25 | 129.75 | 16.16% |
| 4NES2 | 147.91 | 11.27 | 136.64 | 7.62% |
| Averages | 137.70 | 35.18 | 102.52 | 25.87% |

The classes with native Spanish-speaking instructors were also observed three times and during each of the recordings of the classes, the total time spent by the instructors interacting with the entire class was recorded along with the total amount of time spent in pair or small-group activities. The average time spent in the class was 138.85 minutes. The maximum amount of time spent in pairs or small-groups by the students with a native Spanish-speaking instructor was almost 50% or 66 minutes over the three observations by instructor 2NSS1. The minimum time spent in groups was 0% or 0 minutes over the three observations by instructor 3NSS2.

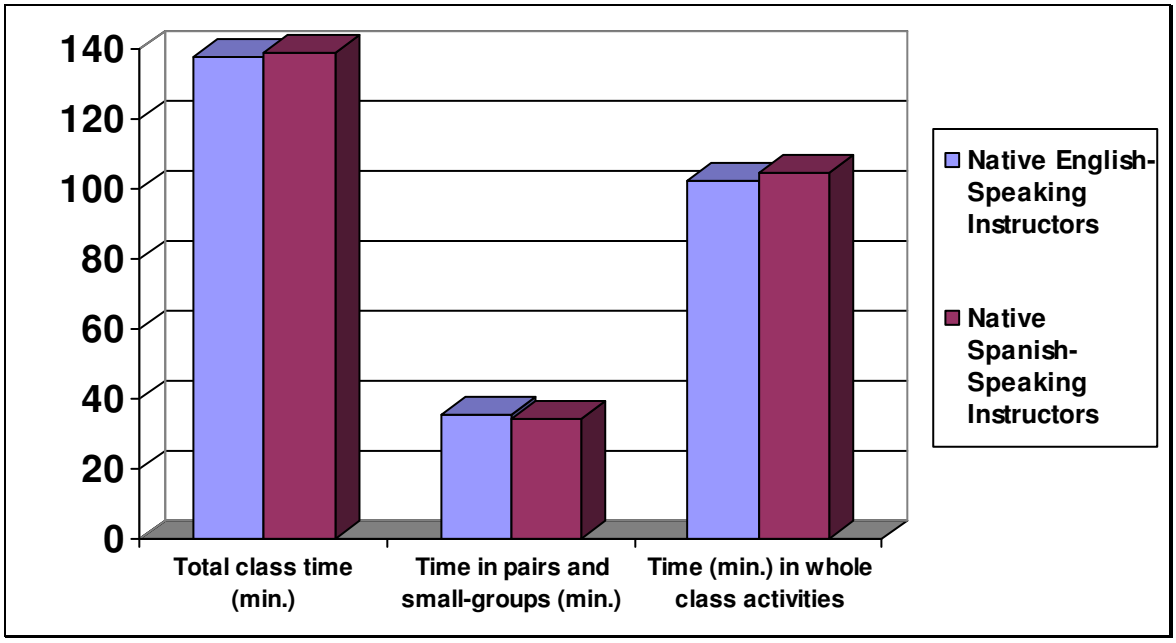
For classes with native Spanish-speaking instructors the average time for classroom interaction as a whole class was about 105 minutes or 34 minutes per class and the average time spent in pairs or small-groups over the three observations was about 35 minutes or about 12 minutes per class. The standard deviation for these classes was 26 minutes (see Table 4.14).

**Table 4.14 Native Spanish-Speaking Instructors' Class Time When Working as a Whole Class and in Small-Groups or Pairs over Three Observations**

| Instructor | Total Class Time (min.) | Time in Pair or Small-Group Activities (min.) | Time (min.) in Whole Class Activities | % of Time in Groups |
|---|---|---|---|---|
| 1NSS1 | 141.23 | 57.61 | 83.62 | 40.79% |
| 2NSS1 | 133.37 | 65.65 | 67.72 | 49.22% |
| 3NSS1 | 144.98 | 40.13 | 104.85 | 27.68% |
| 4NSS1 | 146.13 | 13.35 | 132.78 | 9.14% |
| 1NSS2 | 137.08 | 60 | 77.08 | 43.77% |
| 2NSS2 | 134.64 | 34.62 | 100.02 | 25.71% |
| 3NSS2 | 133.2 | 0 | 133.2 | 0.00% |
| 4NSS2 | 140.18 | 3 | 137.18 | 2.14% |
| Averages | 138.85 | 34.30 | 104.56 | 24.81% |

A visual comparison of all of the averages of the instructors according to native language helps give a better idea of what is happening in the classroom and in this case to show how similar the averages are in spite of the difference of native language of instructors. Figure 4.7 shows the totals of the different instructors' division of the class time between whole class activities and pair and small-group activities according to the native language of the instructors.

**Figure 4.7 Average Time Spent as a Whole Class and in Small-Groups and Pairs by Native Language**

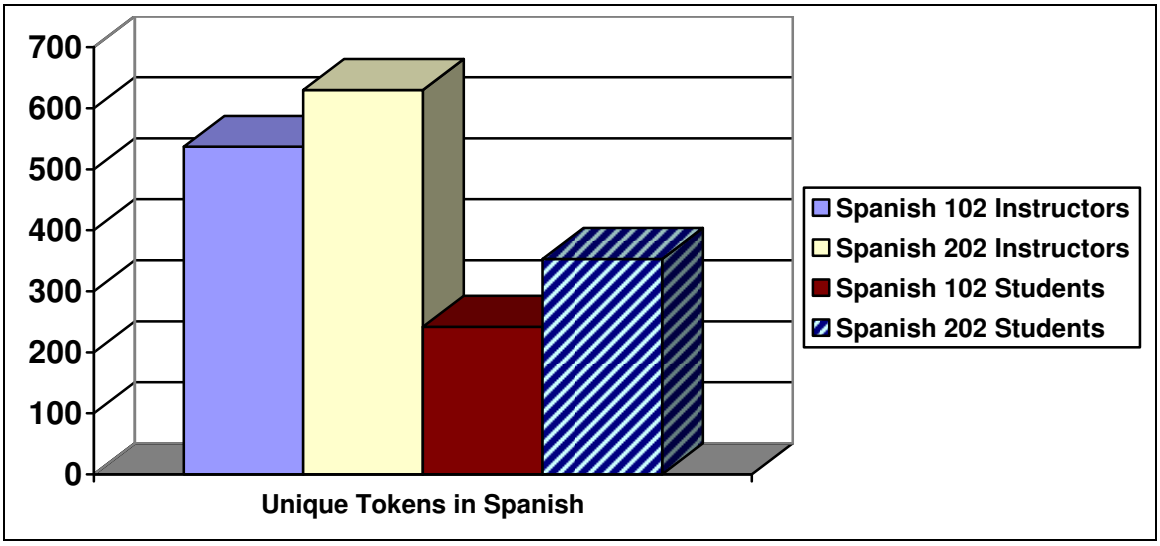



One final result in comparing the percentage of student talk to teacher talk was the number of unique words or words produced in Spanish by the teachers and the students. Each word was counted as only one unique word regardless of how many times it was used in the classroom during each observation. A unique word was defined as a different word produced during each individual recording of the classes. Even if a word were used 100 times during the class, it was only counted as one unique word because all of the other uses were repetitions of the original. The importance of considering unique words is that this measure can be used to evaluate how much unique speech students are being exposed to during each class period.

*Class Level.* The production of unique words by the teachers varied both by class level and also by native language. In order to obtain the number of unique words

produced, the average of unique words was taken from the three observations. The average number of unique words in Spanish used by Spanish 102 instructors was 597, representing a total of 26.83% of the total speech. The students in Spanish 102 produced a total of 242 unique words per class or 48.83% of their speech. The average number of unique words for Spanish 202 instructors was 631, representing a total of 26.26% of the total speech. The students for Spanish 202 produced a total number of 253 unique words per class. While more than the Spanish 102 students, this number of words represents a production of only 41.07% of unique words in their speech (see Figure 4.8). Even though all of the students produced a lesser number of unique words than their instructors, the number of unique words in the students' speech represents a much higher percentage of their speech, about 50%. The instructors used a higher number of unique words but that represented only about 25% of their total production, showing that 75% of the speech produced by instructors is repetition of words that they have already used during the class period.

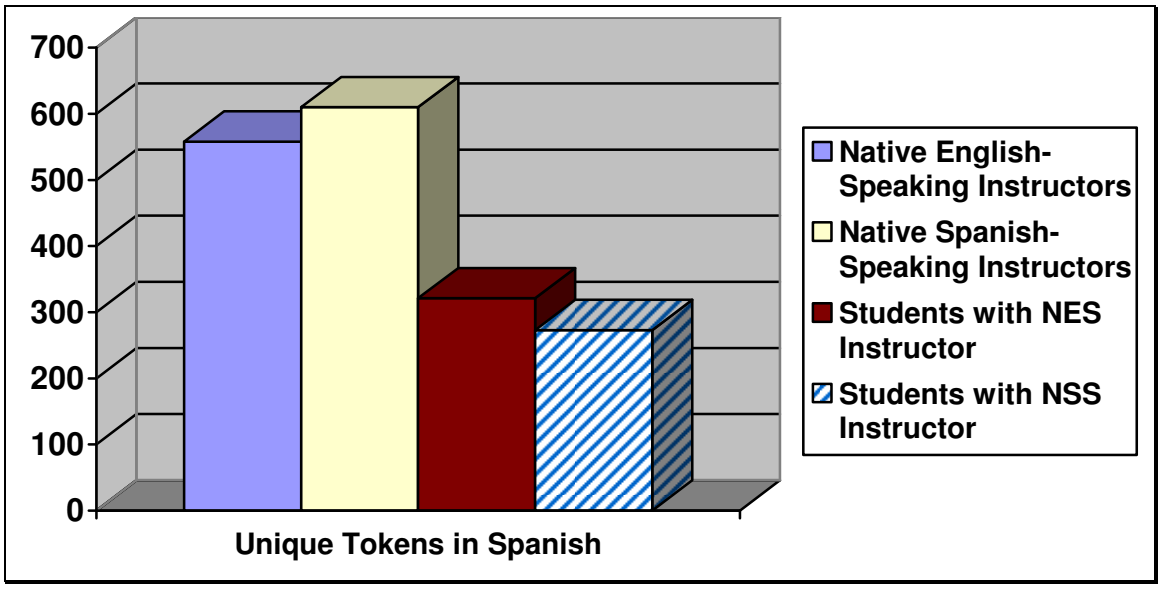
**Figure 4.8 Average Number of Unique Words Produced by Instructors and Students in Spanish 102 and Spanish 202 Classes**




*Native Language*. The average number of unique words in Spanish used in class by a native English-speaking instructor was 558, representing a total of 28.86% of the total speech. The students with a native English-speaking instructor produced a total of 321 unique words per class or 44.43% of their speech. The average number of unique words for classes with a native Spanish-speaking instructor was 610, representing a total of 24.23% of the total speech. The students with a native Spanish-speaking instructor produced a total number of 273 unique words per class. While this total number of unique words is less than the students with a native English-speaking instructor (321), this amount of words represents a slightly higher percentage of 45.47% of the words being unique (see Figure 4.9). As with the comparison of the Spanish 102 and Spanish 202 level, even though all of the students produced a lesser number of unique words than their instructors, regardless of native language, the number of unique words in the students' speech represents a much higher percentage of their speech, about 50%. The instructors

used a higher number of unique words but that represented only about 25% of their total production, showing that 75% of the speech produced by instructors is repetition of words that they have already used during the class period.

**Figure 4.9 Average Number of Unique Words Produced by Native English-Speaking and Native Spanish-Speaking Instructors and Their Students**




Research question #3.

*What factors influence gains in listening proficiency in the language classroom?*

*Introduction.* One of the goals of this study was to explore selected factors that may influence proficiency gains in the FL classroom. As previously mentioned, the students were given a listening pre-test at the beginning of the semester and a post-test at the end of the semester to measure listening proficiency gains using an instrument developed by the Center for Advanced Research on Language Acquisition (CARLA). This instrument was chosen due primarily to the fact that it was designed using language acquisition principles and standardized and normed to the ACTFL proficiency guidelines.

In addition to level, the variable of having a native Spanish-speaking instructor versus a native English-speaking instructor was considered due to the fact that both of these types of instructors constitute part of the instructional staff at most universities.

The data for this analysis was collected from those students who completed both the pre- and post-test. A total of 29 classes participated in the study, with sixteen classes from Spanish 102, and thirteen classes from Spanish 202. A total of 338 Spanish 102 students took the pre-test and a total of 291 students took the post-test. Of these students, 270 (80% of the initial 338) completed both the pre- and the post-test. For the Spanish 202 students, a total of 233 students took the pre-test and 209 students took the post test. Of these students, 186 (80% of the initial 233) took both the pre- and the post-test. The numbers of the students completing both tests were quite high for both levels due in large part to using intact classrooms and using normal class time to complete the exams (see Table 4.15).

**Table 4.15 Spanish 102 and Spanish 202 Students Who Completed the Pre and Post Listening Test**

| Class Level | Students Who Completed the Pre-test | Students Who Completed Post-test | Students Who Completed Both the Pre- and Post-tests | % of Students Who Completed Both Pre-test and Post-test |
|---|---|---|---|---|
| Spanish 102 Classes | 338 | 291 | 270 | 80% |
| Spanish 202 Classes | 233 | 209 | 186 | 80% |
| Total Participants | 571 | 500 | 456 | 80% |

*Spanish 102 results.* The Spanish 102 students showed a greater gain over their Spanish 202 counterparts in their aural proficiency from the pre- to the post-test. This is

likely due to the fact that it is easier for lower level students to show gains because their initial scores were significantly lower, thus facilitating greater gains over the course of a semester. This follows the ACTFL inverted pyramid which helps explain that at higher levels, gains in language ability take more time because of the increasing skill sets required. It is also possible that there is a kind of ceiling effect or plateau that the 202 students have reached to which they need additional classes or instruction to surpass. While the gains were small for the Spanish 102 level, due in large part to the fact that the pre- and post-test occurred within a relatively short time (12 weeks), the overall change from the pre-test to the post-test showed that the students made statistically significant gains with $p < .0001$ from the pre- to the post-test when using a two-sample paired t-test. One consideration to take into account is the possibility of a testing effect, given that the same test was used for both evaluations. However, given that the pre-test was administered during the first few weeks and the post-test during the last couple of weeks of the semester, the testing effect should have been negligible, especially with all the other listening exams and assessments with which the students were involved during the semester.

The test consisted of 35 questions and the average score on the pre-test for 102 students was 18.7 out of 35 (53.4%) and the average score on the post-test for 102 students was 20.90 (60%) for a difference of 2.20 points. When comparing the native language of the instructors, the average score for 102 students with native English-speaking instructors on the pre-test was 19.11 and the average score on the post-test was 21.17 for a difference of 2.06 points. The average score for 102 students with native

Spanish-speaking instructors was 18.34 on the pre-test and 20.66 on the post-test for a difference of 2.32. By comparing the means the 102 students with native English-speaking instructors with the means of the 102 students with native Spanish-speaking instructors on the pre-test with a two-sample t-test, no significant difference could be established. This means that the Spanish 102 students did not have significantly different scores at the beginning of the semester ($p = .20$). Upon comparing the results on the post-test using a two-sample t-test, it was found that no significant difference existed in gain scores between the students of the native English-speaking instructors and the native Spanish-speaking instructors at the Spanish 102 level ($p = .45$).

Many of the individual classes showed significant gains from the pre-test to the post-test. It is interesting to note that some of the teachers who had both of their classes participate in the study had one class that improved significantly and another class that did not. The classes of the native English-speaking instructors showed statistically significant improvement in 6 of the 8 classes that they taught, whereas the classes of the native Spanish-speaking instructors showed significant improvement in 4 of the 8 classes that they taught. The individual classes are listed in Table 4.16. As previously mentioned, each instructor received an alphanumeric code such as 1NES1 which means that this teacher is number 1 and the teacher is a native English-Speaker (NES) and the numeral 1 following the letters, means the Spanish 102 level. Because some of the teachers had two of their classes participate in this portion of the study, additional numbers were added to distinguish between the two classes, the #1 means that it is class #1 out of two classes and the #2 means that it is class #2 of two classes. Some instructors only included one class

so they would only have a #1. The native Spanish-speaking instructors (NSS) were also classified together to better be able to compare the similarities and differences between speakers.

Using a paired t-test, the gain scores of the Spanish 102 students of the native English-speaking instructors and the native Spanish-speaking instructors both were statistically significant ($p < .0001$), meaning that during the semester there was significant improvement on average by all students.

**Table 4.16 Spanish 102 Students' Results on the Pre- and Post-Test**

| Instructors N = 8 | Average Pre-Test Scores | Average Post-Test Scores | Average Gain Scores | P-value p < .05 |
|---|---|---|---|---|
| 1NSS1#1 | 18 | 20.94 | 2.94 | .01* |
| 1NSS1#2 | 18.56 | 20.5 | 1.94 | .04* |
| 2NSS1#1 | 18.41 | 19.94 | 1.53 | .16 |
| 2NSS1#2 | 18 | 19.75 | 1.75 | .17 |
| 3NSS1#1 | 17.8 | 20.73 | 2.93 | .08 |
| 3NSS1#2 | 18.56 | 21.83 | 3.27 | .0001* |
| 4NSS1#1 | 17.6 | 20.45 | 2.85 | .004* |
| 4NSS1#2 | 19.43 | 20.96 | 1.53 | .29 |
| Average of All NSS Instructors' 102 Classes | 18.34 | 20.66 | 2.32 | .0001* |
| 1NES1#1 | 17.47 | 20.2 | 2.73 | .009* |
| 1NES1#2 | 19.62 | 21.62 | 2.00 | .04* |
| 2NES1#1 | 18.9 | 20 | 1.1 | .18 |
| 2NES1#2 | 17.88 | 19.69 | 1.81 | .008* |
| 3NES1#1 | 21.32 | 23.16 | 1.84 | .007* |
| 3NES1#2 | 19.47 | 23 | 3.53 | .003* |
| 4NES1#1 | 19.5 | 20.36 | .86 | .43 |
| 4NES1#2 | 18.36 | 21.29 | 2.93 | .008* |
| Average of All NES Instructors' 102 Classes | 19.11 | 21.17 | 2.06 | .0001* |
| All 102 Classes Average | 18.7 | 20.90 | 2.2 | .0001* |

Key: NES = Native English Speaker; NSS = Native Spanish Speaker; 1 at the end of instructor code = Spanish 102 level; the initial number = number of the participant; #1 or #2 = number of class

*Spanish 202 results.* The same listening comprehension test was used for both the Spanish 102 students and the Spanish 202 students. As previously mentioned, the test was designed to measure listening proficiency at the Intermediate-Low level on the ACTFL scale and the 202 students should have been either at that level or higher. The test consisted of 35 questions and the average score on the pre-test was 24.26 out of 35 (69.3%) and the average score on the post-test was 25.73 (73.5%) for a difference of 1.47

points. The Spanish 202 students did show a smaller overall gain from the pre-test to the post-test of 1.47 points versus the Spanish 102 students overall gain of 2.06 points. A paired t-test that was used to measure the statistical significance indicated that the Spanish 202 students' overall gain from the pre-test to the post-test was significant ($p < .0001$).

When comparing native English-speaking 202 instructors to native Spanish-speaking 202 instructors, the average student score for the native English-speaking instructors on the pre-test was 24.5 and the average score on the post-test was 25.79 for a difference of 1.29 points. The average student score for the native Spanish-speaking instructors was 24.08 on the pre-test and 25.69 on the post-test for a difference of 1.60 points. There were no significant differences between the pre-test results of the Spanish 202 students with native English-speaking instructors and native Spanish-speaking instructors, meaning that they were not statistically different at the beginning of the semester ($p = .58$). Upon comparing the results using a paired t-test, it was found that no statistically significant difference existed in the gain scores of the students of the native English-speaking instructors and the native Spanish-speaking instructors ($p = .89$).

Many of the individual classes also showed significant gains from the pre-test to the post-test. It is interesting to note that teachers (1NSS2, 3NSS2, 1NES2) who had both of their classes participate in the study had one class whose gain scores were statistically significant and another class whose scores were not. The gain scores of the native English-speaking instructors were statistically significant in 1 of the 8 classes (1NES2#1) that they taught whereas the gain scores of the students with native Spanish-speaking

instructors were statistically significant in 2 of the 8 classes (1NSS2#1 and 3NSS2#1) that they taught. This again is likely due to the fact that the higher students' proficiency, the slower the progress in acquisition becomes due to the increasing skills that must be developed. The results of the individual classes are listed in Table 4.17.

Using a paired t-test, the students of the native English-speaking instructors and the native Spanish-speaking instructors showed significant improvement in their gain scores from the pre- to the post-test ($p < .0001$), meaning that during the semester there were statistically significant gains on average by all students.

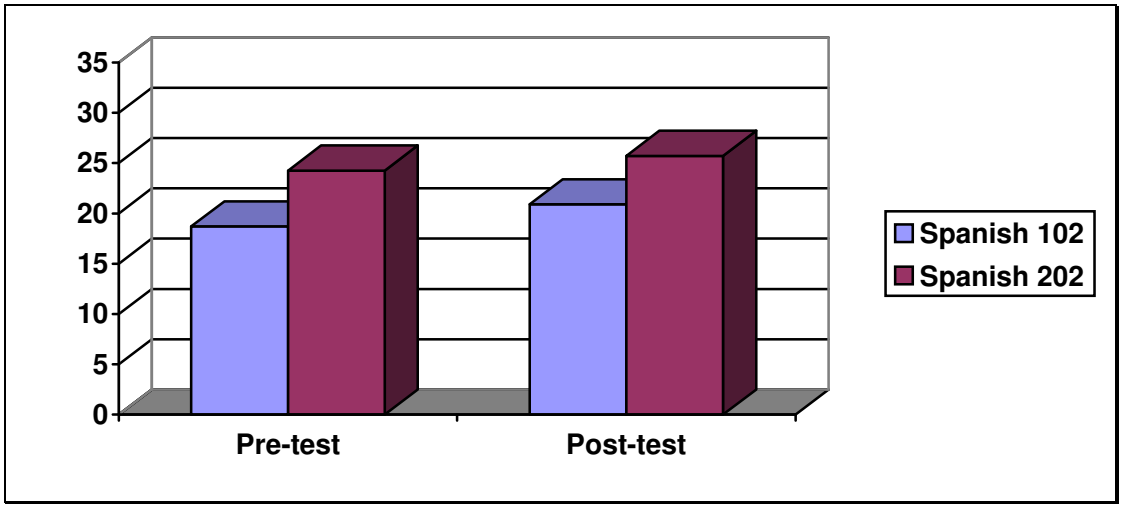
**Table 4.17 Spanish 202 Students Results on the Pre- and Post-Test**

| Instructors N = 8 | Average Pre-Test Score | Average Post-Test Score | Average Gain Scores | P-value $p < .05$ |
|---|---|---|---|---|
| 1NSS2#1 | 24.5 | 27.6 | 3.1 | .001* |
| 1NSS2#2 | 23 | 24.8 | 1.8 | .08 |
| 2NSS2#1 | 26.43 | 26.6 | .17 | .81 |
| 3NSS2#1 | 21.18 | 24.1 | 2.92 | .01* |
| 3NSS2#2 | 26 | 26.8 | .8 | .41 |
| 4NSS2#1 | 24.31 | 24.8 | .49 | .65 |
| 4NSS2#2 | 23.2 | 24.9 | 1.7 | .07 |
| Average of All NSS Instructors' 202 Classes | 24.08 | 25.69 | 1.60 | .0001* |
| 1NES2#1 | 24.33 | 26.2 | 1.87 | .04* |
| 1NES2#2 | 24.89 | 26 | 1.11 | .37 |
| 2NES2#1 | 25.43 | 26.4 | .97 | .13 |
| 2NES2#2 | 24.22 | 25.4 | 1.18 | .18 |
| 3NES2#1 | 24.16 | 25.6 | 1.44 | .12 |
| 4NES2#1 | 24.25 | 25 | .75 | .41 |
| Average of All NES Instructors' 202 Classes | 24.5 | 25.79 | 1.29 | .0001* |
| All 202 Classes Average | 24.27 | 25.73 | 1.46 | .0001* |

Key: NES = Native English Speaker; NSS = Native Spanish Speaker; 2 at the end of instructor code = Spanish 202 level; the initial number = number of the participant; #1 or #2 = number of class

*Comparison of Spanish 102 and Spanish 202 results.* Upon analyzing the results, some trends were found between the different levels. Figure 4.10 shows a comparison of gains between the different class levels. Where the average pre-test score for the Spanish 102 students was 18.7 out of 35 and the average pre-test score for the Spanish 202 students was 24.27. The average post-test score for the Spanish 102 students was 20.90 and the average score for the Spanish 202 students was 25.73 (see Figure 4.10).

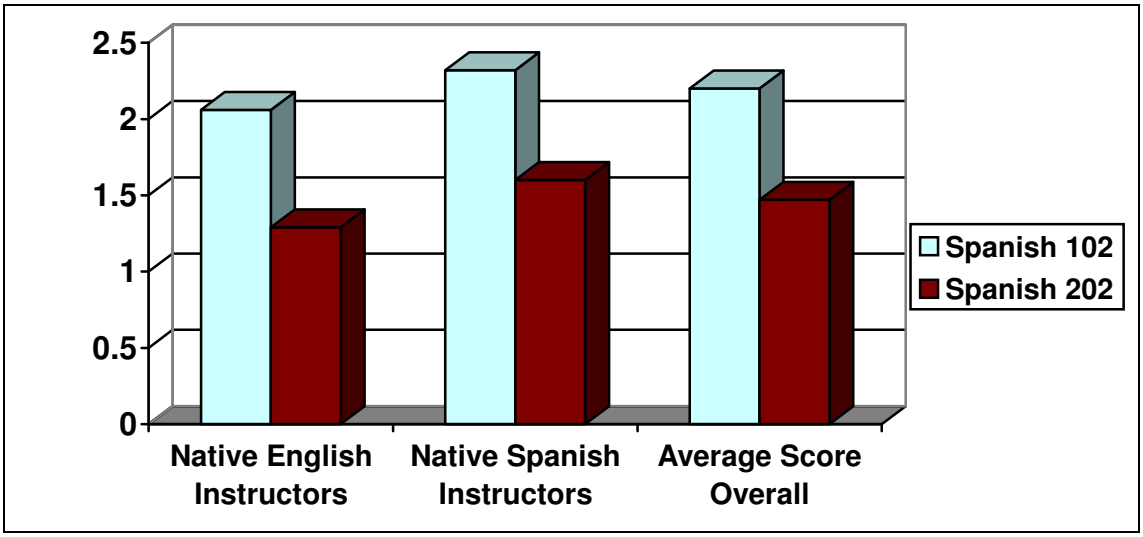
**Figure 4.10 Results on the Pre-Test and Post-Test of Spanish 102 and Spanish 202**




In addition, the gains between the levels also varied due to the previously mentioned factors of language proficiency. The average gain for the Spanish 102 level was an increase of 2.2 from the pre-test to the post-test, and the average gain for the Spanish 202 level was 1.47. Though the difference in gain scores between the students who had a native English-speaking instructor and those who had a native Spanish-speaking instructor was not statistically significant, the average gain score for those students who had a native Spanish-speaking instructor was higher for both the Spanish

102 level and the Spanish 202 level (see Figure 4.11). Some students' scores decreased from the pre-test to the post-test at both levels.

**Figure 4.11 Gains for Spanish 102 and 202 Students from Pre- to Post-Test**




Several different statistical tests were used to explore selected factors that may have related to students' gains. Using the Pearson Correlation of parametric data, I analyzed the data to determine whether there were any significant correlations between either select aspects of the demographic information (e.g. age, teaching experience, time-lived abroad, etc.) or, more importantly, L1 and TL use in the classroom by both the instructors and students and language gains between the pre- and the post-test. Additionally, I ran a Pearson correlation on the data comparing gains to 20 factors, including native language, training in pedagogy, amount of time spent in pairs and small-groups, amount of time spent in whole class interactions with the teacher, the time the instructor had lived abroad, teacher use of English, teacher use of Spanish, student use of English, student use of Spanish, teachers' age, total of English and Spanish words used in the class, total of Spanish words used in the class, total of English words used in the class,

teacher education level, self-reported teacher proficiency in English, self-reported teacher proficiency in Spanish, pre-test score, post-test score, class level, and total class time. None of these factors were statistically significant except one. There was a significant negative correlation ($r = -.541$) ($p = .042$) between the pre-test score and the overall gains. This correlation is logical, in that those students at the lower levels have a greater opportunity to make gains than students who are already more advanced, especially on a test with only 35 items where most of the Spanish 202 students scored significantly higher than the Spanish 102 students. When comparing the use of English in the classroom by the students and the teachers, no statistically significant correlation was found between gain scores and language usage.

Although no significant correlations were found, those students who had a native Spanish-speaking instructor improved more than those who had a native English-speaking instructor, raising the possibility that there are other factors influencing students' gain scores. While the lack of statistically significant correlations between students' gain scores and 20 different factors was surprising, this information provides useful insights into understanding some of the factors that did not contribute to significant improvement in gain scores. These results will be discussed more in-depth in Chapter 5. Also, the lack of statistically significant correlations may be due to the relatively small gains made by students over the relatively short time between the pre- and post-test.

Research question #4.

*What are the contexts in which students and teachers use the L1 and TL?*

Regarding the uses of the TL and the L1, several authors developed different systems to categorize L1 and TL use in the classroom. Duff and Polio (1994), as previously mentioned, divided the teachers' L1 language use into eight categories 1) classroom administrative vocabulary, 2) grammar instruction, 3) classroom management, 4) empathy/solidarity, 5) practicing English, 6) unknown vocabulary/translation, 7) lack of comprehension, 8) interactive effect involving students' use of English. Rolin-Ianziti and Brownlie (2002) coded their data according to three broad categories a) L1 in classroom-translation, b) metalinguistic uses, and c) communicative uses. Inside of these three broad categories of L1 use, they enumerated several subcategories that included different uses by both the instructors and the students. They described the category of translation as switching from the TL to the L1 to make input comprehensible, with subcategories of translation of items from the lesson or instructions. The metalinguistic uses were defined as talking about the language rather than talking in the language, and here they included discussions of grammar as well as TL culture. The final category in their study, communicative uses, contained the broadest array of subcategories. They defined this category as switching from talking in the TL to using the L1 for communicative purposes such as giving instructions, motivating students, checking comprehension, answering questions, and others.

I chose to use mainly the categories developed by Duff and Polio (1994) which included many of the same features as the ones found in research by Rolin-Ianziti and

Brownlie (2002). The categories that I used in my analyses were also the same that I used in the questionnaire when the teachers and students were asked in what situations they felt that some L1 should be used. This was done in order to analyze whether the categories identified by instructors and students as appropriate for L1 use correlated with their actual language use in the classroom. The categories were 1) classroom administration issues, 2) grammar instruction, 3) classroom management, 4) to establish solidarity or a relationship with the class or teacher, 5) to explain new topics or assignments, 6) translation of vocabulary, 7) to indicate a lack of comprehension, 8) to respond to students' use of L1, and 9) other.

The complete transcriptions of all 48 classroom observations were analyzed in order to determine the type and amount of code-switches in the different classes, focusing on the interactional episode as mentioned by Gumperz (1982) and Auer (1984, 1995, and 1998) and the events taking place immediately before and after the switch to determine the category. A sample of the coding procedure is found in Appendix I where a segment of transcription is given along with how the data was coded. Also, the tally sheet that was used to count the different number of switches can be found in Appendix F and Appendix G. In analyzing the data, a tally of each of the different uses of the L1 (English) was taken and marked on the tally sheet. Additionally, the categories were divided according to class level as well as native language in the data analysis.

