

THESIS

THE RELATIONSHIP BETWEEN METALINGUISTIC KNOWLEDGE/LEARNING
CONTEXTS AND LANGUAGE PROFICIENCY

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ABSTRACT

THE RELATIONSHIP BETWEEN METALINGUISTIC KNOWLEDGE/LEARNING CONTEXTS AND LANGUAGE PROFICIENCY

This study explores the relationship between learning context on learners' oral proficiency, metalinguistic knowledge of Spanish (MKS) and metalinguistic knowledge of English (MKE). The study also explores the relationship between MKE and MKS, and MKS on oral proficiency between the two learning contexts. The two contexts in question were a traditional semester (TS) that met five days a week, fifty minutes a day for fifteen weeks and a four-week summer intensive program that met five days a week, four hours a day for four weeks. A COPI (computerized oral proficiency interview) was administered to measure oral proficiency and two different measures of metalinguistic knowledge were employed to test MKE and MKS. The MKE test was administered as a pre and posttest, whereas the MKS test was given at the end of the semester. The study found that, a) students in the TS group have significantly higher levels of MKS, b) student in the TS group significantly improve their MKE more so than the IS group, c) there is a significant relationship between MKS and oral proficiency regardless of group, d) there is a significant relationship between MKE pretest and MKS at the end of the semester, and e) there is no significant difference between oral proficiency between the two contexts.

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CHAPTER I

INTRODUCTION

1.1 Overview

In recent years, the notion of linguistic proficiency in the field of second language acquisition (SLA) has changed considerably (Hu, 2011). Traditionally, language proficiency was measured solely as learners' "structural accuracy" or learners' knowledge of language structures (e.g., adjective clause, coordinating conjunction, etc.) with very little focus on how to use these language structures (Omaggio-Hadley, 2001, p. 8). However, when the notion of communicative competence emerged in the field of SLA and teaching, the focus shifted from the very narrow view of language proficiency to a broader range of language abilities, which are not only the knowledge of a language's phonology, syntax, vocabulary, and semantics, but also the ability to use this knowledge in real-life situations (Canale & Swain, 1981; Nowrozi, 2011; Shaw, 1992).

When the notion of proficiency expanded from its original definition, researchers in the field of SLA began to examine the factors believed to influence second language acquisition (Alderson, Clapham & Steel, 1997; Collentine, 2004; Dewey, 2004; Ellis, 2005; Muñoz, 2011; Norris & Ortega, 2000; Onwuegbuzie, Bailey & Daley, 2000). Within these studies, researchers have looked at internal factors, such as motivation (Grupta & Woldemariam, 2011; Netten, Droop & Verhoeven, 2011), age (Muñoz, 2011), gender (Spellerberg, 2011) and cognition (Onwuegbuzie, Bailey & Daley, 2000). Other studies have examined external factors, such as instruction (Ellis, 2005; Norris & Ortega, 2000; Spada & Tomita, 2010) and learning contexts (Collentine, 2004; Dewey, 2004; Segalowitz & Freed, 2004) whereas some studies have looked at linguistic factors, such as metalinguistic knowledge (e.g., Alderson *et al.*, 1997; Elder & Manwaring, 2004; Elder *et al.*, 1999; Hu, 2002; Hu, 2011; Roehr, 2006; Roehr, 2008).

In the past two decades, a considerable number of studies have been conducted comparing different learning contexts which have looked at the effects of learning contexts on oral performance (Lafford, 2004; Rifkin, 2005; Segalowitz & Freed, 2004) and linguistic development (Collentine, 2004; DeKeyser, 1999; Isabelli-Garcia, 2010). The majority of these studies have focused mainly on study abroad programs given the strongly held belief that study abroad programs are preferable to other types of contexts. However, the findings from these studies have oftentimes been contradictory with respect to their effects on different aspects of language development (Freed, Segalowitz & Dewey, 2004). Some studies have shown that the domestic immersion program is more advantageous to learners' linguistic and oral development (Rifkin, 2005). Others have shown that traditional contexts are more beneficial to linguistic development (Collentine, 2004) whereas study abroad seems more beneficial for oral performance development (Segalowitz & Freed, 2004). Although studies (Collentine, 2004; DeKeyser, 1991; Dewey, 2004; Golonka, 2006; Isabelli-Garcia, 2010; Segalowitz & Freed, 2004) have emerged recently dealing with study abroad, domestic immersion and traditional contexts, very few, if any, have investigated the effects of an intensive language class on language development, a context in which the number of hours of instruction per day is increased from the traditional context.

Another factor that has received attention is the effect of metalinguistic knowledge on language proficiency. Metalinguistic knowledge is defined as:

[A] learner's explicit or declarative knowledge about the syntactic, morphological, lexical, pragmatic and phonological features of the L2. It [is] further defined as including explicit knowledge about categories (e.g. 'noun'; 'verb'; 'adjective') as well as explicit knowledge about relations between categories (e.g. 'subject of the main clause'; 'In English, an *-s* needs to be attached to the verb if it expresses third person present tense'; 'German *ei* is pronounced like English *i*') (Roehr, 2006, p. 183).

What published literature reveals is that metalinguistic knowledge aids in the development of language proficiency (Elder & Manwaring, 2004; Roehr, 2006). Yet there are other studies that have failed to find a relationship between metalinguistic knowledge and proficiency

(Alderson *et al.*, 1997; Elder, *et al.*, 1999). Within the studies that have looked at the relationship between metalinguistic knowledge and language proficiency, few, if any, have examined how different learning contexts affect the development of metalinguistic knowledge.

To date, very little research, if any, has combined these two factors when investigating language proficiency, compared an intensive classroom context with a traditional classroom setting, or examined the effects of context on the development of metalinguistic knowledge. The current study proposes to contribute to fill these gaps in research by (a) examining the effects of an intensive Spanish class and a traditional semester-long class on learner's oral proficiency, level of metalinguistic knowledge and improvement of metalinguistic knowledge in their first language (L1); (b) looking at the relationship between learners' metalinguistic knowledge and oral proficiency; and (c) studying the effects of prior metalinguistic knowledge of learners' L1 on metalinguistic knowledge of the target language in the two contexts.

1.2 Research Questions

In order to help narrow the existing gaps in current research, the present study seeks to answer the following research questions:

1. Is there a significant difference between the metalinguistic knowledge of Spanish (MKS) exhibited by students enrolled in an intensive course (IS) and students enrolled in a traditional course (TS) at the end of the semester?
2. How does metalinguistic knowledge of English (MKE) improve over a semester in an intensive semester (IS) and a traditional semester (TS)?
3. To what extent does group (TS or IS) (a traditional course or an intensive course) and GPA contribute to explain the variation of oral proficiency (COPI) in Spanish at the end of the semester?

4. To what extent does metalinguistic knowledge in Spanish (MKS) at the end of the semester explain variation in student's oral proficiency (COPI)?
5. What is the relationship between learners' metalinguistic knowledge of English (MKE1) at the beginning of the semester and metalinguistic knowledge of Spanish (MKS) at the end of the semester?

1.3 Hypotheses

The hypotheses under investigation predict the following:

1. Students enrolled in TS group will have a greater amount of acquired metalinguistic knowledge as compared to those in the IS group.
2. Students in the TS group will have a greater development of metalinguistic knowledge of their L1 (English) as compared to the students in the IS group.
3. Students in the IS group will have higher levels of oral proficiency than students in the TS group.
4. There will be a positive relationship between learners' metalinguistic knowledge and oral proficiency of the target language.
5. Students in both groups (IS and TS) will show a positive relationship between their metalinguistic knowledge in English and their metalinguistic knowledge in Spanish.

1.4 Importance of the current study

Because the notion of competence has changed so drastically in the last 30 years, an abundant amount of research has been conducted to examine the most advantageous ways of acquiring a second or foreign language. The current study seeks to contribute to this discussion by further investigating two external factors believed to influence second language acquisition. Shedding more light on how different factors affect language acquisition helps educators and policy makers design curriculum that is beneficial to second language

acquisition.

1.5 Thesis outline

The present study is organized in the following way. Chapter II introduces the reader to the research on the effects of context and metalinguistic knowledge on oral proficiency. Chapter III describes the methods and procedures implemented in this study. Chapter IV presents the results from the data analysis, and offers a discussion of the findings. Chapter V offers a conclusion, addresses the limitations and implications of the current study, and offers suggestions for future research.

CHAPTER II

LITERATURE REVIEW

This chapter begins with an overview of the different learning contexts in which foreign language students may find themselves. Then, it discusses the effects of context on oral performance and grammatical accuracy. Finally, it addresses the relationship between metalinguistic/grammatical knowledge and language proficiency.

2.1 Learning Contexts

Tens of thousands of university students in the US enroll in foreign language classes each year. These students generally find themselves in one of four learning contexts: traditional foreign language classes, study abroad programs, domestic immersion programs or intensive summer programs. The traditional classroom context, referred to in the current study as TS, is a traditional or formal foreign language university class that takes place during the length of a semester/trimester/quarter (usually 50 minutes a day, three to five days per week). The second context is study abroad (SA), in which students travel to a country where the target language is the native language and typically live with host families. The third context is a domestic immersion program (IM), which refers to contexts in which learners do not travel abroad, but the surrounding language is the target language. These types of programs require more hours per day of instruction than a formal classroom setting (Dewey, 2004) and the students agree to speak the L2 for social functions inside and outside the classroom (Freed, Segalowitz & Dewey, 2004; Rifkin, 2005). These contexts are generally in university settings and take place during the summer. The previously mentioned contexts are the three contexts that have been used in studies comparing learning contexts. In the current study, an alternative context was examined in which students dedicate more hours per day than they would in a traditional context, but they are not in an environment where the surrounding language is the target language. This context will be referred to as an Intensive

Semester program or IS. Few studies, if any, have looked into this context to compare language proficiency outcomes.

2.2 Effects of context on L2 proficiency

Studies have looked into the effect of context (IM, SA or TS) on oral performance, including oral proficiency (Segalowitz & Freed, 2004), fluency (Freed, et al., 2004), communication strategies (DeKeyser, 1991; Lafford, 2004), and the effects of context on the development of linguistic accuracy (Collentine, 2004; DeKeyser, 1991; Isabelli-Garcia, 2010; Isabelli, 2004).

2.2.1 Effect of context on oral performance

Much of the recent research that has been conducted in learning contexts has dealt with oral performance under the widely held assumption that SA and IM contexts result in higher language improvement than other types of contexts because of the extensive comprehensible input and sizable amount of speaking practice with native speakers (DeKeyser, 1991; Serrano, 2011). In these studies, oral performance has been measured as oral proficiency (Golonka, 2006; Rifkin, 2005; Segalowitz & Freed, 2004), which is operationalized as an oral proficiency interview (OPI) under the measurement of the *ACTFL proficiency guidelines* (See *Appendix A*). In other studies, oral performance has been measured as oral fluency, which has been referred to as “smoothness of language” (Freed et al., 2004; Segalowitz and Freed, 2004) or use of communication strategies (DeKeyser, 1991; Lafford, 2004).

Freed *et al.* (2004) compared oral fluency among 28 French learners in IM, TS and SA programs. They gathered 15-30 minute recorded interviews at the beginning and the end of each of the semesters, which later provided a speech corpus. In order to measure oral fluency, they used computing speech rate, hesitation-free speech runs, filler-free speech runs, fluent runs, repetition-free speech runs, grammatical-repair-free speech runs, total words

spoken, and duration of speaking time. They found that the students in the TS group did not significantly improve in any of the categories they examined and, in fact, performed worse on the grammatical-repair free speech runs in the posttest than the pre-test. These findings were only marginally significant with a correlation coefficient of .46. The SA group, on the other hand, made gains on all of the six variables although they were not statistically significant. Surprisingly, the IM group made the most gains out of the three groups. They improved in repetition-free runs and fluent runs ($p < .05$ in both cases).

