Dynamic Written Corrective Feedback and Linguistic Accuracy of University Learners of Spanish

Maria Teresa Company
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Dynamic Written Corrective Feedback and Linguistic Accuracy
of University Learners of Spanish

Maria Teresa Company

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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ABSTRACT

Dynamic Written Corrective Feedback and Linguistic Accuracy of University Learners of Spanish

Maria Teresa Company
Department of Spanish and Portuguese, BYU
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This study evaluated the efficacy of Dynamic Written Corrective Feedback (DWCF) on advanced students’ writing accuracy of Spanish. This method focuses on manageable, meaningful, timely and constant feedback. Previously, DWCF was studied in the context of English as a second language. The current study investigated the efficacy of DWCF in the context of students who were enrolled in an advanced Spanish grammar class at the university level. A comparative study was conducted measuring students’ writing accuracy who received the DWCF against students’ writing accuracy who did not receive this feedback methodology. Results showed that there was not a significant difference in writing accuracy between these two groups of students. However, both groups improved their writing accuracy over time. This study also provided a list of the most frequent writing errors made by 28 students in an advanced Spanish class. The results show that the most frequent linguistic errors for learners of Spanish are accent marks, prepositions, gender and number, punctuation, and word choice.

Keywords: Spanish L2 learners, Spanish L2 writing, Spanish linguistic writing errors
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CHAPTER 1: INTRODUCTION

The acquisition of writing skills in second language (L2) writing is a complex process that takes times and practice. Writing itself is a multifaceted process where different aspects are involved such as fluency, complexity, and accuracy (Tan, 2007). L2 writers not only face the complexity of writing but also the struggles of learning a language and learning to write at the same time (Hyland, 2003; Myles, 2002). They are also concerned about being linguistically accurate in writing since being a competent writer is an important skill for educational purposes (Tan, 2007) and “one of the most salient outcomes of higher education” (Hartshorn et al., 2010, p. 84).

In an endeavor to help L2 writers be more linguistically and lexically competent, written corrective feedback (WCF) or error correction has been widely used as an instructive tool by many L2 writing teachers. However, there is a gap between L2 writing research and L2 writing teaching practices that leaves L2 writing teachers with a dilemma about what methods and practices to use in the classroom to better serve their students (Ferris, 1999, 2010; Guénette, 2007; Russell & Spada, 2006).

One instructional approach that addresses the issue of error correction is Dynamic Written Corrective Feedback (DWCF) (Evans, Hartshorn, McCollum, & Wolfersberger, 2010a; Hartshorn et al., 2010). This methodology provides feedback on what the L2 writers need most and ensures that “writing tasks and feedback are meaningful, timely, constant, and manageable for both student and teacher” (Hartshorn et al., 2010, p. 87). In fact, several studies have already shown that DWCF may enable the improvement of linguistic accuracy in writing (Evans et al., 2010a; Evans, Hartshorn, & Strong-Krause, 2011; Hartshorn et al., 2010; Lee, 2009).

The general purpose of this study is to provide more insight into Spanish L2 writing accuracy inasmuch as “the amount of research available on English L2 writing, when
compared to studies dedicated to Spanish L2 writing, is overwhelming” (Nas & Van Esch, 2014, p. 492). Specifically, the study aims to assess the efficacy of DWCF on the Spanish L2 writing accuracy of students enrolled in Spanish grammar and writing classes. It also aims to collect and provide a selected list of the most frequent linguistic writing errors of Spanish L2 learners.

**Research Aims**

Based on the assumption that raising teacher and learner awareness of linguistic errors will be useful, this study has two aims:

1. To analyze the efficacy of applying DWCF on the writing accuracy of learners of Spanish.
2. To provide a selected list of the most frequent linguistic errors of learners of Spanish.

Although this research focuses on selected linguistic errors made by intermediate high to advanced learners of Spanish applying DWCF at Brigham Young University (BYU), its findings may also provide a guideline for Spanish writing and grammar teachers in other academic institutions and settings.

**Research Questions**

Will university-matriculated learners of Spanish as a second language exposed to one semester of DWCF produce greater linguistic accuracy than students exposed to a traditional process writing and grammar approach?

Along with this main question, the following supplemental question will be addressed:

a. What are the most frequent linguistic errors in writing made by university-matriculated learners of Spanish as a second language?

**Definitions**

Some of the terms used in this research are explained and clarified in this section.
Written Corrective Feedback: Lightbown and Spada (1999) define corrective feedback as “any indication to the learners that their use of the target language is incorrect. This includes various responses that the learners receive” (p. 171-172). Along with this definition, Russell and Spada (2006) describe corrective feedback as “any feedback provided to a learner, from any source that contains evidence of learner error of language form” (p. 134).

Dynamic Written Corrective Feedback: An instructional method that requires interaction between the teacher and the students in order to help students improve their written linguistic accuracy. This instructional approach “draws on principles of L2 acquisition to facilitate improved written linguistic accuracy” (Evans et al., 2011, p. 232). A more detailed description will be given in Chapter 2.

Errors: “Morphological, syntactic and lexical deviations from the grammatical rules of a language that violate the intuitions of native speakers” (Ferris & Hedgcock, 2005, p. 264). In other words, “A linguistic form or combination of forms which, in the same context and under similar conditions of production, would, in all likelihood, not be produced by the speakers’ native speaker counterpart” (Lennon, 1991, p. 182).

Delimitations

This study is limited to the evaluation of the efficacy of DWCF on Spanish L2 writing accuracy. It does not aim to investigate other aspects of writing given that DWCF does not seem to make any significant impact on other aspects of students’ writing, especially at the advanced proficiency level (Hartshorn, 2008). This method is designed to improve linguistic accuracy in writing. Therefore, whether or not DWCF affects other aspects of writing is beyond the scope of this study. Despite this narrow scope, the findings of the study may provide insight on the curriculum development of Spanish L2 writing and grammar classes.
CHAPTER 2: LITERATURE REVIEW

For a better understanding of the complexity of L2 writing and the ongoing debate on error correction, this chapter will examine some of the relevant points of literature. It will begin with a brief explanation of what written corrective feedback is. Next, the debate on error correction will be introduced to better understand the concern of L2 writing and error feedback. This will be followed by a description of DWCF as the tool used to gather the data of this study. Finally, some implications of L2 writing pedagogy will be discussed.

Written Corrective Feedback

Lightbown and Spada (1999) define corrective feedback as “any indication to the learners that their use of the target language is incorrect. This includes various responses that the learners receive” (pp. 171-172). Along with this definition, Russell and Spada (2006) describe corrective feedback as “any feedback provided to a learner, from any source, that contains evidence of learner error of language form” (p. 134).

Although research on the effective of WCF has been inconclusive, this procedure is still used by teachers in responding to students’ writing. This could be one of the reasons why it is still the focus of research, especially on the efficacy of several types of WCF. The main types of WCF that have been the subject of study are explicit vs. implicit WCF and direct vs. indirect WCF.

Ellis, Erlam, and Loewen (2006) state that, in a theoretical point of view, explicit corrective feedback provides more effective learning. However, they provide in their study a table that summarizes some studies comparing implicit and explicit corrective feedback that comes to no conclusion. On the other hand, Ferris and Roberts (2001), in their study on how explicit error feedback should be in L2 writing, conclude that less explicit feedback and corrections coded by error type seem to help students to self-edit.
Regarding whether feedback should be direct or indirect, the research evidence is also inconclusive. In the study carried out by Lalande (1982), the students who received indirect corrective feedback did better than those who received direct correction. However, in the study done by Chandler (2003), direct corrective feedback helped to improve writing accuracy in L2 learners. On the other hand, Van Beuningen, De Jong, and Kuiken (2008) found positive effects of both direct and indirect corrective feedback in improving writing accuracy, but that only direct feedback was more beneficial in the long-term.