The researcher coded all of the data but in order to establish the reliability of the coding, a second coder was asked to code a selection of transcripts from both the Spanish 102 and Spanish 202 levels. After a brief explanation of the different categories and

minimal training, a level of agreement of 85% among the two raters was obtained. The percentage of agreement is relatively high, in large part due to the fact that most of the categories were clear, given the descriptions provided.

*Instructor L1 switches by class level.* The data showed that there was a great deal of variation between both individual instructors as well as instructional levels. As previously mentioned, the different class levels not only used differing amounts of Spanish but also varied in their use of English. For the Spanish 102 instructors, the most common context for the use of English was grammar instruction with 293 (about 32%) code-switches from Spanish to English falling into this category. Additionally, the categories of explaining a new topic or assignment accounted for 243 (26%) code-switches and the translation of new vocabulary for 207 (22%) code-switches. These three categories account for around 80% of all of the code-switches that occurred in the classroom. The differences between the number and type of switches when taken as a whole between the Spanish 102 and the Spanish 202 level ($p = .46$) were not found to be statistically significant when analyzed using a two-sample t-test (see Table 4.18 and Table 4.19). Table 4.18 summarizes the Spanish 102 instructors' code-switches.

**Table 4.18 Code-Switches between English and Spanish by Spanish 102 Instructors**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to students' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NSS1 | 27 | 11 | 0 | 2 | 19 | 17 | 5 | 2 | 2 |
| 1NES1 | 5 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 2NSS1 | 5 | 1 | 0 | 0 | 6 | 12 | 4 | 5 | 0 |
| 2NES1 | 12 | 55 | 0 | 1 | 11 | 35 | 8 | 6 | 0 |
| 3NSS1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 0 |
| 3NES1 | 17 | 91 | 0 | 5 | 47 | 18 | 10 | 1 | 1 |
| 4NSS1 | 19 | 78 | 1 | 4 | 157 | 90 | 16 | 2 | 1 |
| 4NES1 | 8 | 54 | 0 | 0 | 3 | 26 | 0 | 7 | 0 |
| Totals | 93 | 293 | 1 | 13 | 243 | 207 | 43 | 33 | 4 |
| % of totals | 10% | 31.51% | .11% | 1.40% | 26.13% | 22.26% | 4.62% | 3.55% | .43% |

For the Spanish 202 instructors, the most common context for the use of English was in the translation of new vocabulary, with about 375 (53%) code-switches from Spanish to English falling into this category. The categories of grammar instruction had 146 (20%) code-switches and classroom administration had 72 (10%) code-switches (see Table 4.19). These three categories account for around 83% of all of the code-switches that occurred in the classroom. As already mentioned, the differences between the number and type of switches when taken as a whole between the Spanish 102 and the Spanish 202 level ($p = .46$) were not found to be statistically significant when analyzed using a two-sample t-test (see Table 4.18 and Table 4.19). However, when analyzing the individual categories of L1 use between Spanish 102 and Spanish 202 instructors, there was a statistically significant difference between the categories of responding to the students' lack of comprehension/the clarification of the material ($p = .04$) and response to the students' L1 usage ($p = .03$) (see Table 4.18 and Table 4.19).

**Table 4.19 Code-Switches between English and Spanish by Spanish 202 Instructors**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to students' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NES2 | 24 | 78 | 0 | 8 | 46 | 85 | 0 | 0 | 0 |
| 1NSS2 | 7 | 1 | 0 | 0 | 5 | 20 | 0 | 0 | 1 |
| 2NES2 | 0 | 7 | 0 | 0 | 1 | 9 | 1 | 2 | 1 |
| 2NSS2 | 6 | 7 | 0 | 12 | 12 | 54 | 0 | 2 | 3 |
| 3NES2 | 10 | 2 | 0 | 0 | 1 | 32 | 0 | 2 | 1 |
| 3NSS2 | 7 | 2 | 0 | 1 | 2 | 24 | 0 | 0 | 1 |
| 4NES2 | 12 | 15 | 0 | 3 | 1 | 126 | 2 | 0 | 1 |
| 4NSS2 | 6 | 34 | 0 | 3 | 3 | 25 | 3 | 4 | 0 |
| Totals | 72 | 146 | 0 | 27 | 71 | 375 | 6 | 10 | 8 |
| % of totals | 10.07% | 20.42% | 0.00% | 3.78% | 9.93% | 52.45% | 0.84% | 1.40% | 1.12% |

*Students' L1 switches by level.* The data showed that the students also varied considerably when analyzed according to level. For the Spanish 102 students, the most common context for the use of English was in the translation of new vocabulary, with 178 (28%) code-switches from Spanish to English falling into this category. Additionally, the categories of explaining a new topic/assignment had 132 (21%) code-switches, grammar instruction had 86 (14%) code-switches, and the students showing a lack of comprehension had 79 (13%). These four categories account for around 86% of all of the switches that occurred in the classroom. When analyzed using a two-sample t-test, there was no statistically significant difference between the number and type of switches when taken as a whole between the Spanish 102 and the Spanish 202 level ($p = .25$) (see Table 4.20).

**Table 4.20 Code-Switches between English and Spanish by Spanish 102 Students**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to teachers' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NSS1 | 17 | 5 | 0 | 6 | 9 | 37 | 9 | 4 | 1 |
| 1NES1 | 5 | 24 | 0 | 7 | 4 | 10 | 11 | 1 | 2 |
| 2NSS1 | 9 | 3 | 2 | 1 | 9 | 8 | 8 | 4 | 2 |
| 2NES1 | 6 | 10 | 0 | 3 | 3 | 16 | 5 | 3 | 1 |
| 3NSS1 | 5 | 0 | 0 | 3 | 1 | 18 | 7 | 2 | 1 |
| 3NES1 | 3 | 23 | 0 | 5 | 9 | 9 | 7 | 13 | 5 |
| 4NSS1 | 10 | 13 | 0 | 10 | 89 | 56 | 32 | 13 | 5 |
| 4NES1 | 1 | 8 | 0 | 0 | 8 | 24 | 0 | 4 | 1 |
| Totals | 56 | 86 | 2 | 35 | 132 | 178 | 79 | 44 | 18 |
| % of totals | 8.89% | 13.65% | 0.32% | 5.56% | 20.95% | 28.25% | 12.54% | 6.98% | 2.86% |

For the Spanish 202 students, the most common context for the use of English was in the translation of new vocabulary, with 532 (56%) code-switches from Spanish to English falling into this category. Additionally, the categories of grammar instruction with 149 (16%) code-switches, classroom administration with 99 (11%) code-switches, and explaining a new topic/assignment with 91 (10%) code-switches were noteworthy factors. These four categories account for around 96% of all of the switches that occurred in the classroom (see Table 4.21). As previously mentioned, there was no significant difference between the number and type of switches when taken as a whole between the Spanish 102 and the Spanish 202 level ($p = .25$) when analyzed using a two-sample t-test. However, when analyzing the individual categories of L1 use between Spanish 102 and Spanish 202 students, there was a statistically significant difference between the categories of translation of vocabulary ($p = .02$) and the response to the students' L1 usage ($p = .02$).

**Table 4.21 Code-Switches between English and Spanish by Spanish 202 Students**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to teachers' L1use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NES2 | 47 | 112 | 0 | 7 | 55 | 77 | 2 | 0 | 0 |
| 1NSS2 | 0 | 0 | 0 | 0 | 0 | 25 | 2 | 0 | 0 |
| 2NES2 | 0 | 0 | 1 | 6 | 1 | 30 | 4 | 0 | 1 |
| 2NSS2 | 2 | 3 | 0 | 3 | 15 | 75 | 1 | 5 | 0 |
| 3NES2 | 3 | 4 | 0 | 0 | 1 | 70 | 3 | 0 | 3 |
| 3NSS2 | 42 | 22 | 0 | 0 | 7 | 55 | 10 | 1 | 1 |
| 4NES2 | 5 | 1 | 0 | 1 | 4 | 165 | 6 | 0 | 2 |
| 4NSS2 | 0 | 7 | 0 | 2 | 8 | 35 | 1 | 2 | 1 |
| Totals | 99 | 149 | 1 | 19 | 91 | 532 | 29 | 8 | 8 |
| % of totals | 10.58% | 15.92% | 0.11% | 2.03% | 9.72% | 56.84% | 3.10% | 0.85% | 0.85% |

*Instructors' L1 switches by native language.* The teachers' native language was surprisingly neither a significant factor overall in determining the types of switches nor did any of the individual categories have a statistical significant difference. For the native English speaking instructors, the most common context for the use of English was in the translation of new vocabulary, with 331 (37%) code-switches from Spanish to English falling into this category. The categories of grammar instruction with 305 (34%) code-switches, and explaining a new topic/assignment with 110 (12%) code-switches were also noteworthy factors (see Table 4.22). These three categories account for around 83% of all of the switches that occurred in the classroom. When analyzed using a two-sample t-test, there were no statistically significant differences ($p = .61$) between the number and type of switches when taken as a whole between the classes with native English-speaking instructors (Table 4.22) and native Spanish-speaking instructors (Table 4.23).

**Table 4.22 Code-Switches between English and Spanish by Native English-Speaking Instructors**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to students' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NES1 | 5 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 2NES1 | 12 | 55 | 0 | 1 | 11 | 35 | 8 | 6 | 0 |
| 3NES1 | 17 | 91 | 0 | 5 | 47 | 18 | 10 | 1 | 1 |
| 4NES1 | 8 | 54 | 0 | 0 | 3 | 26 | 0 | 7 | 0 |
| 1NES2 | 24 | 78 | 0 | 8 | 46 | 85 | 0 | 0 | 0 |
| 2NES2 | 0 | 7 | 0 | 0 | 1 | 9 | 1 | 2 | 1 |
| 3NES2 | 10 | 2 | 0 | 0 | 1 | 32 | 0 | 2 | 1 |
| 4NES2 | 12 | 15 | 0 | 3 | 1 | 126 | 2 | 0 | 1 |
| Totals | 88 | 305 | 0 | 18 | 110 | 331 | 21 | 19 | 4 |
| % of totals | 9.82% | 34.04% | 0.00% | 2.01% | 12.28% | 36.94% | 2.34% | 2.12% | 0.45% |

For the native Spanish-speaking instructors, the most common context for the use of English was in the translation of new vocabulary, with 251 (34%) code-switches from Spanish to English falling into this category. The categories of explaining a new topic/assignment with 204 (27%) code-switches, and grammar instruction with 134 (18%) code-switches were also noteworthy factors. These three categories account for around 79% of all of the switches that occurred in the classroom (see Table 4.23). When analyzed using a two-sample t-test, there were no statistically significant differences ($p = .61$) between the number and type of switches when taken as a whole between the classes with native English-speaking instructors (Table 4.22) and native Spanish-speaking instructors (Table 4.23).

**Table 4.23 Code-Switches between English and Spanish by Native Spanish-Speaking Instructors**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to students' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NSS1 | 27 | 11 | 0 | 2 | 19 | 17 | 5 | 2 | 2 |
| 2NSS1 | 5 | 1 | 0 | 0 | 6 | 12 | 4 | 5 | 0 |
| 3NSS1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 0 |
| 4NSS1 | 19 | 78 | 1 | 4 | 157 | 90 | 16 | 2 | 1 |
| 1NSS2 | 7 | 1 | 0 | 0 | 5 | 20 | 0 | 0 | 1 |
| 2NSS2 | 6 | 7 | 0 | 12 | 12 | 54 | 0 | 2 | 3 |
| 3NSS2 | 7 | 2 | 0 | 1 | 2 | 24 | 0 | 0 | 1 |
| 4NSS2 | 6 | 34 | 0 | 3 | 3 | 25 | 3 | 4 | 0 |
| Totals | 77 | 134 | 1 | 22 | 204 | 251 | 28 | 24 | 8 |
| % of totals | 10.28% | 17.89% | 0.13% | 2.94% | 27.24% | 33.51% | 3.74% | 3.20% | 1.07% |

*Students' L1 switches by native language of their instructor.* The students showed less variation when analyzed according to the native language of their instructors as opposed to class level. For the students with native English-speaking instructors, the most common context for the use of English was in the translation of new vocabulary with 401 (48%) code-switches from Spanish to English falling into this category. The categories of grammar instruction with 182 (22%) code-switches, and explaining a new topic/assignment with 85 (10%) code-switches were also noteworthy factors. These three categories account for around 80% of all of the switches that occurred in the classroom (see Table 4.24). When analyzed using a two-sample t-test, there were no statistically significant differences ($p = .66$) between the number and type of switches when taken as a whole between the students in the classes with native English-speaking instructors (Table 4.24) and the students with native Spanish-speaking instructors (Table 4.25). None of the individual categories showed a statistically significant difference.

**Table 4.24 Code-Switches between English and Spanish by Students of Native English-Speaking Instructors**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to teachers' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NES1 | 5 | 24 | 0 | 7 | 4 | 10 | 11 | 1 | 2 |
| 2NES1 | 6 | 10 | 0 | 3 | 3 | 16 | 5 | 3 | 1 |
| 3NES1 | 3 | 23 | 0 | 5 | 9 | 9 | 7 | 13 | 5 |
| 4NES1 | 1 | 8 | 0 | 0 | 8 | 24 | 0 | 4 | 1 |
| 1NES2 | 47 | 112 | 0 | 7 | 55 | 77 | 2 | 0 | 0 |
| 2NES2 | 0 | 0 | 1 | 6 | 1 | 30 | 4 | 0 | 1 |
| 3NES2 | 3 | 4 | 0 | 0 | 1 | 70 | 3 | 0 | 3 |
| 4NES2 | 5 | 1 | 0 | 1 | 4 | 165 | 6 | 0 | 2 |
| Totals | 70 | 182 | 1 | 29 | 85 | 401 | 38 | 21 | 15 |
| % of totals | 8.31% | 21.62% | 0.12% | 3.44% | 10.10% | 47.62% | 4.51% | 2.49% | 1.78% |

For the students with native Spanish-speaking instructors, the most common context for the use of English was in the translation of new vocabulary with 309 (43%) code-switches from Spanish to English falling into this category. The categories of explaining a new topic/assignment with 138 (19%) code-switches, and classroom administration issues with 85 (12%) code-switches were also noteworthy factors. These three categories account for around 84% of all of the switches that occurred in the classroom (see Table 4.25). As previously mentioned, when analyzed using a two-sample t-test, there were no statistically significant differences ($p = .66$) between the number and type of switches when taken as a whole between the students in the classes with native English-speaking instructors (Table 4.24) and the students with native Spanish-speaking instructors (Table 4.25). None of the individual categories showed a statistically significant difference.

**Table 4.25 Code-Switches between English and Spanish by Students of Native Spanish-Speaking Instructors**

| Instructor | Class admin. | Grammar instr. | Class manag. | Establish solidarity | Explain topic or assign. | Translation of vocab. | Clarify | Respond to students' L1 use | Other |
|---|---|---|---|---|---|---|---|---|---|
| 1NSS1 | 17 | 5 | 0 | 6 | 9 | 37 | 9 | 4 | 1 |
| 2NSS1 | 9 | 3 | 2 | 1 | 9 | 8 | 8 | 4 | 2 |
| 3NSS1 | 5 | 0 | 0 | 3 | 1 | 18 | 7 | 2 | 1 |
| 4NSS1 | 10 | 13 | 0 | 10 | 89 | 56 | 32 | 13 | 5 |
| 1NSS2 | 0 | 0 | 0 | 0 | 0 | 25 | 2 | 0 | 0 |
| 2NSS2 | 2 | 3 | 0 | 3 | 15 | 75 | 1 | 5 | 0 |
| 3NSS2 | 42 | 22 | 0 | 0 | 7 | 55 | 10 | 1 | 1 |
| 4NSS2 | 0 | 7 | 0 | 2 | 8 | 35 | 1 | 2 | 1 |
| Totals | 85 | 53 | 2 | 25 | 138 | 309 | 70 | 31 | 11 |
| % of totals | 11.74% | 7.32% | 0.28% | 3.45% | 19.06% | 42.68% | 9.67% | 4.28% | 1.52% |

The language level played a much more significant role in the type of switches that occurred than the native language of the instructor. It is important to note that in both levels and with the native English-speaking instructors and the native Spanish-speaking instructors there were some outliers, such as 4NSS1, 1NES2, and 4NES2. These instructors used English significantly more in their classes and thus had many more switches between languages, thus causing their classes to skew the data in the direction of the results for their individual classes. However, even by removing these individuals from the data, the major categories and results are very similar.

*Examples of categories taken from transcriptions.* In order to better understand the categories used in the classification of the switches between English and Spanish, two examples of each of the categories are given in the body of the text and several other examples of each type of code-switching are found in Appendix H. Though some of the switches required some more extensive analysis to arrive at the proper category, most of

the switches in these classes fell neatly within the categories given, especially given that around 80% of the switches were classified as the translation of vocabulary, grammar instruction, and explanation of a new topic. The teachers are identified by their code and all of the students are identified by the three letter abbreviation of CLS for class.

*Classroom administration.* The switches in this category encompassed the questions addressed to the instructor or students regarding administrative issues, such as due dates, grades, and other administrative issues.

Example 1:

CLS: Sí.

2NSS1: Y bueno página ciento dieciséis para mí. And your participation is a 10% of your grade. Finally. Sí, dime.

CLS: Who is going to pick the days?

Example 2:

CLS: Are we getting our oral proficiency?

3NSS2: Alisa. Ahorita vamos a ver si tienen preguntas.

CLS: Oh wait how did you do our writings?

3NSS2: Uh, Michael uh no está.

CLS: I have a zero in writings too.

*Grammar instruction.* This category included all switches between English and Spanish addressing a part of a lesson specifically teaching different grammatical concepts. Many times teachers would say phrases and include grammatical terminology in English. These would fall under this category as opposed to the translation of vocabulary.

Example 1:

4NES1: However, dudar with no in front of it because you are saying I don't doubt.

CLS: Uh huh.

Example 2:

4NES1: No, todo el tiempo, todo el tiempo con de infinitivo después depends what tense you're talking about it's, it's in general it's not specific to subjuntivo.

*Classroom management/discipline*. Because of the fact that these students were college age, this was not a factor in representing switches between the L1 and TL. The minimal classroom management and discipline that took place occurred in Spanish.

*Establish solidarity or a relationship with the class or teacher*. This category was used for switches involving humor or the use of English to lower the affective filter and establish a positive relationship with the students as opposed to accomplishing specific linguistic goals. Ferguson (2003) states that code-switching is used "to humanize the affective climate of the classroom and to negotiate different identities" (p. 39). Also included in this category were the use of English for praise and support

Example 1:

3NES1: España ¿alguien más no tiene su nombre en la pizarrón? The rest get the crap. Just kidding.

Example 2:

3NES1: Okay ahora vocabulario página xxx cuatrocientos setenta y uno cuatro siete y uno vocabulario Paso dos, con el ritmo de la música just kidding. Okay repitan cáncer.

*Explanation of new topics or assignments.* This category describes the explanation of material that is new to the students or about which the students are confused that is not specifically the teaching of a grammar topic. This deals with subjects as in the process of teaching or explaining culture and not the more administrative activities previously classified.

Example 1:

1NSS1: No bueno lean un poco sobre estos personajes después voy a preguntarles um sobre ellos son los integrantes, integrantes which will sort of not the participants but the group members, okay. They compose this group now, Buena Vista Social Club. Así que lean sobre ellos, también lean como grupos, okay en esto grupo que están sí lean la página cuatrocientos ochenta y tres y cuatrocientos ochenta y cuatro en voz alta después compartan el personaje que les tocó. A mí me tocó Bararito Torres, él toca el laúd cubano y se lo lean al grupo. ¿sí?

Example 2:

3NES1: ¿Cómo?

CLS: Diecinueve, do I have to say both of them at the same time.

3NES1: Eso no importa,

*Translation of vocabulary.* This category is where the majority of the switches occurred both by the instructors and also in regards to the students asking for clarification of specific vocabulary. This section included translation not only at the word level but also at the phrase level. Additionally, words and phrases that were uttered in English that appeared to be due to a lexical gap in the speakers vocabulary were also classified in this

section unless they dealt with one of the other established categories. This section did not include questions about grammar or classroom administration.

Example 1:

2NSS1: más o menos. Vamos a ver esto, entonces chicos silencio, vamos a ir todos aquí página cuatrocientos cuarenta y ocho ejercicio 'a'. bueno entonces en ese ejercicio, en ese ejercicio ustedes tienen cuatro verbos. Tienen el verbo recomendar, el verbo aconsejar, el verbo insistir en siempre en, en siempre y sugerir, entonces ustedes usan estos cuatro verbos para, vamos a ver, persuadir. ¿Cómo es esta palabra en inglés?

CLS: Persuasion.

CLS: Persuade.

Example 2:

CLS: ¿Cómo se dice ship?

2NSS1: Ah barco.

*Lack of comprehension.* This category was the most problematic due to the general nature of the classification. Because much of the classification took place in more specific categories, this one was reserved for expressions of a lack of comprehension on a more global level reflecting not just a lack of comprehension of a word or phrase.

Example 1:

4NSS1: Hace dos mesas que salí a comer con mis amigos. Excelente. Y si comienzas con salí then how would you reword the whole thing? Salí.

CLS: What?

Example 2:

2NSS2: ¿Cómo se dice esta palabra?

CLS: What'd she say? Adjective.

*Respond to students' or instructor's use of L1.* Many times in reading and analyzing the transcript, it appeared as though the switch between English and Spanish was motivated by either the instructors' or students' use of the L1 prior to the switch. These switches that appeared motivated by accommodation to the speaker's use of English were classified here. These examples show that both the students and the instructors accommodated to the linguistic patterns of their interlocutor. These types of switches support Giles (1973) Accommodation Theory wherein he states that speakers will converge linguistically toward the speech patterns that they believe to be characteristic of their speech partner in order to gain social approval. These switches may very well be motivated be by both the students and teachers attempting to find approval with one and other.

Example 1:

CLS: Oeste y ahora el capital tiene mucho, ¿Cómo se dice damage?

2NSS2: Damage, damage, damage, damage, bueno.

Example 2:

3NES2: El ganado y los granos. ¿Qué son granos?

CLS: En inglés grain.

3NES2: Y que, un ejemplo. ¿Qué es un ejemplo de un grain?

*Other.* Finally, other was reserved for any switches that were not classified under any of the other categories. Few switches did not fit under the other areas but some

common expressions that I classified here were filler words such as “yeah”, apologies, exclamations, etc. Several examples are given of the switch into English.

Example 1:

2NES2: Y chequea concordancia de género, femenino, masculino y número singular y plural. ¿vale?

CLS: Sí, sí.

2NES2: Yeah.

Example 2:

2NSS2: Uh bueno que vamos a hacer. ¿Fuiste solo? ¡Hola señorita! ¿Listos? Apaga las luces señorita Johnson, por favor. Well, la pregunta que siempre tenemos las mujeres, bueno yo primeramente. ¿Qué dice allá? ¿Qué dice acá? ¿Se puede ver bien? ¿Qué dice Mafalda? Esta es una cómica de Argentina y de Chile, es muy, muy popular. ¿Qué dice Mafalda? ¿puedes leerlo por favor? Me pregunto alcanzas a verlo. ¿Señor Tom puedes leerlo?

2NSS2: Wow, preguntas ¿chicas?, ¿chicos?

Research question #5.

*What are the factors that may influence teachers’ and students’ L1 and TL use in the classroom e.g., class level, previous teaching or classroom experience, educational background of the instructor, training in pedagogy, teaching experience, etc.?*

Using the Pearson Correlation of parametric data, I analyzed the data to determine whether there were any statistically significant correlations between the different instructor and student-related factors and changes in language use in the classroom (see

Appendix J). A very strong and statistically significant correlation of r = .826 (p = .000) was found between the instructors' use of English and the students' use of English. This result shows that as the instructors used more English in the classroom, so did the students. This outcome supports those who argue for the exclusion of English from the classroom based on the belief that this will increase the use of English by the students. The data from this study support that increases in L1 use by the teacher will result in increases in L1 use by the students.

When comparing the use of Spanish by the instructors with that of students, the results showed no significant correlation (r = .47) between Spanish use by the instructor and the students' use of Spanish (p = .067). Possibly, with a larger sample these results might change. Teaching experience was not a significant factor in regards to Spanish and English use by the instructors. One of the unexpected findings was a correlation (r = -.45) that approached significance (p = .07) between the instructors' self-evaluated proficiency in English and amount of Spanish used in the classroom. This correlation showed that the higher the instructors evaluated their proficiency in English, the less Spanish they used in the classroom. This is due in large part to the fact that the native English-speaking instructors evaluated their proficiency higher and being fluent in the L1 of the students, they could have been more likely to use English. However, some of the native Spanish-speaking instructors who evaluated their English proficiency as native or native-like also used more English in the classroom.

Not surprisingly, class level was also a significant factor (p = .05), when correlated (r = .49) with the amount of Spanish use by the students, meaning that the

higher the level of the student the more TL was produced. This was another correlation that should be expected in large part due to the fact that the more advanced students have a greater ability and vocabulary from which to draw from and who thus should be able to produce more language than their less proficient counterparts at lower levels. There was also a significant correlation ($r = .668$) between class level and teaching experience ($p = .005$). This can be explained, given that the majority of the new graduate student instructors who begin a graduate program in the Spanish Department at the University of Arizona are placed into the lower level classes, thus assigning the higher level courses to those instructors who have already been in the program for a more extensive period of time. Finally, there was a significant correlation ($r = .52$) between the teachers' beliefs regarding students' use of Spanish and the teachers' self-evaluated proficiency in Spanish ($p = .041$) implying that the more proficient teachers tend to believe that exclusive use of the TL is preferred.

In conducting the data analysis, several factors showed no significant differences in determining the use of English and Spanish in the classroom. There was no statistically significant correlation between the students' Spanish use ($r = -.08$) or English use ($r = -.156$) and the amount of training the teachers had in language pedagogy. This implies that pedagogical training for these instructors did not result in statistical significance in gain scores for their students. Teaching experience was also not a statistically significant factor in either the students' use ($r = .42$) or the teachers' use ($r = .33$) of Spanish in the class. Teaching experience was also not a statistically significant factor in the students' use ($r = -.02$) and teachers' use of English ($r = -.33$). In addition, no statistically

significant correlation ($r = -.08$) was found between the students' use of English and their use of Spanish. This would suggest that just because students use more English in the classroom, they are not going to use less Spanish. This can also be seen in several of the graphs found under research question #1 in this chapter where many of the students produced a large amount of both Spanish and English.

In order to measure whether certain factors in the language classroom were interacting**,** I used a repeated measures multivariate analysis to determine statistical significance between teacher and student factors including, use of Spanish and English and the other variables that were being examined such as class level, native language, time abroad, proficiency in English and Spanish, teaching experience, and pedagogical training. The repeated means analysis was used in order to see if there was a significant interaction between two or more factors. The interaction between the teachers and students and their use of Spanish compared with their use of English produced the strongest significant difference ($p < .001$). This can be seen in the production by the teachers and students in their preferred use of Spanish over English. Additionally, I found that there was a significant interaction ($p = .046$) between Spanish and English use and the teachers' self-evaluated proficiency in English. Further analysis of the data demonstrated that the more proficient the teacher is in English, the more English is used in the classroom overall; and the lower the proficiency in English the more Spanish is being used. It is again important to note that the proficiency measure in both English and Spanish was self-reported, and no testing was done to measure actual proficiency. Upon conducting the same test of repeated measures to test whether teacher proficiency in

Spanish significantly changes the production of students, no statistically significant difference was found ($p = .547$) providing evidence that mere proficiency in Spanish alone is not a predictor of language use in the classroom.

The only other statistical analysis that resulted in a near significant finding was the native language of the instructor on their use of Spanish and English ($p = .064$). The instructors who were native Spanish-speakers used more Spanish and less English than the native English-speaking instructors. While not statistically significant, the finding points to a trend that possibly the native language of the teacher does play a role in production. Additionally, a regression analysis was conducted in order to test whether the teachers' native language influenced student and teacher language use in the classroom, the results were, however, also not statistically significant. Additional factors that were analyzed using the repeated means but where no significance was found were interactions between Spanish and English use by the instructors and students compared to pedagogical training, educational level, class level, and teaching experience.

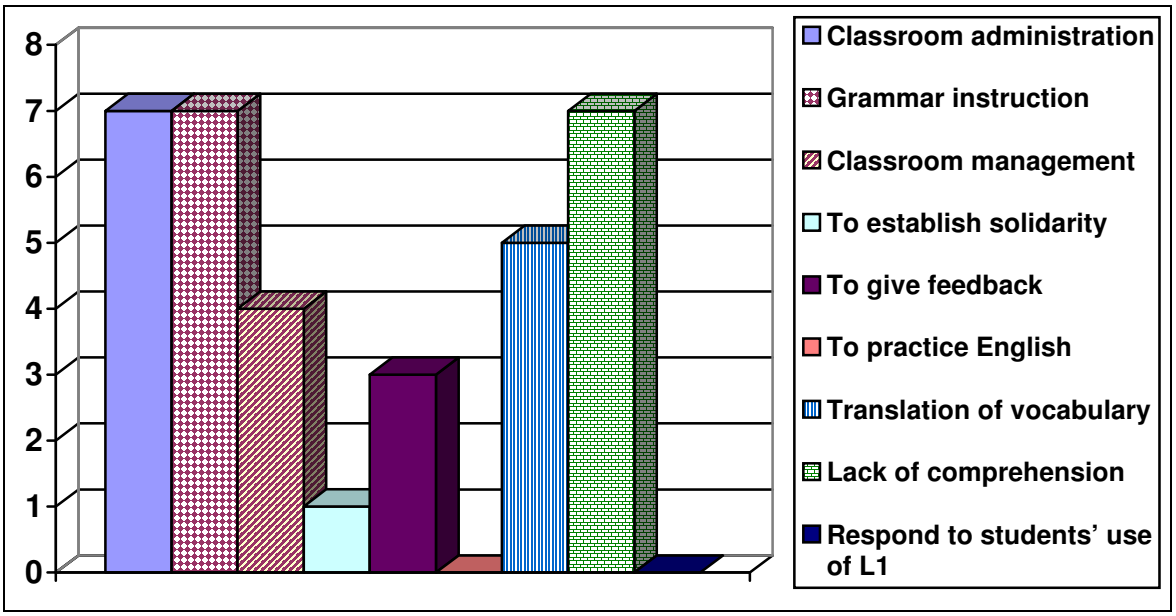
*Analysis of Questionnaires.* From the data gathered in the questionnaires (see Appendix A and Appendix B), several questions helped shed light on student and teacher language use in the classroom. All of the participants completed a questionnaire where they answered a series of questions on language uses and appropriateness of using the L1 (English) in the classroom. Additionally, the instructors were asked to include the top three reasons to which they attributed their use of Spanish in the classroom. In order to not limit the participants' responses on the questionnaire when they were asked to check which factors influenced their L1 and TL use, these questions contained an "other" option,

where respondents were able to add anything they felt was missing from the choices they had been given.

In the questionnaires, the Spanish 102 and Spanish 202 instructors were asked to mark a series of statements regarding the situations in which they felt that instructors should use some English in the Spanish FL classroom. The ambiguity of the term "some" can lead to a wide-array of interpretations by both the students and teachers. However, in contrasting the TL-only classroom with one where 'some' of the L1 is employed, it was a useful adjective.