The researchers theorized that these findings could have been due to two different possibilities. First, they stated that the IM group reported spending much more time speaking the target language outside the classroom than the SA group. They also explored a second possibility that the distribution of learning hours could have been more effective in the IM group. The hours of learning in the IM group were over a seven-week period as opposed to a twelve-week period in the SA and TS groups. They posited that a shorter time frame, in which students have more hours of instruction per day, may be more beneficial for language development.

Segalowitz and Freed (2004) also investigated the effects of a SA context and a TS context on oral performance. The TS group consisted of 18 students in one Spanish class in the US. The SA group was 22 students taking classes at a university in Spain, taking a grammar/syntax class, a reading and writing class and a conversation class. In order to measure their performance, both groups were given a pre and post OPI, which was first used to test their oral proficiency. The researchers also cut the interviews into extracts and made them into a corpus in order to examine students' fluency. In this study, they included eight variables; number of words spoken, duration of speech, number of words in the longest run, fluent run, filler free, speech rate, absence of hesitation and an OPI measured with the *ACTFL Guidelines*. They found that the SA group made significant gains over the TS group in turn

($p=.007$), rate ($p<.001$), filler-free ($p=.028$), and fluent run ($p=.057$). Also, the SA group showed significant improvement in oral proficiency as well as fluency ($p<.001$), whereas the TS group did not show significant improvement from the pretest to the posttest. They attribute their findings to the fact that those in the SA programs took three classes during their semester, whereas the TS group was only enrolled in one language course. As for other possibilities, such as more exposure, the researchers were not able to find a positive relationship between more exposure and higher oral performance gain.

Rifkin (2005) sought to find out if there was a difference in language gain in a traditional and an IM context. In order to compare the two groups of students he employed reading, writing, listening, grammar and speaking tests based on the *ACTFL Proficiency Guidelines*. The students who had previously taken Russian were required to take the reading, writing, listening, grammar and speaking tests and all students were required to take these tests at the end of the program. When comparing these two data sets, Rifkin observed that those with 600 or more hours of TS instruction barely reached an intermediate-high level of proficiency in all of the skill areas, whereas those with 450 hours of IM instruction were able to reach advanced levels of proficiency. He states that the reason why the IM students outperform the TS students is the amount of exposure the IM students had outside of the classroom. The TS students had on average three to five hours of class instruction, whereas the IM group had over 100 hours of interactions per week.

Lafford (2004) investigated the effect of context (SA and TS) on the frequency and types of communication strategies used in oral communication. She looked at 20 learners in a TS Spanish setting, and 26 in a SA setting in Spain. In order to examine communication strategies in these two settings, she developed a corpus from extracts of role-plays and OPIs that were taken throughout the two programs. Using the corpus, the researcher looked for a total of 26 communication strategies that fit into either direct strategies, for example, code-

switching into the L1, or interactional strategies, such as asking the interviewer if the question was understood correctly. The results indicated that both groups significantly reduced the number of communication strategies from the pretest to the posttest. However, the results also indicated that the SA group used far less resource deficit strategies ($p = .000$), other performance (asking for clarification from the interviewee) ($p = .009$) and own performance (asking if the interviewer understood) ($p = .004$) strategies in the posttest than their TS counterparts. Lafford posited that fewer communication strategies found in the SA group could have been a result of more exposure to native speakers, which resulted in improved narrative and discursive abilities rather than discrete grammatical gains. By focusing less on discrete grammatical points, the SA group had less need to use communication strategies to self-correct. These results indicate that the SA students were able to hold a conversation longer without the use of continual communication strategies.

The previous research suggests that IM and SA programs tend to be more effective than TS programs for gaining oral proficiency because “classroom drills cannot substitute for extended experience communicating with native speakers in natural settings about real-life matters” (Brecht et al., 1995, p. 37). Thus, it would be difficult to attain high levels of proficiency in acquisition-poor environments (i.e. environments in which the language of instruction differs from the language of the culture).

Despite the obvious benefits of study abroad or domestic immersion programs for different reasons, it is not possible for everyone who desires to learn a second or foreign language to be completely immersed in the target language, as is the case in an IM or SA program. Research (Brecht et al., 1995; Rifkin, 2005; Thompson, 1996) shows that it takes much longer for students in TS programs to attain advanced levels of oral proficiency, and that most students who take a foreign language throughout their university careers only reach an intermediate level (see *ACTFL Proficiency Guidelines* in *Appendix A*). In their study,

Brecht et al. (1995) measured second and third year students speaking proficiency before beginning a SA program. They found that the majority of the students had intermediate-mid oral proficiency and very few had intermediate high. Thompson (1996) also found that third-year learners in the TS context fall into the intermediate-mid or high OPI levels. Rifkin (2005) reported fourth-year university students in Russian having an intermediate-mid speaking proficiency.

Rifkin (2003) theorized that low levels of oral proficiency in TS contexts are due to the time constraints of a 50-minute class that limits one-on-one teacher-student interactions. He argued:

The time constraints compel instructors to use partner work as a means to increase the number of times students are able to speak in class, but this very strategy reduces the amount of close teacher observation of that interaction, making it harder for teachers to monitor the discourse of each student struggling to produce a paragraph or avoiding the task with a series of unconnected simple sentences (Rifkin, 2005, p. 587).

2.2.2 Effect of context on the development of grammatical accuracy

Another set of studies has looked at the effects of context on the development of grammatical accuracy (Collentine, 2004; DeKeyser, 1991; Isabelli, 2004; Isabelli & Nishida, 2005; Regan, 1995; Rodrigo, 2011).

Regan (1995) looked at the effects of a year abroad in France and Brussels for six French learners on negation in French. In French, negation is formed by a proclitic particle *ne* and a marker of negation, but there has been a recent trend to delete the proclitic *ne*. Regan tried to find out if after studying abroad, the French learners would acquire the deletion. In order to do so, she collected 45-minute interviews right before the year program began and after the students returned. The interviews were transcribed and coded for each instance of the negative marker. She found that the *ne* deletion doubled over the year abroad for the six French learners. Deleting the *ne* marker indicated that the learners were recognizing dialectical nuances of the target language, but the acquisition was not complete. Although the

learners were deleting, as native speakers do, they still did not delete it every time a native speaker would. Regan argued that this could indicate a longer time abroad was necessary to fully acquire the deletion.

Isabelli (2004) examined the syntactic development and the acquisition of the null subject parameter of 64 students taking part in a year-long program in Spain. The control group consisted of 18 native-Spanish speakers from Spain. Isabelli employed a grammaticality judgment task (GJT) and an oral interview to elicit the use of the null subject. For the GJT, the students had to indicate if the sentence was possible or impossible and add a correction if the sentence was impossible. The results indicated that the SA group did not perform significantly differently than the control group with regard to the null subject parameter on the GJT. The oral interview also resulted in a non-significant difference between the control group and the SA group because the SA group was already performing at ceiling before studying abroad, but the SA group did improve significantly over the school year ($p = .034$)

Although the two previously mentioned studies show significant gains in the development of grammatical accuracy in SA programs, they lack a TS control group and therefore are unable to show the comparative benefits of the contexts. Collentine (2004), DeKeyser (1991), Isabelli and Nishida (2005) and Isabelli–Garcia (2010) took this weakness into consideration and used a TS control group to compare the benefits of one context over the other.

Collentine (2004) looked at a TS program and a SA program in the development of grammatical abilities. He collected pre and post OPIs from 20 students in a TS program and 26 from an SA program in Spain. The interviews made up a corpus used to examine the differences between the two groups' use of gender, number, person, tense and mood in Spanish. There were a total of 17 measures used to compare the two groups including

morphological, syntactical and morpho-syntactical structures. His results indicated the TS and SA groups significantly differed ($p = .045$). They also reported that the TS group performed significantly better than the SA group in five variables, including copula accuracy, present-tense verb accuracy, indicative accuracy, subordinate-conjunction accuracy, and subordinate-clause count. Collentine attributes his findings to the context in which the participants of his study found themselves. He states that the TS context facilitated the learning of these specific grammatical features more so than the SA group.

DeKeyser (1991) measured the effects of a semester abroad in Spain on the grammatical development of seven learners and then compared the outcomes to five learners in a TS setting. The participants in his study took a pre exam in grammar, in which they were tested on their knowledge of grammatical features common in second-year instruction (i.e., the Spanish copula, subjunctive and conditional). DeKeyser also collected three different interviews throughout the TS and SA programs. He looked at how the university learners used their knowledge of Spanish in their oral communication and how the learners used communication strategies to make up for gaps in knowledge. He found no clear indication that either of the groups had improved in their monitoring ability. DeKeyser did not find a significant difference between the two groups based on communication strategies ($p = .73$). These findings suggest that there may not be a dichotomy between a SA setting and a TS setting. However, when considering these findings it is important bear in mind the relatively low number of participants (seven in the SA group and five the TS group) in this study.

Isabelli and Nishida (2005) compared the effects of a SA context and a TS context on their subjunctive abilities. They collected oral interviews, which were based on the Simulated Oral Proficiency Interview (SOPI). The data for the 29 students in the SA group was collected at the beginning of the semester, four months into the program and at the end of the program. The data for the 32 participants in the TS group, on the other hand, was collected at

the end of their fifth semester of Spanish study or the end of their sixth semester. From the interviews, they examined students' use of the subjunctive in nominal, adverbial and adjectival subordinate clauses. In order to compare the two groups, Isabelli and Nishida compared one question from the interview process, which elicited the subjunctive. They found that the SA and TS groups differ greatly in the production of temporal clauses. The TS group production rate was 19-20%, whereas the SA group ranged from 55-59%, which indicated that the SA group resorted to more syntactically complex structures than the TS group. Their findings only report on percentage of production, but do not indicate if these findings are statistically significant.

Isabelli-Garcia (2010) compared 12 university learners in a TS context and 12 learners from a SA context over the period of one academic semester in Spanish. She tested the effects of these two contexts on learners' development of gender agreement, including predicative and attributive adjectives as well as determiners, using a grammaticality judgment test. In the grammaticality judgment test the learners had to determine if a sentence was correct or incorrect and fix the sentence if it was deemed incorrect. She found that there was no significant difference between the pre and posttests for the attributive and predicative adjectives. Although not statistically significant, she states that the learners in the TS context performed slightly better than the SA group for the attributive and predicative adjectives. She relates her findings to the type of instruction (i.e. focus on formS) that the students in the TS class were exposed to. One of the issues with this study was the low number of participants (12 in the TS and 12 in the SA context).

Rodrigo (2011) also contrasted a TS control group and a SA experimental group on grammar development. She looked at 21 students who were studying Spanish in a TS context in the U.S. and 18 students who were enrolled in a five-week SA course in Spain. To measure grammatical development, Rodrigo employed a pre and posttest that consisted of 64

questions including eight different grammatical structures. The learners were required to judge the grammaticality of the sentences using a likert scale. She found that both groups significantly improved over the two different semesters ($p < .001$). However, the results indicate that group was not a significant factor in determining grammatical development. Both groups improved their grammatical comprehension ($p = .076$).