Thus, the different studies carried out on WCF have not yet determined conclusively whether it is beneficial to L2 writers. Further research is needed to provide more conclusive evidence about the effectiveness of WCF as well as which type of corrective feedback is more beneficial, which proficiency levels can benefit from it, and how direct and explicit it should be.

**Debate on Error Correction**

The topic of error correction has become an ongoing debate among researchers, inasmuch as studies on error feedback have not yet reached consistent results (Bitchener, Young, & Cameron, 2005; Chandler, 2003; Evans, Hartshorn, & Tuioti, 2010b; Ferris, 1999, 2004; Ferris and Roberts, 2001; Truscott, 1996, 1999, 2007). This inconsistency among studies on the role of error correction in the language classroom has contributed to different opinions toward error feedback, which has sparked a discussion among L2 writing scholars (Ferris, 1999, 2002, 2004, 2010; Truscott, 1996, 1999, 2007).

The strongest position against error correction has been taken by Truscott (1996, 1999, 2007) who has fervently claimed that “grammar correction has no place in writing courses and should be abandoned” (1996, p. 328) because of its negative effects such as taking time away from other more vital writing problems. Opposed to Truscott’s claim, other researchers have taken the position that research on the subject of error feedback is
not conclusive yet and that more research on this matter is needed (Bitchener et al., 2005; Chandler, 2003; Ferris, 1999, 2004).

To give a different perspective on this debate, Guénette (2007) compared various studies on WCF, concluding that the different findings regarding error correction are due to the fact that the research design and methodology are dissimilar or flawed. She insists that “we need designs that address different issues and control as many variables as possible” and that “we also need descriptive studies that will take the whole context into account, in and out of the classroom” (p. 51).

Bruton (2009) has also given a different perspective on error correction. He claims that error feedback offered on communicative writing tasks in a helpful and positive environment will not harm students ‘writing. His argument here is that research on error correction can only have meaningful pedagogical implication for L2 writing teachers “if it is conducted within a decision-making framework to extended communicative writing development, under reasonably authentic classroom circumstances” (p. 611). This suggests contemplating relevant pedagogical outcomes first and then posing research questions.

**Dynamic Written Corrective Feedback**

Inasmuch as this debate has not yet reached any conclusion, improving error correction methods may be seen as a possible solution to facilitate learning and achieve more effective L2 writing pedagogy. Actually, in response to the question as to whether or not to correct written grammatical errors that certain researchers have suggested that an important question would be how to provide error correction (Evans et al., 2010a; Evans et al., 2011; Hartshorn et al., 2010). It may not be the case that error correction does not work, but rather that error correction has not been done correctly (Evans et al., 2010a).

To answer this how, Evans (2011) proposed a strategy: DWCF. It is an instructional method that requires interaction between the teacher and the students. It consists of writing...
a 10-minute paragraph at the beginning of almost every class period. The teacher then provides indirect, coded feedback on the students’ paragraphs. Those paragraphs are then returned to the students who have to edit their paragraphs according to the teacher’s feedback. This process of the teacher giving feedback and the students editing their paragraphs continues until the paragraph is error-free.

DWCF has two main purposes. The first purpose is to ensure that “writing tasks and feedback are meaningful, timely, constant, and manageable for both student and teacher” (Hartshorn et al., 2010, p. 87). The second purpose is to guarantee that “feedback reflects what the individual learner needs most as demonstrated by what the learner produces” (Evans et al., 2010a, p. 8).

Evans (2011) and Hartshorn (2010) affirm that DWCF accomplishes these two purposes because of its instructional characteristics. First, it provides meaningful feedback by giving a reason for the feedback to students, by not going beyond students’ linguistic ability, and by engaging students in self-correction. Second, it provides timely feedback by minimizing the time gap between students’ writing and the teacher’s feedback. Third, it provides constant feedback, which will be more effective than sporadic feedback (Ferris, 2004). Fourth, it provides manageable feedback by having students write a ten-minute paragraph. Ten minutes “is long enough to capture a representative sample of student writing while still enough to keep the tasks and feedback manageable” (Evans et al., 2010a, p. 10). Finally, it provides feedback that mirrors students’ individual needs “based on factors such as first language, language aptitude, and the reasons for learning a second language” (Evans et al., 2010a, p. 8).

This error-correction method has been applied in various contexts with positive results in learners’ linguistic accuracy (Evans et al., 2010a; Evans et al., 2011; Hartshorn et al., 2010; Lee, 2009). These positive results seem to support the assumption that learners
can improve their linguistic accuracy if appropriate error correction is applied (Bitchener, 2008; Ferris, 2002). However, as Bruton (2009) said, this method may not be appropriate for all L2 learners and in all contexts.

**Pedagogical Implications for L2 Writing**

Understanding the different perspectives on error correction could provide better insight in the implications for L2 writing pedagogy. We should consider the teachers’ perspective as well as the learners’ perspective. Indeed, L2 writing teachers and L2 writers are the ones who must deal with error correction and the ones who could provide better comprehension of what is needed in L2 writing classes.

Teachers have seen that it is usually difficult to improve writing without providing any kind of feedback on errors (Bitchener et al., 2005; Evans et al., 2010a; Evans et al., 2011; Ferris, 2006; Myles, 2002; Sheen, 2007). Evans, Hartshorn, and Tuioti (2010b) distributed an online survey to L2 writing teachers to answer two questions: “a) to what extent do current L2 writing teachers provide WCF? and b) what determines whether or not practitioners choose to provide WCF?” (p. 53). They reported that a vast majority (95%) of L2 writing teachers who were surveyed provide WCF for several reasons, specifically because it helps students and because students expect it and need it. This study is valuable since there was a large number of participants who were experienced writing instructors teaching in more than sixty different countries.

Likewise, L2 writers are also concerned about writing accuracy. Many have high writing expectations and a great desire to improve their linguistic accuracy (Ferris & Hedgcock, 2005). They want to write “close to error-free texts” and be more accurate and proficient writers (Myles, 2002, p. 1). However, even highly advanced and trained L2 writers still exhibit numerous problems and shortfalls because they may encounter many
difficulties producing more linguistically accurate writing (Ferris, 2009; Hinkel, 2004; Silva, 1993).

It seems that whatever approach teachers take to L2 writing, there is still a need to reduce the struggles that L2 writers face. As Ellis, Sheen, Murakami, and Takashima (2008) have suggested, more studies are necessary to be able to identify more effective ways to help L2 learners write more accurately. Similarly, there is also a need to focus on “teachers’ development of knowledge about how to give effective feedback” (Hyland, 2010, p. 180).

The ongoing debate on error correction has impacted teachers and researchers differently. Researchers may see this as an opportunity to keep looking for answers to their questions. However, teachers are left with a dilemma in which they do not know how to help their students write more effectively and accurately (Evans et al., 2010a; Ferris, 2010); they may not know how to interpret or apply the results of L2 writing research. While they are confused about what to do because of the gap between research and practice regarding L2 writing, they keep seeing linguistic errors in their students’ writing and have few ideas on how to help.

DWCF seems to be a feasible strategy in some specific contexts to help L2 learners in their endeavors of becoming competent L2 writers. Actually, because research on Spanish L2 writing has been neglected (Nas & Van Esch, 2014), applying this methodology to Spanish SL writing or grammar classes could bring more light to the research available in Spanish L2 writing.