The results for the Spanish 102 instructors showed that 7 of the 8 (87.5%) instructors felt that some English should be used when addressing the topic of grammar, in dealing with classroom administration issues, and when students appear not to understand the material. It was not determined how the instructors determined a lack of comprehension in their students to answer these questions. It is not known whether the instructors used paralinguistic cues or English comments by the students to determine their confusion. The other purposes for which the majority of teachers felt some English was to be used was in the translation of vocabulary (5 out of the 8 instructors or 62.5%), and in classroom management (4 of the 8 instructors or 50%). The other areas that were less important were to give feedback, where 3 of 8 (37.5%) felt some English should be used, and to establish solidarity, where only 1 of 8 (12.5%) felt that some English should be used. None of the instructors felt that some English should be used to practice their English or in response to the students' use of the L1 (see Figure 4.12).

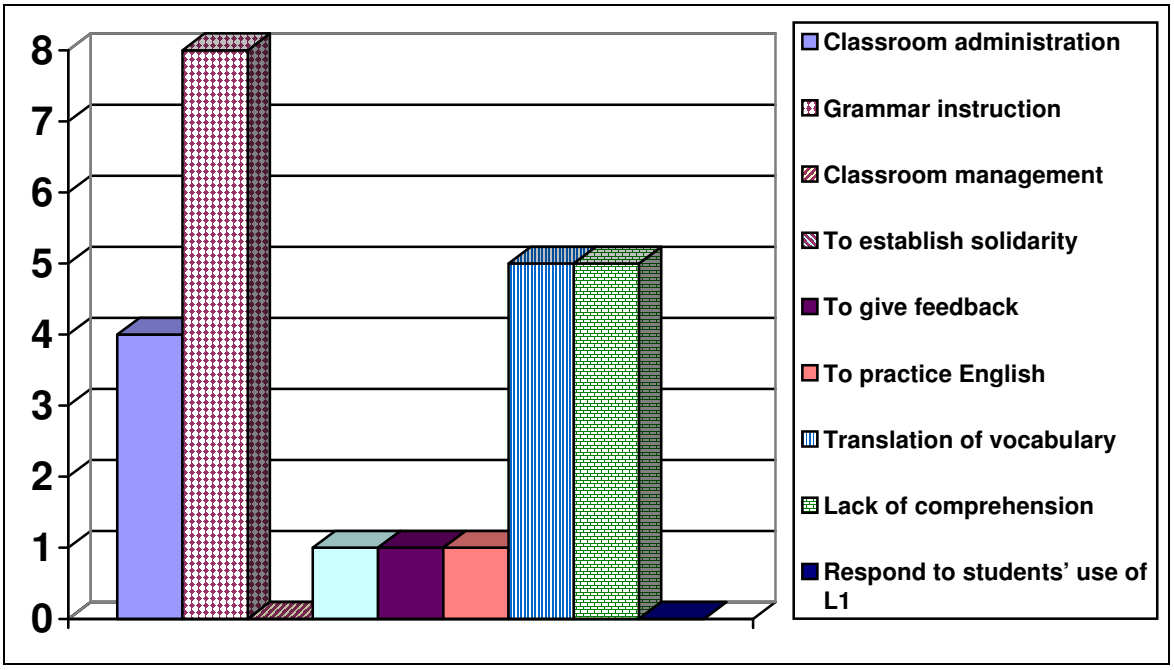
**Figure 4.12 Purposes for Which Spanish 102 Instructors Feel Some English Should Be Used**




Responses by the Spanish 202 instructors indicated some different patterns for when they felt that the L1 (English) should be employed to some degree in the classroom. All 8 instructors felt that some English should be used when addressing the topic of grammar. Five out of the 8 instructors (62.5%) felt that English should be used when students appear not to understand the material and in the translation of unknown vocabulary. As previously mentioned, it was not clear how the instructors determined a lack of comprehension from their students to answer this question. It is not known whether the instructors used paralinguistic cues or comments in English from their students to determine their confusion. In dealing with classroom administration issues, 4 of the 8 instructors (50%) felt that some English should be used. Only 1 of the 8 instructors (12.5%) felt that any English should be used to establish solidarity with the class, to give feedback, and to practice English. None of the instructors felt that some

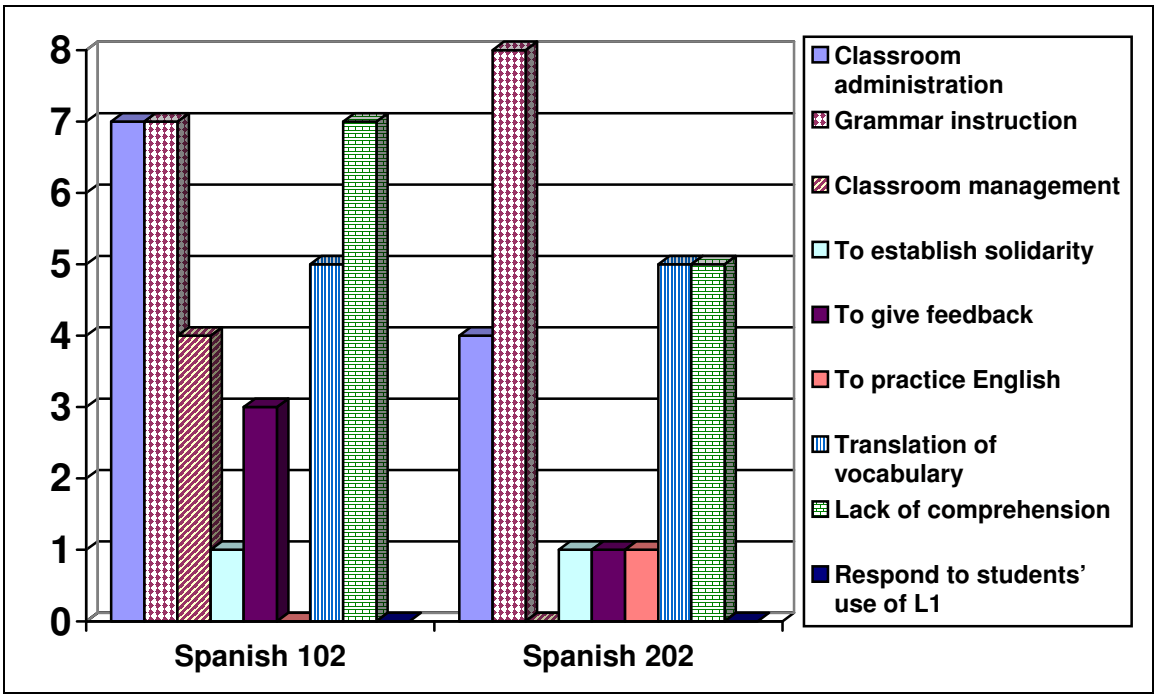
English should be used in response to the students' use of the L1 or in classroom management, whereas half of the 102 instructors found that classroom management was an acceptable area to use some English. This finding reflects an interesting distinction between levels and is likely attributable to the age and maturity difference between the different levels. Most of the students in Spanish 102 were recent graduates of high school and thus were younger than the Spanish 202 students and so more need for disciplinary measures is therefore likely (see Figure 4.13).

**Figure 4.13 Purposes for Which Spanish 202 Instructors Feel Some English Should Be Used**




A comparison between the Spanish 102 level and the Spanish 202 level better expresses some of the differences between levels (see Figure 4.14).

**Figure 4.14 Purposes for Which Spanish 102 and Spanish 202 Instructors Feel Some English Should Be Used**

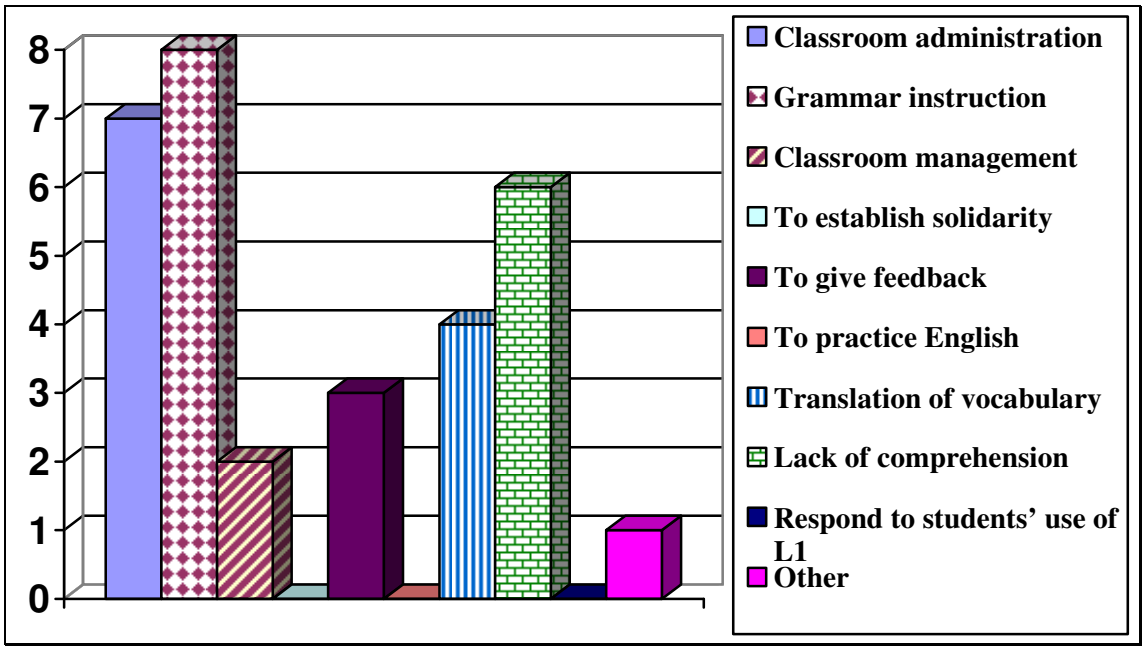



When analyzing the differences between native Spanish-speaking instructors and native English-speaking instructors, several distinctions were found; however, none of these were statistically significant. When comparing the results on the question when English should be used and the question about the reasons for using Spanish in the classroom, none of the results were significant. Additionally, using t-tests on the individual factors to compare the native English-speaking instructors and the native Spanish-speaking instructors, no statistically significant differences were found on any of the questions. In spite of this lack of statistically significant differences, several interesting findings were noted and are subsequently described.

All eight of native English-speaking instructors felt that some English should be used when addressing the topic of grammar. Seven out of the 8 instructors (87.5%) felt

that English should be used in dealing with classroom administration issues. Almost as many of the instructors, 6 of the 8 (75%) felt that some English should be used when students appear not to understand the material. Four of the 8 instructors, felt that some English should be used in the translation of vocabulary and 3 of the 8 instructors (37.5%) felt that only English should be used to give feedback to the students. Only 2 of the 8 (25%) felt that some English should be used in classroom management. None of the instructors felt that some English should be used in response to the students' use of the L1, to practice English, or to establish solidarity. Only one instructor used the "other" box to respond and wrote that English should be used when discussing exams (See Figure 4.15).

**Figure 4.15 Purposes for Which Native English-Speaking Instructors Feel Some English Should Be Used**

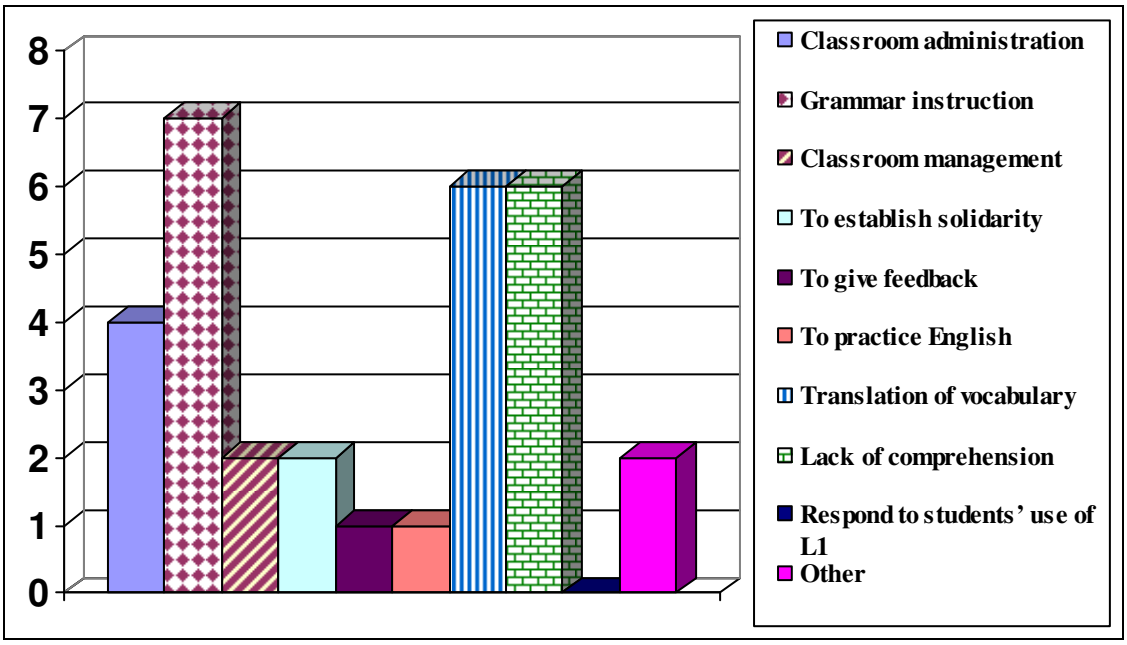



The native Spanish-speaking instructors had many similar results to those of the native English-speaking instructors. Seven of the 8 (87.5%) instructors felt that some

English should be used when addressing the topic of grammar. Six of the 8 instructors (75%) felt that English should be used in the translation of vocabulary and when students exhibit a lack of comprehension of the material. Two of the 8 (25%) felt that some English should be used in classroom management, to establish solidarity, and other. Comments in the "other" category were that English should be used to discuss quizzes and exams (see Figure 4.16).

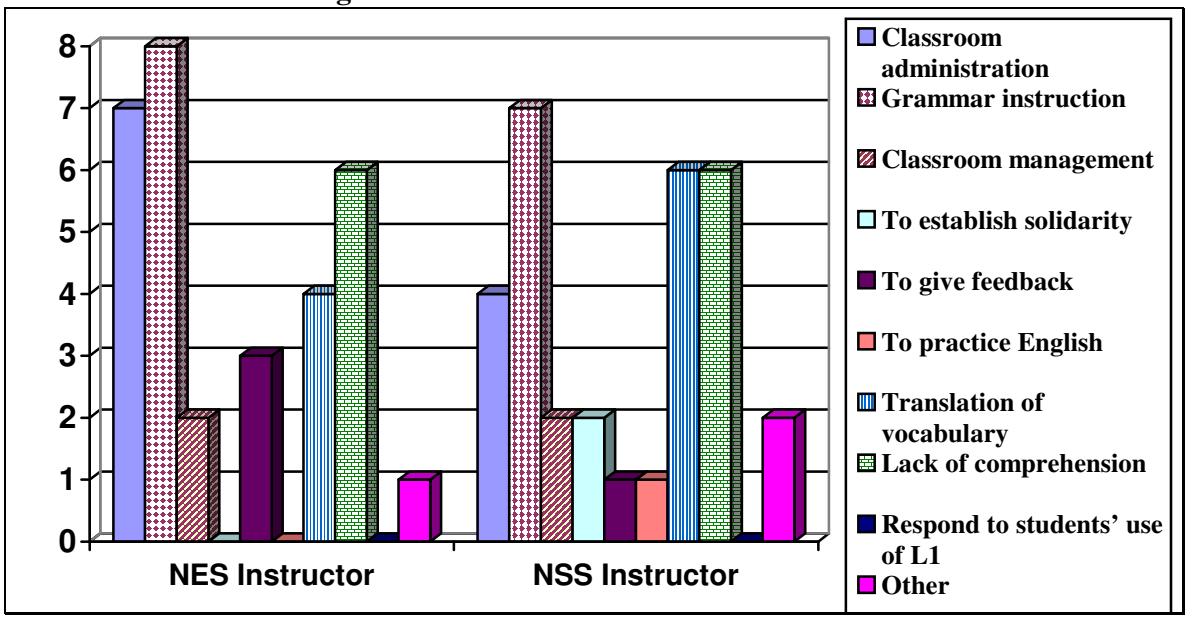
It is interesting to note that none of the native English-speaking instructors felt that English should be used to establish solidarity, whereas 2 of the 8 native Spanish-speaking instructors did mark it as an acceptable use of English. One of the instructors felt that some English should be used to give feedback and one instructor felt that some English could be used in the classroom to actually practice English. Obviously, this was not a consideration for the native English-speaking instructors. None of the instructors felt that some English should be used in response to the students' use of the L1.

**Figure 4.16 Purposes for Which Native Spanish-Speaking Instructors Feel Some English Should Be Used**




A graphical comparison between the native English-speaking and the native Spanish-speaking instructors shows some of the salient differences (see Figure 4.17).

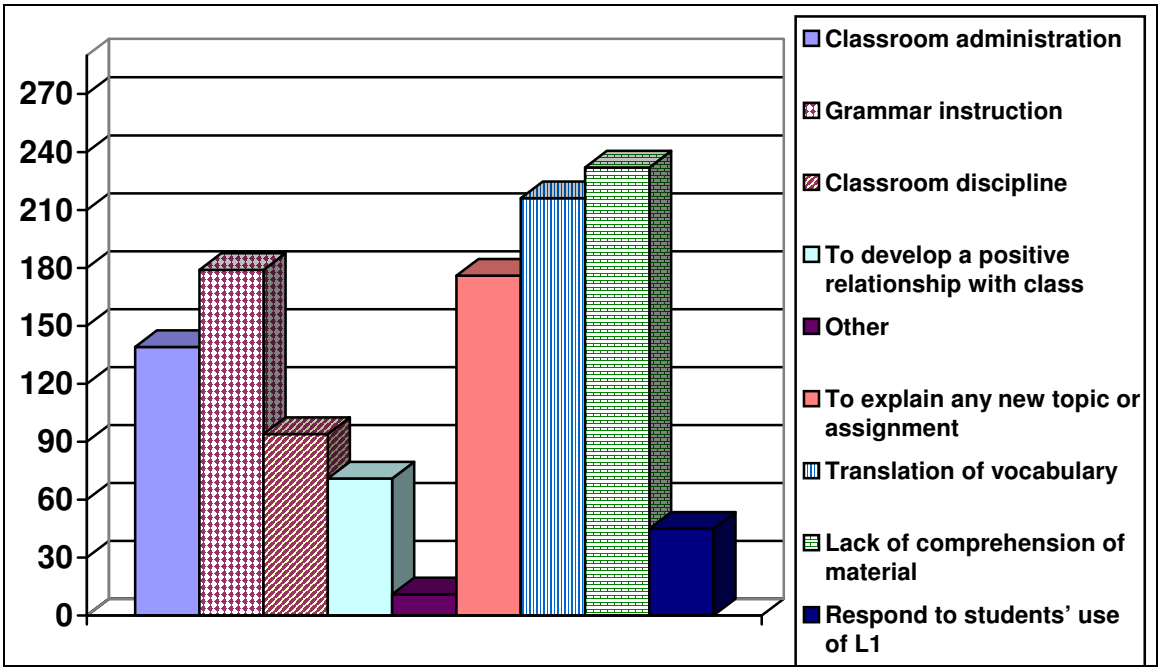
**Figure 4.17 Purposes for Which Native English-Speaking and Native Spanish-Speaking Instructors Feel Some English Should Be Used**



The students were given a similar questionnaire; however, some of the questions varied in relation to the teachers' questionnaire (see Table 4.31). The students also showed some variation between class levels similar to their instructors. Of the 287 Spanish 102 students, 232 (81%) felt that some English should be used if there is a lack of comprehension of the material. The next most common reason to use some English was the translation of unknown vocabulary where 216 of the 287 students (75%) responded affirmatively. Both the explanation of a new topic or assignment and grammar instruction received about the same score with 179 out of 287 students (62%) requesting English with the teaching of Spanish grammar, and 176 out of 287 (61%) wanting some English when a new topic is presented or a new assignment given.

Around half of the students, 139 of 287 (48%) stated that some English should be used in classroom administration. Of the other categories where some English use was suggested, 94 out of 287 (33%) suggested it for classroom discipline, 71 out of 287 (25%) to help develop a relationship with the class, and 15 out of 287 (5%) to respond to the students' use of the L1. Eleven of the 287 students (4%) marked the "other" category. These students stated that some English should be used when going over tests and quizzes (see Figure 4.18).

**Figure 4.18 Purposes for Which Spanish 102 Students Feel Some English Should Be Used in the Classroom**

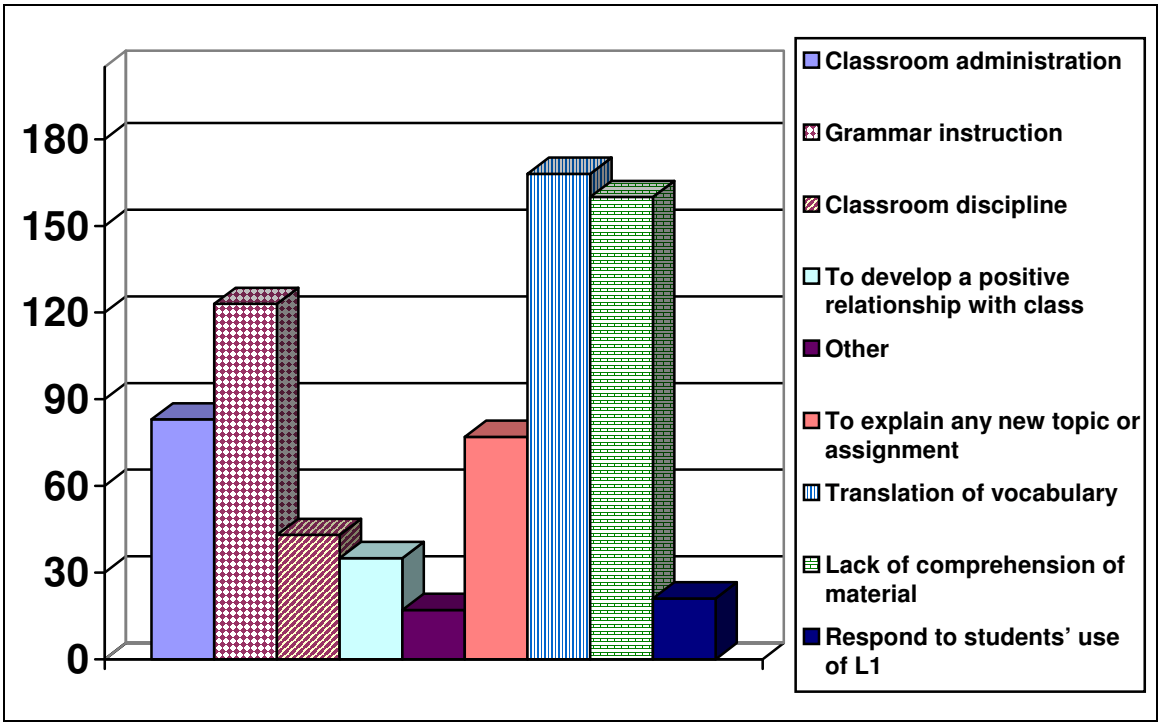



Of the 204 Spanish 202 students, 168 (82%) felt that some English should be used in the translation of unknown vocabulary. The next most common reason to use some English is if there was a lack of comprehension of the material where 160 of the 204 students (78%) responded affirmatively. Using some English in the teaching of grammar was the only other question to which the majority of students responded affirmatively with 123 of the 204 students (60%) supporting this use.

Both the explanation of a new topic or assignment and classroom administration received about the same score with 83 out of 204 students (40%) and 77 out of 204 (38%) wanted some English when a new topic was presented or a new assignment given. Of the other categories where some English use was suggested, 43 out of 204 (21%) suggest it for classroom discipline, 35 out of 204 (17%) to help develop a relationship with the class,

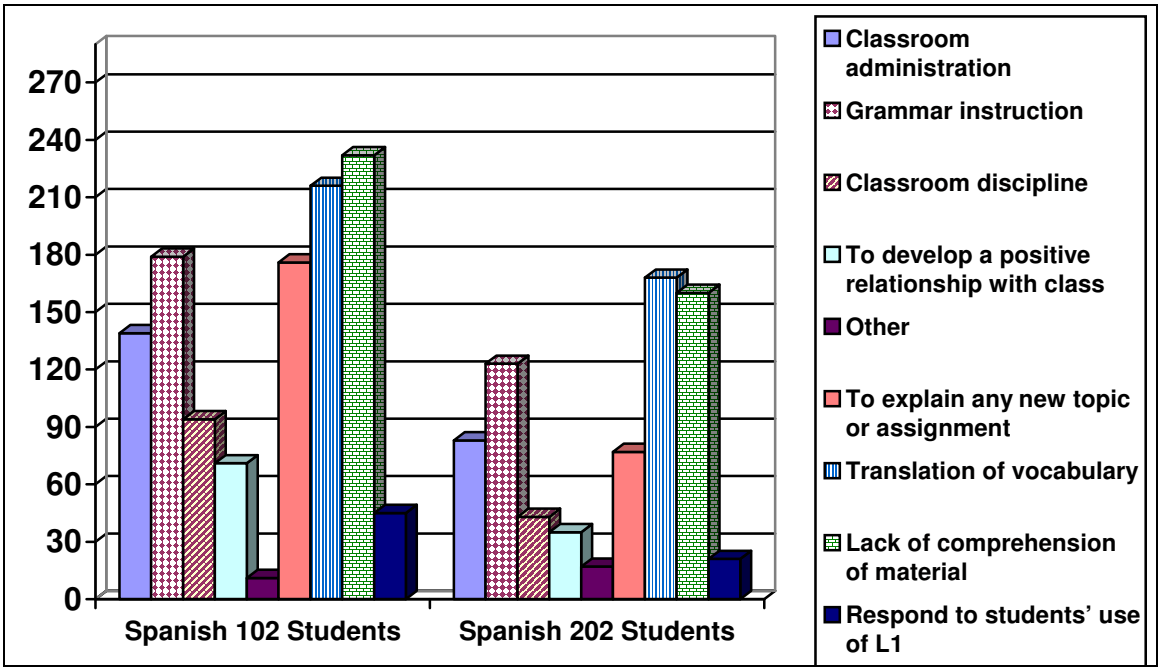
and 21 out of 204 (10%) to respond to the students' use of the L1. Seventeen of the 204 students (8%) marked the "other" category. These students stated that some English should be used when going over tests and quizzes and to clarify an assignment (see Figure 4.19). The students from Spanish 102 and Spanish 202 as a group were much more homogeneous than their instructors regarding their responses.

**Figure 4.19 Purposes for Which Spanish 202 Students Feel Some English Should Be Used in the Classroom**




A graphical comparison between the Spanish 102 students and the Spanish 202 students shows some of the salient differences as well as any similarities that exist (see Figure 4.20).

**Figure 4.20 Purposes for Which Spanish 102 and Spanish 202 Students Feel Some English Should Be Used in the Classroom**

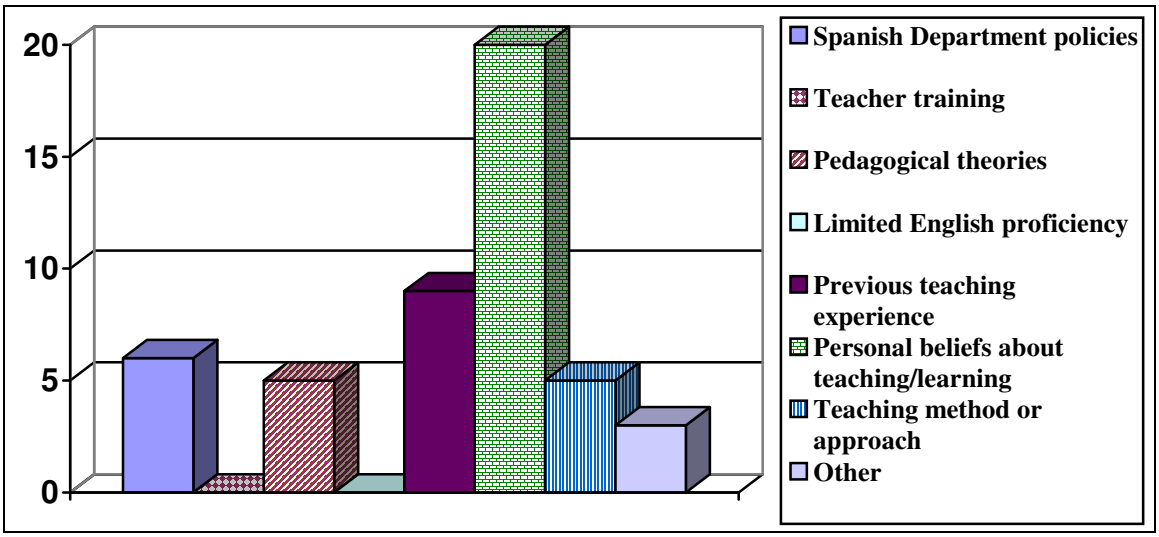



The instructors were asked to rank the reasons of why they choose to use Spanish in the classroom from one to three, according to the importance given to their top three choices. In order to better visually represent the choices of the instructors, I changed the value on the instructors' answers to make one the third most important, two the second most important, and three the most important. This number scheme more accurately reflects the importance of each of the instructors' choices meaning that a higher total of points represent a higher value placed on a given reason for using Spanish in the classroom. With the change, each question could receive a score from one to three and the higher the score on a reason for using Spanish, the more important the instructors felt that item to be. A maximum score of 24-points was possible if all eight of the instructors put that item as most important with a score of three.

The results showed that for the Spanish 102 instructors their personal beliefs about teaching and learning were significantly more important than any of the other factors. Of the maximum 24 points possible, this category received 20 points. Every instructor marked it as one of the top three, with five of the eight 102 instructors marking it as their number one reason for using Spanish in the classroom. This may reflect the lack of experience teaching Spanish as a foreign language by these instructors who had less experience than those teachers of Spanish 202 because the 102 teachers had fewer motives upon which to base their choice in using Spanish in the classroom.

Also, important to the use of Spanish in the classroom was the previous teaching experience and the Spanish department policies. The teachers' pedagogical theories and the teaching method/approach were lesser factors. Teacher training and limited English proficiency were not given by any of the instructors as reasons to use Spanish in the classroom. It should be noted that many of the instructors came from undergraduate programs where they would have received little if any teacher-training and thus a possible explanation for not considering this factor (see Figure 4.21).