2.3 Effect of metalinguistic or grammatical knowledge on L2 proficiency

The relationship of metalinguistic knowledge and L2 proficiency has been highly debated in recent years (Hu, 2002; Hu, 2011; Serrano, 2011). Krashen (2003) and Paradis (1994) argue that explicit grammar knowledge is only useful for monitoring purposes, but not beneficial for L2 acquisition. Paradis (1994) states:

[Explicit knowledge] is not automatically in the unconscious process. [Learners] cannot tap into metalinguistic knowledge when performing. Cannot be used as a part of the automatic production process. The production of utterances from conscious and deliberate application of explicitly known grammatical rules could not be performed on-line at the normal rate of the speech while at the same time selecting the lexical items and applying phonological rules (p. 399).

Along the same lines as Paradis, Krashen (2003) challenges the notion that syntactic rules can be automatized and used for L2 production. He claims that comprehensible and meaningful input leads to L2 production, not the learning of syntactic rules.

In contrast, others posit that, with practice, knowledge of grammar and syntactic rules can become automatized, therefore making it beneficial for L2 acquisition beyond monitoring. DeKeyser (1997) suggests that learning a language can be compared to other cognitive domains, such as geometry or computer programming. As learners learn rules and practice these rules, this declarative knowledge is then turned into procedural knowledge and a slow process of automatization takes place in which this knowledge is available for communication.

One of the other reasons for the controversy is the fact that the research that has been conducted has come up with inconsistent and conflicting results (Hu, 2002). On one hand,

grammatical knowledge has been shown to be beneficial when predicting learner outcomes such as reading, writing and speaking (Brecht et al., 1995; Golonka, 2006). On the other hand, correlational studies have been more mixed. Some have found significant relationships between metalinguistic or grammatical knowledge and all language skills (Rifkin, 2005), others have found strong relationships when proficiency is operationalized as reading, writing or grammar (Roehr, 2008; Elder & Manwaring, 2004; Hu, 2011), and other studies have found only weak relationships (Alderson et al., 1997; Elder, et al., 1999). Brecht et al. (1995) examined the variables believed to contribute to L2 proficiency gain in 658 students enrolled in a four-month SA program in Russia. In order to measure gain, the researchers administered a pre and posttest consisting of an OPI, a listening test and a reading test. The participants also took a pre-qualifying grammar and reading exam, which determined their level in the program. The researchers found that the pre-qualifying grammar and reading test was the most significant factor in predicting oral proficiency for the learners who crossed a major threshold in oral proficiency levels.

Golonka (2006) conducted a follow up study that looked at the predictors for language gain in L2 Russian in a SA context. The 22 participants studied in either Moscow or St. Petersburg. In the study, gain was operationalized as a pre and post OPIs. Those who were deemed gainers were those who crossed a major threshold in the ACTFL levels (see *Appendix A* for ACTFL levels). She employed five variables believed to predict gain, including three linguistic variables (grammar, vocabulary and accuracy) and metalinguistic variables (self-corrected errors and sentence repair) operationalized using an OPI. All five variables showed to be powerful in discriminating the gainer group from the non-gainer group. The highest correlation was sentence repair (.652); therefore, those who could self-correct were more likely to be in the gainer group. The results also indicate a correlation between the qualifying grammar test and the gainer group. Those who had higher levels of grammatical knowledge

were those who also made the most gains.

On the other hand, correlational studies have been more mixed. Rifkin (2005), mentioned earlier, also looked at the correlation of grammar knowledge and speaking, listening, writing and reading skills. He found that all of the skills correlated positively with knowledge of grammar including speaking (.76), listening (.82), writing (.74), and reading (.80). Although Rifkin did find positive correlations between all language skills (even speaking) it should be taken into account that the grammar test did not require students to have explicit knowledge of syntactic rules. The students were given a 100-item fill-in-the-blank grammar assessment.

Elder and Manwaring (2004) looked at the amount of grammar knowledge intermediate Chinese learners had and the relationship between the L2 grammar knowledge and their performance. The study consisted of two groups: one that had studied Chinese for four to six years and one that had completed the second year at the university level. The researchers used a Chinese metalinguistic assessment containing two parts: 1) one in which the students were required to match the metalinguistic terms to the different parts of speech given, 2) the students had to correct ungrammatical sentences in Chinese using metalinguistic terminology. In order to assess learner achievement, the researchers used a combined oral, aural and written test. After correlating the achievement tests with the Chinese metalinguistic tests, the results indicated that the correlation coefficients for reading and writing were more significant than the listening and speaking coefficients. They found that grammatical terms (.74) and error correction (.82) were shown to have the strongest relationships with Chinese achievement. They also found that being able to state the rule yielded the weakest relationship (.54) with listening and speaking. They surmise that this may be due to the fact that reading and writing tests are under more planned conditions than listening and speaking.

Roehr (2008) looked at the relationship between L1 English speakers' metalinguistic knowledge and their proficiency in the L2 (German). Roehr operationalized proficiency using a combined grammar and vocabulary test. The test contained such features as cognates, false cognates, functional features of German that do not exist in English and grammatical features that do exist in English and German. To measure metalinguistic knowledge, Roehr used a two-part test containing a description/explanation section in which the students were required to correct, describe and explain a highlighted error and an analytical section in which students identified the grammatical role of the highlighted parts of a sentence. She found that L2 metalinguistic knowledge and L2 grammar and vocabulary were strongly and significantly correlated. This result was especially high amongst the fourth-year learners with a correlation of .804. Roehr contributes the positive findings to the fact that the learners who have an understanding of the structures in the grammar and vocabulary test, also would have a strong knowledge of the items in the metalinguistic test. She states that the two tests may be matched in nature because the knowledge tested in both the metalinguistic test and the tests to measure proficiency were testing the same types of knowledge. This could be the reason for the strong correlations found in her study. Roehr did not seek to find a relationship between different constructs, such as aural or oral proficiency and metalinguistic knowledge.

Alderson *et al.* (1997) examined the relationship between metalinguistic knowledge and language proficiency and aptitude. There were 509 participants in total from different English universities. In order to measure the students' proficiency, the participants were put through a battery of tests measuring the learner's language proficiency and their metalinguistic knowledge. These tests ranged from a cloze grammar test, a grammar test, a reading comprehension test, listening test, the MLAT (words in sentences test) and an inductive language-learning test. To measure metalinguistic knowledge, Alderson *et al.* employed a metalinguistic assessment test in which the students had to identify if a sentence

was grammatical or ungrammatical, correct the sentence and state the rule that had been broken. This particular test was given in both the learners' L1 (English) and L2 (French). A factor analysis was used to measure the relationships between the different proficiency tests used and the learners' metalinguistic knowledge. The factor analysis consistently showed that the metalinguistic tests loaded on one factor and proficiency loaded on another, indicating that these are two separate factors in L2 acquisition. The study also found that levels of metalinguistic knowledge vary considerably among L2 learners of French and the relationship between proficiency and metalinguistic knowledge is weak. The highest correlation that they found was .34 between the metalinguistic assessment and the grammar test. They state that knowledge about the language may still be worthwhile even though the study did not demonstrate that. In their discussion of the results, Alderson *et al.* state that a follow up study of the value of metalinguistic knowledge is necessary. They also mention that particular aspects of language may be relevant under certain conditions, for example when automatic processing is involved (e.g. listening and speaking tasks).

In a follow up study, Elder *et al.* (1999) investigated the relationship between learners' prior metalinguistic knowledge and language proficiency among 334 undergraduate students. To measure learners' metalinguistic knowledge a metalinguistic assessment test in the L1 (English) and L2 (French) were administered, tests in which the students were required to identify parts of speech and correct and explain errors in sentences. They also employed a MLAT test and an inductive Language Learning Test. To measure proficiency, they used a C-test (to test French proficiency), a multiple choice reading test of French, and a writing test. Their study did not show prior English metalinguistic knowledge to be positively related to successful performance in their L2. They call for a follow up study in which different skills, the ones that require automatic processing (i.e. listening and speaking), are investigated using metalinguistic knowledge as a factor. They also suggest that it would be beneficial to look

more into the benefits of learners' L1 metalinguistic knowledge on L2 proficiency.

2.4 Summary

The previous review of the literature indicates that SA and IM contexts appear to be more beneficial for L2 oral performance than TS contexts. However, none of these studies has taken into account the differences between a TS context and an IS context where one of the main differences is the distribution of hours of instruction and exposure. If IM and SA contexts have been shown to be more beneficial with regards to oral performance than TS contexts, are intensive programs also more beneficial even if the amount of exposure is less than in SA or IM contexts? Conversely, there are no conclusive findings with respect to which context is more favorable to grammatical accuracy. The studies that have looked at grammatical accuracy have relatively low numbers of participants and have employed a wide variety of measurements to elicit grammatical accuracy. This research also reveals a conflict regarding the benefits of metalinguistic knowledge on L2 proficiency. It has been shown to be beneficial when predicting L2 proficiency outcomes, but the relationship between L2 proficiency and metalinguistic knowledge is still not clear.

The other issue is that, although Collentine and Freed (2004) state that metalinguistic knowledge varies from context to context, a very minimal amount of, if any, studies have studied the effects of different contexts on the development of metalinguistic knowledge. More emphasis has been placed on oral performance rather than knowledge of linguistic features and relationships between features. The research that has been conducted has examined linguistic accuracy, which does not necessarily tap into learners' metalinguistic knowledge and has not taken into account the possibility for learners to be linguistically accurate without having a knowledge of syntactic rules and linguistic categories (Green & Hecht, 1992).

2.5 The present study

The present study attempts to fill a gap within the previous research by comparing the effects of an intensive language setting (IS) and a traditional semester setting (TS) on 1) learners' metalinguistic knowledge in Spanish, 2) development of L1 metalinguistic knowledge, and 3) oral proficiency. Additionally, the current study seeks to find out if there is a relationship between learners' oral proficiency and grammatical knowledge and if prior metalinguistic knowledge in the L1 is beneficial for metalinguistic knowledge in the target language.

CHAPTER III

METHODS

3.1 Introduction

This chapter introduces the methodology implemented in the current study. First, it provides a profile of the participants who were recruited to be a part of this study and gives a brief overview of the two learning contexts. Second, it describes the materials implemented in this investigation. Finally, it states the statistical measures and procedures employed.

3.2 Participants

The participants in the current study were 63 beginning Spanish students at a large Research I public university in the United States. Of the 63 participants, 20 were enrolled in a four-week intensive semester (henceforth IS) and 43 were enrolled in a traditional semester foreign language class (henceforth TS). Both settings are considered beginning level, which means that students taking these classes had not had prior contact with the language (in or outside of class) or were assigned to this level after taking a placement exam in the university's Foreign Language Department. Thus, it is assumed that the participants had no prior metalinguistic knowledge or oral proficiency in Spanish.

3.3 Learning contexts

Although both groups (TS and IS) were enrolled in the first semester course at the university, the courses differed in many different respects: time frame, presentation of grammar, distribution of grades, out-of-class participation, and exposure to native speakers. The sections below provide a breakdown and description of the differences between the two courses.

3.3.1 Time frame

The TS groups met five days a week, fifty minutes a day for fifteen weeks with a total of 66 hours of instruction. Conversely, the IS group took place during the summer. The class

was four weeks long, five days a week and four hours a day, also totaling 66 hours of instruction.

3.3.2 Presentation of grammar

The presentation of grammar varied between the two contexts. In the TS course it was necessary that the students understood metalanguage (i.e. language used to talk about language: “present simple”, “subject”, “verb”, “noun”, etc.) in order to succeed on assessments. Thus, in order to get the students to acquire this type of knowledge, sometimes the instructors switched to the first language. Also, because the assessments were predominately comprised of discrete grammar points, fill-in-the-blank and cloze exercises (See *Appendix B* for a sample test), the teachers were under more pressure to teach the syntactic rules explicitly and use metalanguage to do so. Although the techniques to present grammar varied, the daily lesson plans were based around a specific grammatical feature (e.g. simple present, imperfect, etc.).