The study of the efficacy of DWCF would be significant to teachers and learners, not only to understand errors per se, but to improve writing accuracy. Hence, it is a logical step to also compile a list of the most frequent linguistic errors made by learners of Spanish in an effort to help teachers provide meaningful and specific error feedback and to help
learners to develop strategies of self-correction. The following chapter will explain the methodology used to examine this writing feedback methodology and to compile a list of these writing linguistic errors.
CHAPTER 3: METHODOLOGY

This chapter presents the methodology applied to answer the research questions: 1. Will university-matriculated learners of Spanish as a second language exposed to one semester of DWCF produce greater linguistic accuracy than students exposed to a traditional process writing and grammar approach?, and 2. What are the most frequent linguistic errors in writing made by university-matriculated learners of Spanish as a second language? The first section will describe the participants and instructional context. The second section will explain the research design used. The instructional methods followed by both groups and the instrument in the study will then be described. Finally, the procedures used to carry out this study and analysis of the data will be discussed.

Participants and Instructional Context

All participants were enrolled in a Spanish grammar class required for their Spanish major or minor. It is an advanced Spanish class, which fulfills the university core language requirement. This class involves analyzing literary works, studying and applying advanced grammar rules as well as writing short compositions.

Due to the organization of university classes, the participants were not able to be selected randomly. Therefore, the participants were composed of two intact groups or two different sections of the same class. One class was the control group with a total of 24 participants, and the other class was the experimental group with a total of 28 participants. Both groups were taught by the same teacher (not the researcher).

The majority of the participants in both groups, the experimental and control, performed missionary service in a Spanish speaking country for a year and half to two years, where they learned the Spanish language. Their ages ranged from 18 to 25. The control group was enrolled in a morning class from 9:30-10:45 am., and the experimental group was enrolled in an evening class from 4:30-5:20 pm. Both groups attended this class
twice a week, Tuesdays and Thursdays. Table 1 provides further demographic information about the participants.

Table 1

Participants’ Demographic Information

<table>
<thead>
<tr>
<th>GROUP</th>
<th>GENDER</th>
<th>STANDING</th>
<th>EMPHASIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (24 students)</td>
<td>14 males</td>
<td>7 junior</td>
<td>13 undeclared major</td>
</tr>
<tr>
<td></td>
<td>10 females</td>
<td>17 senior</td>
<td>11 declared major</td>
</tr>
<tr>
<td>Experimental (28 students)</td>
<td>19 males</td>
<td>2 freshman</td>
<td>17 undeclared major</td>
</tr>
<tr>
<td></td>
<td>9 females</td>
<td>11 sophomore</td>
<td>11 declared major</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 junior</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 senior</td>
<td></td>
</tr>
</tbody>
</table>

The teacher of both groups was an associate teaching professor of the university who has taught Spanish university classes for about 17 years. Specifically, she has been teaching the class used in this study for about 8 years. She is also a Spanish native speaker.

Research Design

This study was designed as an adapted replication of the study carried out by Evans, Hartshorn, and Strong-Krause (2011) on the efficacy of DWCF on English L2 learners’ writing. This study also tried to follow some of the recommendations given by Bruton (2009) on corrective feedback research. These recommendations include having a control and an experimental group, administering a pre-test and a post-test, and ensuring that students pay some attention to the feedback (e.g. making learners rewrite their text after the corrective feedback).

A static-group pretest-posttest design or a nonequivalent control group pretest-posttest was used in this study since two intact groups were used. A diagram of this design is illustrated in Table 2.
Table 2

*Pretest, Posttest Nonequivalent Control Group Design*

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>O1</td>
<td>X</td>
<td>O2</td>
</tr>
<tr>
<td>Control</td>
<td>O1</td>
<td></td>
<td>O2</td>
</tr>
</tbody>
</table>

*Note.* O1 = pretest; O2 = posttest; X = treatment

**Instructional Methods**

The control and the experimental groups were instructed differently. The control group was taught as usually has been done in this class. They learned grammatical concepts and rules, completed some grammatical tasks to apply these rules, and wrote four short compositions.

The experimental group was also taught grammatical concepts and rules and wrote two short compositions instead of four as the control group did. However, the experimental group received the treatment consisting of writing 10-minute paragraphs focused on accuracy once a week, followed by the DWCF (see Figure 1). The total number of paragraphs written was 10. The treatment replaced the two extra compositions that were written by the control group.

The treatment or the DWCF method is explained in the following figure, which represents the six-step process.
Figure 1. Overview of Error-Correction Strategy (Evans et al., 2010a, p. 454)

However, the six steps of this methodology were not able to be carried out completely in this study due to the class curriculum. The students in the experimental group were only able to edit their paragraphs once. The students wrote a paragraph once a week and received feedback using DWCF. After receiving feedback, they edited their paragraph by themselves. The cycle then was interrupted because the students were not able to revise this same paragraph again due to time restrictions.

In addition, it should be taken into consideration that the teacher also provided indirect, coded feedback on the students’ short compositions that both groups, the experimental and control groups, wrote. All students in both groups were able to write four drafts of each of their short-compositions on which they received feedback using the instructor’s own coding system as well (see Appendix A). Thus, the control group also received indirect, coded feedback provided by the teacher as well as the experimental group.
**Instrumentation**

To answer the main research question, both groups completed the same 30-minute pretest and posttest essays. The prompt of the pre-test was not the same as the prompt in the post-test to control for the testing threat ("practice" effect) to internal validity. Although the students wrote their responses in Spanish, these prompts were given to the students in English so as not to provide extraneous vocabulary hints. Table 3 shows the prompts used in the pre and posttests for both groups.

Table 3

*Pretest and Posttest Prompts*

<table>
<thead>
<tr>
<th>Test</th>
<th>Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Some people believe that university students should be required to attend classes. Others believe that going to classes should be optional for students. Which point of view do you agree with? Use specific reasons and details to explain your answer.</td>
</tr>
<tr>
<td>Posttest</td>
<td>It has been said, &quot;Not all learning takes place in the classroom.&quot; Compare and contrast knowledge gained from personal experience with knowledge gained from classroom instruction. In your opinion, which source is more important? Why</td>
</tr>
</tbody>
</table>

The 10-minute paragraphs written by the experimental group were used to answer the supplemental research question. In order to list the most frequent linguistic errors made by the students, an error tally sheet was created (See Appendix B). Because the experimental group was instructed using the DWCF method, most of the feedback was provided indirectly in the form of coded symbols. The students then were required to record the error types on this error tally sheet, which was collected to answer the supplemental research question. This error tally sheet is an adaptation of the one used by Company (2012) in her study on error frequencies among ESL writers. Even though this tally sheet included twenty one different kinds of writing errors, this study only considered seventeen of them. The errors categorized as *the meaning unclear* (?), *awkward wording* (AWK), *omit* ( ), and *something is missing* (˄) were excluded from the error...
analysis inasmuch as these errors could encompass several things. The coded symbols used are presented below in Table 4. The categories and symbols presented here are an English version of the Spanish version used in the study (see Appendix C for the Spanish version).