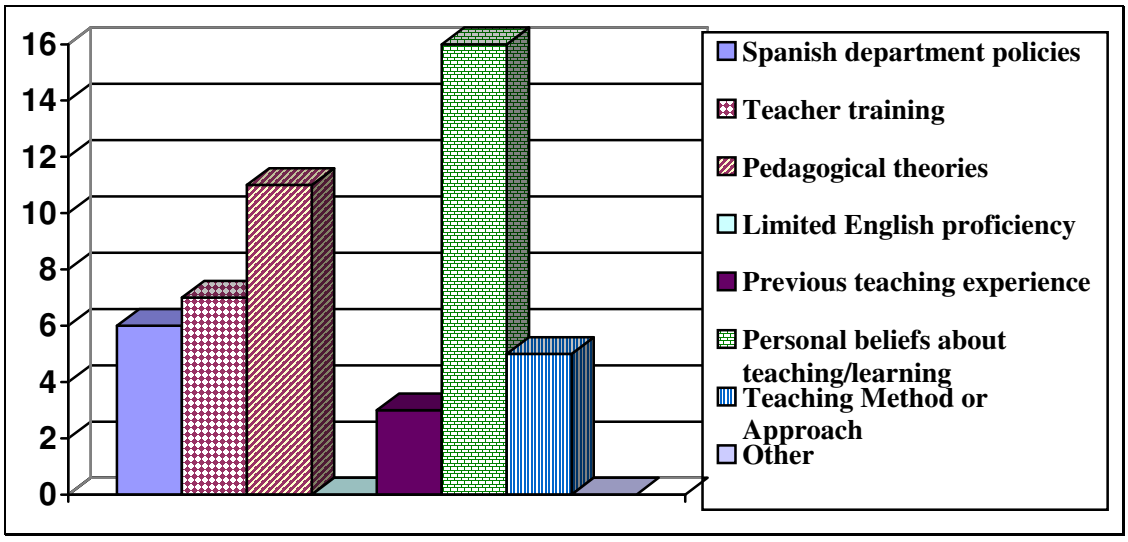
**Figure 4.21 Reasons for Spanish 102 Instructors to Use Spanish in the Classroom**




The results for the Spanish 202 instructors also showed that their personal beliefs about teaching and learning were more important than any of the other factors in their choice to use Spanish in the classroom, similar to the Spanish 102 instructors. Of the maximum 24 points possible, this category received 16 points. Seven of the eight instructors marked it as one of the top three reasons for using Spanish in the classroom. These teachers cited pedagogical theories as the next most important with 11 out of a possible 24 points.

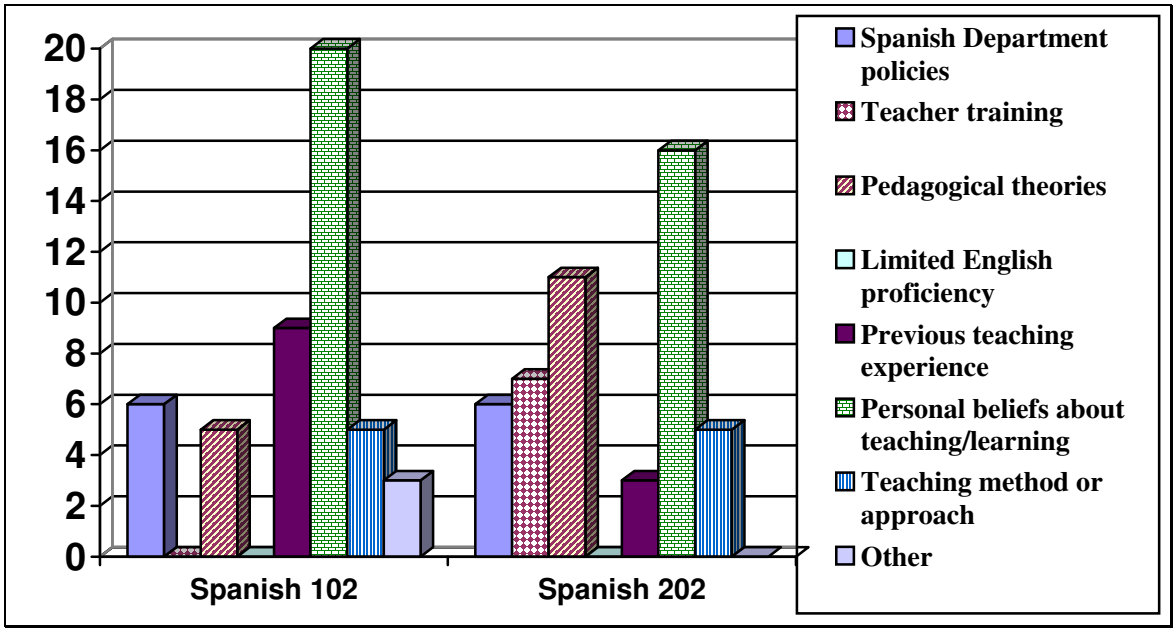
Also, important reasons for the use of Spanish in the classroom was teacher training and the Spanish Department policies. Previous teaching experience and the teaching method/approach were lesser factors. Limited English proficiency was not given by any of the professors as reasons to use Spanish in the classroom. These instructors had been teaching for longer periods of time and thus they brought a different background to the classroom. The results of the Spanish 202 instructors reflected a wider range than those of the Spanish 102 instructors (see Figure 4.22).

**Figure 4.22 Reasons for Spanish 202 Instructors to Use Spanish in the Classroom**



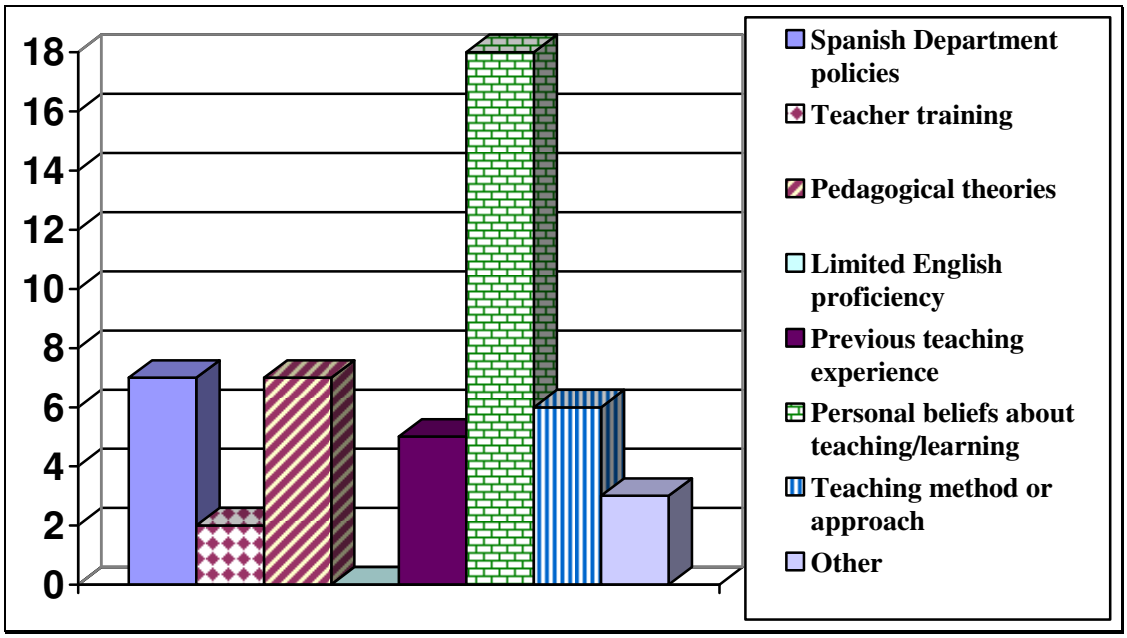

A graphical comparison of the Spanish 102 instructors and the Spanish 202 instructors' reasons for using Spanish in the classroom illustrates the differences and similarities between the two levels of instructors (see Figure 4.23).

**Figure 4.23 Reasons for Spanish 102 and Spanish 202 Instructors to Use Spanish in the Classroom**



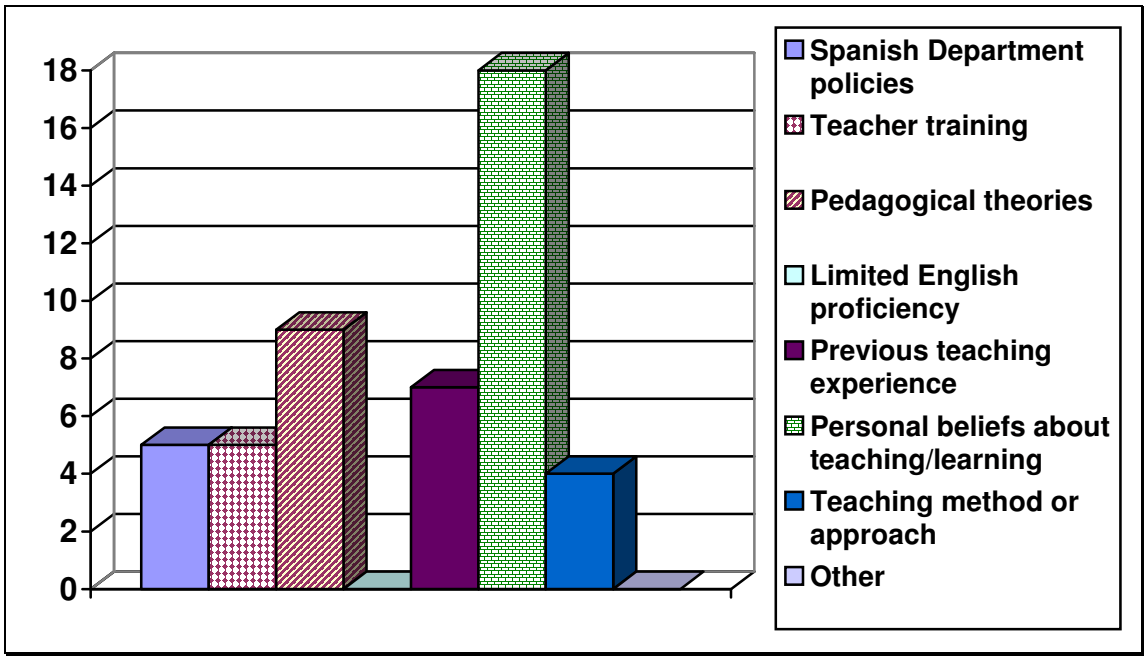
Regarding the differences between native English-speaking instructors and native Spanish-speaking instructors, again some differences were found among the instructors based on native language spoken. The results showed that for the native English-speaking instructors, their personal beliefs about teaching and learning were significantly more important than any of the other characteristics. Of the maximum 24 points possible, this category received 18 points. Every instructor marked it as one of the top three choices with four of the eight instructors marking it as their number one reason for using Spanish in the classroom. Also important to the use of Spanish in the classroom were previous teaching experience and the Spanish Department policies. Teacher training was one of the lesser factors. Limited English proficiency was not given by any of the instructors as a reason to use Spanish in the classroom (see Figure 4.24).

**Figure 4.24 Reasons for Native English-Speaking Instructors to Use Spanish in the Classroom**



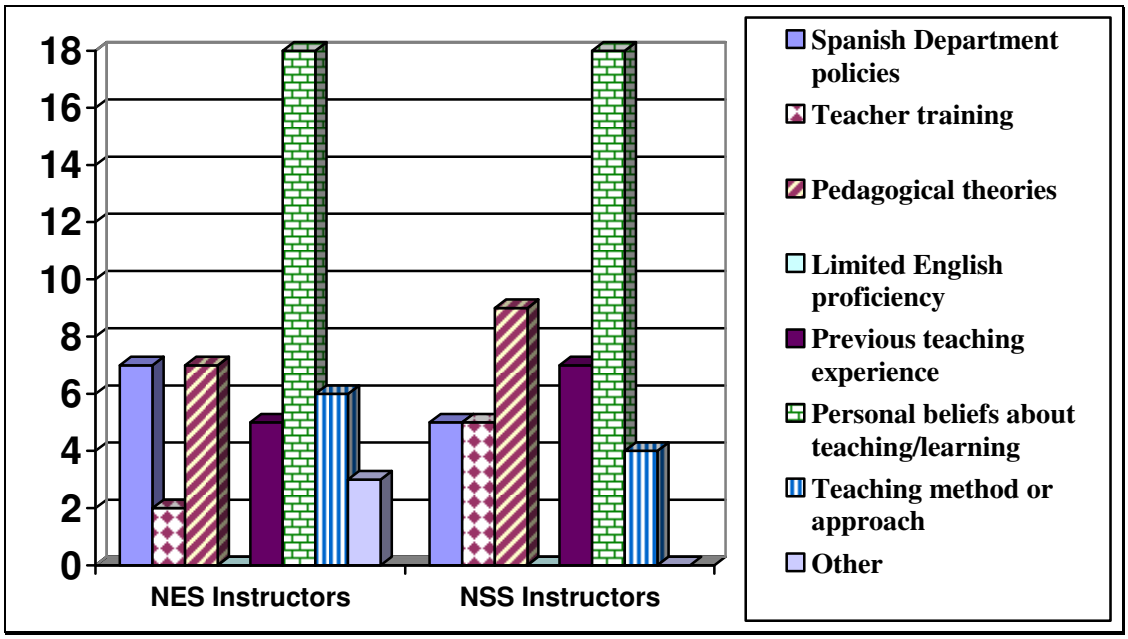
The native Spanish-speaking instructors showed similar patterns to those of the native English-speaking instructors. The results showed that for the native Spanish-speaking instructors their personal beliefs about teaching and learning were significantly more important than any of the other characteristics. Of the maximum 24 points possible, this category received 18 points. Every instructor except one marked it as one of the top three choices with five of the eight instructors marking it as their number one reason for using Spanish in the classroom. Also, important to the use of Spanish in the classroom were previous teaching experience and pedagogical theories. Spanish Department policies, teacher training, and a particular teaching method or approach were also factors, even though to a lesser degree. Limited English proficiency was not given by any of the instructors as a reason to use Spanish in the classroom (see Figure 4.25).

**Figure 4.25 Reasons for Native Spanish-Speaking Instructors to Use Spanish in the Classroom**



A graphical comparison of native English-speaking instructors' and the native Spanish-speaking instructors' reasons for using Spanish in the classroom illustrates the differences and similarities between the two types of instructors (see Figure 4.26).

**Figure 4.26 Reasons for Native English-Speaking Instructors and Native Spanish-Speaking Instructors to Use Spanish in the Classroom**




Research Question #6.

*Does a relationship exist between student and teacher perceptions and beliefs regarding L1 and TL use and actual use?*

This question was analyzed in two different ways: first, a Pearson Correlation of parametric data was used to analyze the students' and instructors' responses to the questions regarding their perceptions and beliefs about the use of Spanish and English in the classroom; second, the questionnaire data were examined and two-sample t-tests were used to determine the differences between different levels of classes and also between students and teachers, dividing them according to the native language of the instructors.

*Correlational Analysis.* Using the Pearson Correlation of parametric data, I analyzed the data to measure the different relationships between perceived use of the L1 and TL in the classroom by the students and instructors, as responded to on the language questionnaire and actual use as measured during the three observations (see Table 4.26). This table shows that the instructors' perception of their Spanish use positively correlated ($r = .629$; $p = .009$) with their actual Spanish use in the classroom. Additionally, their actual English use had a negative correlation ($r = -.547$; $p = .028$) to their perception of Spanish use. The instructors' perception of their students' use of Spanish and actual Spanish use by the students showed no statistically significant correlation ($r = .094$; $p = .729$), meaning that the teachers' perception of their students' Spanish use in the classroom was not validated with actual observational data. An analysis of the teachers' beliefs regarding Spanish use in the classroom compared to their actual Spanish use found that there was no statistically significant correlation ($r = .048$; $p = .859$), meaning that a there was a negligible relationship between their stated beliefs and actual observed behavior in the classroom. Similarly, no statistically significant correlation ($r = .030$; $p = .913$) was found between the teachers' beliefs about English use in the classroom and actual recorded data, providing again evidence that what teachers believe should occur in the classroom does not always materialize at least in these data.

The students' data were also analyzed to compare how their perceptions and beliefs about language use correlated with actual classroom behavior. Findings showed a positive correlation ($r = .528$; $p = .035$) between their perception of their teachers' Spanish use and actual Spanish use. The students also showed a strong negative

correlation (r = -.781; p = .000) between their perception of their teachers' Spanish use and their instructors' use of English. In this instance, a strong negative correlation signifies that they are relatively accurate in predicating their instructors' English use. The students showed no statistically significant correlation between their perception of their own Spanish use and their actual Spanish use in the classroom. It should be noted, however, that only the students' interactions with their instructors were recorded, so the students may have included their perception of the time that they spent in groups. The students did have a strong negative correlation (r = -.707; p = .002) between their perception of their Spanish use in the classroom and their actual English use. In this instance, a significant negative correlation means that they are aware of their English use in the classroom. No statistically significant correlations between students' beliefs about Spanish use in the classroom and their own Spanish and English use were found, providing further evidence of a possible disconnect between beliefs and actual behavior. The results showed a significant correlation (r = .561; p = .024) between the students beliefs about teachers' Spanish use in the classroom and the amount of actual Spanish use by their particular instructor in the classroom. Additionally, the students' belief about teachers' Spanish usage in the classroom and actual English use by their instructors showed a correlation that approached significance (r = -.486; p = .056) (see Table 4.26). It is important to note that because the questionnaire was administered at the end of the semester, it is impossible to determine whether the students' beliefs about language use in the classroom were shaped by their instructor over time or whether the instructors'

language use in the classroom was judged based on pre-existing beliefs about language usage.

**Table 4.26 Pearson Product Correlations of Teachers' and Students' Actual Spanish and English Use with Their Perceptions and Beliefs about Language Use**

| | Actual Teacher Spanish Use in the Classroom | Actual Teacher English Use in the Classroom | Actual Student Spanish Use in the Classroom | Actual Student English Use in the Classroom |
|---|---|---|---|---|
| Teachers' Perception of Their Own Spanish Use | r = .629<br>p = .009* | r = -.547<br>p = .028** | r = .237<br>p = .376 | r = -.318<br>p = .230 |
| Teachers' Perception of Their Students' Spanish Use | r = .565<br>p = .023* | r = -.118<br>p = .665 | r = .094<br>p = .729 | r = -.271<br>p = .310 |
| Teachers' Beliefs about Teacher Spanish Use | r = .048<br>p = .859 | r = .030<br>p = .913 | r = .034<br>p = .804 | r = .151<br>p = .577 |
| Teachers' Beliefs about Student Spanish Use | r = .160<br>p = .554 | r = -.285<br>p = .284 | r = .182<br>p = .500 | r = -.020<br>p = .940 |
| Students' Perception of Their Teachers' Spanish Use | r = .528<br>p = .035* | r = -.781<br>p = .000* | r = .068<br>p = .804 | r = -.913<br>p = .000* |
| Students' Perception of Their Own Spanish Use | r = .553<br>p = .026* | r = -.632<br>p = .009* | r = .366<br>p = .164 | r = -.707<br>p = .002* |
| Students' Beliefs about Student Spanish Use | r = .175<br>p = .516 | r = -.243<br>p = .364 | r = -.076<br>p = .781 | r = -.169<br>p = .533 |
| Students' Beliefs about Teacher Spanish Use | r = .561<br>p = .024* | r = -.486<br>p = .056 | r = -.112<br>p = .680 | r = -.332<br>p = .209 |

* Correlation is significant at the 0.05 level (2-tailed).

Several other statistically significant correlations were found when comparing the students' and instructors' perceptions and beliefs (see Table 4.27). A statistically

significant positive correlation (r = .530; p = .035) was found between the students' and teachers' perception of the students' Spanish use in the classroom. As previously mentioned, no positive statistically significant correlations were found between the students' actual use of Spanish and English and the perceived use by either the teachers or students. However, this significant correlation of r = .530 between teachers and students provides further support that interactions outside of those with the teacher may be taken into consideration in determining student L1 and TL use. There was no statistically significant correlation between the teachers' and students' beliefs about teacher language use nor was there a statistically significant correlation between the teacher's and students' belief about student language use. The students' perceptions of their own Spanish use correlated strongly (r = .806; p = .000) with their instructors' beliefs regarding Spanish use in the classroom. In addition, the students perception of their instructors' Spanish use correlated moderately (r = 496; p = .05) with the students' beliefs regarding their teachers' Spanish use in the classroom. A strong positive correlation (r = .806; p = .000) was also found between the students' perception of their own Spanish use and their perception of their instructors' Spanish use. This could possibly imply that the students feel that they are using more of the TL if they perceive that their instructors are using more Spanish in the classroom.

**Table 4.27 Pearson Product Correlations of Teachers' and Students' Perceptions and Beliefs about Language Use**

| | Teachers' Perception of Their Own Spanish Use | Teachers' Perception of Their Students' Spanish Use | Teachers' Beliefs about Teacher Spanish Use | Teachers' Beliefs about Student Spanish Use | Students' Perception of Their Teachers' Spanish Use | Students' Perception of Their Own Spanish Use | Students' Beliefs about Student Spanish Use | Students' Beliefs about Teacher Spanish Use |
|---|---|---|---|---|---|---|---|---|
| Teachers' Perception of Their Own Spanish Use | r = 1<br>p = .000 | r = .482<br>p = .059 | r = -.067<br>p = .805 | r = .067<br>p = .804 | r = .468<br>p = .068 | r = .529<br>p = .035* | r = .694<br>p = .003* | r = .542<br>p = .03* |
| Teachers' Perception of Their Students' Spanish Use | r = .482<br>p = .059 | r = 1<br>p = .000 | r = -.186<br>p = .49 | r = .187<br>p = .489 | r = .421<br>p = .104 | r = .530<br>p = .035* | r = .374<br>p = .153 | r = .224<br>p = .404 |
| Teachers' Beliefs about Teacher Spanish Use | r = -.067<br>p = .805 | r = -.186<br>p = .49 | r = 1<br>p = .000 | r = .271<br>p = .31 | r = -.006<br>p = .983 | r = .035<br>p = .897 | r = -.019<br>p = .994 | r = .48<br>p = .06 |
| Teachers' Beliefs about Student Spanish Use | r = .067<br>p = .804 | r = .187<br>p = .489 | r = .271<br>p = .31 | r = 1<br>p= .000 | r = .061<br>p = .823 | r = .303<br>p = .255 | r = -.059<br>p = .828 | r = .093<br>p = .721 |
| Students' Perception of Their Teachers' Spanish Use | r = .468<br>p = .068 | r = .421<br>p = .104 | r = -.006<br>p = .983 | r = .061<br>p = .823 | r = 1<br>p = .000 | r = .806<br>p = .000* | r = .237<br>p = .376 | r = .496<br>p = .05* |
| Students' Perception of Their Own Spanish Use | r = .529<br>p = .035* | r = .530<br>p = .035* | r = .035<br>p = .897 | r = .303<br>p = .255 | r = .806<br>p = .000* | r = 1<br>p = .000 | r = .441<br>p = .088 | r = .452<br>p = .079 |
| Students' Beliefs about Student Spanish Use | r = .694<br>p = .003* | r = .374<br>p = .153 | r = -.019<br>p = .944 | r = -.059<br>p = .828 | r = .237<br>p = .376 | r = .441<br>p = .088 | r = 1<br>p = .000 | r = .498<br>p = .049* |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Students' Beliefs about Teacher Spanish Use | r = .542<br>p = .03* | r = .224<br>p = .404 | r = .48<br>p = .06 | r = .093<br>p = .731 | r = .496<br>p = .05* | r = .452<br>p = .079 | r = .498<br>p = .049* | r = 1<br>p = .000 |

* Correlation is significant at the 0.05 level (2-tailed).

*Questionnaire Data Comparison.* The students and teachers completed a questionnaire where they were asked to indicate their perceptions of language use in the classroom and their beliefs about TL and L1 use in the classroom. The questions were similar on both the teachers' and students' questionnaires (see Appendices A and B). Many statistically significant differences were found between the perceptions and beliefs of the Spanish 102 and Spanish 202 instructors. Additionally, many statistically significant differences were found between the students' and teachers' beliefs and perceptions of L1 and TL use in the classroom.

*Instructors' perceptions according to level.* The first thirteen questions on the questionnaire dealt with perceptions regarding L1 and TL use in the classroom. The differences found between Spanish 102 and 202 instructors proved to be statistically significant on over 50% of the questions regarding their perceptions of language use in the classroom (see Table 4.28) as determined by a two sample t-test ($p < .001$). This finding resulted in spite of the fact that both levels had the same number of native-speakers of Spanish and native-speakers of English. The scale used was a 5-point scale where the teachers marked their perception of the amount of language used in different situations. For analysis purposes, the 5-point scale on the questionnaire was divided according to twenty percentage increments from 0% to 100%. Each of the five divisions

was assigned a number from one to five with a one representing from 0%-20%, a two 21%-40%, a three 41%-60%, a four 61%-80%, and a five 81%-100%.

The results showed that on every question that tested statistically significant, the Spanish 202 instructors marked a higher number than the Spanish 102 instructors. Most of the questions where significant differences were found were questions regarding the instructors' use of the TL in the classroom. The question for the instructors regarding overall use of Spanish with the students showed a statistically significant difference between class levels. Though the amount of Spanish use that both the Spanish 102 and 202 instructors perceived they were using at both levels was quite high, the Spanish 202 instructors perceived themselves to be using the TL almost all of the time. The Spanish 202 instructors also perceived themselves using more Spanish in teaching culture, history, and customs of the Spanish –speaking world, in teaching grammar, when talking about tests and quizzes, and with administrative information that is given to the students. The 202 instructors also perceived that they used more Spanish in their interactions with their students outside of the classroom (e.g., office hours, in the hall, before or after class, etc.). This perceived use of Spanish outside of the class was not measured in this study.

**TABLE 4.28 Spanish 102 and 202 Instructors' Perceptions of Language Use in the Classroom**

| # | Questions | Spanish 102 Average | Spanish 202 Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #1 | I use **Spanish** to communicate **with my students** about _____ of the time. | 4.38 | 4.85 | 0.02* |
| #2 | My **students** use **Spanish** to communicate **with me** about _____ of the time. | 3.81 | 3.69 | 0.69 |
| #3 | **My students** use **Spanish** to communicate **with each other** about _____ of the time. | 2.88 | 2.62 | 0.44 |

| | | | | |
|---|---|---|---|---|
| #4 | I use **Spanish** to give directions for **activities** exclusively (i.e., no translation) in **Spanish** about _____ of the time. | 3.75 | 4.62 | 0.09 |
| #5 | I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities. | 4.31 | 4.85 | 0.03* |
| #6 | I use **Spanish** to communicate with students about **grammar and usage** about _____ of the time we spend on discussing or working on these. | 3.56 | 4.38 | 0.03* |
| #7 | I use **Spanish** to communicate with students about **tests, quizzes and other assignments** about _____ of the time we spend discussing these. | 3.19 | 4.15 | 0.03* |
| #8 | I use **Spanish** to communicate with students about **administrative information** (course policies, announcements, deadlines, etc.) about _____ of the time we spend discussing these. | 2 | 3.38 | 0.002* |
| #9 | I use **Spanish** to communicate with students **outside of class time** (e.g., office hours, in the hall, before or after class, etc.) about _____ of the time. | 2.06 | 3 | 0.04* |
| #10 | I use **Spanish** to give instructions about assignments, tests, homework, etc. about _____ of the time. | 3.31 | 4.38 | 0.03* |
| #11 | While students are working **with partners or groups** in my Spanish class, they switch to **English** as soon as they are through with a particular activity about _____ of the time. | 3.63 | 3.46 | 0.72 |
| #12 | My students **understand** what I am saying in Spanish about _____ of the time. | 4.13 | 4.15 | 0.90 |
| #13 | When my students **do not understand** what I am saying in **Spanish**, they request that I repeat or clarify about _____ of the time. | 3.44 | 3.62 | 0.61 |

Key: 1 = 0%-20%, 2 = 21%-40%, 3 = 41%-60%, 4 = 61%-80%, 5 = 81%-100%.

*Instructors' perceptions according to native language.* The native English-speaking instructors and the native Spanish-speaking instructors showed very few

differences in their perceptions about language use in the classroom. The differences that were seen between levels were mitigated when dividing the instructors according to level. Both groups felt they used the TL most of the time in the classroom, with the native Spanish-speaking instructors indicating slightly more use of the TL. However, two questions did show statistically significant differences when comparing these two groups. Question #9 asked teachers about their language use outside of the classroom environment, and the native Spanish-speaking instructors indicated that they used Spanish between 40%-60% of the time, whereas the native English-speaking instructors indicated that they only used it between 20%-40%.

The other statistically significant finding was in question #13, "When my students do not understand what I am saying in Spanish, they request that I repeat or clarify about _____ of the time." The native Spanish-speaking instructors felt that their students were much more willing to ask for recasts or repetition of material that they did not understand. This may be due to the fact that the students either have a harder time understanding the native Spanish-speaking instructors or that the students feel more at ease in asking the teacher to repeat the information because he or she is a native Spanish-speaking of Spanish (see Table 4.29).

**TABLE 4.29 Native English-Speaking Instructors and Native Spanish-Speaking Instructors' Perceptions of Language Use in the Classroom**

| # | Questions | Native English Average | Native Spanish Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #1 | I use **Spanish** to communicate **with my students** about _____ of the time. | 4.57 | 4.6 | 0.90 |
| #2 | My **students** use **Spanish** to communicate **with me** about _____ of the time. | 3.79 | 3.73 | 0.86 |

| | | | | |
|---|---|---|---|---|
| #3 | **My students** use **Spanish** to communicate **with each other** about _____ of the time. | 3 | 2.53 | 0.15 |
| #4 | I use **Spanish** to give directions for **activities** exclusively (i.e., no translation) in **Spanish** about _____ of the time. | 4.43 | 3.87 | 0.28 |
| #5 | I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities. | 4.43 | 4.67 | 0.36 |
| #6 | I use **Spanish** to communicate with students about **grammar and usage** about _____ of the time we spend on discussing or working on these. | 4.14 | 3.73 | 0.29 |
| #7 | I use **Spanish** to communicate with students about **tests, quizzes and other assignments** about _____ of the time we spend discussing these. | 3.5 | 3.73 | 0.62 |
| #8 | I use **Spanish** to communicate with students about **administrative information** (course policies, announcements, deadlines, etc.) about _____ of the time we spend discussing these. | 2.36 | 2.87 | 0.29 |
| #9 | I use **Spanish** to communicate with students **outside of class time** (e.g., office hours, in the hall, before or after class, etc.) about _____ of the time. | 1.93 | 3 | 0.02* |
| #10 | I use **Spanish** to give instructions about assignments, tests, homework, etc. about _____ of the time. | 3.71 | 3.87 | 0.76 |
| #11 | While students are working **with partners or groups** in my Spanish class, they switch to **English** as soon as they are through with a particular activity about _____ of the time. | 3.57 | 3.53 | 0.93 |
| #12 | My students **understand** what I am saying in Spanish about _____ of the time. | 4.29 | 4 | 0.19 |
| #13 | When my students **do not understand** what I am saying in **Spanish**, they request that I repeat or clarify about _____ of the time. | 2.93 | 4.07 | 0.0002* |

Key: 1 = 0%-20%, 2 = 21%-40%, 3 = 41%-60%, 4 = 61%-80%, 5 = 81%-100%.

*Students' perceptions according to language level.* The students at the two different levels were also asked many of the same questions concerning their perceptions of language use in the classroom by themselves, their peers, and that of their instructor. When measuring the overall significance of differences between the Spanish 102 and Spanish 202 students' perceptions of language use in the classroom, the results were not statistically significant ($p = .06$). However, a p-value of .06 does approach significance, supporting the notion that there may be significant differences between the perceptions of Spanish students at various instructional levels. The Spanish 202 students perceived higher usage of the TL in all categories, including their interactions with their peers and with their instructor. The 102 students did perceive that the instructor was using more of the TL in class than the Spanish 202 students perceived of their teachers. This is likely due the fact that as more inexperienced language learners who had less exposure to the TL, they perceive that more Spanish is being used because of a greater difficulty processing the language at the lower level.

Two individual questions showed a statistically significant difference between the different levels. The Spanish 202 students perceived that they used more Spanish in talking and discussing the culture, history, and customs of the Spanish-speaking world. This again may be in large part due to the design of the courses and the differences in level. A more ample vocabulary is needed to discuss the culture and history, thus the 202 students would have an advantage in that they have had greater exposure to language. Also, the textbooks that are used at the different levels focus on different skills and contents with the Spanish 202 textbooks having a principal focus on history, culture, etc.,

whereas the Spanish 102 textbooks focus less of those areas and more on listening and speaking skills. The other question where a statistically significant difference was found was in using the language with the instructor outside of the classroom. While language use outside of the classroom was not measured in this study, the Spanish 202 students perceived that they were using significantly more TL outside of the classroom environment, reflecting possibly the fact that they are more comfortable with the language due to having studied it for a longer period of time. Additionally, findings on two other questions approached statistical significance with the 202 students perceiving that they used more Spanish than their Spanish 102 counterparts to discuss tests, quizzes and other assignments, and they felt that they understood what the instructor was saying more of the time (see Table 4.30).