The instructors in the IS course, on the other hand, presented grammar in Spanish using a variety of techniques to shift learners’ attention towards grammatical structures, such as Total Physical Response (TPR) and grammar through context. For example, *Goldilocks and the Three Bears* was a recurring story that was used throughout the four weeks. It was continually modified to present new grammatical features such as direct and indirect object pronouns. The class would read the story together and the instructor and the students would use TPR to present unknown vocabulary. Once the students understood the story, the instructor would point learners' attention towards the target grammatical features.

3.3.3 Assessment and grade distribution

The TS course was characterized as espousing the communicative approach. However, only five percent of the final grade was based on oral production (a final interview), whereas fifty-five percent was based on traditional grammar tests and thirty

percent on written work (lab manual homework, a composition and bi-weekly journals). The grammar tests were discrete point tests made up of cloze exercises, short answer, true/false, and fill-in-the-blank exercises (See *Appendix B* for sample test).

The assessments in the intensive course (IS), on the other hand, had a higher focus on oral production. The majority of the assessments consisted of situation-based activities in which the students had to complete different communicative tasks. The six situation-based assessments made up thirty-five percent of the final grade and included different communicative activities, such as presenting a family album, presenting a partner in a fashion show, ordering a meal at a Spanish-speaking restaurant or simulating a mini market scene. In the mini market scene, for example, the classroom was transformed into a market where the students had set up a booth of ten items that they brought from home. Their task was to describe the items (e.g. color, shape, price, texture) to potential buyers, bargain with them, and eventually sell the items (See *Appendix C* for sample rubric).

Apart from the situation-based assessments, the students had to write their own version of *Goldilocks and the Three Bears*, memorize it and tell the story to the class using props and gestures, (five percent of the final grade) and had a final interview at the end of the semester (fifteen percent of the final grade).

Even though fifty-five percent of the grade was comprised of oral production (situation-based tasks, final interview, and storytelling), fifteen percent of the grade was based on traditional grammar quizzes including the structures they had learned that week. These quizzes were discrete point tests comprised of cloze exercises and short answer (See *Appendix D* for sample weekly quiz).

3.3.4 Exposure to native speakers and out-of-class exposure with the target language

The TS group had one “intercambio cultural” (cultural exchange) that was due at the end of the semester in which they had to watch a movie, interview a native speaker or read an

article from a Spanish speaking country. In the IS class, the students were exposed to native (or near native) speakers of Spanish one to two times per week as they were required to complete four cultural activities throughout the four weeks, whether it was attending a weekly salsa dancing lesson, watching a Spanish speaking movie, or interviewing a native Spanish speaker.

3.3.5 Summary

This section provided a description of the two learning contexts that the participants were enrolled in. Table 1 provides a breakdown of the differences between the two contexts.

Table 1

Learning Context: Traditional semester vs. Intensive Semester

	Intensive Semester (IS)	Traditional Semester (TS)
Assessment	Situation-based assessments, mini language quizzes, final interview	Four explicit grammar exams, one final interview, bi-weekly journals
Grade breakdown	Task-Based language performance assessment (35%), Oral interview (15%), story-telling (5%), participation (20%), grammar quizzes (15%), written work (10%)	Grammar, fill-in-the-blank, true false, auditory section (55%), final interview (5%), bi-weekly journals and final composition (25%), cultural exchange (5%), participation, (10%)
Time Frame	4 weeks, 5 day/week 4 hours/day	16 weeks, 5 days/week 50 minutes/day
Exposure	Weekly exposure to native speakers/weekly cultural exchanges	One cultural exchange during the semester
Presentation of Grammar	Presentation of Grammar in the L2	Presentation of grammar in the L1 and L2

3.4 Materials

3.4.1 Background survey

The first day of class, students were asked to complete a background information survey (based on Alderson *et al.*, 1997) in which each student was asked about prior language knowledge, languages spoken in the household, age, sex, major, comfort level with English grammar and comfort level with Spanish grammar (See *Appendix E*).

3.4.2 English Metalinguistic pre-test (MKE1)

The TS and IS groups were both given a pre-test containing two sections: a terminology section and a correction and explanation section. The format of both of these sections was adapted from Elder and Manwaring (2004), Roehr (2008), and Green and Hecht (1992).

3.4.2.1 Terminology section

The pre-test terminology section consisted of 15 sentences in which the participants were required to underline the appropriate part of speech (See *Appendix F*). The pre-test was only given in English because it was assumed that the students had little to no prior knowledge of Spanish. The students had to identify and underline parts of speech such as subject, definite article, direct object, adjective, adverb, indirect object, verb in simple past tense, possessive adjective, verb, noun, preposition, indefinite article, infinitive verb, verb in simple present and past participle.

An example sentence is shown below.

- (1) **Subject:** The hippo over there ate two large meals.

Each answer was given a zero, a half, or one point. If the student left a sentence blank or underlined the incorrect word he/she was given a zero for that item. If she/he underlined part of the correct answer or the answer plus other words, he/she received half a point. Finally, if the student underlined the correct words and *only* the correct words, he or she

received the full point.

3.4.2.2 Correction and explanation section

It has been commonplace to measure metalinguistic knowledge by requiring learners to explain grammatical rules (Hu, 2002; Alderson *et al.*, 1997; Green and Hecht, 1992). Following these studies, the learners in the current study were presented ten sentences and required to (a) determine if each sentence was correct or incorrect, and if the sentence was incorrect, (b) write the correct sentence, and (c) explain the grammatical rule that had been broken using as much metalinguistic terminology as possible (See *Appendix G*). A sample item is offered below.

(2) *She have been sick for several days*

Correct/Incorrect. *If incorrect, write the grammatical version below:*

Correct version: *She has been sick for several days.*

Rule: *Subject must match the auxiliary verb.*

In this section, the participants were given a zero, a point and a half or three points (explained in Table 2). In order to test the reliability, a second rater rated 33% of the tests with .95 interrater reliability.

Table 2

Correction and Explanation Section rating (adapted from Han & Ellis 1998).

Point	Rationale
Zero	The student was unable to produce an explanation of why the sentence was wrong or the student wrote an incorrect response. e.g. <i>I left my house quick</i> 'Incorrect. Adjective must correspond to the subject'
Point and a half	The student was able to somewhat state the grammatical rule using some technical language. e.g. <i>walked in the park yesterday.</i> 'Incorrect. Missing word'
Three points	The student was able to state a completely correct rule using the appropriate technical language. e.g. <i>Mary and Bob goed to the bar yesterday.</i> 'Incorrect. to go is an irregular verb + past tense changes to went'

3.4.3 COPI (Computerized Oral Proficiency Interview)

The COPI (Computer Adaptive Oral Proficiency Interview) elicits learner performance by presenting tasks through a computer program. These tasks are “ratable according to the criteria of the [ACTFL Proficiency] Guidelines” (Tschirner, 2007, p. 114). A computerized interview was chosen over a traditional OPI because it allowed for the researcher to test a large amount of participants at one time.

The COPI was administered to all of the participants on the second to last day of classes. It was only administered at the end of the semester because the participants had no previous knowledge of Spanish at the beginning of the semester. The participants could choose their beginning level (A, B, C, or D). Even though there were four different levels, the majority of the participants started in level A, which requires students to do tasks such as counting from 1 to 20, naming colors, naming different modes of transportation or describing the items that are in a typical classroom. As the students finished the different tasks, they

could choose to stay within that level or go on to more challenging tasks, like giving directions or talking about their family unit.

The COPI was scored according to the *ACTFL Proficiency Guidelines* (see *Appendix A* for guidelines).

Table 3

ACTFL Proficiency Score and numerical equivalent

ACTFL Score	Numerical Equivalent
Novice Low	1
Novice Mid	2
Novice High	3
Intermediate Low	4
Intermediate Mid	5
Intermediate Higher	6

There were two raters responsible for rating the COPI's. Before examining the interviews, both of the raters took the COPI training provided with the software. However, it should be noted that the raters were not certified ACTFL raters. Both of the raters rated 10 sets of student responses together in order to ensure that both were rating using the same criteria. Because of time constraints and availability, the second rater only rated 33% of the total student responses, with a reliability coefficient between the two raters of .95.

3.4.4 Metalinguistic knowledge post-test (MKE2 and MKS)

On the last day of classes, students were given a metalinguistic knowledge post-test in English. The post-test was identical to the pre-test (see section 3.4.2). In addition to the posttest, the students were also given a metalinguistic knowledge test in Spanish (MKS). The Spanish metalinguistic test also contained the same two sections: A terminology section and an error correction and explanation section (See *Appendix H* for terminology and *Appendix I* for error correction). Two sample items are shown below.

(3) Terminology:

Preposición: *Carmen puso las manzanas en el refrigerador. (Carmen put the apples in the refrigerator).*

(4) Section 2 Error Correction and explanation:

A Ricardo se gusta la película.

Correct/Incorrect *If incorrect, write the grammatical version below:*

Correct version: *A Ricardo le gusta la película* *(Richard likes the movie)*

Rule: *With the verb gustar, the indirect object pronoun is needed not the reflexive pronoun.*

3.5 Statistical analysis

In order to answer RQ1, a one-way analysis of covariance (ANCOVA) was conducted. This type of analysis examines the effect of an independent variable (group) on a dependent variable (MKS) at the end of the semester while controlling for the effects of correlated variables or ‘covariates’ (GPA). A covariate is used to increase statistical power by controlling for continuous variables, such as, motivation, age and prior language knowledge, which may cause variability in the data. The possibility for variation in the ANCOVA and the Ordinal Logistic Regression (See below) may be high in these tests because a pre test was not conducted (See *Appendix J* for GPA as covariate).

In order to answer RQ2, a one-way ANOVA with repeated measures was used. This test is used when the participants are evaluated more than once over a period of time. In the case of the current study, each participant’s MKE was evaluated two times: once at the beginning (MKE1) and once at the end of the semester (MKE2).

In order to answer RQ3 and to test the effect of group in oral proficiency (COPI), an Ordinal Logistic Regression was employed. This type of regression is used to determine the predictive value of a set of independent variables (group, GPA) on a dependent variable that

is categorical (COPI).

For RQ4, another Ordinal Logistic Regression Model was used with COPI and group as independent variables and MKS as the dependent variable.

Finally, in order to answer RQ5 an ANCOVA model was used. This model looked at the relationship between MKE1 as the dependent variable and MKS and group as the independent variables.

CHAPTER IV

RESULTS AND DISCUSSION

This chapter addresses the results attained by the data analysis. Next, it provides a discussion of the results and the hypotheses.

4.1 Results

Table 4 outlines the descriptive statistics for the assessment measures in both groups intensive Semester (IS) and traditional semester (TS) in the current study.