Table 4

*Error Categories and Codes Used in Researcher Marking and in Analysis*

<table>
<thead>
<tr>
<th>Error Category</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determiner</td>
<td>D</td>
</tr>
<tr>
<td>Verb tense</td>
<td>VT</td>
</tr>
<tr>
<td>Indicative/Subjunctive</td>
<td>I/S</td>
</tr>
<tr>
<td>Reflexive verb</td>
<td>RV</td>
</tr>
<tr>
<td>Relative pronouns</td>
<td>RP</td>
</tr>
<tr>
<td>Verb to be (<em>ser/estar</em>)</td>
<td>S/E</td>
</tr>
<tr>
<td>Preposition</td>
<td>PP</td>
</tr>
<tr>
<td>Spelling</td>
<td>SPG</td>
</tr>
<tr>
<td>Word form</td>
<td>WF</td>
</tr>
<tr>
<td>Word choice</td>
<td>WC</td>
</tr>
<tr>
<td>DO &amp; IO pronouns</td>
<td>PN</td>
</tr>
<tr>
<td>Gender &amp; number</td>
<td>G/N</td>
</tr>
<tr>
<td>Accent mark</td>
<td>A</td>
</tr>
<tr>
<td>Word order</td>
<td>WO</td>
</tr>
<tr>
<td>Capitalization</td>
<td>C</td>
</tr>
<tr>
<td>Punctuation</td>
<td>P</td>
</tr>
<tr>
<td>Subject-verb agreement</td>
<td>SV</td>
</tr>
</tbody>
</table>

Although the researcher did not interfere in the teacher’s instruction, she helped the teacher provide feedback on the errors made on the 10-minute paragraphs by marking each error on the students’ writing using the symbol codes. The following sentence shows an example of this kind of feedback: *El escalador subió a cima de montaña.*

The error categories and codes were explained once to the students in the experimental group before they started writing their paragraphs. These errors categories and codes were introduced using the sheet shown in Appendix C. At that point, the students received an instructional packet with further explanation on these errors and how to edit them (see Appendix D).
All pre and posttests were rated by two different raters. One of them was the researcher who is a Spanish native speaker. The other rater was an undergraduate student majoring in Spanish teaching who had taught Spanish university classes at the intermediate level. This second rater learned Spanish in his two-years stay in a Spanish speaking country. He was instructed by the researcher on how to rate the pre and posttests using the error categories and codes provided by the researcher. He was also provided with the same instructional packet that the students received on how to interpret the error codes and correct their errors (see Appendix D).

**Data Collection and Analysis**

Students in both the treatment and control groups typed their pretest and posttest essays using a laptop or computer under the supervision of their teacher. After 30 minutes, the teacher did not allow the students to keep typing. The tests were then forwarded to the researcher.

Once the tests were forwarded, each essay was labeled with a code, so the two raters were not able to identify names with the essays. Each group was marked with C for the control group and E for the experimental group. The pretest essays were also distinguished from the posttest essays by being marked as 1 for the pretest and 2 for the posttest. The students’ names were also coded using numbers, which allowed for the identification of the students.

To answer the main research question, the linguistic accuracy of students’ 30-minute essays in both the pre and posttest was evaluated by calculating an accuracy ratio for each error type. This was done by subtracting from 1 the result of dividing the total number of each type of error made by the number of words written: 1- (# errors / # words). The ratios of each error type were used to conduct a repeated measure ANOVA test to compare mean error ratios from students in the control group with those from students in
the experimental group, as well as ratios from students on the pretest with ratios on the posttest.

To answer the supplemental research question, the error tally sheets from each student in the experimental group were collected. Each type of error made by each student in their paragraphs was tallied to obtain the total number of errors and total number of errors of each type of error that the students made. Next, the percentage or average of each type of error from the total number of errors made by the students was calculated to obtain the mean of each error type made by the students in their paragraphs.

The results of the study will be discussed in Chapter 4.
CHAPTER 4: RESULTS

The purpose of this chapter is threefold. First, the chapter reports the Pearson correlation estimated to establish the reliability between the two raters (the researcher and the second rater) in the process of rating and counting the errors on the pre and posttests. Second, it presents the results of the repeated measures ANOVA computed to answer the main research question. Finally, it provides the results of most frequent linguistic errors to answer the supplemental question.

Reliability Estimates

To assess the reliability of measurements that were used in this study, all essays in the pretest and posttest were double rated. Two different raters independently rated and counted the total number of errors in the pre and posttest. Next, a Pearson correlation coefficient was calculated for each individual rating to determine if there was a high or strong correlation in the total number of errors identified in each essay-test by each rater. These correlations are presented in Table 5. As can be seen, correlations ranged from 0.88 to 0.97, suggesting an acceptable degree of inter-rater reliability.

Table 5

<table>
<thead>
<tr>
<th>Error Type</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>0.95</td>
</tr>
<tr>
<td>VT</td>
<td>0.92</td>
</tr>
<tr>
<td>I/S</td>
<td>0.96</td>
</tr>
<tr>
<td>RV</td>
<td>0.87</td>
</tr>
<tr>
<td>RP</td>
<td>0.90</td>
</tr>
<tr>
<td>S/E</td>
<td>0.93</td>
</tr>
<tr>
<td>PP</td>
<td>0.97</td>
</tr>
<tr>
<td>SPG</td>
<td>0.92</td>
</tr>
<tr>
<td>WF</td>
<td>0.93</td>
</tr>
<tr>
<td>WC</td>
<td>0.96</td>
</tr>
<tr>
<td>PN</td>
<td>0.94</td>
</tr>
<tr>
<td>G/N</td>
<td>0.96</td>
</tr>
<tr>
<td>A</td>
<td>0.93</td>
</tr>
<tr>
<td>WO</td>
<td>0.88</td>
</tr>
<tr>
<td>C</td>
<td>0.91</td>
</tr>
<tr>
<td>P</td>
<td>0.88</td>
</tr>
<tr>
<td>SV</td>
<td>0.89</td>
</tr>
</tbody>
</table>
ANOVA Test Results

Before presenting the results from the statistical tests of the repeated measures ANOVA, it will be worth mentioning that the control group had an average of 27 errors per student over an average of 370 words written in the pretest, and an average of 17 errors per student over an average of 300 words written in the posttest, compared to the experimental group that had an average of 29 errors over an average of 401 words written in the pretest and an average of 25 errors over an average of 379 words written in the posttest. On both tests, it appears that the control group wrote fewer words, but with a higher degree of accuracy than the experimental group. Both groups improved their writing accuracy.

Table 6 provides a summary of the repeated measure ANOVA test for each error type, based on the accuracy ratio described in Chapter 3: [1 - (#errors / #words)]. Table 5 shows that the mean change in student errors from pre to post did not differ significantly between the two groups, and that effect sizes or partial eta squared numbers were quite small, meaning that very little of the total variance in student errors was associated with membership in the experimental or control group.

Although there is not a statistically significant difference between groups, both groups improved over time. Some of these improvements were on determiners, indicative and subjunctive, and reflexive verbs. If we established $p < 0.05$ as statistically significance, we can see these improvements of both groups over time on determiners ($p = 0.025$), on the indicative and subjunctive ($p = 0.036$), and on reflexive verbs ($p = 0.39$).
Table 6