**TABLE 4.30 Spanish 102 Students' and Spanish 202 Students' Perceptions of Language Use in the Classroom**

| # | Questions | Spanish 102 Average | Spanish 202 Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #1 | My **Spanish instructor** uses **Spanish** to communicate **with students** about _____ of the time. | 4.73 | 4.54 | 0.31 |
| #2 | My **classmates** use **Spanish** to communicate **with the instructor** about _____ of the time. | 3.67 | 3.80 | 0.56 |
| #3 | My **classmates** use **Spanish** to communicate **with other students** about _____ of the time. | 2.68 | 2.73 | 0.81 |
| #4 | **I** use **Spanish** to communicate **with my instructor** about _____ of the time. | 3.55 | 3.80 | 0.30 |
| #5 | **I** use **Spanish** to communicate **with my classmates** about _____ of the time. | 2.74 | 2.88 | 0.56 |
| #6 | I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these | 3.45 | 3.82 | 0.05* |

| | | | | |
|---|---|---|---|---|
| | activities. | | | |
| #7 | I use **Spanish** to communicate about **grammar and usage** about _____ of the time we spend on discussing or working on these. | 3.27 | 3.54 | 0.13 |
| #8 | I use **Spanish** to communicate about **tests, quizzes and other assignments** about _____ of the time I spend discussing these with my instructor and classmates. | 2.96 | 3.36 | 0.06 |
| #9 | I use **Spanish** to communicate with my instructor **outside of class time** (e.g., office hours, in the hall, before or after class) about _____ of the time. | 2.19 | 2.71 | 0.02* |
| #10 | I use **Spanish** to communicate with my classmates **outside of class time** (e.g., in the hall, before or after class, at lunch) about _____ of the time. | 1.37 | 1.37 | 0.95 |
| #11 | While working with a partner or group in my Spanish class, I switch to **English** as soon as we are through with a particular activity about _____ of the time. | 3.36 | 3.39 | 0.89 |
| #12 | I understand what my **instructor** is saying in **Spanish** about _____ of the time. | 4.02 | 4.20 | 0.08 |
| #13 | When I do not understand what my instructor is saying in Spanish, I request in **Spanish** that she or he repeats or clarifies about _____ of the time. | 3.18 | 3.36 | 0.17 |

Key: 1 = 0%-20%, 2 = 21%-40%, 3 = 41%-60%, 4 = 61%-80%, 5 = 81%-100%.

*Spanish 102 instructors' and their students' perceptions.* Two-sample t-tests were run to compare the overall difference in means between the instructors and the students about their perceptions of language usage in the classroom to see if any significant differences existed. T-tests were used to measure the statistical difference between student and teacher responses even though there were slight changes to the stem of the some of the questions in the respective questionnaires (see Table 4.31). The teachers' questionnaire began with "I" and the students' questionnaire began with "My teacher" in several of the questions. Also, on other questions, the teachers' questionnaire was worded

in regards to “with the students” whereas the students’ questionnaire stated “with the instructor”. Those differences are noted in Table 4.31.

In consultation with a statistician, the concern was raised that some researchers and psychometricians may be concerned with the change in the stem. The concern is that the change in the stem; however small, introduces the possibility of variation due to the fact that the teachers and the students would be approaching the questions with a slightly different perspective because of the wording of the stem. It was determined that t-tests would be used in spite of this concern due to the fact that the variation introduced by the slight change in the stem would likely not change the significance of the results. The use of different stems only occurred in the comparison of the students’ and instructors’ perception of their L1 and TL use. All of the other comparisons used the exact same wording.

Additionally, due to the fact that the two questionnaires had some unique questions that did not apply to both groups or that some of the questions that were asked fell under the same category when comparing students and teachers, these questions were either not included in the two-sample t-tests analysis comparing teachers and students or combined with a similar question. Examples are questions 2 and 4 on the student questionnaire. Question 2 states, “My classmates use Spanish to communicate with the instructor about _____ of the time.” and question 4 states, “I use Spanish to communicate with my instructor about _____ of the time.” When these questions are compared to the questions posed to the instructor, both of these questions reflect question 2 from the instructors’ questionnaire which states, “My students use Spanish to

communicate with me about _____ of the time." With the few questions where this occurred, an average was taken of both of the scores and then that number was used for the data analysis. Also, the numbering of the questions on the questionnaires differed, so they had to be changed so that like questions could be compared. When measuring the overall difference of the Spanish 102 instructors' and students' perceptions of language use in the classroom, the results were not statistically significant ($p = .08$) supporting the notion that there are many differences between the perceptions of Spanish 102 instructors and their students.

In addition, the student questionnaire asked questions relating to the students' use of language in the classroom, whereas the instructors' questionnaire asked about the instructors' language use. This can be seen on Table 4.31 in questions 5, 6, 7, and 9 where parentheses were added to reflect what the student questions said. The other questions in the questionnaire were the same for both groups. It is interesting to note that on questions 5, 6, 7, and 9 only question 5 resulted in statistically significant differences between students' language use from that of their instructor. This difference may be due in large part to the limited proficiency of the Spanish 102 students and the lack of knowledge about cultural and historical topics, causing a greater degree not only of use of the L1 but overall production of words.

The students' and teachers' perception of how much Spanish the instructor used with the students differed significantly. The students perceived that their instructors were using a statistically significant amount more of Spanish ($p = .04$) than the instructors perceived they were using. However, both groups felt that the instructor was using

Spanish between 80%-100% of the time, with the instructors perceiving their use to an average of 4.38 and the students with an average score of 4.73 out of five. The rest of the questions showed no statistically significant difference between the students' and their instructors' perceptions.

**TABLE 4.31 Spanish 102 Students' and Instructors' Perceptions of Language Use in the Classroom**

| # | Questions | Spanish 102 Students' Average | Spanish 102 Instructors' Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #1 | I (My instructor) use (s) **Spanish** to communicate **with my students** (students) about _____ of the time. | 4.73 | 4.38 | 0.04* |
| #2 | My (The) **students** use **Spanish** to communicate **with me** (the instructor) about _____ of the time. | 3.61 | 3.81 | 0.39 |
| #3 | **My students** (The students) use **Spanish** to communicate **with each other** about _____ of the time. | 2.71 | 2.88 | 0.59 |
| #5 | I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities. | 3.45 | 4.31 | 0.0005* |
| #6 | I use **Spanish** to communicate with students (my instructor) about **grammar and usage** about _____ of the time we spend on discussing or working on these. | 3.27 | 3.56 | 0.34 |
| #7 | I use **Spanish** to communicate with students (my instructor) about **tests, quizzes and other assignments** about _____ of the time we spend discussing these. | 2.96 | 3.25 | 0.43 |
| #9 | I use **Spanish** to communicate with students (my instructor) **outside of class time** (e.g., office hours, in the hall, before or after class, etc.) about _____ of the time. | 2.19 | 2.06 | 0.69 |

| | | | | |
|---|---|---|---|---|
| #11 | While students are working **with partners or groups** in my Spanish class, they switch to **English** as soon as they are through with a particular activity about _____ of the time. | 3.36 | 3.63 | 0.46 |
| #12 | My students **understand** what I am saying in Spanish about _____ of the time. | 4.02 | 4.13 | 0.52 |
| #13 | When my students **do not understand** what I am saying in **Spanish**, they request that I repeat or clarify about _____ of the time. | 3.18 | 3.44 | 0.24 |

Key: 1 = 0%-20%, 2 = 21%-40%, 3 = 41%-60%, 4 = 61%-80%, 5 = 81%-100%.

*Spanish 202 instructors' and students' perceptions.* The Spanish 202 instructors and students showed a very different pattern from that of the Spanish 102 level. By using a two-sample t-test to measure the overall significance of differences in the Spanish 202 instructors' and students' perceptions of language use in the classroom, the results were statistically significant ($p = .003$). Also, instead of perceiving the same usage of Spanish on questions 5, 6, 7, and 9 as was found with the Spanish 102 instructors and students, all of these questions except question 9 showed statistically significant differences, with the students perceiving that they were using much less Spanish in interacting with their instructors about culture, history, and customs of the Spanish-speaking world, grammar and usage, and in discussing tests, quizzes and other assignments. The instructors perceived that their TL use was significantly greater than their students' use of the TL in all of these areas. These differences resulted in a statistically significant difference overall between the teachers and students. However, there was no statistically significant difference between the perceived amount of Spanish used by the instructor ($p = .17$) as was found with the Spanish 102 level ($p = .04$). Finally, all of the other questions show

that students and teachers perceive very similar usage of Spanish in the classroom (see Table 4.32).

**TABLE 4.32 Spanish 202 Students' and Instructors' Perceptions of Language Use in the Classroom**

| # | Questions | Spanish 202 Students' Average | Spanish 202 Instructors' Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #1 | I (My instructor) use (s) **Spanish** to communicate **with my students** (students) about _____ of the time. | 4.54 | 4.85 | 0.17 |
| #2 | My (The) **students** use **Spanish** to communicate **with me** (the instructor) about _____ of the time. | 3.80 | 3.69 | 0.73 |
| #3 | **My students** (The students) use **Spanish** to communicate **with each other** about _____ of the time. | 2.81 | 2.62 | 0.42 |
| #5 | I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities. | 3.82 | 4.85 | .000* |
| #6 | I use **Spanish** to communicate with students (my instructor) about **grammar and usage** about _____ of the time we spend on discussing or working on these. | 3.54 | 4.38 | 0.001* |
| #7 | I use **Spanish** to communicate with students (my instructor) about **tests, quizzes and other assignments** about _____ of the time we spend discussing these. | 3.36 | 4.27 | 0.003* |
| #9 | I use **Spanish** to communicate with students (my instructor) **outside of class time** (e.g., office hours, in the hall, before or after class, etc.) about _____ of the time. | 2.71 | 3 | 0.44 |
| #11 | While students are working **with partners or groups** in my Spanish class, they switch to **English** as soon as they are through with a particular activity about _____ of the time. | 3.39 | 3.46 | 0.82 |

| | | | | |
|---|---|---|---|---|
| #12 | My students **understand** what I am saying in Spanish about _____ of the time. | 4.20 | 4.15 | 0.79 |
| #13 | When my students **do not understand** what I am saying in **Spanish**, they request that I repeat or clarify about _____ of the time. | 3.36 | 3.62 | 0.41 |

Key: 1 = 0%-20%, 2 = 21%-40%, 3 = 41%-60%, 4 = 61%-80%, 5 = 81%-100%.

*Instructors' beliefs according to language level.* The instructors at the Spanish 102 and Spanish 202 levels also differed greatly regarding their beliefs about using the L1 and TL. Statistically significant differences were found on 6 of the 12 (50%) questions (see Table 4.33a and Table 33b). Using a two sample t-test to measure whether a significant difference existed between the Spanish 102 and Spanish 202 instructors, the results showed a significance level of $p < .02$, meaning that there was a statistically significant difference between the 102 and 202 instructors overall on their answers to questions regarding their beliefs about language use.

The questions that asked about the instructors' beliefs about L1 and TL use in the classroom were questions 14-21 (see Table 33a). These questions used a Likert-type scale from one to five, with one being strongly disagree and five being strongly agree. All of these questions made definitive statements regarding the exclusive use of Spanish in the classroom. On all of the questions resulting in a statistically significant difference, the Spanish 202 instructors believed that more exclusive use of Spanish was needed in the classroom. Additionally, on all the questions except question #20, "I believe that, regardless of how much Spanish students choose to use, the instructor should use Spanish at all times in the classroom", the 202 instructors believed that the more exclusive use of the TL was better for the students to learn.

The most salient differences in regards to teaching are those of question 14, "I believe the more Spanish that students use in the classroom; the better they will be at communicating in Spanish", and question 15, "I believe that in order to really master/acquire Spanish, students must use Spanish exclusively in the classroom." The Spanish 202 instructors also significantly differed on questions about their beliefs regarding language use in the classroom for specific language uses. The 202 instructors believed that more Spanish is needed to discuss tests, quizzes, and other assignments, to discuss course policies, attendance, and other administrative information, and that students should use only Spanish the entire time they are in the classroom with both the instructor and classmates, both during and between activities. It should be noted that the Spanish 102 and 202 instructors also differed significantly in their perceptions of their language usage on these same types of questions, providing evidence of a link between perceptions of language use and beliefs about L1 and TL usage in the classroom.

Questions 22-25 asked about the instructors' beliefs and the self-evaluation of their own usage of the L1 and TL in the classroom (see Table 4.33b). They were asked not only to assess their own usage of Spanish and English, but also that of their students on a three-point scale with 1 = too little, 2 = the right amount, and 3 = too much. The only question where differences were statistically significant was question #23 which states, "I believe that I use _____ English in the classroom." The Spanish 102 instructors reported using too much English in the classroom and the Spanish 202 instructors reported using too little English in the classroom. Both groups of instructors scored almost exactly the same on the questions regarding their belief about their use of Spanish

in the classroom and their students' use of Spanish. The average scores of the instructors indicated that they believed that they used the right amount of Spanish, with the Spanish 102 average score being 2.06 and the Spanish 202 score being 2.00, with a score of 2 indicating the right amount of TL usage. Both groups of instructors believed that their students used too little Spanish in the classroom, and both ranked Spanish use by students at 1.31 with a score of 1 indicating too little (see Table 4.33a and Table 4.33b).

**TABLE 4.33a Spanish 102 and 202 Instructors' Beliefs about Language Use in the Classroom**

| # | Questions | Spanish 102 Average | Spanish 202 Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #14 | I believe the more **Spanish** that students use in the classroom; the better they will be at communicating in **Spanish**. | 4.63 | 5 | 0.01* |
| #15 | I believe that in order to really master/acquire **Spanish**, students must use **Spanish** exclusively in the classroom. | 3.5 | 4.54 | 0.002* |
| #16 | I believe that there are no situations in which **English** should be used in the classroom (i.e., I believe that total immersion in **Spanish** classes is best). | 2.38 | 3 | 0.24 |
| #17 | I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish class. | 2.63 | 2.92 | 0.45 |
| #18 | I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments. | 2.5 | 3.46 | 0.04* |
| #19 | I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information. | 1.88 | 3 | 0.02* |
| #20 | I believe that, regardless of how much Spanish students choose to use, the instructor should use **Spanish** at **all** times in the classroom. | 3.75 | 3.54 | 0.69 |
| #21 | I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and classmates both during and between activities. | 3.75 | 4.46 | 0.05* |

Key: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

**TABLE 4.33b Spanish 102 and 202 Instructors' Beliefs about Language Use in the Classroom**

| | | | | |
|---|---|---|---|---|
| #22 | I believe that **I** use _____ **Spanish** in the classroom. | 2.06 | 2 | 0.79 |
| #23 | I believe that **I** use _____ **English** in the classroom. | 2.31 | 1.77 | 0.04* |
| #24 | I believe that my **students** use _____ **Spanish** in the classroom. | 1.31 | 1.31 | 0.98 |
| #25 | I believe that my **students** use _____ **English** in the classroom. | 2.75 | 2.46 | 0.22 |

Key: 1 = too little, 2 = the right amount, and 3 = too much

*Instructors' beliefs according to native language.* Many statistically significant differences were found between the native English-speaking instructors and the native Spanish-speaking instructors. The overall comparison of the beliefs of the native English-speaking instructors and the native Spanish-speaking instructors were not significant ($p < .11$) but some definitive trends were noted in the results. On every question the average score for the native Spanish-speaking instructors was higher, meaning that they believed that exclusive use of Spanish was more important than the native English-speaking instructors (see Table 4.34a). The native Spanish-speaking instructors also believed much more strongly that the students needed to exclusively use Spanish in the classroom. This is noted in questions 15 and 21. While neither of these questions resulted in statistically significant differences, question 15 approaches significance with $p = .07$.

As previously mentioned, questions 22-25 asked about the instructors' beliefs and the self-evaluation of their own usage of the L1 and TL in the classroom (see Table 4.34b). Teachers were asked not only to assess their own usage of Spanish and English but also that of their students. These questions used a three-point scale, with 1 = too little, 2 = the right amount, and 3 = too much. The native Spanish-speaking instructors showed

that they tended toward believing that they used too much Spanish in the classroom, and the native English-speaking instructors tended toward believing that they used too little. The results were almost exactly reversed for use of English in the classroom. When asked about student language use in the classroom, both groups of instructors felt that their students used too little Spanish, but the native Spanish-speaking instructors felt more strongly about this point. Concerning use of English by the students, again both groups felt too much English was used in the classroom, but again the native Spanish-speaking instructors felt that their students were closer to the optimal amount. There appears to be a belief by the native Spanish-speaking instructors that in their classrooms more Spanish is used by the instructors as well as by the students (see Table 4.34a and Table 4.34b).

**TABLE 4.34a Native English-Speaking Instructors and Native Spanish-Speaking Instructors' Beliefs on Language Use in the Classroom**

| # | Questions | Native English Average | Native Spanish Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #14 | I believe the more **Spanish** that students use in the classroom; the better they will be at communicating in **Spanish**. | 4.71 | 4.87 | 0.33 |
| #15 | I believe that in order to really master/acquire **Spanish**, students must use **Spanish** exclusively in the classroom. | 3.64 | 4.27 | 0.07 |
| #16 | I believe that there are no situations in which **English** should be used in the classroom (i.e., I believe that total immersion in **Spanish** classes is best). | 2.29 | 3 | 0.17 |
| #17 | I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish class. | 2.64 | 2.87 | 0.57 |
| #18 | I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments. | 2.86 | 3 | 0.77 |
| #19 | I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information. | 2.29 | 2.47 | 0.72 |
| #20 | I believe that, regardless of how much Spanish students choose to use, the instructor should use **Spanish** at **all** times in the classroom. | 3.5 | 3.8 | 0.57 |
| #21 | I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and classmates both during and between activities. | 3.79 | 4.33 | 0.14 |

Key: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

**TABLE 4.34b Native English-Speaking Instructors and Native Spanish-Speaking Instructors' Beliefs on Language Use in the Classroom**

| | | | | |
|---|---|---|---|---|
| #22 | I believe that **I** use _____ **Spanish** in the classroom. | 1.71 | 2.33 | 0.005* |
| #23 | I believe that **I** use _____ **English** in the classroom. | 2.36 | 1.8 | 0.03* |
| #24 | I believe that my **students** use _____ **Spanish** in the classroom. | 1.07 | 1.53 | 0.006* |
| #25 | I believe that my **students** use _____ **English** in the classroom. | 2.93 | 2.33 | 0.007* |

Key: 1 = too little, 2 = the right amount, and 3 = too much

*Students' beliefs about TL and L1 use according to language level.* When measuring the overall significance of the Spanish 102 and Spanish 202 students' beliefs about TL language use in the classroom, the differences were not statistically significant ($p = .06$). However, the p-value does approach significance, supporting the notion that there are many differences between the beliefs of Spanish students as they continue their language study. The students differed significantly on 5 of the 12 questions, questions 14, 18, 19, 20, and 21. The Spanish 202 students felt that Spanish should be used more than the 102 students on every question. The scale for questions 14-21 was a Likert-type scale where 1 was strongly disagree and 5 was strongly agree (see Table 4.35a). As already mentioned, the scale for questions 22-25 was 1 = too little, 2 = the right amount, and 3 = too much (see Table 4.35b).

The 202 students differed significantly in their beliefs on questions concerning Spanish use by the students, specific purposes for which Spanish should be used, and instructor use of the TL regardless of students' usage. The results of questions 22-25 were revealing in that the results were very much similar in regards to whether or not they were using the right amount of the L1 and TL, but also the amount of usage by their instructors. The students found that their instructors were using very close to the right amount of Spanish. The 102 students had an average score of 2.10 and the 202 students had an average score of 2.04 with 2 = the right amount. They also found that their instructors were using close to the right amount of English. The Spanish 102 had an average score of 1.91 and the Spanish 202 students had an average score of 1.89 with 2 = right amount (see Table 4.35b). Both classes believed that they used too much English in

the classroom with the 102 students' average of 2.44 and the 202 students' average of 2.41 with 3 = too much. Both groups found that they used too little Spanish in the classroom with the 102 average of 1.54 and 202 average of 1.56 with 1 = too little (see Table 4.35a and Table 4.35b).

**TABLE 4.35a Spanish 102 Students' and Spanish 202 Students' Beliefs on Language Use in the Classroom**

| # | Questions | Spanish 102 Students' Average | Spanish 202 Students' Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #14 | I believe the **more Spanish** that students use in the classroom; the better they will be at communicating in **Spanish**. | 4.30 | 4.51 | 0.02* |
| #15 | I believe that in order to really master/acquire **Spanish**, students must use **Spanish** exclusively in the classroom. | 3.35 | 3.60 | 0.10 |
| #16 | I believe that there are no situations in which **English** should be used in the classroom (i.e., I believe that total immersion in **Spanish** classes is best). | 2.42 | 2.48 | 0.56 |
| #17 | I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish class. | 2.41 | 2.54 | 0.25 |
| #18 | I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments. | 2.36 | 2.69 | 0.005* |
| #19 | I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information. | 2.22 | 2.61 | 0.002* |
| #20 | I believe that, regardless of how much Spanish students choose to use, the instructor should use **Spanish** at **all** times in the classroom. | 2.79 | 3.14 | 0.02* |
| #21 | I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and classmates both during and between activities. | 2.99 | 3.26 | 0.03* |

Key: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

**TABLE 4.35b Spanish 102 Students' and Spanish 202 Students' Beliefs on Language Use in the Classroom**

| | | | | |
|---|---|---|---|---|
| #22 | I believe that **my instructor** uses _____ **Spanish** in the classroom. | 2.10 | 2.04 | 0.40 |
| #23 | I believe that **my instructor** uses _____ **English** in the classroom. | 1.91 | 1.89 | 0.87 |
| #24 | I believe that **I** use _____ **Spanish** in the classroom. | 1.54 | 1.56 | 0.73 |
| #25 | I believe that **I** use _____ **English** in the classroom. | 2.44 | 2.41 | 0.64 |

Key: 1 = too little, 2 = the right amount, and 3 = too much

*Spanish 102 instructors' and students' beliefs about L1 and TL use in the classroom.* When measuring whether an overall difference existed between the Spanish 102 instructors' and students' beliefs about language learning, a statistically significant difference was found ($p = .03$). Additionally, there were many significant differences on individual questions (4 out of 12) regarding beliefs about language use that were found between these two groups. The students and instructors differed significantly on questions 14, 20, 21, and 23, with the instructors scoring these questions higher, meaning they tended toward more exclusive use of the TL, than the students.

The instructors had a stronger belief that more Spanish should be used in the classroom on all of the questions, even though not all of the differences were statistically significant. The questions where a significant difference was found dealt with students using more Spanish in the classroom with their instructor and classmates, the instructors' exclusive use of the TL regardless of student use, and the amount of English that the students were using in the classroom. Two of the others questions that addressed the notion of the amount of language use in the classroom approached statistical significance. On question 23, the students tended toward their instructor using the right amount of

English but the instructors felt that they were using too much English. On question 24, both groups felt that the students were using too little Spanish in the classroom but the instructors believed that they were using less than their students. Both the students and instructors gave almost the same score regarding the amount of Spanish that the instructors were using in the classroom. The students gave them an average score of 2.10 and the instructors rated themselves at a 2.06, with a score of 2 being equal to the right amount. This result provides further evidence that students are generally pleased with the instructors' level of TL use even though a great deal of variation was found (see Table 4.36a and Table 4.36b).

**TABLE 4.36a Spanish 102 Instructors' and Students' Beliefs on Language Use in the Classroom**

| # | Questions | Spanish 102 Students' Average | Spanish 102 Instructors' Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #14 | I believe the **more Spanish** that students use in the classroom; the better they will be at communicating in **Spanish**. | 4.30 | 4.63 | 0.02* |
| #15 | I believe that in order to really master/acquire **Spanish**, students must use **Spanish** exclusively in the classroom. | 3.35 | 3.5 | 0.49 |
| #16 | I believe that there are no situations in which **English** should be used in the classroom (i.e., I believe that total immersion in **Spanish** classes is best). | 2.42 | 2.38 | 0.90 |
| #17 | I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish class. | 2.41 | 2.63 | 0.42 |
| #18 | I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments. | 2.36 | 2.5 | 0.61 |
| #19 | I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information. | 2.22 | 1.88 | 0.17 |
| #20 | I believe that, regardless of how much Spanish students choose to use, the instructor should use **Spanish** at **all** times in the classroom. | 2.79 | 3.75 | .0001* |
| #21 | I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and classmates both during and between activities. | 2.99 | 3.75 | 0.002* |

Key: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

**TABLE 4.36b Spanish 102 Instructors' and Students' Beliefs on Language Use in the Classroom**

| | | | | |
|---|---|---|---|---|
| #22 | I believe that **my instructor (I)** use(s) _____ **Spanish** in the classroom. | 2.10 | 2.06 | 0.84 |
| #23 | I believe that **my instructor (I)** use(s) _____ **English** in the classroom. | 1.91 | 2.31 | 0.06 |
| #24 | I believe that **I (my students)** use _____ **Spanish** in the classroom. | 1.54 | 1.31 | 0.08 |
| #25 | I believe that **I (my students)** use _____ **English** in the classroom. | 2.44 | 2.75 | 0.01* |

Key: 1 = too little, 2 = the right amount, and 3 = too much

*Spanish 202 instructors' and students' beliefs about L1 and TL use in the classroom.* The section of the questionnaire on beliefs about language use in the classroom was the same for both teachers and students. The only difference being in questions 22-25 where the order of the questions was different. Using two-sample t-test to measure the statistical significance of overall differences between the Spanish 202 instructors' and students' beliefs about language learning, an overall significant difference was found ($p = .005$). Additionally, differences on 3 out of 12 individual questions regarding beliefs about language use were statistically significant. The students and instructors differed significantly on questions 14, 15, and 21, with the instructors scoring these questions higher, favoring more exclusive use of the TL, than the students.

The instructors had a stronger belief that more Spanish should be used in the classroom on all of the questions, even those where the difference was not found to be statistically significant. The questions where a significant difference was found dealt with students using more Spanish in the classroom with their instructors and classmates, and the importance of using Spanish in the classroom in order to master Spanish. Two other questions approached significance. Question 18 asked about the exclusive use of Spanish to discuss tests, quizzes and other assignment. The 202 students disagreed with this question whereas the Spanish 202 instructors agreed that Spanish should be the language of such discussions. On question 24, both groups felt that the students were using too little Spanish in the classroom, but the instructors believed even more so that their students were using less than was appropriate. Both the students and instructors gave almost the same score regarding the amount of Spanish that the instructors were using in

the classroom. The students gave them an average score of 2.04 and the instructors rated themselves at a 2 with a score of 2 being equal to the right amount. This result provides further evidence that students are generally pleased with the instructors' level of TL use, even though a great deal of variation was found. The teachers and students also both agreed that the students were using too much English in the classroom (see Table 4.37a and Table 4.37b).

**TABLE 4.37a Spanish 202 Instructors' and Students' Beliefs on Language Use in the Classroom**

| # | Questions from Questionnaire | Spanish 202 Students' Average | Spanish 202 Instructors' Average | P-value $p \leq .05$ |
|---|---|---|---|---|
| #14 | I believe the **more Spanish** that students use in the classroom; the better they will be at communicating in **Spanish**. | 4.51 | 5 | .00001* |
| #15 | I believe that in order to really master/acquire **Spanish**, students must use **Spanish** exclusively in the classroom. | 3.60 | 4.5 | 0.002* |
| #16 | I believe that there are no situations in which **English** should be used in the classroom (i.e., I believe that total immersion in **Spanish** classes is best). | 2.48 | 3 | 0.24 |
| #17 | I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish class. | 2.54 | 2.92 | 0.22 |
| #18 | I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments. | 2.69 | 3.46 | 0.06 |
| #19 | I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information. | 2.61 | 3 | 0.38 |
| #20 | I believe that, regardless of how much Spanish students choose to use, the instructor should use **Spanish** at **all** times in the classroom. | 3.14 | 3.54 | 0.47 |
| #21 | I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and classmates both during and between activities. | 3.26 | 4.46 | 0.0006* |

Key: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

**TABLE 4.37b Spanish 202 Instructors' and Students' Beliefs on Language Use in the Classroom**

| | | | | |
|---|---|---|---|---|
| #22 | I believe that **my instructor (I)** use(s) _____ **Spanish** in the classroom. | 2.04 | 2 | 0.80 |
| #23 | I believe that **my instructor (I)** use(s) _____ **English** in the classroom. | 1.89 | 1.77 | 0.53 |
| #24 | I believe that **I (my students)** use _____ **Spanish** in the classroom. | 1.56 | 1.31 | 0.09 |
| #25 | I believe that **I (my students)** use _____ **English** in the classroom. | 2.41 | 2.46 | 0.83 |

Key: 1 = too little, 2 = the right amount, and 3 = too much

Research Question #7.

*Are there differences in L1 and TL use in the classroom between instructors who are native and non-native speakers of Spanish?* This question was addressed in the individual research questions 1-7. The principle reason for including the differences in the results according to language with research questions 1-7 was to facilitate a comparison between the different types of analysis according to level, native language status, and between students and instructors. These differences are discussed in chapter five as to the possible effect that native language had on the different results.

*Summary*

All of the research questions were analyzed in this chapter including both a description of the results as well as figures and tables intended to improve an understanding of the results. Also, the data analysis is found in chapter 5 to facilitate discussion of the data as well as draw meaningful conclusions. Chapter 5 will also address some of the limitations of this study as well as provide suggestions for future research.

# CHAPTER 5

# DISCUSSION AND CONCLUSIONS

## *Introduction*

This chapter summarizes the results of this study and elaborates on the significance of this research. Additionally, this chapter addresses some of the salient findings regarding language use in the classroom as well as providing additional evidence to a growing body of research regarding TL and L1 use in the FL classroom. This chapter will draw conclusions as to findings that were described in Chapter 4.

This chapter is divided according to the different focuses that formed part of the data analysis, such as the differences between native Spanish-speaking instructors and native English-speaking instructors, the differences found between class levels, and the distinctions found between the instructors and their students regarding their L1 and TL use as well as their beliefs and perceptions of language use. In addition, I also compare the questionnaire results with the data from the classroom observations to explain some of the differences between perceptions and beliefs and actual observed language use. Finally, this chapter delineates some of the limitations of this study as well as provides several suggestions for future research.

## *Language Use According to Level*

Through an analysis of the contexts in which different types of code-switches were used, the results showed that individual variation of the instructors and students was the most salient influence. However, the pattern of L1 use by the instructors followed trends found in previous studies (e.g., Brice, 2001; Ferguson, 2003; Üstünel and

Seedhouse, 2005) where the bulk of the switches were done when addressing grammar issues and translating vocabulary. The student code-switches varied to a wider degree than their instructors especially at the 102 level. The Spanish 202 students showed less variation due, in large part, to the fact that the translation of vocabulary made up over 50% of their code-switches. One possible explanation for the variation is that of the research by Bell (2001) wherein language was used to establish a persona. Many of the switches by the instructors and especially the students in this study could be related to the desire to establish a persona with the interlocutors. Many students feel that they are unable to express their persona in the classroom and thus may feel the need to code-switch to establish their identity. The instructors, while not limited as much due to proficiency, may feel the need to code-switch in establishing a persona that they feel to be important in their relationship with their students. The use of the L1 may help the students and teachers establish their desired persona.