Table 4

Summary of Students' average test scores and GPA

Test	Intensive Semester (IS)				Traditional Semester (TS)			
	N	M	SD	CV	N	M	SD	CV
MKE1	17	11.8	3.453	30%	43	11.233	3.92	35%
MKE2	17	12.917	2.557	20%	43	13.977	4.92	35%
MKS	20	10.75	5.401	20%	43	11.349	3.768	33%
COPI	19	3.15	1.11	35%	32	2.727	1.35	50%
GPA	20	3.501	.593	17%	41	2.838	1.103	39%

Figure 1 provides a visual representation of Table 4. In Figure 1, it appears that the TS group has a slightly higher score for the MKE1 (11.8 vs. 11.233), but the TS group seems to be higher in the MKE2 (12.917 vs. 13.977). We also see that the MKS (10.75 vs. 11.349) appears to be higher in the TS group than the IS group. However, GPA (3.501 vs. 2.838) and COPI scores (3.15 vs. 2.727) both seem higher in the IS group than the TS group. In order to check for the extent of variability in relation to the means, a coefficient of variation (CV) was used in which the SD is divided into the mean and multiplied by 100 to give a percentage. The CV is used when there are different numbers of participants in the two groups. Higher

percentages indicate that the variable is more dispersed, whereas low percentages indicate a lower dispersion. As seen in Table 4, the dispersion of the scores in IS group is much lower than the dispersion of scores in the TS group. The scores for the IS group are much more consistent than those of the TS group.

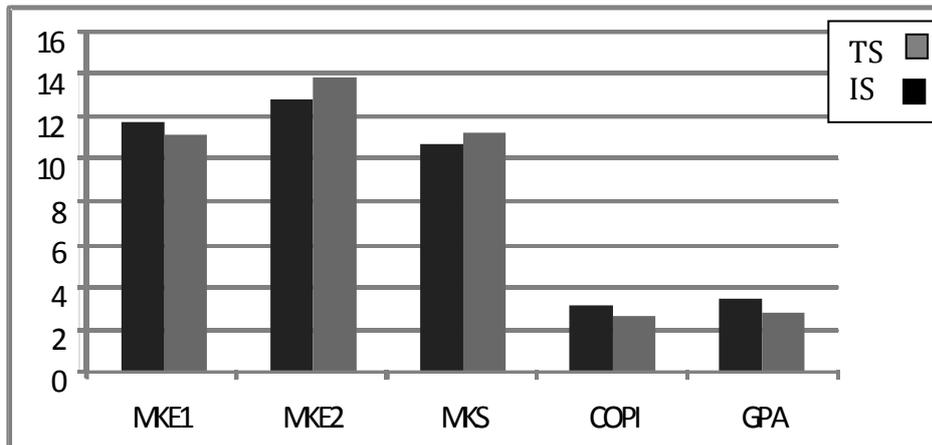


Figure 1. Average means for the Traditional semester group and Intensive semester group

RQ1: Is there a significant difference between the metalinguistic knowledge of Spanish (MKS) exhibited by students enrolled in an intensive course (IS) and students enrolled in a traditional course (TS) at the end of the semester?

The ANCOVA model in Table 5 shows that, after controlling for GPA, MKS significantly differs between the two groups. The TS group scored significantly higher in MKS than the IS group ($F_{(1,55)}=11.311$; $p=.0014$) and GPA helped control for some of the variation in MKS, as it was positively correlated ($F_{(1,55)}=23.118$; $p<.001$). Moreover, because the Group*GPA interaction was not significant ($F_{(1,55)}=3.9665$; $p=.0514$) it is concluded that the correlation between MKS and GPA was consistent between both groups, meaning that GPA was correlated with the development of MKS regardless of the group.

Table 5

Analysis of Covariance for MKS score with GPA as covariate

Factors	DF _{denominator}	F ratio	p
Group	55	11.311	.0014
GPA	55	23.118	<0.001
Group * GPA	55	3.9665	.0514

Figure 2 shows that the TS group (solid line) showed a higher level of MKS than the IS group (dashed line) for any given GPA score. Also, we see that as GPA increases, so does MKS, demonstrating again the positive correlation between GPA and MKS score for both groups.

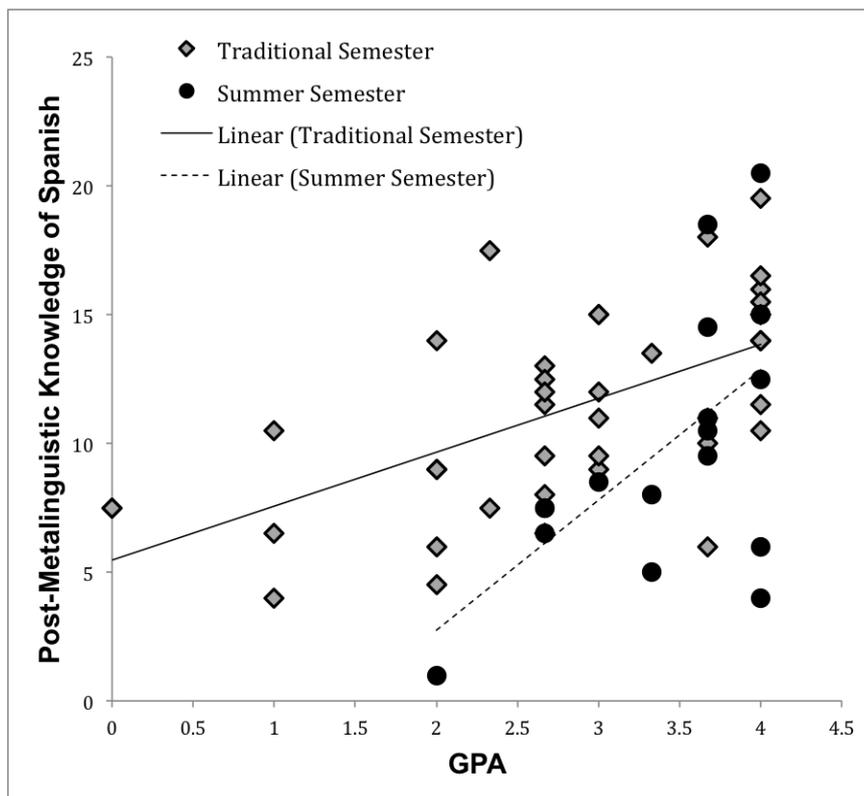


Figure 2. Comparison of metalinguistic knowledge in Spanish (MKS) at the end of the semester by the TS and IS groups with GPA as a covariate.

RQ2: How does metalinguistic knowledge of English (MKE) improve over a semester in an intensive semester (IS) and a traditional semester (TS)?

A separate T-test was conducted in order to test the differences of MKE1 between the

TS and IS groups. The T-test showed that there is not a significant difference between MKE1 between the IS and TS groups and that both of them started with similar levels of MKE ($F_{(1, 56)}=.246$; $p=0.6218$).

In Table 6 “Group” refers to the effect that group had on MKE, “Semester” refers to the improvement over the semester in the individual groups, and “groups over semester” refers to the amount of improvement over the semester taking into account the two different groups.

Table 6 shows that the level of MKE improved in both groups along the semester. This observation is supported by the significant effect of “semester” in the repeated measures ANOVA ($F_{(1, 58)}=5.602$; $p= .0213$). The table also shows that the average scores between the two groups is not significant ($F_{(1, 58)}=5.602$; $p= .0213$). However, regardless of the averages between the groups, the interaction between group and semester was significant, indicating that there was a greater improvement of MKE over the semester in the TS group than in the IS group ($F_{(1, 58)}=5.141$; $p= .0271$).

Table 6

One-way ANOVA with repeated measures for MKE (pre and post-test)

Factors	DF _{denominator}	F ratio	p
Group	58	1.616	.2087
Semester	58	5.602	.0213
Groups * Semester	58	5.141	.0271

Figure 3 shows that MKE improved significantly over the semester in both groups ($F_{(1, 58)}=5.602$; $p= .0213$). It also shows that the degree of MKE improvement depends on the group meaning that the improvement of MKE was significantly greater in the TS group than the IS group ($F_{(1, 58)}=5.141$; $p= .0271$).

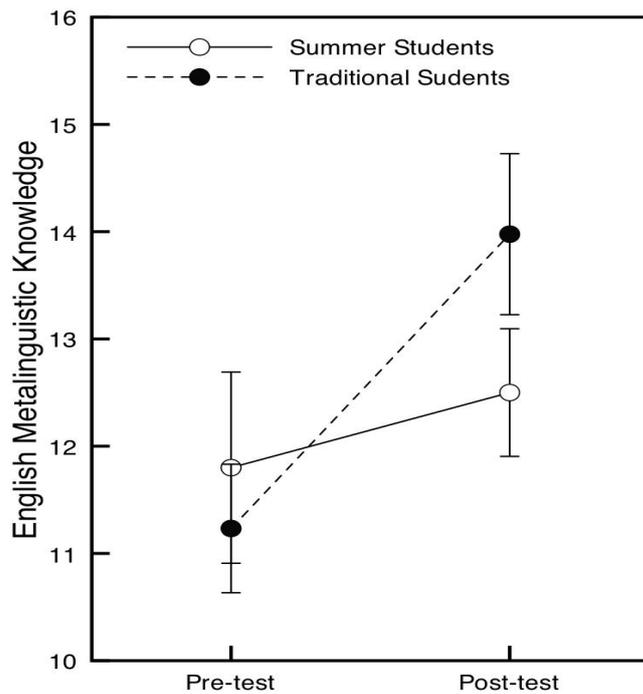


Figure 3. Improvement of metalinguistic knowledge of English (MKE) over the semester

RQ3: To what extent does group (TS or IS) (a traditional course or an intensive course) and GPA contribute to explain the variation of oral proficiency (COPI) in Spanish at the end of the semester?

The Ordinal Logistic Regression model in Figure 7 shows that COPI scores at the end of the semester do not significantly differ between groups ($\chi^2 = 1.285$, $p = .257$). In contrast, there is a significant relationship between GPA scores and COPI scores ($\chi^2 = 11.273$, $p < .001$).

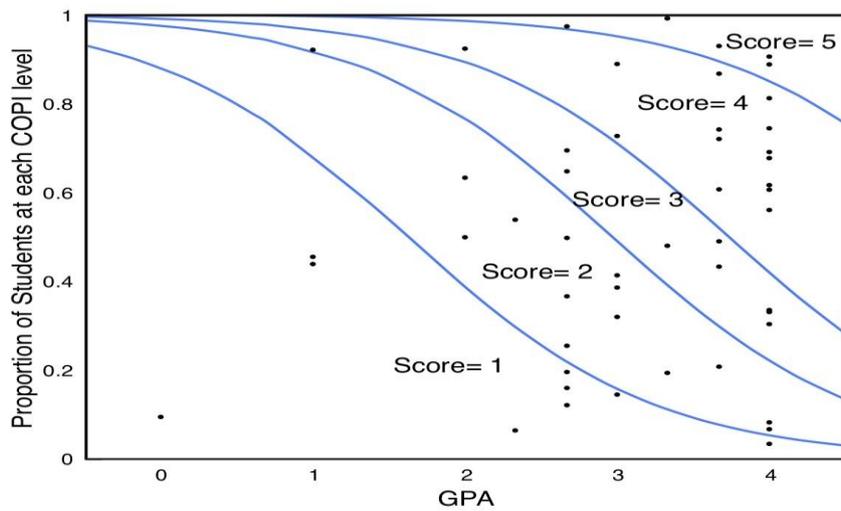


Figure 4: Proportion of students at each COPI level based on GPA and Group

This relationship between GPA and COPI is similar for the two groups as the interaction between group and GPA is not significant ($\chi^2 = 0.954$, $p = .329$), which means that learners with higher GPAs, regardless of group, also had a higher COPI score.

Table 7

Ordinal Logistic Regression Model for COPI score with GPA and group as independent variables

Factors	Chi squared	p
Group	1.285	.257
GPA	11.273	<.001
Group * GPA	0.954	.329

RQ4: To what extent does metalinguistic knowledge in Spanish (MKS) at the end of the semester explain variation in student's oral proficiency (COPI)?