**Effect by Time and by Group**

<table>
<thead>
<tr>
<th>Error</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Time</td>
<td>$F(1,50) = 5.339, p = .025$, partial eta squared = .096</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .026, p = .872$, partial eta squared = .001</td>
</tr>
<tr>
<td>VT</td>
<td>Time</td>
<td>$F(1,50) = .084, p = .774$, partial eta squared = .002</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = 1.308, p = .258$, partial eta squared = .025</td>
</tr>
<tr>
<td>I/S</td>
<td>Time</td>
<td>$F(1,50) = 4.630, p = .036$, partial eta squared = .085</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .271, p = .605$, partial eta squared = .005</td>
</tr>
<tr>
<td>RV</td>
<td>Time</td>
<td>$F(1,50) = 4.511, p = .039$, partial eta squared = .083</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .701, p = .407$, partial eta squared = .014</td>
</tr>
<tr>
<td>RP</td>
<td>Time</td>
<td>$F(1,50) = 1.967, p = .167$, partial eta squared = .038</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .000, p = .984$, partial eta squared = .000</td>
</tr>
<tr>
<td>S/E</td>
<td>Time</td>
<td>$F(1,50) = .221, p = .640$, partial eta squared = .004</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .113, p = .738$, partial eta squared = .002</td>
</tr>
<tr>
<td>PP</td>
<td>Time</td>
<td>$F(1,50) = 1.193, p = .280$, partial eta squared = .023</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = 2.321, p = .134$, partial eta squared = .044</td>
</tr>
<tr>
<td>SPG</td>
<td>Time</td>
<td>$F(1,50) = 3.271, p = .077$, partial eta squared = .061</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .036, p = .880$, partial eta squared = .001</td>
</tr>
<tr>
<td>WF</td>
<td>Time</td>
<td>$F(1,50) = .002, p = .962$, partial eta squared = .000</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .383, p = .539$, partial eta squared = .008</td>
</tr>
<tr>
<td>WC</td>
<td>Time</td>
<td>$F(1,50) = 1.234, p = .272$, partial eta squared = .024</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .405, p = .527$, partial eta squared = .008</td>
</tr>
<tr>
<td>PN</td>
<td>Time</td>
<td>$F(1,50) = .066, p = .798$, partial eta squared = .001</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .501, p = .482$, partial eta squared = .010</td>
</tr>
<tr>
<td>G/N</td>
<td>Time</td>
<td>$F(1,50) = .000, p = .983$, partial eta squared = .000</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .600, p = .442$, partial eta squared = .012</td>
</tr>
<tr>
<td>A</td>
<td>Time</td>
<td>$F(1,50) = 1.044, p = .312$, partial eta squared = .020</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .023, p = .879$, partial eta squared = .012</td>
</tr>
<tr>
<td>WO</td>
<td>Time</td>
<td>$F(1,50) = 2.036, p = .160$, partial eta squared = .039</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .005, p = .945$, partial eta squared = .000</td>
</tr>
<tr>
<td>C</td>
<td>Time</td>
<td>$F(1,50) = 1.891, p = .175$, partial eta squared = .036</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .237, p = .629$, partial eta squared = .005</td>
</tr>
<tr>
<td>P</td>
<td>Time</td>
<td>$F(1,50) = .362, p = .150$, partial eta squared = .007</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = .982, p = .327$, partial eta squared = .019</td>
</tr>
<tr>
<td>SV</td>
<td>Time</td>
<td>$F(1,50) = .376, p = .543$, partial eta squared = .007</td>
</tr>
<tr>
<td></td>
<td>Time by group</td>
<td>$F(1,50) = 1.218, p = .275$, partial eta squared = .024</td>
</tr>
</tbody>
</table>

**t test Results**

To look at the effect of DWCF in students’ accuracy writing on the paragraphs that the experimental group wrote, a $t$ test was run to compare the first three with the last three in terms of the mean number of errors per paragraph. Choosing the three first and last paragraphs provides more reliability because this way includes more than one occasion and paragraph. Different occasions and paragraph topics could affect the quality or accuracy of
the writing. Table 7 shows the results of the $t$ test comparing the first three paragraphs with the last three paragraphs. It is found that there is a statistical difference ($p = .0247$) between the means of the students on their first three and their last three paragraphs. This means that the students in the experimental group improved from the beginning to the end of the semester. This may not be exclusively due to the DWCF, since a comparison of the students’ writing in the control group cannot be performed because this group did not write the ten 10-minute paragraphs. However, we can confirm again that at least the DWCF did not have a negative effect on students’ writing accuracy, and they made significant improvement.

Table 7

*Comparison of First Three Paragraphs with Last Three Paragraphs*

<table>
<thead>
<tr>
<th></th>
<th>Variable 1</th>
<th>Variable 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>24,92857143</td>
<td>20,92857</td>
</tr>
<tr>
<td>Variance</td>
<td>148,5132275</td>
<td>136,5873</td>
</tr>
<tr>
<td>Observations</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.722887946</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>2.378576034</td>
<td></td>
</tr>
<tr>
<td>$P(T&lt;=t)$ one-tail</td>
<td>0.012357099</td>
<td></td>
</tr>
<tr>
<td>$t$ Critical one-tail</td>
<td>1.703288446</td>
<td></td>
</tr>
<tr>
<td>$P(T&lt;=t)$ two-tail</td>
<td>0.024714198</td>
<td></td>
</tr>
<tr>
<td>$t$ Critical two-tail</td>
<td>2.051830516</td>
<td></td>
</tr>
</tbody>
</table>

Table 8 also compares errors in the writing of the experimental group in the pretest (1) and the posttest (2). Taking $p<.05$, Table 8 shows that there is statistical significance for the following types of errors: determiners (D), relative pronouns (RP), prepositions (PP), gender and number (G/N), accent mark (A), and subject and verb agreement (SV). In each case, students performed significantly better on the posttest than on the pretest.
Table 8

**Paired Sample Correlation: Pretest & Posttest - Experimental Group**

<table>
<thead>
<tr>
<th>Pair</th>
<th>Category</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>D1 &amp; D2</td>
<td>28</td>
<td>.655</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 2</td>
<td>TV1 &amp; TV2</td>
<td>28</td>
<td>.258</td>
<td>.185</td>
</tr>
<tr>
<td>Pair 3</td>
<td>I/S1 &amp; I/S2</td>
<td>28</td>
<td>.280</td>
<td>.150</td>
</tr>
<tr>
<td>Pair 4</td>
<td>RV1 &amp; RV2</td>
<td>28</td>
<td>.088</td>
<td>.655</td>
</tr>
<tr>
<td>Pair 5</td>
<td>RP1 &amp; RP2</td>
<td>28</td>
<td>.393</td>
<td>.038</td>
</tr>
<tr>
<td>Pair 6</td>
<td>S/E1 &amp; S/E2</td>
<td>28</td>
<td>-.106</td>
<td>.592</td>
</tr>
<tr>
<td>Pair 7</td>
<td>PP1 &amp; PP2</td>
<td>28</td>
<td>.407</td>
<td>.031</td>
</tr>
<tr>
<td>Pair 8</td>
<td>SPG1 &amp; SPG2</td>
<td>28</td>
<td>.327</td>
<td>.089</td>
</tr>
<tr>
<td>Pair 9</td>
<td>WF1 &amp; WF2</td>
<td>28</td>
<td>.001</td>
<td>.995</td>
</tr>
<tr>
<td>Pair 10</td>
<td>WC1 &amp; WC2</td>
<td>28</td>
<td>-.072</td>
<td>.717</td>
</tr>
<tr>
<td>Pair 11</td>
<td>PN1 &amp; PN2</td>
<td>28</td>
<td>-.124</td>
<td>.529</td>
</tr>
<tr>
<td>Pair 12</td>
<td>G/N1 &amp; G/N2</td>
<td>28</td>
<td>.682</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 13</td>
<td>A1 &amp; A2</td>
<td>28</td>
<td>.595</td>
<td>.001</td>
</tr>
<tr>
<td>Pair 14</td>
<td>WO1 &amp; WO2</td>
<td>28</td>
<td>-.221</td>
<td>.258</td>
</tr>
<tr>
<td>Pair 15</td>
<td>C1 &amp; C2</td>
<td>28</td>
<td>-.114</td>
<td>.564</td>
</tr>
<tr>
<td>Pair 16</td>
<td>P1 &amp; P2</td>
<td>28</td>
<td>-.036</td>
<td>.857</td>
</tr>
<tr>
<td>Pair 17</td>
<td>SV1 &amp; SV2</td>
<td>28</td>
<td>.475</td>
<td>.011</td>
</tr>
</tbody>
</table>

The Most Frequent Linguistic Errors Made by SSL Writers

Before presenting the most frequent linguistic errors in writing, it is worth noting that the total number of errors for each category of linguistic error may not indicate how difficult that linguistic error was for the students. It simply indicates the frequency with which linguistic errors occur in the paragraphs that the students wrote. For instance, accent mark errors are more frequent than word choice errors, but accent marks may be less difficult than word choice for L2 writers.

To answer the supplemental research question, the total number of errors and the total number of each type of error, percentage, and mean value of errors made by the students in the experimental group in their paragraphs were considered. Table 9 shows the total number of errors for each category of linguistic errors as well as its percentage and mean value or mean number of errors per composition. Error numbers and percentages were rounded and sorted in descending order of frequency. The results of the mean values
show that the five most common errors are accent marks (17.47), prepositions (13.42),
gender and number (10.15), punctuation (9.71), and word choice (9.22).