The variation in the amount of time that students spent in groups is also a significant factor between the different levels. The Spanish 102 classes averaged 31% of the class time in groups or pairs but the Spanish 202 classes averaged only 19%. One of the disconcerting observations in this study was that the students actually produced very little creative speech in the observed classroom context. The students were observed to read from written text in much of their production of the TL. This type of production does not force the students to engage in meaningful communication, since there is no guarantee that they understand what they are saying. Generally it was discouraging that more opportunities were not created for students to use language communicatively during

the instructional segments observed. Guthrie (1984) raises this as a concern that the routine nature of the language classroom may very well be detrimental to forcing the students to pay attention and listen in order to comprehend the words used by the instructor. If the students only need to pay minimal attention to their instructor due to the routine nature of the language classroom, it is very possible that they are listening for a set number of words that they need to perform the activity at hand.

A statistically significant difference in the students' language production between the Spanish 102 and Spanish 202 levels was found. The 202 students produced almost 40% more Spanish words than their Spanish 102 counterparts, and the Spanish 202 students produced 46% more unique words per class. The greater output was not only in the TL but also in the L1. The 202 students used 77% more English than the 102 students. This shows that more production in the L1 as well as in the TL is taking place with the 202 students than with the 102 students possibly implying more active involvement in the learning process by these students. While experience with the language plays an important role in this distinction, the issue of concern is how to increase the production of lower level students with meaningful activities, given their limited vocabulary. This increase in output may also be due to the lesser amount of time that the 202 students spent in pair and small-group activities raising, the possibility that the 102 students actually used more of the L1 or TL but did it while working with other classmates.

One of the findings based on classroom observations was the amount of language that the teachers used and the amount that the students used varied more by level than native language of the instructor. Also, as would be expected, the teachers produced

significantly more speech than their students. These data also appear to contradict one of the current trends in the language pedagogy where teachers are urged to develop a more learner-centered classroom with engaging activities that allow the students to create with the language. The classes in this study, with few exceptions, were very much teacher-centered. Not only did teachers direct all of the activities, but they spent much more time speaking than the students. Consequently, this would make the students' utterances all the more important, as they were very much limited in the time that they were given to interact in the TL.

The students produced an average of 20% of the speech overall at the 102 level and an average of 25% at the 202 level, including both English and Spanish production. Given that Spanish 102 and 202 students used English for an average of 25% of the words that they produced, their production in Spanish during whole class activities (70% of the instructional time for 102 students and 80% of instructional time for 202 students) represents a small percentage of total word production. The way in which instructional time is used by the teachers in order the assist the students in their TL use can greatly help or hinder their production. One of the ways to provide students with more opportunities to communicate with their classmates when the class is engaged in some form of discussion is through the use of effective group activities that provide opportunities for a more communicative use of language. As the students moved to the higher levels, less and less time was spent working in pairs or small-groups which, when done properly, could provide students with the chance to negotiate meaning and use the TL even given their limited proficiency in the language.

Given the wide-range of TL use (9%-100%) found in the classroom in previous studies (e.g., Duff and Polio,1990; Turnbull, 1998; Macaro, 2001), the students and instructors in this study were much more homogeneous regardless of level. The instructors in this study employed the TL the majority of the time. Of the total of 16 instructors, 12 of the 16 teachers used Spanish over 80% of the time with 9 of the 16 using Spanish over 95% of the time in the classroom. The range for the instructors' TL use in the classroom varied from 45% to nearly 100%. While the observer's presence may have influenced language use by teachers, most of the instructors consistently employed the TL throughout the three different observations. This shows that the teachers involved in this study are making an effort to maintain use of the TL in the classroom. For those who did employ less of the TL, three of those who used English over 20% of the time were Spanish 102 instructors, and one was a Spanish 202 instructor. Two of the speakers were native Spanish-speakers and two were native English-speakers. The 102 and 202 students also used the TL the majority of the time. Nine of the 16 classes used the TL over 80% of the time and 5 of those classes used the TL over 90% of the time. Only one class used the TL less than 50% of the time.

While effective teacher training would seem to be the solution to problems in the FL classroom such as excessive L1 use, teacher-centered activities, and lack of communicative language use, teacher training and experience with classroom FL pedagogy did not appear to have significantly changed any of the teachers' behaviors in the classroom as explored in this study. When teacher training and experience with

classroom foreign language pedagogy were correlated with the teachers' and students' use of English and Spanish, the results showed no statistically significant relationships.

*Native Language Distinctions*

The notion held by many learners and educators that the native speaker has some inherent pedagogical advantages was both supported and challenged by the findings of this study. Overall, having a native speaker of the TL or a native speaker of the L1 made no statistically significant difference on the students' production in either Spanish or English. Additionally, while there were differences in the amount and type of production by the native English-speaking instructors and the native Spanish-speaking instructors, these differences were not statistically significant. Also, while the native Spanish-speaking instructors produced a greater quantity of speech, the native English-speaking instructors produced a higher percentage of unique words in the FL. This result is a bit deceiving, given that this was a percentage of the total words produced by the different types of instructors. When looking at the actual numbers instead of percentages, the native Spanish-speaking instructors actually produced more unique words than their English-speaking counterparts.

While the differences between native Spanish-speaking instructors and native English-speaking instructors were not found to be statistically significant in this study, there were differences between those classes who had a native speaker of the TL and those who had a native speaker of the L1. The students with the native Spanish-speaking instructor were not only exposed to more of the TL and less of the L1, but they showed greater gains between the pre- and post-test given in the class. This implies that there may

be certain benefits to having a native speaker of the TL. While the trend was for more exposure to the TL and greater gains in listening proficiency in individual courses taught by native Spanish-speaking instructors, fluent non-native speakers of Spanish also exposed the students to a wide range of language use. In this study, instructor 2NES1 produced the third most number of words in Spanish out of all of the instructors. Additionally, exposure to a large number of words in the TL was not enough to improve listening comprehension. In this study the teacher 4NSS2, a native-speaker of Spanish, produced the largest number of words in Spanish and had students who only showed gains between the pre- and post-test that were not statistically significant.

Contrary to previous research by Gutherie (1984) and Macaro (2001) who did not find any correlation between the students' Spanish and English use with that of their instructors' Spanish and English use, this study found a strong positive correlation ($r = .826$) of the instructors' use of English with their students' English use. This finding supports those who promote exclusive use of the TL in the classroom due to what many perceive as the detrimental effect of English in the FL classroom. However, the amount of L1 use by either teachers or students did not adversely influence the students' gain scores on the listening exam. Even for the native Spanish-speaking instructor, 4NSS1, who used English 42% of the time, or a total of more than 3800 words, students as a group improved significantly from the pre-test to the post-test. It is important to also note that the listening comprehension test used in this study had not been normed to the university population with which it was used introducing the possibility that the exam itself may not have accurately reflected students' listening proficiency gains.

Extensive comprehensible input in the TL is often seen as essential for developing listening comprehension (Krashen, 1982), but the results of this study provide further evidence as to the complex cognitive and linguistic skill that listening is. These findings raise the question as to whether or not the exposure that the students receive from the instructor is comprehensible or not, and that possibly those instructors who do provide their students with such input show the greatest gains. The results of this study seem to support that simply providing students with enough input is insufficient for their listening comprehension development and that other issues such as topic familiarity, comprehensibility of input, short-term memory, choice of language learning strategies, purpose and context of use, and organization are also essential. In addition, the evaluation instrument, as previously mentioned, played an important role in determining listening gains and a different type of instrument may give distinct results. Also, cognitive, social, and linguistic issues seem to form a very important part of the process. It is interesting that the teacher, 3NSS1, who used Spanish the highest percentage of the time (99.64%), only employing 27 words in English during all three of the observations, had a class that did not significantly improve on the listening post-test. This raises again some of the questions posited in previous chapters as to the role of English in the classroom and how it can best be used to assist in TL acquisition as well as how comprehensible the input was that the instructor was using with the class. The possibility exists that if this instructor had used more English to assist the students with their comprehension through comprehension checks in the L1, students may have shown increased gains.

While the native English-speaking instructors used more English with their students than the native Spanish-speaking instructors, the students of the native English-speaking instructors used a higher percentage of Spanish than those students who had a native Spanish-speaking instructor. This may be due to the fact that the native English-speaking students not only share the same cultural and linguistic background as their native English-speaking teacher, but they also know that their teacher had to learn Spanish just as they did. This seems to reassure the students so that they are more willing to attempt to use the TL, whereas with the native Spanish-speaking instructor, the students may feel a slight amount of intimidation at using the TL with someone who is a native speaker of that language or they are afraid to make mistakes because it is the native language of their instructor.

*Student and Instructor Comparisons*

Statistically significant correlations were found between the students' ($r = .565$) and instructors' perception ($r = .528$) of use Spanish and English use by the instructor and the actual observed Spanish and English use. This is a salient finding, given that previous studies into language use in the classroom had looked at actual observed data or perceived data through the use of a questionnaire, but had failed to correlate the two to see if a relationship existed. The results of this study provide support for the validity of using self-reports of students and teachers to determine the quantity of teacher TL and L1 use in the classroom. Surprisingly, both the teachers and the students were unable to predict with any accuracy the students' use of the language in the classroom. However, this could be due in part, as I previously mentioned in Chapter 4, to the fact that the

language use in pairs and small-groups was not measured. While the questionnaire asked students specifically about their own use and their classmates' use of Spanish when speaking with their instructor, the instructor did go around the class while the students were in pairs and small-groups to answer questions, so this may be the cause of the discrepancy.

The students in this study produced a larger percentage of unique words (about 250 words or 50%) on average than the instructors. Whereas the instructors produced only about 600 words or 25% of original words, the students produced unique words in almost 50% of their speech. However, the teachers produced on average over twice as many unique words as their students. The student speech did not include as much of the repetition that constitutes much of the teachers' speech. The repetitive nature of the teachers' talk provides students the necessary opportunities to listen to different language tasks more than once in order to be able to carry out the many tasks in the language classroom.

*Questionnaire and Pre-Test and Post-Test Discussion*

A statistically significant correlation was found between the actual observed uses of English by the instructors and the questionnaire results regarding when they felt that some English should be used in the classroom. In this area, teachers' beliefs reflected their L1 use in the classroom. In further analyzing the questionnaire results, the instructors repeatedly indicated the importance of beliefs in regard to how much language use they perceive should take place and whether to use the L1 or TL. When asked about the reasons for using the TL in the classroom, almost all of the teachers included their

own personal beliefs as one of the key factors in deciding why they chose to use Spanish in the classroom.

It appears that many times the instructors' beliefs are formed prior to entering into the classroom, making it harder for teacher development programs to modify these beliefs and subsequent behaviors. These data support the need for informing instructors or future instructors not only of theories and research pertaining to foreign language learning and teaching, but also to work at modifying beliefs that are contrary to theories or research in the field of language acquisition. The data in this study have shown that the teachers feel that their language use in the classroom is determined in large part by their beliefs about language learning even though their teaching experience and teacher training contradicts these beliefs. However, in spite of teachers' indicating repeatedly that their beliefs are what are the most important factors in their language use, there was no statistically significant correlation found between what the teachers professed to believe regarding exclusive use of the TL in the classroom and their actual TL use. Data from classroom observations indicated that the teachers actually tended toward the exclusive use of the TL in the classroom, even though many of them did not feel that was part of their belief system, implying that other factors that the instructors seem not to be aware of are influencing their language use.

Based on the findings, some of the most important factors to consider are the goals of the program in which a language is being learned. The influence that department policies have on the instructors' decision to use the L1 or TL, as shown in this study,

makes clear the need to establish comprehensible guidelines so that teachers know what the expectations are for a particular program. Turnbull (2001) states,

> I believe that official guidelines that encourage teachers to use the TL create positive pressures for teachers encouraging them to speak as much TL as possible. In addition to official guidelines, teacher educators must help teacher candidates and practising teachers make principled decisions about the judicious use of the L1, while maximizing their TL use (p. 537).

Given the extensive analysis of possible relationships between gain scores and 20 different categories regarding demographic information of the teacher including their experience and training (see Appendix J), it was surprising to not find any factors that significantly contributed to the gains, raising further questions about the multifaceted skill that listening comprehension entails. While students need exposure to the TL in order to acquire language, input does not appear to be sufficient for students to acquire the language. While this may appear to contradict Krashen (1982), the question is raised as to whether or not the input in this study was comprehensible to the students. Walsh (2002) states that the focus in the language classroom has been too much on quantity and not enough on quality. As previously mentioned, in several of the classes observed and recorded in this study, the instructors used the TL almost exclusively, and yet their students did not make significant gains between the pre- and post-test, while students whose instructor did not use the TL as extensively did make significant gains. This raises the question as to whether the proposal of a mitigated use of English may be beneficial to listening comprehension development in the TL.

An important finding of this study was that the native language of the instructor did not significantly influence the gain scores of the students from the pre-test to the post-test, providing evidence that having a non-native instructor does not adversely influence the students' TL use or listening comprehension. In analyzing the classes that had significant gains, the native English-speaking instructors actually had more classes (7) with significant gains than the native Spanish-speaking instructors (5). However, the fact that these results are based on an exam that was not meaned to the population needs to be considered in the interpretation of these results.

When comparing the teachers' and students' perceptions, there were significant differences found between class levels regarding student and teacher perceptions as well as beliefs about language use in the classroom. Nevertheless, perceptions of differences were greater than actual observed differences when analyzed statistically. Though significant differences existed between observed language use at the Spanish 102 and the Spanish 202 levels, the perception of these differences appears to be greater than the language produced by the instructors supports. In spite of these differences between actual usage and perceived usage and beliefs, the class level and native language of instructor do play a role in what students and teachers perceive should take place in the classroom and what is actually taking place. The native-Spanish speaking instructors felt as though they were using more of the TL and less of the L1 and the actual observed data support this. The teachers in this study, while not always accurate in their perceptions, still could be used as a relatively reliable resource to self-evaluate their own L1 and TL usage in the classroom.

Proponents of exclusive TL use in the classroom might have expected to find a negative correlation between the use of English in the classroom and gain scores in listening proficiency and a positive correlation between the use of Spanish in the classroom and gains in proficiency, but that was not supported by the results. There was a positive correlation between the English use by the instructor and the English use of the students, but this did not correlate to lower listening gain scores by the students. While the use of English in the classroom did not correlate to adverse gain scores, it also did not correlate to any significant positive gains by the students. This provides support to those proponents who declare that using limited L1 in the classroom does not adversely affect TL gains. However, the data do not support that using the L1 was beneficial to the students' listening comprehension either.

*Limitations*

Several limitations to this study need to be considered in order to help understand the contribution of this research in the area of L1 and TL use. First, the location of the study constitutes a limitation that needs to be considered. This study was conducted at the University of Arizona in Tucson, Arizona, a large Research I institution with over 35,000 students. The vast majority of the students who participated in the study were taking the class to fulfill the language requirement, and thus can be assumed to have differing degrees of motivation for FL learners. Also, while the university attempts to properly place heritage learners and traditional foreign language students, there are heritage learners in most of the language classes as well as a wide range of abilities that both heritage and non-heritage students bring to the classroom. Many students had studied

Spanish in high-school between one and four years, and thus even the Spanish 102 students had some previous exposure to the TL. Given that the only significant factor in determining gains between the pre- and post-test was that the students scored lower on the pre-test were more likely to have a significant improvement, including students who have more limited exposure to the TL might provide different results. Also, increasing the sample size of the study would provide more participants, especially regarding the number of instructors. While this study was larger than most previous studies that analyzed similar aspects of language use, increasing the number of instructors would help to mitigate some of the outliers and individual differences.

As previously mentioned, the instrument used in the study was not meaned to the population of students at the University of Arizona. Also, the test chosen was for the Intermediate-Low level on the ACTFL scale and thus below the level of some of the Spanish 202 students giving them a very narrow range in which to improve. The test contained only 35-multiple choice questions which may not have been enough to establish a reliable rating of the students listening proficiency. The fact that the gain scores between the pre- and post-test were quite small may have also contributed to the fact that few statistically significant correlations were found.

Research into study abroad and immersion settings such as Middlebury College, where exclusive use of the TL occurs, have found that students are capable of making large gains over a relatively short period of time when exclusive use of the TL is present. This study did not focus on those types of learners who typically pursue immersion or intensive language programs. Even though it is likely that there were many highly

motivated students within the different classes, they were the minority to those who were principally taking the class to fulfill the university foreign language requirement. Given students who are highly motivated learners with a strong desire to learn the TL, presents a population that was not the main population of this study. Research and decisions regarding L1 and TL use would need to be reconsidered with such a population.

The fact the research was carried out only over the course of a semester also limits the findings, especially in term of improvement on a listening test with only 35 questions. A longitudinal study could possibly change the results. One of the logistical problems with conducting a longitudinal study at the university level is that students typically change instructors every semester and the likelihood of having the same type of teacher is greatly limited. There is also the possibility of a positive testing effect, given that students were given the same test for both the pre- and the post-test. I do not believe this to be a factor, as previously mentioned, due in large part to the quite extensive listening and other types of exams that were administered during the regular course of study between these two tests. The fact that the students did not receive any credit and that the test did not factor into the grades is a limitation. The lack of any compensation or penalty based on the performance on the exam made it a low-stakes test.

Another area of concern was the fact that I was not able to record the students in their pair and small-group work. This was not feasible due to the size of the classes and the fact that the classes were dispersed over the whole campus at the University of Arizona. As previously mentioned, the amount of time that students spent working in groups varied greatly according to the different classes and levels. Some of the instructors

spent an average of over 50% of the time in pair or small-group activities while other instructors did not spend any time in small-group or pair activities. At the commencement of the study, I was concerned that I would not be able to hear the student and teacher interactions in the recording, this was not the case. Although this was more challenging for some teachers than other, due to the high quality of the video-camera used, almost all of the audio could be transcribed.

It needs to be mentioned that during the semester of data collection, I also taught and worked for the Spanish Department at the University of Arizona as an assistant to the basic language director of working with the Spanish 102 level. Though my main function was material and test development, some of the instructors participating in this study may have perceived me as having some sort of punitive authority that I actually did not have due to my employment as an assistant to the basic language director. Though participation was voluntary and all of the instructors were reassured that the results of the study would be anonymous, some may have changed their linguistic behavior in the classroom in an attempt to conform to some notion of what was considered effective teaching or what characteristics I expected to record in the classroom. This was mitigated through the use of multiple recordings in an attempt to elicit a more natural language behavior in the classroom. Also, the fact that the classes were recorded may have changed the behavior of the students and teachers to a behavior that was not representative of the normal daily interactions.

This study was limited to Spanish classes and did not include any other languages. Spanish has many similarities to English and thus further research would need to be

conducted to determine whether or not other instructional contexts would reflect similar findings, especially in the less commonly taught languages. Duff and Polio (1994) found that teachers of two linguistically related non-Indo-European languages varied significantly (96% vs. 10%) in their use of the TL in the classroom, implying that variation between related languages can occur as well as variation across unrelated languages.

Finally, there was no overt control over the lesson plan and content of the class during the study. However, the Spanish and Portuguese Department at the University of Arizona provides each instructor with a detailed syllabus of the material that they are to cover each class period. Using that as a guide for the classroom content and by conducting all of the observations for each level within three days, I found that all of the lessons were quite similar and the content covered was very much the same. In the majority of the classes, the same lesson was repeated with modifications due to the nature of each of the individual instructors. Also, I was able to avoid going into classes where exams were being given or compositions were being written during the whole hour because they were all carefully programmed on the syllabus. So while no control for lesson content was purposely made, due to the structure of the course syllabi, this was not a significant limitation of this study.

*Future Research*

In order to mitigate some of the concerns raised in this study, a different test should be used with more items so as to give a more valid indicator of listening proficiency than the one used in this study that contained only 35 questions. As

mentioned in Chapter 3, the test that was chosen was normed to students completing their first year at the University of Minnesota, so the test scores of the Spanish 202 students were higher and thus had less of a margin for improvement. A more valid listening proficiency measure could be used to get a wider variation in the scores of the more advanced students.

Further study is needed as to why instructors and students are able to accurately assess instructor language use but not students' language use. What additional factors if any are students and teachers taking into account when considering perceptions of the amount of student language use?

Though I was not able to transcribe all of the group work in the classes, I observed that many times the students were very productively using both the TL and L1 to negotiate meaning of the assignment that they had been given while working in pairs and small-groups and yet, at other times, no meaningful production in the TL took place. It was observed that the students were often times left in group activities for too long and became bored and started addressing each other in the L1 or engage in other non-language related activities. In other instances, too little time was given and the students were unable to integrate the knowledge that the teacher wanted them to produce. Though the field of small-group work has received considerable attention, there appears to be a lack of awareness on the part of the teacher as to the appropriate amount of time to stay in pairs or small-groups and how to get students to move from simply completing grammar assignments in pairs or small-groups to communicative language use. The students were producing language during the group activities but whether any type of communication

was taking place needs further study. Research needs to be conducted to determine whether this is an artifact of a lack of experience on the part of the different instructors or if some type of awareness raising can help teachers to become more cognizant of the effect that the time spent in pair and small-groups has on use of the L1 or the TL.

Future research needs to explore how the type of task assigned affects student choice between the TL and the L1. Task type may be a factor in students' language use, especially in pair and small-group work, where a complex task may overly tax the students' cognitive load, hampering the use of the TL. Also, while there is a small body of research that has looked at how much TL is being taught in the classroom (e.g., Guthrie, 1984; Duff & Polio, 1990, 1994; Macaro, 2001; Levine, 2003), more research is needed to explore how the complexities of the language that is being used can affect students' processing of the language, and how this can affect acquisition. Guthrie (1986) found in her study that while many of the instructors used the TL most of the time, the predictable nature of the type of language that was used in the classroom as well as the routine activities did not require the students to have to process very much of the TL. More research is needed to find the levels of language at which students are required to process language at a level that does not overly exceed their own abilities i.e., the mysterious I + 1 for listening (Krashen, 1982).

Also, more research is needed that explores how teacher training can be modified to affect teachers' pre-established belief systems regarding language use. Most of the code-switches between Spanish and English occurred with the translation of vocabulary and the teaching of grammar. This current study, as well as previous research (e.g., Duff

and Polio, 1990; Turnbull, 1998; Macaro, 2001), have found that grammar and vocabulary teaching are areas where the L1 continues to be used. Teacher training needs to be revisited to discover how effective training can help teachers achieve their pedagogical goals in regards to language use in the classroom. It is possible that teachers are not being given the tools in their training to be able to effectively present all of the material in their classes in the TL, even if they think exclusive use of the TL is desirable.

Future research also needs to control for the type of language activity that is being observed (e.g., listening activity, grammar activity, and cultural activity) and how that affects the L1/TL use in the classroom. This understanding would be beneficial in teacher training and supervision by helping supervisors to evaluate their teachers, taking into account the type of activity taking place and help with training by providing a better understanding of the challenges that students face in using the TL in different types of classroom activities. If certain types of activities proved difficult for teachers to use the TL, teacher trainers could assist in the development of effective techniques and activities to help these teachers maintain use of the TL in these areas of difficulty. The teachers in this study were informed of the observations before they took place in order to avoid any classes where no interactions between teachers and students were planned for the day in question. However, future research needs to determine whether prior knowledge of observations affects the teachers' use of the L1 and TL in the classroom.

While the scope of this study does not measure language use outside of the classroom, the finding that the native Spanish-speaking instructors claim to use more Spanish outside of the classroom when dealing with students may very well provide those

students who have ample contact with their instructors with more input in the TL. If students go to office hours and meet with their instructors, the chance of this taking place in the TL appears to be greater with the native Spanish-speaking instructors.

In addition, the lack of statistically significant correlations between the gain scores and the 20+ factors (see Appendix J) in this study supports the notion for a longitudinal study into the acquisition of different skills. Students need to be observed and tested from their initial exposure and study of the TL through several years of study in order to be able to better understand what factors are salient in the acquisition of the listening modality.

The video-recordings of the classes also provides data for future research to study how the semiotics, gestures, and other non-verbal behaviors may affect the students' language usage and possibly influence their overall proficiency.

Also, while code-switching occurred at all levels of instruction, the level of the code-switches were not coded to identify whether the switch took place at the word, phrase, or discourse level. While this research looked at the amount of L1 and TL use in the classroom and tallied the number of code-switches according to the established criteria, the possibility exists that different listening gains are not based on the number of words but rather the context and type of switch that the instructors employ with the students and the types of code-switches that the students use with their instructors. Additional discourse analysis of the code-switches could be used to determine both the kinds of code-switches used in the classroom and how they influence the language learner. It is possible that while the number of code-switches for two instructors is equal,

one employs switches at the discourse level while the other only switches at the word level.

The code-switches in the classroom paralleled to a certain degree the types of code-switches that are found in many of textbooks that are used in the FL classroom. Many of the textbooks begin with grammar explanations in English as well as giving the students instructions in English. Also, most beginning textbooks begin with the direct translation of vocabulary by first giving the FL word and then glossing it in English. At the intermediate level, this starts to become less common, as the texts move more toward exclusive use of the TL. Similar patterns to these were found in the classes included in this study. Future research should compare and contrast L1 and TL use in the classroom to that of the FL textbooks to see if the code-switching found in the classroom reflects textbook language use or vice-versa.

Studies also need to consider the influence of the type of speech that is being used by the students. This study did not analyze whether the production by the students was in the form of original sentences or whether they were reading from a printed text. Further studies need to quantify not only the amount of oral production of the L1 and the TL but also the type of speech being produced. The classes in this study were in large part teacher-centered and the students often were not producing creative language but rather reading from a textbook or some other printed material. The amount of creative use of the language may be an important characteristic in developing certain skills.

Also, the question is still open as to what is the appropriate amount of the TL and L1 to use in the FL classroom for the teachers and students. The results show no definite

conclusion as to an optimum amount of L1 or TL use in the classroom. Some of the instructors who used the TL exclusively had their students experience significant gains, while other who used lesser amounts of the TL also had students who significantly improved. Research into looking at how do other languages, both commonly taught and less commonly taught, employ the TL in the classroom would also be beneficial, especially since a consistently wider array of languages are being offered to students. In addition, this study did not conduct a discourse analysis of the quality of the speech that was used by the instructors. Further studies need to consider not just the quantity of exposure to the TL but also the quality of the speech being used and how that may play a role in the helping the students both use and understand more of the TL.

The percentage of new words to total speech was one of the unexpected findings in this study. Almost all of the instructors averaged between 500-600 unique words per class. While not part of this study, future studies should consider the relationship, if one exists, between the 500-600 words used by the different instructors and whether they are unique to a particular classroom. Student and instructor production should be compared in order to determine whether or not a relationship exists between the different words they produced and the class level or native language of the instructor. It is possible that a certain number of particular words are being used. This could lead to a useful corpus-type analysis that might very well produce insights into the types of words that teachers and students use and what type of words are incorporated in student up-take. The possibility exists that some corpus of classroom Spanish could be formed wherein students could be taught the most common words used in the Spanish FL classroom as they begin their

language study. If a commonality existed between these words across most Spanish FL classes, then students could be instructed early on in their language study and thus increase their vocabulary beyond what they are currently being exposed to. Additionally, cross-language comparisons could be made to see if a similar set of words are part of the instructors' language use in other language classes.

In my transcription of the data, I found what appeared to be a limited set of students who not only participated in the classroom but who were called upon to participate. Due to the lack of individual identifiers for the students, they were all classified together when their speech was analyzed, so that no individual differences were addressed. Further studies into language use in the classroom need to address not only the general production by the students but also who are the students who are participating in the class and whether they are representative of the whole classroom or simply a small sample of those students who are either more motivated, more confident in their language abilities or simply more extroverted and willing to talk in the class. A study of these individual differences would assist in making sure that all students are given the opportunity to participate in classroom activities.

One of the findings not addressed extensively in the previous chapters was the result that gain scores of a certain percentage of the students actually decreased from the pre- to the post-test. Many possible explanations exist for this decline which for the most part was quite minimal within one or two points. However, research should be conducted to see if the performance of these students declined because they paid less attention to the

listening data at the end of the study or because of some other type of listening behavior changed with their instructor from semester to semester.

Finally, because a certain amount of time is dedicated to group activities, research needs to be conducted into how the implementation of activities in small-groups or pairs can be optimized to assist students in their TL acquisition. The teachers in this study employed a wide variety of pair and small-group activities both in regard to type and time dedicated to individual activities. Research is needed to see how different divisions of time affect the students' learning and acquisition of different language skills.

*Conclusion*

In conclusion, the debate as to the optimal use of the L1 and TL in the classroom continues. While this study has contributed to the body of research into language use in the classroom, many more questions have been raised regarding the complexities of listening comprehension and effect of language use by both teachers and students in the classroom. Additionally, this study has helped to highlight the differences that exist between native English-speaking instructors of Spanish and native Spanish-speaking instructors of Spanish. Finally, teacher and student beliefs appear to have an influence on language use in the classroom. Student and teacher beliefs need to be further studied to be able to modify existing beliefs that are inconsistent with language acquisition theories and to reinforce those beliefs that tend to lead toward greater learning and eventual language acquisition.

# APPENDIX A

## Students' Language Questionnaire

Instructions: **Please write the** month **and** day **you were born as well as the first** three **letters of your** mother's **name in the space provided below.**

_____ _____ _____ _____ _____ _____ _____
**Month (MM) Day (DD) First 3 letters of mother's name**

**Instructions:** Mark the answer that most accurately describes your current Spanish language classroom and your own feelings regarding language teaching and language use in the classroom. Unless otherwise specified, **limit your responses to your IN CLASS behavior**.

1. My **Spanish instructor** uses **Spanish** to communicate **with students** about _____ of the time.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
2. My **fellow students** use **Spanish** to communicate **with the instructor** about _____ of the time.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
3. My **fellow students** use **Spanish** to communicate **with other students** about _____ of the time.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
4. **I** use **Spanish** to communicate **with my instructor** about _____ of the time.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
5. **I** use **Spanish** to communicate **with my fellow students** about _____ of the time.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
6. I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
7. I use **Spanish** to communicate about **grammar and usage** about _____ of the time we spend on discussing or working on these.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
8. I use **Spanish** to communicate about **tests, quizzes and other assignments** about _____ of the time I spend discussing these with my instructor and fellow students.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
9. I use **Spanish** to communicate with my instructor **outside of class time** (e.g., office hours, in the hall, before or after class) about _____ of the time.
   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]
10. I use **Spanish** to communicate with fellow Spanish students **outside of class time** (e.g., in the hall, before or after class, over coffee) about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

11. While working with a partner or group in my Spanish class, I switch to **English** as soon as we are through with a particular activity about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

12. I understand what my **instructor** is saying in **Spanish** about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

13. When I do not understand what my instructor is saying in Spanish, I request in **Spanish** that she or he repeats or clarifies about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

**Instructions:** Mark the answer that most accurately describes your **BELIEFS** about Spanish and English usage in the language classroom.