The Ordinal Logistic Regression model (Table 8) shows that MKS has significant value in predicting students' COPI scores ($\chi^2 = 7.744$, $p = .0054$).

Table 8

Ordinal Logistic Regression Model for MKS and COPI with group and MKS as independent variables

Factors	Chi Squared	p
MKS	7.744	.005
Group	1.103	.293
Group * MKS	0.018	.894

As seen previously, group has no effect on COPI ($\chi^2 = 1.103$, $p = 0.293$) meaning that there was no significant difference in oral proficiency between the IS and TS groups. The predictive value of MKS is independent of the group as shown by the non-significant interaction between the two ($\chi^2 = 0.018$, $p = .894$). Those who scored higher on the test of MKS also had a higher COPI score regardless of the group they were in.

Figure 5 below shows the predicted proportions of students at each level of the COPI score (1-5) based on their level of metalinguistic knowledge in Spanish (MKS). Each of the dots represents the data from the participants. Although it appears that all of the participants are not represented, some of the participants, or dots, overlap with respect to their scores. For example, based on this Logistic Regression model, 80% of the students scoring a 0 on MKS will score less than 2 on the COPI, indicating that when the level of metalinguistic knowledge in Spanish increases, the predicted proportion of students who score a 5 also increases.

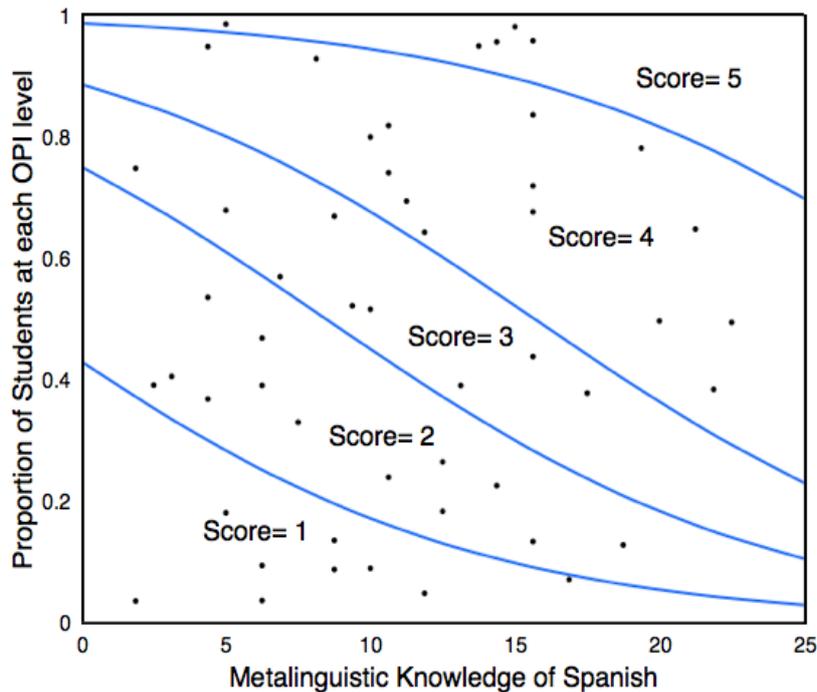


Figure 5. Proportion of students at each COPI level based on metalinguistic knowledge of Spanish (MKS)

RQ5: What is the relationship between learners' metalinguistic knowledge of English (MKE1) at the beginning of the semester and metalinguistic knowledge of Spanish (MKS) at the end of the semester?

As illustrated in Table 9, there is a significant difference between MKS in both groups ($F_{(1, 54)}; p = .007$). The table also shows that there is a significant relationship between MKE and MKS ($F_{(1, 54)} = 18.751; p < .0001$): the higher the MKE1 score is, the higher the MKS score is at the end. However, there is no interaction between group and MKE1 ($F_{(1, 54)}; p = 0.098$). In both of the groups MKE1 has a strong relationship with MKS.

Table 9

ANCOVA Model for MKS score with MKE1 and group as independent variables

Factors	DF _{denominator}	F ratio	p
Group	54	7.870	.007
MKE1	54	18.751	<.0001
Group * MKE1	54	2.833	.098

As seen in Figure 6, both of the lines rise as MKE1 increases and MKS increases. However, the TS group, represented by the dotted line, has a steeper slope indicating that the relationship between MKE1 and MKS is stronger in the TS group than in the IS group.

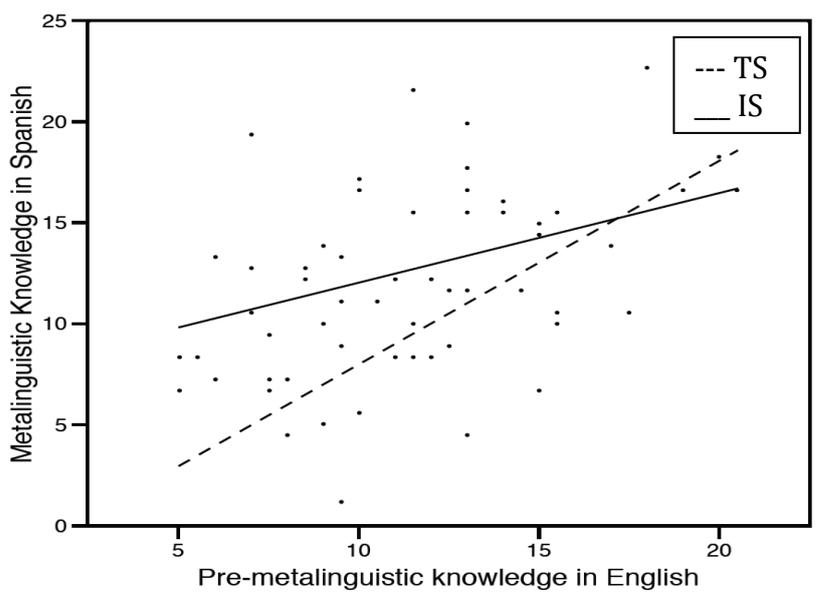


Figure 6. Comparison of pre-metalinguistic knowledge of English (MKE1) and metalinguistic knowledge of Spanish (MKS) in traditional (TS) and intensive (IS) groups

4.2 Discussion

4.2.1 Research question 1

Is there a significant difference between the metalinguistic knowledge of Spanish (MKS) exhibited by students enrolled in an intensive course (IS) and students enrolled in a traditional

course (TS) at the end of the semester?

The results in the previous section indicate that, at the end of the semester, those in the traditional group (TS) had significantly higher levels of metalinguistic knowledge of Spanish than those in the IS group. These findings were consistent with the hypothesis made at the beginning of the study. It can be suggested that these findings are a result of the context in which the two groups found themselves as Collentine (2004), DeKeyser (1991) and Golonka (2006) also found. In the current study, the teachers in the TS groups were under a great deal of pressure to teach grammar explicitly due to the fact that the majority of the final grade was based on explicit grammar knowledge. They focused their instruction on metalanguage and syntactic rules. The IS context, on the other hand, focused more on communicative abilities rather than explicit grammar knowledge. It could be suggested that the TS group resulted in a higher level of metalinguistic knowledge than their IS counterparts because of the differences in learning contexts.

The results also reveal that the covariate, GPA, has a positive relationship with MKS in both the TS and the IS groups. These findings were expected in the TS group where most of the final grade is based on the knowledge of grammatical terminology. However, with only 15% of the final grade based on explicit grammar quizzes, it was surprising that there was a positive relationship between MKS and GPA in the IS setting.

4.2.2 Research question 2

How does metalinguistic knowledge of English (MKE) improve over a semester in an intensive semester (IS) and a traditional semester (TS)?

The results indicate that both the TS and IS groups significantly improved their MKE, but the learners in the TS group improved significantly better than their IS counterparts which was consistent with the hypothesis. It is important to note, that not only did the students in the TS group improve significantly more than the IS

group, but they also has significantly higher levels of MKS, as was seen in the RQ1. As the traditional semester progressed, and students were taught explicit Spanish grammar rules (e.g. subject/verb agreement, placement of direct and indirect object pronouns), their explicit knowledge of their L1 also increased. One possible explanation for this improvement is cross-linguistic transfer, which is defined by Odlin (1989) as “the influence resulting from similarities and differences between the target language and any other language that has been previously acquired” (p. 27). A better explanation may be bidirectional influence (Kecskes, 2008) or backward or reverse transfer (Cook, 2003) in which the L2 affects the L1. According to Cook, those who have studied two languages or are bilingual generally have more knowledge of their L1. It is possible that the students in this study had reverse transfer of Spanish syntactic rules, and transferred their L2 syntactical knowledge to their L1.

4.2.3 Research question 3

To what extent does group (TS or IS) (a traditional course or an intensive course) and GPA contribute to explain the variation of oral proficiency (COPI) in Spanish at the end of the semester?

As the results indicate in the previous section, there was no significant difference between the COPI score of the TS and IS groups. These findings were quite surprising given the differences between the two learning contexts. There are different possibilities for these results. First, it is possible that the number of hours per day was not a factor in the development of oral proficiency. Although the students in the IS group received more class time per day, the number of total instructional hours did not differ between the groups. These findings contradict the claims of Rifkin (2003) and Freed et al. (2004) who both suggest that more learning hours per day may be more beneficial for L2 oral performance. Another

possibility is that there was not enough exposure to the target language in the IS group, although they did have more exposure than the TS group. The learning context studies that found SA contexts to be more beneficial than TS contexts attributed their findings to the fact that the SA group was exposed more to the target language outside of the classroom (Freed *et al.*, 2004; Rifkin, 2005; Segalowitz and Freed, 2004), but the students in the IS context did not reach the level of exposure that SA students receive.

The results also reveal that the covariate, GPA, had a positive relationship with the participants' oral proficiency, regardless of group. These findings were expected in the IS class in which 55% of the final grade consisted of oral production, but these were surprising in the TS group because only 5% of the final grade consisted of oral production.

4.2.4 Research question 4

To what extent does metalinguistic knowledge in Spanish (MKS) at the end of the semester explain variation in student's oral proficiency (COPI)?

The results indicate that there was a significant relationship between oral proficiency and MKS. Those students who had higher levels of MKS also had higher oral proficiency. These results were consistent for both groups, as group was not a significant variable. One plausible explanation for these results is that if students are able to identify parts of speech and correct an ungrammatical sentence that they will be more linguistically accurate in their speech. Another possibility is the way in which the COPI was assessed. As stated earlier, the *ACTFL Proficiency Guidelines* were used to assess the learners' oral proficiency. One of the categories in the guidelines is accuracy, which refers the amount of errors committed in the recording. Therefore, it can be suggested that those who are able to correct ungrammatical sentences and state the rule that is broken, are also more accurate in their speech.

Although some studies have also found strong relationships between grammar knowledge and speaking (Brecht *et al.*, 1995; Golonka, 2006; Rifkin, 2005), none of these

studies operationalized knowledge of grammar as the ability to correct incorrect sentences, state the rule that had been broken or identify parts of speech. The tests are much different in the sense that the metalinguistic knowledge test employed in the current study requires learners to have explicit knowledge of grammatical features and syntactic rules whereas the tests employed in the three studies mentioned, did not necessarily tap into learners' explicit knowledge (Elder & Manwaring, 2004; Green & Hecht, 1992). One study that did operationalize metalinguistic knowledge in the same manner as the current study was Elder and Manwaring (2004). The results in their study indicated that MK was not strongly correlated with speaking ability, which they attribute to the fact that listening and speaking are more spontaneous language skills, that do not allow the student to process information before producing.