Table 9

Errors per Paragraph and Percentage per Category

<table>
<thead>
<tr>
<th>Errors</th>
<th>Total no. of errors</th>
<th>Percentage (%)</th>
<th>Mean (N=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>358</td>
<td>17.47</td>
<td>12.79</td>
</tr>
<tr>
<td>PP</td>
<td>275</td>
<td>13.42</td>
<td>9.82</td>
</tr>
<tr>
<td>G/N</td>
<td>208</td>
<td>10.15</td>
<td>7.43</td>
</tr>
<tr>
<td>P</td>
<td>199</td>
<td>9.71</td>
<td>7.11</td>
</tr>
<tr>
<td>WC</td>
<td>189</td>
<td>9.22</td>
<td>6.75</td>
</tr>
<tr>
<td>SPG</td>
<td>184</td>
<td>8.98</td>
<td>6.57</td>
</tr>
<tr>
<td>VT</td>
<td>152</td>
<td>7.42</td>
<td>5.43</td>
</tr>
<tr>
<td>D</td>
<td>131</td>
<td>6.39</td>
<td>4.68</td>
</tr>
<tr>
<td>I/S</td>
<td>100</td>
<td>4.88</td>
<td>3.57</td>
</tr>
<tr>
<td>PN</td>
<td>45</td>
<td>2.20</td>
<td>1.61</td>
</tr>
<tr>
<td>C</td>
<td>45</td>
<td>2.20</td>
<td>1.61</td>
</tr>
<tr>
<td>S/E</td>
<td>43</td>
<td>2.10</td>
<td>1.54</td>
</tr>
<tr>
<td>RV</td>
<td>38</td>
<td>1.85</td>
<td>1.36</td>
</tr>
<tr>
<td>SV</td>
<td>24</td>
<td>1.17</td>
<td>0.86</td>
</tr>
<tr>
<td>WO</td>
<td>23</td>
<td>1.12</td>
<td>0.82</td>
</tr>
<tr>
<td>WF</td>
<td>22</td>
<td>1.07</td>
<td>0.79</td>
</tr>
<tr>
<td>RP</td>
<td>13</td>
<td>0.63</td>
<td>0.46</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2049</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

For a better understanding of this error frequency and accuracy in writing, these
errors can be also classified in error families (Hartshorn & Evans, 2012): lexical
(prepositions, word form, and word choice), grammatical (determiners, verb tenses,
indicative and subjunctive, reflexive verbs, relative pronouns, verb to be (ser/estar), direct
and indirect object pronouns, gender and number, accent marks, word order, and subject-
verb agreement), and mechanical (spelling, capitalization, and punctuation).

Table 10 displays the percentages of error families and mean values. The results of
the mean values show that the most frequent error family is grammatical (40.54), followed
by lexical (17.36), and then mechanical (15.29).
Table 10

*Error Families per Paragraph and Percentage*

<table>
<thead>
<tr>
<th>Errors</th>
<th>Total no. of errors</th>
<th>Percentage (%)</th>
<th>Mean (N=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical</td>
<td>1135</td>
<td>55.39</td>
<td>40.54</td>
</tr>
<tr>
<td>Lexical</td>
<td>486</td>
<td>23.72</td>
<td>17.36</td>
</tr>
<tr>
<td>Mechanical</td>
<td>428</td>
<td>20.89</td>
<td>15.29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2049</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 5: DISCUSSION AND CONCLUSION

The purpose of this chapter is to discuss the results described in Chapter 4. This will be followed by a discussion of some limitations to this study. This chapter will also address some pedagogical implications and provide suggestions for further research.

Discussion

This study investigated the efficacy of DWCF on advanced Spanish L2 learners’ linguistic accuracy in their 30-minute essay writing, and it further examined and provided a list of the most frequent linguistic writing errors of Spanish L2 learners in their 10-minute paragraph writing. The main research question on the efficacy of DWCF was raised as a result of positive effects of this method found in previous research, which examined the effects of DWCF on the writing accuracy of advanced ESL students (Evans et al., 2010a; Evans, Hartshorn, & Strong-Krause, 2011; Hartshorn et al., 2010).

To answer the research question on the efficacy of DWCF on Spanish L2 writing, a repeated measure ANOVA test was performed to compare the mean performance between subjects. The result of the ANOVA indicated that the improvement in accuracy of the treatment group was not significantly greater than that of the control group. However, both groups improved over time independently. This may suggest that students’ writing tends to improve with revision and repeated practice, regardless of the type of corrective feedback given. It should also be taken in consideration that this method was not able to be performed correctly with its six-step process due to the class curriculum. The students in the experimental group were only able to edit their paragraphs once.

There are other uncontrolled threats to internal validity that should be taken into consideration:

Subject characteristics: All the students in the control groups were juniors or seniors suggesting that they may have attended more Spanish and writing classes in the university.
However, the experimental group included some freshman and sophomore students as well suggesting less maturity in university classes.

**Subject attitudes:** Some subjects in the experimental group seemed to have judged the paragraphs just as homework and not as part of their compositions.

**Location:** The students in the control group were attending a morning class, whereas the students in the experimental group were attending an evening class. The performance of the experimental group may have been affected by the time the class was offered.

**Mortality:** Some students in both groups, the experimental and the control, did not take the pretest and/or the posttest.

**Implementation:** The teacher provided indirect, coded feedback on students’ compositions to the control group as well as to the experimental group. These compositions were the ones required in the class curriculum. The experimental group wrote two short compositions, and the control group wrote four short compositions. This teacher’s feedback to both groups may have affected the results of the findings and added confusion to the experimental group having to deal with two kinds of feedback.

   All of these threats to internal validity may have affected the results of the study. However, despite the threats, the students in both groups improved their linguistic accuracy. This suggests that further research may be needed to evaluate again the efficacy of DWCF where these threats can be controlled.

The second aim of this study was to compile a list of the most frequent linguistic writing errors of L2 learners of Spanish. This compilation has shown that the most frequent errors are accent marks, prepositions, gender and number, punctuation, and word choice. This corroborates the results of other studies on errors made by Spanish L2 learners. These studies also showed that Spanish L2 learners made frequent errors in gender and number,
in prepositions, both of omission and substitution, and in word choice (Guntermann, 1978; Madrid, 1999).

Limitations

There are several limitations in this study. First, the participants could not be randomly selected from a broad population of Spanish L2 learners since they came from two intact groups. Second, some unsuspected variables were introduced that may have affected the results of the study. The teacher provided to both groups an indirect, coded feedback on students’ writing somehow similar to DWCF. The characteristics of the participations and time when the classes were offered may have also affected the results as explained above. Third, the DWCF was not able to be carried out correctly since the curriculum of the course did not allow finishing the six steps required in this methodology, which could have provided constant feedback. Hence, the students were not able to edit their paragraphs in a continuous way. Finally, since the errors were recorded by the students, some errors may have not been properly marked down on the tally sheet. However, these tally sheets were also checked by the researcher, so it is unlikely that this could have altered significantly the data.

Pedagogical Implications

It seems that writing feedback helps to improve writing accuracy. Both groups received feedback on their writing, which resulted in an improvement in the students’ writing accuracy. Feedback can help teachers understand learners’ errors and provide an opportunity to help learners understand and recognize their own errors as well.

In regard to the frequent errors made by the students, it should be kept in mind that some errors may be more serious than others and may have a greater effect on the comprehensibility of a piece of writing. For example, a punctuation error may not be as important as a vocabulary choice error since a punctuation error may not affect the
meaning of a message, but a word choice error may affect comprehensibility. However, some errors that are considered as less serious, punctuation in this case, can become much more serious if they occur very often in a piece of writing. This suggests that teachers may have to decide how serious or important an error is in a piece of writing (Lane & Lange, 1999).