< 1 2 3 4 5 >

Strongly **dis**agree Strongly agree

14. I believe the more **Spanish** that students use in the classroom, the better they learn how to communicate in **Spanish**.

strongly **dis**agree 1 2 3 4 5 strongly agree

15. I believe that in order to really master/acquire Spanish, students must use **Spanish** exclusively in the classroom.

strongly **dis**agree 1 2 3 4 5 strongly agree

16. I believe that there are no situations in which **English** should be used in the Spanish language classroom (i.e., I believe that total immersion in **Spanish** classes is best).

strongly **dis**agree 1 2 3 4 5 strongly agree

17. I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish language.

strongly **dis**agree 1 2 3 4 5 strongly agree

18. I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments.

strongly **dis**agree 1 2 3 4 5 strongly agree

19. I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information.

strongly **dis**agree 1 2 3 4 5 strongly agree

20. I believe that, the instructor should use **Spanish** at **all** times in the classroom regardless of how much Spanish students choose to use.

strongly **dis**agree 1 2 3 4 5 strongly agree

21. I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and fellow students both during and between activities.

strongly **dis**agree 1 2 3 4 5 strongly agree

22. I believe that **I** use _____ **Spanish** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

23. I believe that **I** use _____ **English** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

24. I believe that my **instructor** uses _____ **Spanish** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

25. I believe that my **instructor** uses _____ **English** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

26. Mark all of the situations in which you feel your instructor should use some **English**:

Classroom administration _____ To explain any new topic or assignment _____

Grammar instruction _____ Translation of unknown vocabulary ____

Classroom discipline _____ Lack of comprehension of material ____

To develop a positive relationship with a class _____ Respond to students' use of English ____

Other-Explain_____

## APPENDIX B

### Teachers' Language Questionnaire

**Please print your course number, class time, and section #**: (e.g., Span 102 9:00-9:50am Section 21)

_____

**Instructions:** Mark the answer that most accurately describes your current Spanish language classroom and your own feelings regarding language teaching and language use in the classroom. Unless otherwise specified, **limit your responses to your IN CLASS behavior**.

1. I use **Spanish** to communicate **with my students** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

2. My **students** use **Spanish** to communicate **with me** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

3. **My students** use **Spanish** to communicate **with each other** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

4. I use **Spanish** to give directions for **activities** exclusively (i.e., no translation) in **Spanish** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

5. I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

6. I use **Spanish** to communicate with students about **grammar and usage** about _____ of the time we spend on discussing or working on these.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

7. I use **Spanish** to communicate with students about **tests, quizzes and other assignments** about _____ of the time we spend discussing these.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

8. I use **Spanish** to communicate with students about **administrative information** (course policies, announcements, deadlines, etc.) about _____ of the time we spend discussing these.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

9. I use **Spanish** to communicate with students **outside of class time** (e.g., office hours, in the hall, before or after class, etc.) about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

10. While students are working **with partners or groups** in my Spanish class, they switch to **English** as soon as they are through with a particular activity about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

11. My students **understand** what I am saying in Spanish about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

12. When my students **do not understand** what I am saying in **Spanish**, they request that I repeat or clarify about _____ of the time.

0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

**Instructions:** Mark the answer that most accurately describes your **BELIEFS** about Spanish and English usage in the language classroom.

< ——————————————————— >

1 2 3 4 5

Strongly **dis**agree Strongly agree

13. I believe the more Spanish that students use in the classroom, the better they will be at communicating in Spanish.

strongly **dis**agree 1 2 3 4 5 strongly agree

14. I believe that in order to really master/acquire **Spanish**, students must use **Spanish** exclusively in the classroom.

strongly **dis**agree 1 2 3 4 5 strongly agree

15. I believe that there are no situations in which **English** should be used in the classroom (i.e., I believe that total immersion in **Spanish** classes is best).

strongly **dis**agree 1 2 3 4 5 strongly agree

16. I believe that **only Spanish** should be used to learn about grammar and usage of the Spanish class.

strongly **dis**agree 1 2 3 4 5 strongly agree

17. I believe that **only Spanish** should be used to discuss tests, quizzes, and other assignments.

strongly **dis**agree 1 2 3 4 5 strongly agree

18. I believe that **only Spanish** should be used to discuss course policies, attendance, and other administrative information.

strongly **dis**agree 1 2 3 4 5 strongly agree

19. I believe that, regardless of how much Spanish students choose to use, the instructor should use **Spanish** at **all** times in the classroom.

strongly **dis**agree 1 2 3 4 5 strongly agree

20. I believe that students should use **only Spanish** the entire time they are in the classroom with both the instructor and fellow students both during and between activities.

strongly **dis**agree 1 2 3 4 5 strongly agree

21. I believe that **I** use _____ **Spanish** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

22. I believe that **I** use _____ **English** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

23. I believe that my **students** use _____ **Spanish** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

24. I believe that my **students** use _____ **English** in the classroom.

too little [ ] the right amount of [ ] too much [ ]

25. I have made my expectations regarding the use of **Spanish** in the classroom explicit by discussing them with students.

at the beginning of the term [ ] regularly throughout the term [ ] never [ ]

26. I have spent class time working through or discussing **communicative strategies** that will help students communicate in **Spanish**.

at the beginning of the term [ ] regularly throughout the term [ ] never [ ]

27. Pick the top 3 reasons why you use **Spanish** in the classroom and rank them by ranking them with (1) being the most important, (2) the second most important and (3) being the third most important.

Spanish department policies _____ Previous teaching experience _____
Teacher training _____ Personal beliefs about teaching/learning _____
Pedagogical theories_____ Teaching Method or Approach _____
Limited English proficiency_____ Other-Explain_____

28. Mark all of the situations in which you feel some **English** should be used

Classroom administration _____ To practice English _____
Grammar instruction _____ Translation of unknown vocabulary ____
Classroom management _____ Lack of comprehension of material ____
To establish empathy/solidarity with class _____ Respond to students' use of English ____
Other-Explain_____

# APPENDIX C

## Teachers' Language Questionnaire-Second Class

**Please print your course number, class time, and section #**: (e.g., Span 102 9:00-9:50am Section 21)

_____

**Instructions:** Mark the answer that most accurately describes your current Spanish language classroom and your own feelings regarding language teaching and language use in the classroom. Unless otherwise specified, **limit your responses to your IN CLASS behavior**.

1. I use **Spanish** to communicate **with my students** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

2. My **students** use **Spanish** to communicate **with me** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

3. **My students** use **Spanish** to communicate **with each other** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

4. I use **Spanish** to give directions for **activities** exclusively (i.e., no translation) in **Spanish** about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

5. I use **Spanish** to communicate within **activities** about the **culture, history, and customs of the Spanish-speaking world** about _____ of the time we spend on these activities.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

6. I use **Spanish** to communicate with students about **grammar and usage** about _____ of the time we spend on discussing or working on these.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

7. I use **Spanish** to communicate with students about **tests, quizzes and other assignments** about _____ of the time we spend discussing these.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

8. I use **Spanish** to communicate with students about **administrative information** (course policies, announcements, deadlines, etc.) about _____ of the time we spend discussing these.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

9. I use **Spanish** to communicate with students **outside of class time** (e.g., office hours, in the hall, before or after class, etc.) about _____ of the time.

   0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

10. I use **Spanish** to give instructions about assignments, tests, homework, etc. about _____ of the time.

    0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

11. While students are working **with partners or groups** in my Spanish class, they switch to **English** as soon as they are through with a particular activity about _____ of the time.

    0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

12. My students **understand** what I am saying in Spanish about _____ of the time.

    0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

13. When my students **do not understand** what I am saying in **Spanish**, they request that I repeat or clarify about _____ of the time.

    0-20% [ ] 21-40% [ ] 41-60% [ ] 61-80% [ ] 81-100% [ ]

14. I believe that **I** use _____ **Spanish** in the classroom.

    too little [ ] the right amount of [ ] too much [ ]

15. I believe that **I** use _____ **English** in the classroom.

    too little [ ] the right amount of [ ] too much [ ]

16. I believe that my **students** use _____ **Spanish** in the classroom.

    too little [ ] the right amount of [ ] too much [ ]

17. I believe that my **students** use _____ **English** in the classroom.

    too little [ ] the right amount of [ ] too much [ ]

18. I have made my expectations regarding the use of **Spanish** in the classroom explicit by discussing them with students.

    at the beginning of the term [ ] regularly throughout the term [ ] never [ ]

19. I have spent class time working through or discussing **communicative strategies** that will help students communicate in **Spanish**.

    at the beginning of the term [ ] regularly throughout the term [ ] never [ ]

## APPENDIX D

### Demographic Information for Students

**Personal Data:**

1. What is your gender? [ ] Male [ ] Female
2. What is your age? 18-20 [ ] 21-23 [ ] 24-27 [ ] 28-35 [ ] 36-44 [ ] 45+ [ ]
3. Where were you born (country)? _____
4. What is/are your first language(s)? _____
5. Where were your parents born (country)? Father: _____ Mother_____
6. What were your parents' first language(s)? Father:_____ Mother: _____

**Current Academic Data:**

7. Which of the following best describes your current status as a student at the university?
   Freshman [ ] Sophomore [ ] Junior [ ] Senior [ ] Graduate [ ] Non-degree [ ]
8. What is your approximate, overall GPA at the university?
   4.0-3.5 [ ] 3.4-3.0 [ ] 2.9-2.5 [ ] 2.4-2.0 [ ] 1.9-0 [ ] N/A [ ]
9. How difficult do you find this Spanish class to be?
   Very easy [ ] Easy [ ] Average [ ] Difficult [ ] Very difficult [ ]
10. What grade do you expect to receive from this Spanish class?
    A [ ] B [ ] C [ ] D [ ] F [ ] N/A [ ]

**Foreign/Second Language Experience:**

11. Did you **hear Spanish** frequently as a child?
    Yes [ ] No [ ]
12. Did you **speak Spanish** frequently as a child?
    Yes [ ] No [ ]
13. As children, did your parents or grandparents **speak or hear Spanish** frequently?
    Yes [ ] No [ ]
14. How old were you when you started learning **English**?
    English is my first/native tongue [ ] 1-10 yrs. old [ ] 11-20 yrs. old [ ] over 20 [ ]
15. Which **best** describes your self-assessed language proficiency in **Spanish**?
    Beginner [ ] Intermediate [ ] Advanced [ ] Near-native [ ] Native [ ]
16. How much formal education have you had in **Spanish**?
    Junior high/high school: 1 year [ ] 2 years [ ] 3-4 years [ ] more than 4 years [ ]
    Community College/University: 1-2 semesters [ ] 3-4 semesters [ ] more than 4 semesters [ ]

17. How long have you lived consecutively in a country (other than the United States) where **Spanish** is spoken?

never [ ] 1-3 weeks [ ] 1-6 months [ ] 7 mos-2 years [ ] more than 2 years [ ]

18. Have you ever studied another language **other than** Spanish and your native language?

Yes [ ] No [ ]

If yes, how long?: 1-2 semesters [ ] 3-4 semesters [ ] more than 4 semesters [ ]

19. How would you describe your **overall** experience with classroom foreign language learning?

Unsatisfactory [ ] Poor [ ] Neutral [ ] Good [ ] Excellent [ ]

# APPENDIX E

## Demographic Information for Teachers

**Personal Data:**

1. What is your gender? [ ] Male [ ] Female
2. What is your age? 18-20 [ ] 21-23 [ ] 24-27 [ ] 28-35 [ ] 36-44 [ ] 45+ [ ]
3. Where were you born (country)? _____
4. What is/are your first language(s)? _____
5. Where were your parents born (country)? Father: _____ Mother_____
6. What were your parents' first language(s)? Father:_____ Mother: _____

**Current Academic Data:**

7. What degree are you currently seeking and in what field?

_____

8. What degree(s) do you currently hold and in what field?

_____

9. How many classes in language teaching/pedagogy have you taken?

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] more than 5 [ ]

10. Are you currently enrolled in a class in language teaching/pedagogy?

Yes [ ] No [ ]

11. What is your status as a Spanish instructor?

GAT [ ] Adjunct Faculty [ ] Lecturer [ ] Tenure-track Faculty [ ] Tenured-Faculty [ ] Other [ ]

**Teaching Experience:**

12. How much **formal** training have you had in FL teaching (workshops, courses, internships, etc.)?

none [ ] a few workshops [ ] 1/2 to 1 year [ ] 1-2 yrs [ ] 2-4 yrs [ ] more than 4 yrs [ ]

13. How would you characterize **your most important** formal training as a FL instructor? (if you received no formal training, please leave blank):

[ ] advanced degree in applied linguistics, SLA, or FL pedagogy (or related field)

[ ] advanced degree in formal or theoretical linguistics

[ ] university coursework in pedagogy/applied linguistics (e.g., teacher preparation/certification courses)

[ ] workshops with peers and supervisors

[ ] one-on-one interaction about FL teaching with mentors or peers

[ ] other:

_____

14. How would you characterize the primary FL approach/methodology in which you were trained? (if you received no formal training, please leave blank):

communicative approach [ ] grammar translation [ ] processing instruction [ ] cognitive approach [ ] audiolingualism [ ] direct method [ ] natural approach [ ] no particular methodology [ ] don't know [ ]

[ ] other:_____

15. Have you taught a **Spanish** language class using only **Spanish** at all times (as opposed to a mixture of **Spanish and English**)?

Yes [ ] No [ ]

**<u>If yes to 15, then please answer 15a-c</u>**

a) When you engaged in the exclusive use of **Spanish** in your class, was the practice dictated/prescribed to you by a supervisor?

Yes [ ] No [ ]

b) When you engaged in the exclusive use of **Spanish** in your class, did **you** find the experience helpful to the students' language learning?

Yes [ ] No [ ]

c) When you engaged in the exclusive use of **Spanish** in your class, did your **students** generally appear to find the experience helpful to their language learning?

Yes [ ] No [ ]

16. How many years have you been teaching **Spanish** as a foreign/second language at the university level?

less than 1 year [ ] 1-2 years [ ] 3-5 years [ ] 6-10 years [ ] more than 10 years [ ]

17. Have you taught **Spanish** other than in a university setting?

Yes [ ] No [ ]

If yes, where, what level, and how long? _____

18. Have you taught languages **other than Spanish**?

Yes [ ] No [ ]

If yes, what language, where, and how long? _____

19. Have you taught subjects **other than language(s)**?

Yes [ ] No [ ]

If yes, what subject, where, and how long? _____

**Foreign/Second Language Experience:**

20. Did you hear **Spanish** frequently as a child?

Yes [ ] No [ ]

21. Did you speak **Spanish** frequently as a child?

Yes [ ] No [ ]

22. As children, did your parents or grandparents speak or hear **Spanish** frequently?

Yes [ ] No [ ]

23. How old were you when you started learning **English**?

English is my first/native tongue [ ] 1-10 yrs. old [ ] 11-20 yrs. old [ ] over 20 [ ]

24. Which best describes your self-assessed language proficiency in **English**?

Beginner [ ] Intermediate [ ] Advanced [ ] Near-native [ ] Native [ ]

25. Which best describes your self-assessed language proficiency in **Spanish**?

Beginner [ ] Intermediate [ ] Advanced [ ] Near-native [ ] Native [ ]

26. How much formal education have you had in **Spanish**?

Junior high/high school: 1 year [ ] 2 years [ ] 3-4 years [ ] more than 4 years [ ]

Community College/University: 1-2 semesters [ ] 3-4 semesters [ ] more than 4 semesters [ ]

27. How long have you lived consecutively in a country (other than the United States) where **Spanish** is spoken?

never [ ] 1-3 weeks [ ] 1-6 months [ ] 7 mos-2 years [ ] more than 2 years [ ]

28. Have you ever studied another language(s) **other than Spanish** and your native language?

Yes [ ] No [ ]

If yes, how long and what language(s)? _____

# APPENDIX F

## Code-Switching Tally Sheet

| Teachers' Use of English | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Instructors | Classroom admin. | Grammar Instruc. | Discipline | Relationship with class | Explain any new topic or assignment | Translation of vocabulary | Lack of comprehension | Respond to students' L1 | Other |
| (Teacher ID) Observation 1 | | | | | | | | | |
| (Teacher ID) Observation 2 | | | | | | | | | |
| (Teacher ID) Observation 3 | | | | | | | | | |
| Total for all observations | | | | | | | | | |
| (Teacher ID) Observation 1 | | | | | | | | | |
| (Teacher ID) Observation 2 | | | | | | | | | |
| (Teacher ID) Observation 3 | | | | | | | | | |
| Total for all observations | | | | | | | | | |

## APPENDIX G

### Code-Switching Tally Sheet

| Students' Use of English | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Instructors | Classroom admin. | Grammar Instruc. | Discipline | Relationship with class | Explain any new topic or assignment | Translation of vocabulary | Lack of comprehension | Respond to students' L1 | Other |
| (Students) Observation 1 | | | | | | | | | |
| (Students) Observation 2 | | | | | | | | | |
| (Students) Observation 3 | | | | | | | | | |
| Total for all observations | | | | | | | | | |
| (Students) Observation 1 | | | | | | | | | |
| (Students) Observation 2 | | | | | | | | | |
| (Students) Observation 3 | | | | | | | | | |
| Total for all observations | | | | | | | | | |

# APPENDIX H

## Additional Examples of Code-Switches

***1. Classroom administration.***

**Example 3:**

3NES1: Okay wait a minute, I am going to do this randomly, Perú, bien other people I'm going to put that down. Costa Rica okay Chile mi país, Colombia, okay sí.
CLS: I want Colombia.

**Example 4:**

2NSS2: ¿Quién más me falta? ¿Nadie? Bueno juntitos. Levantándose por favor. Juntos ¿no? Vamos a ver, ¿de quién trata el poema de Pablo Neruda? Importante saber. Levantados. Megan, gracias. ¿Quién más me debe escritura? Tyler necesitas una...
CLS: Who is cuatro?

***2. Grammar instruction.***

**Example 3:**

CLS: Con los verbos que están aquí ¿Qué? ¿Qué verbos es um indicativo?
4NES1: Okay no estar seguro would be indicative y pensar crear.

**Example 4:**

CLS: Yo comencé.
3NES1: With the yo form does the z change to?
CLS: c.
3NES1: c every oth- never mind.

**Example 5:**

CLS: So, en el forma de imperfecto del subjunctive es hubieran.
3NES2: Sí, sí. Y entonces lo pones, ¿cómo? Pero para en el examen para que te acuerdes put it in the preterite tense y luego lo cambias. ¿Sí, sí Jenny te contesté?

***3. Establish solidarity or a relationship with the class or teacher.***

**Example 3:**

4NSS1: Excelente, ¿Fuiste a una montaña? That's our purpose ok because when you are in a situation where you have to speak Spanish you are not going to have a textbook telling you. Okay?
CLS: @=laugh.
4NSS1: You can, you can buy, purchase one of those electronic things that @=laugh.

**Example 4:**

2NSS2: A Florida ¿no? allí están todos los intelectuales de uh Cuba. Bueno en Argentina conoció a Fito Páez y se casó con él o sea son esposos xxx se casaron ¡qué cool no! y los dos están en gente del mundo veintiuno Argentina, a mí me parece, me parece raro.

**Example 5:**

4NSS2: Muy bien ¿Por qué no? Yo también estoy de acuerdo, I'm in agreement.
CLS: Tiene um muchos trabajos.

**Example 6:**

1NES2: Como, a ver, quiero como en la película que todos se levanten y digan "Buenos días, señor."
CLS: Okay. Let's do it. we'll do it.
1NES2: No, no don't.
**Example 7:**
2NES1: Bien. Okay. There's, there's there is something called the law of the hammer. Right? When you first learn how to use a hammer. What do you do?
CLS: Hit yourself in the head.
**Example 8:**
3NES1: No es malo. Okay siguiente trescientos setenta cinco, tres siete cinco.
CLS: That was wonderful.
**Example 9:**
3NES1: Suban okay vamos a hacer la clase de aeróbica pónganse de pie pónganse de pie a practicar lo que acabamos de estudiar. ¿Listos? Okay con el ritmo de la música levanten los brazos luego bájenlos. Todos juntos doblen la cintura lentamente a la izquierda y luego la derecha. Lentamente suban la pierna izquierda y luego bájenla. Con energía levanten las, los brazos luego den vuelta a las manos. sin perder el ritmo de la música suban los hombros y luego bájenlos. Rápidos, relájense okay siéntense.
CLS: That was the highlight of my day.
CLS: Nice job team.
***4. Explanation of new topics or assignments.***
**Example 3:**
3NES1: Nueve profoundly doce profundamente. Muy bien okay no hay mucho tiempo dos personas I'll choose two people xxx que no ha ido y de este equipo ¿Quién quiere ir para allá? Okay Kendall te escojo a ti. Okay Kendall try to pick a paper.
**Example 4:**
CLS: Sí.
2NES2: Just like I do on your papers. ¿vale?
CLS: Sí.
**Example 5:**
2NSS2: Otra vez. Número cuatro.
CLS: Remember that this is a group presentation, and you must keep in mind the main theme at all times.
**Example 6:**
2NSS2: Señor Russell ¿Qué dice? Presentations.
CLS: Are six to nine.
2NSS2: Six to nine minutes long. six to nine minutes no un minuto, no cuatro minutos, no cinco minutos, nine minutes ¿verdad? sigue señor.
3NSS2: Y después vamos a contestar las preguntas aquí en la clase. El cuento, silencio. El cuento es un poco difícil así es que tienen todo el fin de semana para que lo lean una o dos o tres veces.
CLS: So we just write a summary?
***5. Translation of vocabulary.***
**Example 3:**

CLS: ¿Qué es mezcla?
2NSS1: Um mezcla es mix.
**Example 4:**
CLS: ¿Qué significa reconocidos?
4NES1: Recognized. ¿otras? No okay ahora vamos a hacer un actividad de escuchar página trescientos sesenta y cinco. Vamos a escuchar la conversación y vamos a hacer la actividad bajo la primera foto. Sí en página trescientos sesenta y cinco. La actividad es el orden de los eventos y tiene el pretérito.
**Example 5:**
2NES2: Y si no comprendes alguna parte, ponle corchete brackets con marca de interrogación. ¿Vale? Y después pues pide que te lo aclare right lo que no entiendes ¿vale?
CLS: Sí.
**Example 6:**
2NSS2: Una persona por favor, Si pudiera vivir nuevamente mi vida.
CLS: If I was able to live my life again.
2NSS2: If I was able to live my life again, If I was able to live my life again. Cosa que yo no puedo hacer. ¿No? no puedo volver a tener diez años. ¿Cuál es tú señor Jason volver a vivir diez cuando tenías diez años? ¿Puedes volver a vivir tu edad a los doce o trece años? No Si pudiera vivir nuevamente mi vida. Ese si pudiera es importante no sabe si if I could live my life again, if I could live my life again cosa que no puedo. No podemos la vida sigue. ¿No? bueno en la próxima trataría de cometer más errores.
**Example 7:**
4NES1: ¿Qué significa prestar atención?
CLS: To pay attention, to pay attention.
**Example 8:**
CLS: ¿Qué es atrajo?
2NSS2: ¿Qué es atraer? ¿Qué es atraer?
CLS: Repaid.
2NSS2: No atrajo that means it brought.
**Example 9:**
3NES2: Teatros y telenovelas ¿Qué son las telenovelas?
CLS: Soap operas.
**Example 10:**
4NES2: Entonces, el título es fundación de las ciudades de Asunción y Buenos Aires que significa, ¿Qué?
CLS: Fundation.
***6. Lack of comprehension.***
**Example 3:**
3NSS2: Ya casi es el final del semestre. Ya pronto. Okay, entonces uh hoy es jueves. El lunes eh vamos a hacer un RPA de un cuento que está en el libro en la página uh ¿Qué página es? Es en el libro. Está en la página cuatrocientos treinta y tres y cuatrocientos treinta y cuatro y cuatrocientos treinta y cinco.
CLS: Can you repeat that again?
**Example 4:**

4NSS2: Eh ya what?
CLS: To choose.
**Example 5:**
4NES2: No, tienes que decir a nosotros. Tell us, some thing you learned from you partner.
CLS: About.
4NES2: De tu compañera, ah.
CLS: What? Uh okay
***7. Respond to students' or instructor's use of L1.***
**Example 3:**
3NES2: Bachelors. Entonces esto es. Okay, muy bien. Okay, ¿preguntas? ¿No? Vamos a la página cuatrocientos setenta y dos. En grupos de tres por favor. Cuatrocientos setenta y dos. Grupos de tres. Cuatro, siete, dos. Estamos viendo el subjuntivo, imperfecto del subjuntivo. Okay, por favor en grupos de tres van a leer página cuatro siete y dos y cuatro siete y tres. Okay, les voy a hacer preguntas. Van a leer. ¿Cómo se hace el imperfecto del subjuntivo? Okay. En español por supuesto. En español. ¿Quién dijo eso? Tienen que saber como se hace el imperfecto del subjuntivo. ¿Cómo? ¿Cuáles son las reglas principales? ¿Quién dijo let's find out? Ya, ¿terminaron? ¿Ya?
**Example 4:**
2NSS2: Sí lee fuerte.
CLS: Yo quiero.
2NSS2: No pero en inglés.
CLS: I want a secretary who speaks Spanish.
**Example 5:**
2NSS2: Sí, este poema terminar en United Fruit Company, proviene de este gran libro Canto General, que se escribió en mil novecientos cincuenta, y nos dice acá que habla de la conciencia política a favor de los oprimidos. ¿Qué significará esto? Conciencia política a favor de los oprimidos. A favor de los oprimidos. He is trying to reach what?
CLS: La gente de la tierra.
2NSS2: ¿Huh ?
CLS: La gente de la tierra.
2NSS2: ¿La?
CLS: The oppressed.
2NSS2: Sí. You see, he wants to talk about the oppressed, pero, what about the oppressed. Jason what about the oppressed? Trata de despertar una conciencia política a favor de los oprimidos en su poema. Trata de alcanzar o despertar una conciencia política a favor de los oprimidos. ¿Qué trata de hacer Pablo Neruda en su poema? Trata de despertar una conciencia política a favor de los oprimidos.
**Example 6:**
3NSS2: ¿Sí entienden la diferencia? En inglés ¿Cómo dirían esto? En inglés.
CLS: I hope, I hope that you all have studied for the exam, for the test. I hope that you all have studied for the exam, for the test.
***8. Other.***
**Example 3:**
CLS: Oh, I missed mine, I am sorry.

2NSS1: Ahorita, me dices later. Eh, DJ, seis, seis ¿quién más? Samanta, tú ¿cuándo?
CLS: Cinco, cinco sorry.

**Example 4:**

3NES1: What does that change to?
CLS: "i".
3NES1: Uh huh diverter.
CLS: Um tió sorry.
3NES1: Está bien.

# APPENDIX I

## Sample of Coding Process

The coding procedure, using the categories established by Polio and Duff (1994), explained in Chapter 4, is shown in the following excerpts from a Spanish 102 class and a Spanish 202 class used in the study. The different types of code-switches were tallied and added up to arrive at the total for each type. Examples of each type of code-switch that did not appear in these two samples can be found in Appendix H.

Key: TS-Teacher Code-Switch; SS-Student Code-switch; CA-Classroom Administration; G-Grammar Instruction; D-Classroom Management/Discipline; RC-Relationship with Class; NTA-Explain New Topic or Assignment; T-Translation of Vocabulary; LC-Lack of Comprehension; L1-Respond to Students' or Teachers' L1 Use; O-Other.

EXAMPLE #1-Spanish 102

*4NES1: hola.
*CLS: hola.
*4NES1: ¿Cómo están?
*CLS: así, así, bien [todos].
*4NES1: okay primero un juego, juego con vocabulario memoría okay ustedes saber jugar el juego memoría sí.
*CLS: sí [todos].
*4NES1: entonces dos equipos primero equipo Stacey y Devin con este lado y Erin con otro lado equipo uno equipo dos okay, okay so primero Casey por favor de equipo uno y Megan de equipo dos después de Casey okay so entonces sí y otra tarjeta okay so haces por favor.
*CLS: what? [SS-LC]
*4NES1: Okay look at the cards sí so dos y la otra okay ¿son lo mismo? [TS-NTA]
*CLS: no [todos].
*4NES1: okay entonces Megan okay y ahora Jake y después Lindsey.
*CLS: @=laugh.
*4NES1: sí muy bien okay.
*CLS: xxx.
*4NES1: sí okay ¿sí o no?
*CLS: no [todos].
*4NES1: ahora Alicia y después Carly okay ¿sí o no?
*CLS: sí.
*4NES1: okay ahora Carly gracias ¿sí o no?

*CLS: no.
*4NES1: okay ahora Britney okay ¿sí o no?
*CLS: sí [todos].
*4NES1: bien.
*CLS: sí ¿es un segunda palabra por joke? [SS-T] Like is there… [SS-T] en inglés por favor.
*4NES1: ¿otra palabra para joke? [TS-L1]
*CLS: sí.
*CLS: chiste, chiste.
*4NES1: creo que un chiste sí.
*CLS: okay.
*4NES1: también por supuesto o obviamente ¿Qué es grease? [TS-T]
*CLS: grasa [todos].
*4NES1: okay muy bien ¿preguntas de vocabulario?
*CLS: no.
*4NES1: muy bien equipo uno y ahora de la tarea pero primero preguntas del subjuntivo. ¿tienen preguntas del subjuntivo? Sí pero no de la tarea solamente preguntas en general.
*CLS: um en inglés.
*4NES1: okay.
*CLS: I don't get when it's not like I understand how it's like she went to the store but there was one exercise or example they showed us where it was like no in the syllabus but she didn't, I don't remember the exact example but it was like a no in front of the first verb and then they said that it wasn't a um. [SS-G]
*4NES1: okay.
*CLS: it wasn't subjunctive because. [SS-G]
*4NES1: okay ciertos verbos.
*CLS: uh huh.
*4NES1: certain verbs like [TS-G] dudar okay is to doubt [TS-T] sí.
*CLS: uh huh.
*4NES1: so that means uncertainty. [TS-G]
*CLS: okay.
*4NES1: so if you have [TS-G] dudar que and a different subject. [TS-G]
*CLS: uh huh.
*4NES1: it's going to be subjunctive. [TS-G]
*CLS: uh huh.
*4NES1: sí because it's uncertainty. [TS-G]
*CLS: right. [SS-L1]
*4NES1: however, [TS-G] dudar with no in front of it because you are saying I don't doubt. [TS-G]
*CLS: uh huh.
*4NES1: is implying certainty. [TS-G]
*CLS: okay.
*4NES1: so then you use the indicative after and not the subjunctive. [TS-G]
*CLS: alright which you don't conjugate like in the subjunctive. [SS-G]

*4NES1: yeah. [TS-L1]
*CLS: just the normal. [SS-G]
*4NES1: if you have if you have if it's like I don't doubt [TS-G], no dudo que.
*CLS: uh huh.
*4NES1: like she said this [TS-G] dice you say [TS-G] dice and not [TS-G] diga.
*CLS: okay.
*4NES1: because [TS-G] no dudo indicates certainty. [TS-G]
*CLS: okay gracias.
*4NES1: de nada ¿otras preguntas? Okay ahora de la tarea in syllabus [TS-T] pon el número que escogen sí ese número oración en el uh syllabus [TS-T] escriban su respuesta en la en la pizarra por favor.