4.2.5 Research question 5

What is the relationship between learners' metalinguistic knowledge of English (MKE1) at the beginning of the semester and metalinguistic knowledge of Spanish (MKS) at the end of the semester?

The results indicate a strong correlation between learners' prior MKE and learners' metalinguistic knowledge of Spanish at the end of the semester. A possible explanation for these findings is that learners who are more familiar with metalanguage and syntactic rules in their L1 before beginning learning a second language will most likely be able to transfer this knowledge to the L2 (Odlin, 1989). Another possible explanation is the “matched nature” of the two tests (Roehr, 2008, p.188). Both of the tests elicited knowledge of similar grammatical constructs in the terminology section and in the correction and explanation section. Therefore, if the learners in the study were able to identify a noun or verb in their L1, it was highly probable that they would be able to do the same in their L2.

CHAPTER V

CONCLUSIONS

The purpose of the study was threefold. The first purpose was to examine the relationship between learning context and levels of oral proficiency and levels of metalinguistic knowledge of the learners' L1 and L2. The second purpose was to examine the relationship between learners' levels of L2 metalinguistic knowledge and oral proficiency in the two contexts. Thirdly, the study examined the relationships between learners' L1 pre-metalinguistic knowledge and post metalinguistic knowledge of Spanish. In this chapter, I first present the main conclusions derived from this study. Second, I discuss the limitations of the study. Third, I offer pedagogical implications, and fourth, I provide suggestions for future research.

5.1 Conclusions

This study has demonstrated that a traditional learning context (TS) may be more conducive to the development of metalinguistic knowledge than an intensive four-week class (IS). The study showed that as students progress in either a traditional or intensive foreign language setting, metalinguistic knowledge of their L1 develops. This is especially the case in the TS context, as the participants in this group improved significantly more than the IS group. The study also showed that students in the TS group have higher levels of MKS at the end of the semester. Although the study found that MKS was higher in the TS group at the end of the semester than the IS group, it cannot be known if this finding was the result of the context in which the students found themselves or if there were other variables that led to the development of MKS. It is possible that the students in these contexts were not true beginners and had previous exposure to Spanish. It is also possible that students took it upon themselves to study more outside of class or had private tutoring sessions that helped with the development of their MKS. However, because there was not a pre-MKS test administered, it

is impossible to know if it was the context that affected the development or if there were other factors involved.

The study also found that oral proficiency did not significantly differ between the IS and TS groups at the end of the semester. Either learning context could be beneficial for oral proficiency. Despite these findings, without a pre-COPI exam it is unknown as to the actual development of oral proficiency over the two semesters. It is possible that there were other factors affecting the learners' level of oral proficiency. One possibility is that the participants in the study had prior exposure to Spanish and came into the semesters with oral proficiency of Spanish. It is also possible that the participants were exposed to Spanish or used Spanish in other facets besides the classroom, for example in their job, with a tutor, or in a conversation group. Instructional differences in the TS classes may have also lead to differences in oral proficiency.

Furthermore, the study hints at the existence of a relationship between learners' oral proficiency and metalinguistic knowledge of the target language regardless of group. It is possible that those students with that are able to correct ungrammatical sentences are also more accurate in their speech. However, this study, in no way, was designed to examine the interface between the knowledge of a particular grammatical feature and production. This study did not look at learners' knowledge of simple present tense verbs and learners' ability to use these verbs in the COPI. Therefore, it cannot be said if metalinguistic knowledge has an effect on oral production. In addition, there may be other variables that contribute oral proficiency besides metalinguistic knowledge that were not examined in this study as discussed above.

Finally, the findings may suggest that having prior metalinguistic knowledge of the L1 (English), aids in the development of metalinguistic knowledge of the L2 in both learning contexts, which is consistent with the notion of cross-linguistic transfer. This theory posits

that learners transfer their knowledge to perform cognitive and linguistic tasks especially if the L1 and L2 possess similar writing systems like Spanish and English (Mora, 2001). In the case of the current study, the measures employed tested features that both Spanish and English possess (i.e. direct and indirect object pronouns, possessive adjectives, nouns, verbs, etc.). Although a significant relationship was found between MKE1 and MKS, it is not known to what extent prior metalinguistic knowledge of the L1 helps in the development of the L2. As seen earlier, there was also a relationship between context and MKS.

5.2 Limitations

As with all studies, the current study had some limitations. One of the limitations dealt with the number and selection of the participants. First, the number of participants in the study was relatively low (43 in TS and 20 in IS) which made it difficult to determine if an actual effect took place in the study. One of the reasons for the small number had to do with the pre-test and posttests. The pre-test was given at the beginning of classes after which many students switched or dropped out of the class. Also, the TS group was made up of considerably more participants than the IS group, lessening the degree of comparability between the two contexts. The reason for the low number of participants in the IS group was because there were only two sections available during the summer and there is much less student enrollment than in a traditional semester. The other limitation with the participants was that they were not randomly assigned to one group or the other. The participants were chosen from one of the beginning level class that students themselves enrolled in. By randomizing the groupings, not only is the potential for generalizability increased, but also there is less risk of having one group considerably larger than the other as is the case in the current study.

A further issue of the study was the pretests. Although the MKE test was administered as a pre and posttest, neither the COPI nor the MKS tests were given as pretests. It was

assumed that the students in the beginning level Spanish class were ‘true beginners’ meaning they had little to no prior knowledge of the language. It became obvious that some students had had prior exposure to Spanish. If a pre and posttest of the COPI and the MKS had been administered, it would have been possible to examine the effects of the contexts. Because the analyses did not have a pretest, GPA was used as a covariate to help control for some of the additional variation. Although there were some factors controlled for with the covariate, there was an issue with the GPA scores as well. The GPAs in the IS group were on average much higher than the TS group (3.501 vs. 2.838).

Another limitation of the study was the possible differences in instruction. For example, it is possible that the teachers in the TS classes employed different oral production tasks that were not known by the researcher. These tasks could have helped to develop oral proficiency of the TS class more so than anticipated. Despite these possible differences, all of the teachers in the TS classes were required to use the same assessment measures and were responsible for teaching syntactic rules.

The assessment of the COPI may also have been an issue. Although the two raters had taken the training that was provided by the COPI program, neither of the raters were ACTFL certified. However, the two raters did use the *ACTFL Proficiency Guidelines* to assess each recording.

5.3 Suggestions for future research

This study supports the possibility that the instruction in a traditional learning contexts leads to a higher level of explicit grammar knowledge in both the L1 and L2, that metalinguistic knowledge is beneficial for L2 oral proficiency and there is little difference in the effects of a TS and IS context on oral proficiency. However, because of the limitations of the study, further research is necessary. First, in order to make the findings more generalizable, it would be necessary to include more participants into the study and change

the way in which the participants were selected. For a future study, it would be necessary to select students randomly to be in one of two contexts. A future study would also need to employ both a COPI pre-test and Spanish metalinguistic knowledge pre-test in order to increase the comparability of the two contexts and measure the effects of the contexts more accurately. Furthermore, it would be necessary for the researcher to observe as many sessions as possible in the TS and IS contexts to have a better understanding of the methods used in the individual classes.

Another way to further the study would be to examine TS and IS contexts in other universities to find out if these results were isolated to this particular four-year university or if there are consistencies in the contexts in different universities.

To get a better understanding of the relationship of metalinguistic knowledge and oral proficiency, it would also be necessary to choose a grammatical feature taught in beginning level classes (e.g. simple present tense conjugations, direct and indirect object pronouns, *por/para*) to see if students who have metalinguistic knowledge of a particular grammatical feature are also able to use this knowledge in oral production. The future study could make a corpora with the COPI recordings and measure the accuracy rate of the grammatical feature chosen. This would help to further understand if metalinguistic knowledge is a necessary piece of language proficiency.

5.4 Pedagogical implications

Given the fact that the results indicated a relationship between oral proficiency and metalinguistic knowledge of Spanish in both learning contexts, I suggest language forms and syntax be integrated into traditional and intensive semester classrooms (Nation, 2007; Rifkin, 2005; Spada & Lightbown, 2008). Nation posits that deliberate attention should be given to individual language forms because it can add to implicit knowledge, help develop consciousness and can be used to develop strategies.

This study also demonstrates that students attain similar levels of oral proficiency regardless of context, but differing levels of metalinguistic knowledge. In either a traditional or an intensive setting, students reached, on average, a novice high or intermediate low level of oral proficiency. When developing curriculum, it is important to know that for first semester learners of a foreign language, both contexts are beneficial for oral performance. Although oral proficiency did not significantly differ between the two contexts, levels of metalinguistic knowledge did. I suggest that if the aim of the class is more focused on the development of metalinguistic knowledge and language forms, that a more traditional semester class be implemented.

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APPENDIX

Appendix A

ACTFL Proficiency Guidelines

Proficiency Level	Global Tasks and Functions	Context/ Content	Accuracy
Novice	Communicate minimally with formulaic and rote utterances, lists and phrases.	Most common informal settings/Most common aspects of daily life.	May be difficult to understand, even for speakers accustomed to dealing with non-native speakers.
Intermediate	Create with language, initiate, maintain, and bring to a close simple conversations by asking and responding to simple questions.	Some informal settings and a limited number of transactional situations.	Understood, with some repetition, by speakers accustomed to dealing with non-native speakers.
Advanced	Narrate and describe in major time frames and deal effectively with an unanticipated complication.	Most informal and some formal settings.	Understood without difficulty by speakers unaccustomed to dealing with non-native speakers.
Superior	Discuss topics extensively, support opinion and hypothesize. Deal with a linguistically unfamiliar situation.	Most formal and informal settings.	No pattern of errors in basic structures. Errors virtually never interfere with communication or distract the native speaker from message.

Appendix B

A. Vocabulario. Indica qué categoría (con su letra) corresponde a cada palabra. (17 puntos)

- | | |
|-------------------------|--------------------------|
| 1. _____ simpático | 9. _____ hace calor |
| 2. _____ el primo | 10. _____ la abuela |
| 3. _____ los pantalones | 11. _____ trabajador |
| 4. _____ la librería | 12. _____ la natación |
| 5. _____ la camisa | 13. _____ el cine |
| 6. _____ delgado | 14. _____ llueve |
| 7. _____ el museo | 15. _____ el baloncesto |
| 8. _____ guapo | 16. _____ la hermanastra |
| | 17. _____ viento |

C. Pretérito. Usando la forma correcta del verbo en paréntesis en el **PRETÉRITO** termina la conversación siguiente entre Alina y Mario sobre su experiencia de los exámenes finales. (11 puntos)

ALINA: ¡_____ (Ser) una semana horrible! Esta semana no me gustó nada porque _____ (ir) a todos los exámenes finales por tres días seguidos.

MARIO: A mí tampoco. Yo _____ (estudiar) muchísimo y _____ (descansar) solo cinco horas cada noche.

ALINA: Yo también. Además, yo _____ (trabajar) en la tienda veinte horas. No _____ (salir) de la biblioteca y _____ (comer) sólo en la cafetería. Susana me dijo que ella _____ (perder) más de dos kilos.

MARIO: Yo no, tuve más apetito por el estrés y la tensión. _____ (Subir) más de dos kilos de peso por comer comida basura. Gracias a Dios que ya los exámenes _____ (terminar) ayer. ¿Qué nota piensas que tú _____ (sacar) en la clase de español?