Teachers’ drawing their students’ attention to recurring errors could be beneficial. If errors that learners make more frequently should have priority when correcting errors (Hendrickson, 1978), teachers should be aware of these errors to be able to assist their students. Considering the errors that learners produce frequently could help establish priorities for correcting errors as well as help to develop instructional materials.

Because an accent mark error was the most frequent for the Spanish L2 learners, some grammar activities focused on accent marks could be introduced in the classroom as part of the writing process. There are rules in Spanish that explain how a syllable should be accentuated. Accent marks not only indicate the pronunciation of a word, but also help to distinguish its meaning from that of other words that are spelled similarly but accentuated differently. For example, the word “ejercito” may have different meanings according to where the accent is placed or not placed at all: ejercito = “I exercised”; ejército = “army”; ejercitó = “he/she exercised.” Accent marks may be considered insignificant by students, but they are crucial to the meaning of a word in writing.

Other useful writing activities would be those focused on vocabulary, which could help learners think of specific words to use. Vocabulary knowledge could also help learners with grammar. The reason to believe this is “that knowing the words in a text or conversation permits learners to understand the meaning of the discourse, which in turn allows the grammatical patterning to become more transparent” (Schmitt, 2000, p. 143).
This vocabulary knowledge could include the knowledge of prepositions and their use. It is dangerous to think that translating English prepositions into Spanish prepositions, for instance, would help to transmit the same meaning. This is not the case. Sometimes one language requires a preposition where the other does not. Thus, teaching the most frequent prepositions and their usage could help learners improve their writing accuracy.

It is imperative also to understand that gender and number is a grammar concept that should be addressed in Spanish writing instruction. The number and gender of nouns are very important since they will affect the articles and adjectives as well.

Knowing the most frequent errors may provide a better idea of where learners are starting. It may also help teachers give specific instruction and provided strategies to correct errors. Among various possible strategies for providing feedback on writing, DWCF could be considered. Improving writing accuracy could be difficult and time-consuming, but knowing that there are some frequent errors from the beginning may help facilitate this arduous work of helping learners to be more competent writers.

**Suggestions for Further Research**

This study could be the beginning of several potential studies on L2 writing. Because this study focused on only one semester, one suggestion would be to evaluate the longitudinal effect of DWCF. It would be interesting to know if the same students were to continue receiving DWCF in the following semester, the longitudinal treatment would provide a significant improvement in writing accuracy during the second semester.

Another area of further research is whether or not DWCF affects other aspects of writing such as fluency or complexity. The present study only focused on accuracy. It did not examine any other aspect of writing, but writing encompasses several things not only accuracy, such as fluency or complexity.
Another important suggestion is to repeat this study in a course, whose curriculum allows following completely the steps of DWCF. The circumstances of the course in this study only allowed giving feedback and editing the writing once. The cycle of the DWCF method was not able to be carried out completely.

Moreover, the findings of this study do not tell us anything about the effects of DWCF on specific linguistic features. A study that identifies whether some linguistic features are more treatable with this kind of feedback than others would be a purpose for future research.

Finally, using the results of the most frequent errors, other studies could be done to create teaching materials based on these frequent Spanish L2 linguistic writing errors. These results could be also used in other studies to help evaluate and/or classify errors according to their seriousness or their effect on writing comprehensibility.

**Conclusion**

This study evaluated the efficacy of DWCF on linguistic writing accuracy of Spanish L2 learners. The results showed that even though there was not a significant difference between the experimental and control group, both groups improved over time. This study has also provided more insight into Spanish L2 writing, especially in terms of the most frequent linguistic errors. Among these errors, accent marks and prepositions are the most common for L2 learners of Spanish. It also made available a list with the most frequent linguistic errors that may provide an additional help to Spanish L2 writing teachers to better assist their students. Showing the linguistic difficulties that Spanish L2 learners may encounter will help learners improve their linguistic competence in L2 writing.
References


Bruton, A. (2009). Improving accuracy is not the only reason for writing, and even if it were… *System, 37*, 600-613. doi:10.1016/j.system.2009.09.005


Appendix A: Teacher’s System for Marking Errors

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Spanish Example</th>
<th>English Example</th>
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<tbody>
<tr>
<td>suprimir</td>
<td>otro ejemplo</td>
<td>voy a ir</td>
</tr>
<tr>
<td>añadir</td>
<td>de el estudiante</td>
<td>del estudiante</td>
</tr>
<tr>
<td>unión</td>
<td>¿Por qué?</td>
<td>¿Por qué?</td>
</tr>
<tr>
<td>separación</td>
<td>un extraño chico</td>
<td>un chico extraño</td>
</tr>
<tr>
<td>cambio de orden</td>
<td>chicas simpáticas</td>
<td>chicas simpáticas</td>
</tr>
<tr>
<td>concordancia</td>
<td>ellos tendrán</td>
<td>ellos tendrán</td>
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<tr>
<td>error de conjugación</td>
<td>ayer yo estudié</td>
<td>ayer yo estudié</td>
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<tr>
<td>error de tiempo verbal</td>
<td>ojalá llueve mañana</td>
<td>ojalá llueve mañana</td>
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<tr>
<td>error de modo verbal</td>
<td>trabajo por BYU</td>
<td>trabajo para BYU</td>
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<tr>
<td>preposición</td>
<td>Me gusta la pizza</td>
<td>Me gusta la pizza</td>
</tr>
<tr>
<td>artículo</td>
<td>obediente</td>
<td>obediente</td>
</tr>
<tr>
<td>ortografía</td>
<td>yo naci</td>
<td>yo naci</td>
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<tr>
<td>calco del inglés</td>
<td>ella lió</td>
<td>ella irá</td>
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<tr>
<td>expresión extraña o repetición</td>
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### Appendix B: Error Tally Sheet

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<tr>
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<th>Para 1</th>
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</tbody>
</table>
## Appendix C: Error Symbols Used in Context (Spanish Version)

<table>
<thead>
<tr>
<th>Error Symbol</th>
<th>Description</th>
<th>Example</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Artículo</td>
<td>Mi madre es en enfermera.</td>
<td>Mi madre es enfermera.</td>
</tr>
<tr>
<td>TV</td>
<td>Tiempo verbal</td>
<td>Ella vino mañana.</td>
<td>Ella viene mañana / Ella vendrá mañana.</td>
</tr>
<tr>
<td>I/S</td>
<td>Indicativo/Subjuntivo</td>
<td>Ojalá María se alegra.</td>
<td>Ojalá María se alegre.</td>
</tr>
<tr>
<td>VR</td>
<td>Verbo reflexivo</td>
<td>Ayer acosté tarde.</td>
<td>Ayer me acosté tarde.</td>
</tr>
<tr>
<td>Q/C</td>
<td>Qué/Cuál/Cuáles</td>
<td>¿Qué es tu nombre?</td>
<td>¿Cuál es tu nombre?</td>
</tr>
<tr>
<td>S/E</td>
<td>Ser/Estar</td>
<td>Eso está importante.</td>
<td>Eso es importante.</td>
</tr>
<tr>
<td>PP</td>
<td>Preposición</td>
<td>Hago gimnasia en la mañana.</td>
<td>Hago gimnasia por la mañana.</td>
</tr>
<tr>
<td>O</td>
<td>Ortografía</td>
<td>Pedro recibió muchos regalos.</td>
<td>Pedro recibió muchos regalos.</td>
</tr>
<tr>
<td>FP</td>
<td>Forma de la palabra</td>
<td>La bella es pasajera.</td>
<td>La belleza es pasajera.</td>
</tr>
<tr>
<td>VB</td>
<td>Vocabulario</td>
<td>Hizo el vestido con diferentes fábricas.</td>
<td>Hizo el vestido con diferentes materiales/telas.</td>
</tr>
<tr>
<td>PN</td>
<td>Pronombre CD/Cl</td>
<td>Carmen les paseaba. (a los niños)</td>
<td>Carmen los paseaba.</td>
</tr>
<tr>
<td>G/N</td>
<td>Género/Número</td>
<td>Son personas simpático y feliz.</td>
<td>Son personas simpáticas y felices.</td>
</tr>
<tr>
<td>?</td>
<td>No se entiende</td>
<td>(requiere clarificación)</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>Tilde/Acento</td>
<td>Mi hermano anda y come al entrar.</td>
<td></td>
</tr>
<tr>
<td>OP</td>
<td>Orden de la palabra</td>
<td>Mi padre tiene un camión.</td>
<td>Mi padre tiene un camión.</td>
</tr>
<tr>
<td>^</td>
<td>Falta algo</td>
<td>Tuvimos un buen tiempo en la fiesta.</td>
<td>Lo pasamos bien en la fiesta / Nos divertimos en la fiesta.</td>
</tr>
<tr>
<td>AWK</td>
<td>awkward</td>
<td>Tuvimos un buen tiempo en la fiesta.</td>
<td>Lo pasamos bien en la fiesta / Nos divertimos en la fiesta.</td>
</tr>
<tr>
<td>SV</td>
<td>Concordancia sujeto y verbo</td>
<td>Los vecinos vienen mañana.</td>
<td>Los vecinos vienen mañana.</td>
</tr>
</tbody>
</table>
Appendix D: Instructions for Error Correction Handout