EXAMPLE #2-Spanish 202

*3NSS2: Ya casi es el final del semestre. Ya pronto. Okay, entonces uh hoy es jueves. El lunes eh vamos a hacer un RPA [TS-T] de un cuento que está en el libro en la página uh ¿Qué página es? Es en el libro. Está en la página cuatrocientos treinta y tres y cuatrocientos treinta y cuatro y cuatrocientos treinta y cinco.
*CLS: can you repeat that again? [SS-LC]
*3NSS2: Se llama Derecho al delirio página cuatrocientos treinta y tres, cuatrocientos treinta y cuatro y cuatrocientos treinta y cinco y otra vez la tarea es que ustedes hagan un resumen del cuento. Lo que entendieron y lo que no entendieron. xxx.
*CLS: gracias.
*3NSS2: Y después vamos a contestar las preguntas aquí en la clase. El cuento, silencio. El cuento es un poco difícil así es que tienen todo el fin de semana para que lo lean una o dos o tres veces.
*CLS: So we just write a summary? [SS-NTA]
*3NSS2: Uh huh, sí. Y luego el martes vamos a tener la escritura número tres que es la última. La escritura número tres y ustedes pueden ir preparando la escritura que está en las, los Classnotes [TS-T] en la página ochenta y siete. Este fin de semana necesito que lean las instrucciones, lean el tema, de que es la escritura. Y luego vamos a. Eso es martes. Eh, el miércoles vamos a tener una actividad. Yo sé que muchos no van a estar. Pero bueno. El miércoles vamos a hacer una actividad de vocabulario. Todavía no sé. Y el peer-editing [TS-T] va a ser hasta la otra semana.
*CLS: so on Wednesday. [SS-CA]
*3NSS2: Vamos a hacer una actividad de vocabulario, todavía no sé cual pero vamos a hacer una actividad sobre el vocabulario. Okay, y la gente también. La gente lo vamos a hacer. ¿A quién van a presentar de la gente de Chile? No de Uruguay. ¿A quién van a presentar? Lo vamos a hacer el miércoles. Lo que hoy tenemos algo de gramática que es un poco difícil.
*CLS: wait [SS-CA] miércoles de next week. [SS-CA]
*3NSS2: uh huh.
*CLS: I'm not going to be here. [SS-CA]
*3NSS2: ni modo pero solamente la gente tú puedes estudiar.

*CLS: is it for a grade? Am I missing out on anything? [SS-CA]
*3NSS2: No esa es la gente. La, las personas que van a presentar de la gente.
*CLS: oh so, you said on Wednesday. [SS-CA]
*3NSS2: Uh huh.
*CLS: xxx.
*3NSS2: ¿Y tú presentas?
*CLS: Yeah. [SS-O]
*3NSS2: Okay, vamos a ver después. Después vamos a ver. Sí.
*CLS: Gastón, ¿Cuál día es la escritura?
*3NSS2: La escritura es, es el martes veintidós en clase, en clase. ¿okay? Bueno, ¿qué más tenemos ahora. Ah, la tarea. La tarea para hoy fue la página cuatrocientos veintisiete, no, no, no cuatrocientos veintiocho, cuatrocientos veintinueve. Okay. Silencio. Okay, y vamos a contestar la ejercicio B en la página cuatrocientos treinta. Okay, vamos a hablar del país de Uruguay. El país de Uruguay es un país. Uh, ¿Es un país grande o es un país pequeño?
*CLS: Pequeño.
*3NSS2: Es un país pequeño, ¿verdad? eh, dice que se puede decir que Uruguay es una ciudad de estado. ¿Qué es una ciudad de estado?
*CLS: city state [todos]. [SS-T]
*3NSS2: ¿Ejemplos? En el mundo.

## Appendix J

Correlational Analysis of Data-Pearson Product Moment Correlations

| | Teacher Spanish Use | Teacher English Use | Student Spanish Use | Student English Use | Age of Teacher | Training In Pedagogy | Gender Male = 1 |
|---|---|---|---|---|---|---|---|
| Teacher Spanish Use (r) | 1 | -.378 | .469 | -.314 | .148 | -.017 | -.116 |
| p = | | .149 | .067 | .236 | .584 | .950 | .668 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Teacher-English Use (r) | -.378 | 1 | -.130 | .826(**) | .301 | -.045 | -.417 |
| p = | .149 | | .632 | .000 | .257 | .868 | .108 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Student Spanish Use (r) | .469 | -.130 | 1 | -.077 | .453 | -.080 | .090 |
| p = | .067 | .632 | | .777 | .078 | .769 | .740 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Student English Use (r) | -.314 | .826(**) | -.077 | 1 | .438 | -.156 | -.491 |
| p = | .236 | .000 | .777 | | .090 | .565 | .053 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Age of Teacher (r) | .148 | .301 | .453 | .438 | 1 | -.398 | -.537(*) |
| p = | .584 | .257 | .078 | .090 | | .126 | .032 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Teacher Training In Pedagogy (r) | -.017 | -.045 | -.080 | -.156 | -.398 | 1 | .169 |
| p = | .950 | .868 | .769 | .565 | .126 | | .531 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Gender Male = 1 (r) | -.116 | -.417 | .090 | -.491 | -.537(*) | .169 | 1 |
| p = | .668 | .108 | .740 | .053 | .032 | .531 | |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Class Level 102 = 1 (r) | .339 | -.137 | .493 | .221 | .445 | -.056 | .126 |
| p = | .199 | .613 | .052 | .412 | .084 | .837 | .642 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

| | Teacher Spanish Use | Teacher English Use | Student Spanish Use | Student English Use | Age of Teacher | Training In Pedagogy | Gender Male = 1 |
|---|---|---|---|---|---|---|---|
| Education Level (r) | .003 | .243 | .200 | .162 | .335 | .302 | -.051 |
| p = | .993 | .364 | .459 | .550 | .205 | .256 | .851 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Proficiency In English (r) | -.464 | .180 | .019 | .186 | .054 | .072 | .000 |
| p = | .070 | .505 | .943 | .491 | .842 | .792 | 1.000 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Proficiency In Spanish (r) | .380 | .119 | .347 | .228 | .039 | -.030 | .026 |
| p = | .146 | .662 | .188 | .395 | .886 | .911 | .925 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Pre-Test Score (r) | .145 | -.100 | .381 | .225 | .313 | .021 | .300 |
| p = | .593 | .712 | .145 | .403 | .238 | .938 | .259 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Post-Test Score (r) | .159 | -.097 | .393 | .195 | .333 | -.031 | .275 |
| p = | .556 | .721 | .132 | .469 | .208 | .908 | .302 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Gain Score on Test (r) | -.014 | .047 | -.112 | -.168 | -.064 | -.154 | -.182 |
| p = | .959 | .862 | .680 | .535 | .813 | .570 | .501 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Total Class Time (r) | .411 | .033 | .653(**) | -.049 | .410 | .311 | -.191 |
| p = | .114 | .902 | .006 | .856 | .114 | .241 | .478 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Time in Groups (r) | -.456 | -.406 | -.387 | -.567(*) | -.482 | .329 | .560(*) |
| p = | .076 | .119 | .139 | .022 | .059 | .213 | .024 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Class Time Outside of Groups (r) | .538(*) | .380 | .547(*) | .503(*) | .562(*) | -.208 | -.568(*) |
| p = | .032 | .146 | .028 | .047 | .024 | .439 | .022 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

| | Teacher Spanish Use | Teacher English Use | Student Spanish Use | Student English Use | Age of Teacher | Training In Pedagogy | Gender Male = 1 |
|---|---|---|---|---|---|---|---|
| Native Speaker of English (r) | .382 | -.110 | -.089 | -.182 | -.318 | .000 | .126 |
| p = | .145 | .684 | .744 | .499 | .230 | 1.000 | .642 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Time Lived Abroad (r) | .392 | .211 | .098 | .290 | .174 | -.053 | -.284 |
| p = | .133 | .432 | .719 | .276 | .520 | .845 | .286 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Teaching Experience (r) | .325 | -.328 | .420 | -.019 | .238 | .149 | .337 |
| p = | .219 | .214 | .106 | .943 | .375 | .581 | .202 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

| | Class Level | Education Level | Proficiency In English | Proficiency In Spanish | Pre-test Score | Post-test score | Gain On Test |
|---|---|---|---|---|---|---|---|
| Class Time Outside of Groups (r) | .366 | .107 | -.063 | .414 | .153 | .155 | -.051 |
| p = | .164 | .693 | .818 | .111 | .572 | .566 | .851 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Native Speaker of English (r) | .000 | -.135 | -.853(**) | .750(**) | -.128 | -.040 | .294 |
| p = | 1.000 | .619 | .000 | .001 | .637 | .884 | .270 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Time Lived Abroad (r) | .237 | .240 | -.506(*) | .720(**) | .090 | .196 | .260 |
| p = | .376 | .371 | .046 | .002 | .740 | .467 | .330 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Teaching Experience (r) | .668(**) | .360 | .114 | .036 | .670(**) | .617(*) | -.398 |
| p = | .005 | .170 | .674 | .893 | .005 | .011 | .127 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

| | Class Level | Education Level | Proficiency In English | Proficiency In Spanish | Pre-test Score | Post-test score | Gain On Test |
|---|---|---|---|---|---|---|---|
| Teacher Spanish Use (r) | .339 | .003 | -.464 | .380 | .145 | .159 | -.014 |
| p = | .199 | .993 | .070 | .146 | .593 | .556 | .959 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Teacher-English Use (r) | -.137 | .243 | .180 | .119 | -.100 | -.097 | .047 |
| p = | .613 | .364 | .505 | .662 | .712 | .721 | .862 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Student Spanish Use (r) | .493 | .200 | .019 | .347 | .381 | .393 | -.112 |
| p = | .052 | .459 | .943 | .188 | .145 | .132 | .680 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Student English Use (r) | .221 | .162 | .186 | .228 | .225 | .195 | -.168 |
| p = | .412 | .550 | .491 | .395 | .403 | .469 | .535 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Age of Teacher (r) | .445 | .335 | .054 | .039 | .313 | .333 | -.064 |
| p = | .084 | .205 | .842 | .886 | .238 | .208 | .813 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Teacher Training In Pedagogy (r) | -.056 | .302 | .072 | -.030 | .021 | -.031 | -.154 |
| p = | .837 | .256 | .792 | .911 | .938 | .908 | .570 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Gender Male = 1 (r) | .126 | -.051 | .000 | .026 | .300 | .275 | -.182 |
| p = | .642 | .851 | 1.000 | .925 | .259 | .302 | .501 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Class Level 102=1 (r) | 1 | .135 | -.107 | .341 | .928(**) | .934(**) | -.335 |
| p = | | .619 | .694 | .196 | .000 | .000 | .204 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

| | Class Level | Education Level | Proficiency In English | Proficiency In Spanish | Pre-test Score | Post-test score | Gain On Test |
|---|---|---|---|---|---|---|---|
| Education Level (r) | .135 | 1 | .230 | .083 | .104 | .062 | -.157 |
| p = | .619 | | .392 | .761 | .700 | .819 | .562 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Proficiency In English (r) | -.107 | .230 | 1 | -.640(**) | .021 | -.109 | -.366 |
| p = | .694 | .392 | | .008 | .939 | .689 | .163 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Proficiency In Spanish (r) | .341 | .083 | -.640(**) | 1 | .200 | .258 | .085 |
| p = | .196 | .761 | .008 | | .457 | .334 | .753 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Pre-test Score (r) | .928(**) | .104 | .021 | .200 | 1 | .951(**) | -.514(*) |
| p = | .000 | .700 | .939 | .457 | | .000 | .042 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Post-Test Score (r) | .934(**) | .062 | -.109 | .258 | .951(**) | 1 | -.224 |
| p = | .000 | .819 | .689 | .334 | .000 | | .404 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Gain Score on Test (r) | -.335 | -.157 | -.366 | .085 | -.514(*) | -.224 | 1 |
| p = | .204 | .562 | .163 | .753 | .042 | .404 | |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Total Class Time (r) | .255 | .499(*) | -.060 | .355 | .161 | .158 | -.069 |
| p = | .340 | .049 | .825 | .177 | .552 | .559 | .800 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Time in Groups (r) | -.318 | .044 | .049 | -.339 | -.115 | -.119 | .034 |
| p = | .230 | .870 | .857 | .200 | .671 | .661 | .902 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

| | Total Class Time | Time in Groups | Class Time Outside of Groups | Native Speaker of English | Time Lived Abroad | Teaching Experience |
|---|---|---|---|---|---|---|
| Teacher Spanish Use (r) | .411 | -.456 | .538(*) | .382 | .392 | .325 |
| p = | .114 | .076 | .032 | .145 | .133 | .219 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Teacher-English Use (r) | .033 | -.406 | .380 | -.110 | .211 | -.328 |
| p = | .902 | .119 | .146 | .684 | .432 | .214 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Student Spanish Use (r) | .653(**) | -.387 | .547(*) | -.089 | .098 | .420 |
| p = | .006 | .139 | .028 | .744 | .719 | .106 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Student English Use (r) | -.049 | -.567(*) | .503(*) | -.182 | .290 | -.019 |
| p = | .856 | .022 | .047 | .499 | .276 | .943 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Age of Teacher (r) | .410 | -.482 | .562(*) | -.318 | .174 | .238 |
| p = | .114 | .059 | .024 | .230 | .520 | .375 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Teacher Training In Pedagogy (r) | .311 | .329 | -.208 | .000 | -.053 | .149 |
| p = | .241 | .213 | .439 | 1.000 | .845 | .581 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Gender Male = 1 (r) | -.191 | .560(*) | -.568(*) | .126 | -.284 | .337 |
| p = | .478 | .024 | .022 | .642 | .286 | .202 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Class Level 102=1 (r) | .255 | -.318 | .366 | .000 | .237 | .668(**) |
| p = | .340 | .230 | .164 | 1.000 | .376 | .005 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

| | Total Class Time | Time in Groups | Class Time Outside of Groups | Native Speaker of English | Time Lived Abroad | Teaching Experience |
|---|---|---|---|---|---|---|
| Education Level (r) | .499(*) | .044 | .107 | -.135 | .240 | .360 |
| p = | .049 | .870 | .693 | .619 | .371 | .170 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Proficiency In English (r) | -.060 | .049 | -.063 | -.853(**) | -.506(*) | .114 |
| p = | .825 | .857 | .818 | .000 | .046 | .674 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Proficiency In Spanish (r) | .355 | -.339 | .414 | .750(**) | .720(**) | .036 |
| p = | .177 | .200 | .111 | .001 | .002 | .893 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Pre-test Score (r) | .161 | -.115 | .153 | -.128 | .090 | .670(**) |
| p = | .552 | .671 | .572 | .637 | .740 | .005 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Post-Test Score (r) | .158 | -.119 | .155 | -.040 | .196 | .617(*) |
| p = | .559 | .661 | .566 | .884 | .467 | .011 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Gain Score on Test (r) | -.069 | .034 | -.051 | .294 | .260 | -.398 |
| p = | .800 | .902 | .851 | .270 | .330 | .127 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Total Class Time (r) | 1 | -.146 | .429 | .074 | .395 | .115 |
| p = | | .591 | .097 | .786 | .130 | .671 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Time in Groups (r) | -.146 | 1 | -.956(**) | -.018 | -.314 | -.114 |
| p = | .591 | | .000 | .946 | .237 | .673 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

| | Total Class Time | Time in Groups | Class Time Outside of Groups | Native Speaker of English | Time Lived Abroad | Teaching Experience |
|---|---|---|---|---|---|---|
| Class Time Outside of Groups (r) | .429 | -.956(**) | 1 | .039 | .403 | .138 |
| p = | .097 | .000 | | .887 | .121 | .609 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Native Speaker of English (r) | .074 | -.018 | .039 | 1 | .593(*) | -.267 |
| p = | .786 | .946 | .887 | | .015 | .317 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Time Lived Abroad (r) | .395 | -.314 | .403 | .593(*) | 1 | .000 |
| p = | .130 | .237 | .121 | .015 | | 1.000 |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |
| Teaching Experience (r) | .115 | -.114 | .138 | -.267 | .000 | 1 |
| p = | .671 | .673 | .609 | .317 | 1.000 | |
| N= | 16 | 16 | 16 | 16 | 16 | 16 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

# REFERENCES

Antón, M. & DiCamilla, F. (1998). Socio-cognitive functions of L1 collaborative interaction in the L2 classroom. *Canadian Modern Language Review, 54*, no. 3, 314-53.

Appel, R & Muysken, P. (1987). *Language contact and bilingualism.* New York: Edward Arnold.

Atkinson, D. (1993). *Teaching monolingual classes.* London: Longman.

Atkinson, K. & Coupland, N. (1988). Accommodation as ideology**.** *Language & Communication: An Interdisciplinary Journal* 8, no. 3-4, 321-327.

Auerbach, E.R. (1993). Reexamining English only in the classroom. *TESOL Quarterly 27*, 9-32.

Auer, P. (1984). *Bilingual conversation*. Amsterdam: John Benjamins.

Auer, P. (1995). The pragmatics of code-switching: A sequential approach. In L. Milroy and P. Muysken (Eds.) *One speaker, two languages: Cross-disciplinary perspectives on code-switching* (pp. 115-135). Cambridge: Cambridge University Press.

Auer, P. (1998). Introduction: Bilingual conversation revisited. In P. Auer (Ed.), *Code-switching in conversation: Language, interaction, and identity* (pp. 1-24). London: Routledge.

Bell, A. (1984). Language style as audience design. *Language in Society* 13, 145-204.

Bell, A. (2001). Back in style: reworking audience design. In P. Eckert and & J. Rickford

(Ed.) *Style and Sociolinguistic Variation* (139-169). Cambridge: Cambridge University Press.

Belz, J. (2003). Identity, deficiency, and first language use in foreign language education. In C. Blyth (Ed.) *The sociolinguistics of foreign-language classrooms: Contributions of the native, the near-native, and the non-native speaker*. *Issues in Language Program Direction, A Series of Annual Reports* (*pp*. 209-248). Boston, Thomson and Heinle.

Belz, J. (2002). The myth of the deficient communicator. *Language Teaching Research* 6(1), 59-82.

Biley, P. (1995). English Only? Community college teacher perceptions of L1 use. Paper presented at the *Annual Meeting of the Teachers of English to Speakers of Other Languages*, Long Beach, CA.

Brice, A. (2001). Choice of language in instruction: One language or two? *Teaching of Exceptional Children, 33*, no. 4, 10-16.

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste.* Cambridge, MA: Harvard University Press.

Cambra, M. & Nussbaum, L. (1997). Gestion des langues en classe de LE, le poids des représentations de l'enseignant. *Etudes de Linguistique Appliquée*, 108, 423-432.

CARLA Website: http://carla.acad.umn.edu/assessment/MLPA/CoLA.html. Retrieved on 03/06/06.

Carroll, J.B. (1975). *The teaching of French as a foreign language in 8 countries.* Stockholm: Almqvist & Wiksell Tryckeri AB.

Carroll, J.B., Clark, J.L.D, Edwards, T.M., & Handrick, F.A. (1967). *The foreign language attainments of language majors in the senior years: A survey conducted in U.S. colleges and universities.* Cambridge, MA: Harvard University Press.

Castellotti, V. & Moore, D. (1997). Alterner pour apprendre, alterner pour enseigner, des nouveaux enjeux pour la classe de langue. *Etudes de Linguistique Appliquée*, 108, 389-392.

Calman, R. & Daniel, I. (1998). A board's-eye view of core French : The North York Board of Education. In Lapkin, S. (Ed.), *French second language education in Canada : Empirical studies* (pp. 281-323). Toronto : University of Toronto Press.

Causa, M. (1996). Le rôle de l'alternance codique en classe de langue. *Le Français dans le Monde, Recherches et Applications. Le Discours: Enjeux et Perspectives*, Julliet, 85-93.

Chambers, G. (1992). Teaching in the target language. *Language Learning Journal,* 6, 66-7.

Chaudron, C. (1985). A method for examining the input/intake distinction. In S. Gass, and C.G. Madden (Eds.), *Input in second language acquisition* (pp. 285-302). Rowley, MA: Newbury.

Chavez, M. (2003). The diglossic foreign-language classroom: Learner's views on L1 and L2 functions. In C. Blyth (Ed.) *The sociolinguistics of foreign-language classrooms: Contributions of the native, the near-native, and the non-native speaker*. *Issues in Language Program Direction, A Series of Annual Reports* (*pp.* 163-208). Boston, Thomson and Heinle.

Centeno-Cortés, B. & Jiménez Jiménez, A. (2004). Problem-solving tasks in a foreign language: the importance of the L1 in private verbal thinking. *International Journal of Applied Linguistics*, *14*, no. 1, 7-35.

Cook, V. (2001). Using the first language in the classroom. *The Canadian Modern Language Review*, *57,* Vol. 3, 402-423.

Cortazzi, M. and Jin, L. (1999). Cultural mirrors: Materials and methods in the EFL classroom. In E. Hinkel (Ed.) *Culture in Second Language Teaching and Learning.* Cambridge: Cambridge University Press.

Coste, D. (1997). Alternances didactiques. In Castellotti, V. & Moore, D. (Eds.), Etudes de Linguistique Appliquée, no. 108, 393-400.

Coupland, N. (2001). Language, situation, and relational self: theorizing dialect-style in sociolinguistics. In P. Eckert and & J. Rickford (Ed.) *Style and Sociolinguistic Variation* (185-210). Cambridge: Cambridge University Press.

Crawford, J. (2004). Language choices in the foreign language classroom: Target language or the learners' first language? *RELC* 35, no. 1, 5-20.

Daniels, D. H. & Perry, K. E. (2003). 'Learner-centered' according to children. *Theory into Practice*, 42, 102-108.

Dickson, P. (1992). *Using the target language in modern foreign language classrooms.* Slough, UK: National Foundation for Educational Research.

Duff, P. & Polio, C. (1990). How much foreign language is there in the foreign language classroom? *The Modern Language Journal*, *74*, 154-166.

Eisner, E. (1985). *The art of educational evaluation*. Lewes: Falmer.

Ellis, R. (1984) *Classroom second language development.* Oxford: Pergamon.

Ellis, R., Tanaka, Y., & Yamazaki, A. (1994). Classroom interaction, comprehension and the acquisition of L1 word meanings. *Language Learning*, 44, 449-491.

Ervin-Tripp, S. (2001). Variety, style-shifting, and ideology. In P. Eckert and & J. Rickford (Ed.) *Style and Sociolinguistic Variation* (44-56). Cambridge: Cambridge University Press.

Ferguson, G. (2003). Classroom code-switching in post-colonial contexts: functions, attitudes and policies. *AILA Review,* 16, 38-51.

Fielding, M. (2001a) Editorial, *Forum for Promoting 3 – 19 Comprehensive Education*, (Special issue, 'Student voice'), 43, 49 – 50.

Freeman, D. (1989). Teacher training, development, and decision-making: A model of teaching and related strategies for language teachers. *TESOL Quarterly 23*, 27-46.

Friedlander, A. (1990) Composing in English: Effects of first language on writing in English as a second language. In B. Kroll (Ed.), *Second language writing* (pp. 109-125). Cambridge: Cambridge University Press.

Ganschow, L., Sparks, R., & Javorsky, J. (1998). Foreign language learning difficulties: An historical perspective. *Journal of Learning Disabilities,* Vol. 31, no. 3, 248-258.

Gass, S. (1997). *Input, interaction and the second language learner.* Mahwah, NJ: Lawrence Erlbaum.

Giles, H. (1973). Accent mobility: a model and some data. *Anthropological Linguistics*, 15, 87-105.

Giles, H. and Byrne, J.L. (1982). An intergroup approach to second language acquisition. *Journal of Multicultural and Multilingual Development*, 3, 17-40.

Gass, S. & Varonis, E. (1994). Input, interaction and second language production. *Studies in Second Language Acquisition Research*, 16, 283-302.

Gumperz, J.J. (1982). *Discourse strategies*. Cambridge: Cambridge University Press.

Guthrie, E. M. L. (1984). Six cases in classroom communication: A study of teacher discourse in the foreign language classroom. In J. P. Lantolf & A. Labarca (Eds.), *Research in second language learning: Focus on the classroom* (pp. 173–194). Norwood, NJ: Ablez.

Hagen, S. (1992). Language policy and strategy issues in the new Europe. *Language Learning Journal*, *5*, 31-34.

Harbord, J. (1992). The use of the mother tongue in the classroom. *ELT Journal* 46, 4, 350-355.

Harland, J., Moor, H., Kinder, K. & Ashworth, M. (2001) *The key stage 3 phase of the Northern Ireland Curriculum cohort study*. Slough: NFER.

Horwitz, E. (1988). The beliefs about language learning of beginning university foreign language students. *Modern Language Journal,* 72, no. 3, 283-294.

Irvine, J. (2002). 'Style' as distinctiveness: the culture and ideology of linguistic differentiation. In P. Eckert and & J. Rickford (Ed.) *Style and Sociolinguistic Variation* (21-43). Cambridge: Cambridge University Press.

Izumi, K. (1995). Translation-aided approach in second language acquisition. *JALT Journal*, 17, no. 2, 225-237.

Kinchin, I. (2004a). Investigating students' beliefs about their preferred role as learners. *Educational Research,* 46, no. 3, 301-312.

Kinchin, I. (2004b). Achieving a shared understanding of the learners' role through teacher –student dialogue, *Education Today*, 54, 28-30.

Kirschner, C. (1984). Style-Shifting and the Spanish-English Bilingual. *Hispanic Linguistics* 1, no. 2: 273-282.

Knight, G. (1996). Oral communication: One year on. *The Language Teacher*, 19, no. 7, 20-21.

Knight, T. (1996). Learning vocabulary through shared speaking tasks. *The Language Teacher,* 20, 24-29.

Kozminsky, E. & Kozminsky, L. (2003). Improving motivation through dialogue. *Educational Leadership* 61, no. 1, 50-54.

Krashen, S. (1982) *Principles and practice in second language acquisition*. New York: Pergamon Press.

Lameta-Tufuga, E. (1994). *Using the Samoan language for academic learning tasks*. Unpublished MA thesis, Victoria University of Wellington, New Zealand.

Lantolf, J. P. 2001. Sociocultural theory and second language acquisition. In R. Kaplan (ed.), *Handbook of Applied Linguistics*. Oxford: Oxford University Press.

Larsen-Freeman, D. (1985). State of the art on input in second language acquisition. In S. Gass and C.G. Madden (Eds.), *Input in second language acquisition* (pp. 433-444). Rowley, MA: Newbury.

Levine, G. (2003). Student and instructor beliefs and attitudes about target language use, first language use, and anxiety: Report of a questionnaire study. *The Modern Language Journal*, *87*, 343-364.

Levine, G. (2005). Co-construction and articulation of code choice practices in foreign language classrooms. In C. Barrette & K. Paesani (Eds.) *Language program articulation: Developing a theoretical foundation* (pp. 110-130). Boston: Thomson Higher Education.

Liebscher, G. & Dailey-O'Cain, J. (2004). Learner code-switching in the content-based foreign language classroom. *The Canadian Modern Language Review, 60*, no. 4, 501-525.

Lightbown, P. (1991). What have we here? Some observations of the influence of instruction on L2 learning. In R. Phillipson, L. Seliker, M. Sharwood Smith, M. Swain, (Eds.), *Foreign/second language pedagogy research* (pp. 197-212). Clevedon, UK: Multilingual Matters.

Lightbown, P.M. and Spada, N. (1993). *How languages are learned*. Oxford: Oxford University Press.

Long, M. (1996). The role of the linguistic environment in second language acquisition. In Ritchie, W. & Bhatia, T. (Eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego: Academic Press.

Macaro, E. (2001). Analysing student teachers' codeswitching in foreign language classrooms: Theories and decision making. *The Modern Language Journal*, *85*, 531-548.

Macaro, E. (1997). *Target language, collaborative learning and autonomy*. Clevedon, UK: Multilingual Matters.

MacBeath, J. (1999). *Schools must speak for themselves: the case for school evaluation*. London: Routledge.

MacDonald, C. (1993). *Using the target language*. Cheltenham, UK: Mary Glasgow Publications.

Merritt, M. (1992). Socialising multilingualism: Determinants of code-switching in Kenyan primary schools. *Journal of Multilingualism and Multicultural Development,* 13.1, no. 2, 103-121.

Nation, P. (1997). L1 and L2 use in the classroom: A systematic approach. *TESL Reporter,* 30, no. 2, 19-27.

Pajares, F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62, 307-332.

Penny, R. (2000). *Variation and Change in Spanish.* Cambridge: Cambridge University Press.

Piasecka, K. (1988). The bilingual teacher in the ESL classroom. In S. Nicholls & E. Hoadley-Maidment (Eds.), *Current issues in teaching English as a second language to adults* (pp. 97-103). London: Edward Arnold.

Pierre, J. & Kalkman, D. (2003). Applying learner=centered principles in teacher education. *Theory to Practice,* 42, no. 2, 127-132.

Polio, C. & Duff, P. (1994). Teachers' language use in university foreign language classrooms: A qualitative analysis of English and target language alternation. *The Modern Language Journal*, *78*, 313-326.

Polio, C. & Gass, S. (1998). The role of interaction in native speaker comprehension of nonnative speaker speech. *The Modern Language Journal, 82*, 308-319.

Potowski, K. (2004). Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance. *The Modern Language Journal, 88,* I, 75-101.

Ramat, A. (1995). Code-switching in the context of dialect/standard language relations. In Milroy, L. and Muysken, P. (Eds.) *One speaker, two languages: Cross-disciplinary perspectives on code-switching* (pp. 45-67). Cambridge: Cambridge University Press.

Rolin-Ianziti, J. & Brownlie, S. (2002). Teacher use of learners' native language in the foreign language classroom. *The Canadian Modern Language Review, 58*, no. 3, 402-426.

Romaine, S. (1989). Bilingualism. *Language in Society* 13. Oxford: Basil Blackwell.

Rudduck, J. & Flutter, J. (2000). Pupil participation and pupil perspective: 'carving a new order of experience', *Cambridge Journal of Education*, 30, 75-89.

Schmidt, K. (1995). Use of Japanese in the EFL classroom: Which way to go? *ETAPS Journal,* 25-32.

Shamash, Y. (1990). Learning in translation: Beyond language experience in ESL. *Voices* 2, no. 2, 71-75.

Shapson, S., Kaufman, D., & Durward, L. (1978). *B.C. French study: An evaluation of elementary French programs in British Columbia*. Burnaby: Faculty of Education, Simon Fraser University.

Stern, H. (1992). *Issues and options in language teaching*. (Allen, P. & Harley, B. (Eds.)). Oxford: Oxford University Press.

Timm, L. (1993) Bilingual code-switching: An overview of research. *Language and Culture in Learning: Teaching Spanish to Native Speakers of Spanish* (pp. 94-114). Bristol, PA: The Falmer Press, Taylor & Francis Inc.

Trudgill (1974). The social differentiation of English in Norwich. Cambridge: Cambridge University Press.

Turnbull, M. (2001a). L1 and L2 use in French second language teaching: Pre-service students views and classroom practice. Paper presented at the annual conference of the *American Association of Applied Linguistics*, St. Louis, MO.

Turnbull, M. (2001b). There is a role for the L1 in second and foreign language teaching, but . . . *The Canadian Modern Language Review, 57*, no. 4, 531-540.

Turnbull, M. & Arnett, K. (2002). Teachers' use of the target language and first languages in second and foreign language classrooms. *Annual Review of Applied Linguistics*, *22*, 204-218.

Üstünel, E. & Seedhouse, P. (2005). Why that, in that language, right now? Code-switching and pedagogical focus. *International Journal of Applied Linguistics*, 15, no. 3, 302-325.

van Lier, L. (1995). The use of L1 in L2 classes. *Babylonia*, 2, 37-43.

Veugelers, W. & de Kat, E. (2002). Student voice in school leadership: promoting dialogue about students' views on teaching. *Journal of School Leadership*, 12, 97-108.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Walsh, S. (2002). Construction or obstruction: Teacher talk and learner involvement in the EFL classroom. *Language Teaching Research* 6, no. 1, 3-23.

Wells, G. (1999). Using the L1 to master the L2: A response to Antón and DiCamilla's *Socio-cognitive functions of L1 collaborative interaction in the L2 classroom. The Modern Language Journal, 83*, no. 2, 248-254.

Wolf, R.M. (1977). *Achievement in America: National report of the United States for the International Educational Achievement project.* New York: Teachers College Press, Columbia University.

Wong-Fillmore, L. (1985). When does teacher talk work as input? In S.M. Gass and C.G. Madden (Eds.), *Input in second language acquisition* (pp. 17-50). Rowley, MA: Newbury.