D. Los verbos del presente. Lee el texto sobre Roberto, escoge el verbo correcto y llena los espacios con la forma correcta del verbo. OJO: Utiliza el **PRESENTE solamente**. (18 puntos)

Hola, yo _____ (llamar/llamarse) Roberto Durán y _____ (ser/estar) de Quito. Yo _____ (tener/ser) diecinueve años y _____ (estar/ser) estudiante de la universidad. Esta universidad es muy grande. Hay más de veinte mil estudiantes. Este semestre yo _____ (tomar/buscar) quince créditos. Muchas de mis clases _____ (ser/ estar) difíciles, pero yo _____ (preferir/conocer) tomar las clases de ciencias. Mi primera clase es de biología a las 9:00 de la mañana. Por las mañanas mis amigos y yo siempre _____ (salir/tomar) el autobús para ir a clase. Mi casa _____ (ser/estar) muy lejos de la universidad. Durante la semana nosotros _____ (estudiar/gustar) mucho para nuestras clases y los profesores están muy contentos con nosotros. Sin embargo, los fines de semana a mí _____ (gustar/molestar) descansar y ver películas. ¡Yo _____ (conocer/saber) bien todas las películas americanas! También me encanta pasear por el centro y practicar mi deporte favorito, el tenis. Mis amigos siempre _____ (buscar/querer) ir al centro porque dicen que hay muchas cosas para hacer. A veces nosotros también comemos el almuerzo en algún restaurante de comida rápida. ¡Nosotros no _____ (querer/tener) mucho dinero porque somos estudiantes! Cuando _____ (hacer/ser) buen tiempo yo _____ (ir/estar) a la piscina de la universidad y me divierto mucho. En la universidad tú _____ (saber/conocer) a muchas personas y es un lugar muy divertido. ¡Me encanta mi vida de estudiante! Yo _____ (saber/conocer) que estos años van a ser muy interesantes.

E. Los objetos directos. Contesta la pregunta con un pronombre del objeto directo. (lo, las, los, etc.)

OJO: Presta atención si necesitas usar **EL PRESENTE O EL PRETÉRITO.** (12 puntos)

1. ¿Comes la carne cada día?

2. ¿Tienes las computadoras en tu casa?

3. ¿Compraron el suéter el viernes?

4. ¿Preparó ella el desayuno por la mañana?

5. ¿Cocina tu mamá los huevos para el desayuno?

6. ¿Tomaste un examen de español el semestre pasado?

Appendix C

Sample Rubric from IS group “Market Scene”

Rúbrica de evaluación, “compras y regateo” (Evaluation Rubric, “buying and bargaining”)

- _____ (20) El/la estudiante participa activamente y se comunica sólo en español durante la actividad. (The student actively participates and only communicates in Spanish during the activity).
- _____ (20) El vocabulario sobre las compras y el regateo es apropiado y variado. (The vocabulary about bargaining and shopping is varied and appropriate. (*Caro, barato, tarjeta de crédito, en efectivo, precio, precio fijo, talla, ganga, marca, dinero, cliente, está bien, aquí tiene*)(*expensive, cheap, credit card, in cash, price, set price, size, bargain, brand, money, client, it's ok, here you go*))
- _____ (20) El/la estudiante usa estructuras gramaticales variadas. (The student uses varied grammatical structures)
- _____ (15) Uso apropiado de los verbos referentes a las compras: *costar, vender, comprar, gastar, quedar bien, probar (se), pagar, dar, devolver, poder, rebajar*. (Appropriate use of the verbs used to refer to buying: to cost, to sell, to buy, to spend, to look good, to try on, to pay, to give, to return, to be able to, to decrease)
- _____ (10) El/la estudiante incluye una descripción detallada de los objetos que trata de vender. Hay concordancia entre adjetivos y sustantivos. (The student includes a detailed description of the objects that he or she is trying to sell. The adjectives and nouns match in gender and number.)
- _____ (15) El/la estudiante negocia los precios adecuadamente. (The student negotiates the prices adequately).

Appendix D

Intensive summer course weekly quiz

Parte I: Sección auditiva

A: Preguntas personales. (8 puntos). Contesta las preguntas con una frase completa.

1. _____
2. _____
3. _____
4. _____

Parte II: Sección escrita

A: Vocabulario (10 puntos) Escribe la palabra de vocabulario. ¡No olvides los artículos!

1. Es amarilla, tiene grasa y la pones en el pan. _____
2. Una fruta amarilla y larga y tiene potasio. _____
3. Se puede comer frito o revuelto para el desayuno. _____
4. Una bebida caliente con mucha cafeína. _____
5. Un tipo de carne típica de *Thanksgiving*. _____
6. Una verdura verde y larga y fina. _____
7. Un carbohidrato que se come mucho en América latina y China. _____
8. Un postre típico del mundo hispano. _____
9. Es un marisco pequeño, rosado y muy sabroso con el bistec. _____
10. El ingrediente más básico de la ensalada; es verde. _____

B: Verbos reflexivos (8 puntos). Contesta las siguientes preguntas sobre tu cuidado personal (personal self-care)

1. Normalmente, ¿a qué hora se acuestan tus padres?
2. ¿Cuántas veces al día te cepillas los dientes?
3. A qué hora se levantan tu compañero/a de cuarto y tú?
4. Qué necesitan hacer Jaime y María antes de la cita?

C: Pronombres directos e indirectos (6 puntos) Escoge la forma correcta del pronombre para completar el párrafo.

Ricitos de Oro entra a la casa de los osos y ve una silla grande. Decide que quiere probar _____. Se sienta en la silla pero no _____ gusta porque es muy dura. Después ve una silla mediana y _____

Prueba también, pero la silla es demasiado blanda. Por fin, ve una silla pequeña y _____ prueba, pero _____ rompe porque ella es demasiado grande. Cuando los osos regresan, el papá oso decide comprar _____ otra sillita al bebé oso.

Appendix E

BACKGROUND QUESTIONNAIRE

Student ID#: _____

Gender: _____ Age: _____

You are a:

Freshman

Sophomore

Junior

Senior

Grad student

Other. Explain: _____

What is your (intended) major? _____

What is your (intended) minor? _____

Which Spanish classes have you **taken** prior to this one? Select all that apply.

- This is my first Spanish class
- 105 (or equivalent)
- 106 (or equivalent)
- 200 (or equivalent)
- 201 (or equivalent)

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

Were any **other languages** spoken in your household when you were growing up? Which ones?

Are you currently enrolled in any English/Composition classes? If so, which classes are you enrolled in?

- I am not **currently** taking any English/Composition courses
- Creative Writing
- Literature
- English for Teachers
- Linguistics
- CO130: Academic Writing
- CO150: College Composition
- CO300: Writing Arguments
- Other: Which one(s)? _____

List any other foreign language classes (**in addition to Spanish**) that you have **completed** in the last three years:

How comfortable are you with English grammar rules? Select **all** that apply.

- I never learned English grammar rules.
- I learned them as a child, but have forgotten them.
- I remember learning them as a child, and still remember a few of them.
- I am learning them now for the first time.
- How comfortable are you with Spanish grammar rules? Select **all** that apply.
- I do not need them to speak/understand Spanish.
- I learn them and they help me, but after a while I do not need them anymore to speak/understand Spanish

○ I remember a few of them. They help me to speak/understand Spanish.
I am learning them now for the first time

Appendix F

PART#1 - ENGLISH

A – TERMINOLOGY

Underline the appropriate part of speech in the following sentences

Example:

Verb: The marathon runners completed the entire course.

Subject: The hippo over there ate two large meals.

Definite article: Have you ever been to the mountains?

Direct object: Jennie bought the present for her brother.

Adjective: Erin and Jack went to a beautiful park yesterday.

Adverb: Connie got dressed quickly because she was going to a party.

Indirect Object: Susan gave a book to her professor in the library.

Verb in the simple past tense: Karrie likes to eat pizza, in fact she ate it yesterday.

Possessive adjective: Luis took his bicycle to a repair shop.

Verb: Hannah and Matt quickly entered into the next race.

Noun: Theaters are always very cold.

Preposition: Mark and Anthony are heading to the park.

Indefinite article: My dad bought me a new car for my birthday.

Infinitive verb: Mary wants to fly to Washington for the weekend.

Verb in simple present: I jog four times a week, but I didn't jog yesterday.

Past participle: Enrique has taken the test five times.

Appendix G

B – ERROR IDENTIFICATION

For each sentence:

Circle if the sentence is correct or incorrect.

If it is incorrect, **rewrite** the sentence fixing the mistakes. If it is correct, go to next sentence.

Explain the grammatical rule that you think has been broken using **as much grammatical terminology** as possible.

Mary and Bob goed to the bar yesterday.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

My friend and I love running in the park.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

Walked in the park yesterday and they had fun.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

The children put their coats on.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

Betty likes his new house.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

I left my house very quick.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

Karrie and her mom been to Paris three times.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

He always exercises after work.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

She have been sick for several days.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

There going to the movies tonight.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

Appendix H

PART#1 – SPANISH

Student ID#: _____

A – TERMINOLOGY

Underline the appropriate part of speech in the following sentences

Example:

Verbo: Jose y yo siempre comemos arroz con pollo.

1. **Objeto directo:** Susana compró leche para su abuela en el supermercado.
2. **Adverbio:** El periodista escribió su artículo rápidamente porque tenía que entregarlo.
3. **Artículo indefinido:** Mi mamá me regaló una blusa por mi cumpleaños.
4. **El verbo en el pretérito:** Mientras estaba escribiendo en la pizarra, María entró en la clase.
5. **Adjetivo:** A mí me gustan mucho los libros interesantes.
6. **Artículo definido:** Los libros de misterio son mis favoritos.
7. **Verbo:** Julia corre en el parque dos veces a la semana.
8. **Preposición:** Carmen puso las manzanas en el refrigerador.
9. **Verbo en el subjuntivo:** Quiero que mi hermana me deje en paz.
10. **Participio:** Tú y yo hemos caminado cuatro millas.
11. **Objeto indirecto:** Ana da un regalo a su novio.
12. **Sujeto:** El hermano de mi mamá se casó ayer.
13. **Nombre/Sustantivo:** Siempre como manzanas verdes.
14. **Adjetivo posesivo:** Nuestra casa tiene tres cuartos.
15. **Verbo Infinitivo:** No puedo ir a la casa de mi amiga este fin de semana.

B – ERROR IDENTIFICATION

PART #2-SPANISH

For each sentence:

1. Circle if the sentence is correct or incorrect.
2. If it is incorrect, **rewrite** the sentence fixing the mistakes. If it is correct, go to next sentence.
3. Explain the grammatical rule that you think has been broken using **as much grammatical terminology** as possible.

1. Miguel y yo comer pan todos los días.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

2. Quiero que mis amigos vienen a mi casa.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

3. El primo de mi tía no conoce Europa.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

4. María y Elena fueron con su padres de vacaciones

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

5. Pepe viajado a Ecuador tres veces.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

6. Nosotros limpiaron la casa anoche.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

7. Susana está jugando al baloncesto en la escuela.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

8. A Ricardo se gusta la película.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

9. Elena ha trabajado en el supermercado por seis años.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

10. Ayer yo tenía un día muy malo.

Correct/Incorrect. If incorrect, write the grammatical version below:

Rule: _____

Appendix J

GPA and grade points equivalent for GPA as covariate

Letter Grade	Grade Point	Letter Grade	Grade Point
A+ (97-100)	4.0	C+ (77-79)	2.3
A (93-96)	4.0	C (73-76)	2.0
A- (90-92)	3.7	C- (70-72)	1.7
B+ (87-89)	3.3	D+ (67-69)	1.3
B (83-86)	3.0	D (65-66)	1.0
B- (80-82)	2.7	F (below 65)	0.0