Instrucciones para la corrección de errores

A, artículo: Necesitas añadir, cambiar o quitar un artículo.

Incorrecto: Ser un instructor de baile te puede ayudar a estar en forma.
Correcto: Ser instructor de baile te puede ayudar a estar en forma.

TV, tiempo verbal: Necesitas cambiar el tiempo verbal porque no es el correcto.

Incorrecto: Cuando era pequeño me encantan las espinacas.
Correcto: Cuando era pequeño me encantaban las espinacas.

I/S, indicativo/subjuntivo: El uso del indicativo o subjuntivo es incorrecto.

Incorrecto: Si (yo) venga te aviso.
Correcto: Si vengo te aviso.

VR, verbo reflexivo: El verbo utilizado es reflexivo y necesita el pronombre reflexivo, o es un verbo que aunque no indique una acción reflexiva también necesita un pronombre reflexivo.

Incorrecto: Seco el pelo después de ducharme.
Correcto: Me seco el pelo después de ducharme.

Incorrecto: Di cuenta de que algo estaba mal.
Correcto: Me di cuenta de que algo estaba mal.

Q/C, qué, cuál, cuáles: El uso de qué, cuál, cuáles se ha confundido o es erróneo.

Incorrecto: ¿Qué es tu dirección?
Correcto: ¿Cuál es tu dirección?

Incorrecto: ¿Cuál son tus zapatos?
Correcto: ¿Cuáles son tus zapatos?

S/E, ser/estar: El uso de los verbos ser y estar es incorrecto.

Incorrecto: Ir a su casa ahora está absurdo.
Correcto: Ir a su casa ahora es absurdo.

PP, preposición: Necesitas añadir o cambiar la preposición utilizada.

Incorrecto: Este regalo es por Antonio.
Correcto: Este regalo es para Antonio.

Incorrecto: Mi casa queda cerca de la estación.
Correcto: Mi casa queda cerca de la estación.

O, ortografía: La palabra está escrita incorrectamente. Muchas veces porque la palabra es parecida en inglés.

Incorrecto: Necesitamos desarrollar nuestras habilidades.
Correcto: Necesitamos desarrollar nuestras habilidades.
**FP, forma de la palabra:** La función o categoría gramatical de la palabra utilizada es incorrecta. Por ejemplo, has utilizado el sustantivo en vez del adjetivo o viceversa.

Incorrecto: Lo has escrito *correcto* (adjetivo).
Correcto: Lo has escrito correctamente (adverbio).

Incorrecto: Quiero ser *farmacia* (sustantivo para lugar, materia).
Correcto: Quiero ser farmacéutico (sustantivo para persona).

**VB, vocabulario:** La palabra utilizada no es la correcta o esa palabra no es la adecuada para el contexto de la oración.

Incorrecto: *Atiendo* clase todos los días.
Correcto: Asisto a clase todos los días.

Incorrecto: Tengo *largas* oportunidades.
Correcto: Tengo grandes oportunidades.

**PN, pronombre CD/CI:** Los pronombres del complemento directo o indirecto hay que añadirlos porque faltan o están, pero no son correctos o no concuerdan en género y/o número con el objeto directo o indirecto al que se refieren.

Incorrecto: A la vecina *le* pillaron robando en el supermercado.
Correcto: A la vecina la pillaron robando en el supermercado.

Incorrecto: *Le* dije a mis padres que me casaba.
Correcto: Les dije a mis padres que me casaba.

Incorrecto: Quiero comprar *lo* (La camisa)
Correcto: Quiero comprarla.

Incorrecto: A mi amigo *robaron* ayer el coche.
Correcto: A mi amigo *le* robaron ayer el coche.

**G/N, género/número:** La palabra no concuerda en género y/o número con la anterior a la que viene referida.

Incorrecto: Puedo darte dos *consejo* para ayudarte.
Correcto: Puedo darte dos consejos para ayudarte.

Incorrecto: Las camisetas son muy *cómodo* y *bonito*.
Correcto: Las camisetas son muy cómodas y bonitas. (Femenino y plural)

**?, no se entiende:** Lo que intentas decir no está claro. El lector no lo puede entender.

Incorrecto: Esperando por los negativos de estas fotos a salir, no es una particular manera.
Correcto: (las respuestas pueden variar)

**T, tilde o acento:** A la palabra le falta la tilde o el acento.

Incorrecto: La lengua coreana no es *fácil* de hablar.
Correcto: La lengua coreana no es fácil de hablar.
**OP, orden de la palabra:** Las palabras están en el orden incorrecto o ese orden de las palabras no comunica bien el mensaje.

Incorrecto: Es un **grande** hombre.
Correcto: Es un hombre **grande**. (Si nos referimos a su tamaño o altura)
Correcto: Es un **gran** hombre. (Si nos referimos a su personalidad o carácter)

**C, Capitalización:** Necesitas poner en mayúscula una palabra o la palabra está en mayúscula cuando debería estar en minúscula.

Incorrecto: **ellos** pueden recoger a laura el **Lunes**.
Correcto: Ellos pueden recoger a Laura el lunes.

**P, puntuación:** Necesitas añadir un signo de puntuación o cambiarlo por otro.

Incorrecto: Quieres venir?
Correcto: ¿Quieres venir?

Incorrecto: Tengo muchas aficiones. Por ejemplo, cantar, nadar y esquiar.
Correcto: Tengo muchas aficiones. Por ejemplo: cantar, nadar y esquiar.

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**¿ omitir:** Has escrito una palabra innecesaria o extra.

Incorrecto: Estaba **muy** más cansado que el día de la boda.
Correcto: Estaba más cansado que el día de la boda.

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**^ falta algo:** Ha omitido una palabra necesaria para que la frase u oración tenga sentido. Por lo tanto, tienes que añadir la palabra que falta.

Incorrecto: Como consecuencia accidente, no puede andar bien.
Correcto: Como consecuencia del accidente, no puede andar bien.

**AWK, awkward:** El mensaje de la oración o frase es clara, pero un hispanohablante no lo expresaría de la misma manera. La frase suena rara, aunque se pueda entender lo que se está queriendo decir.

Incorrecto: Tuve **un tiempo genial** en Hawái.
Correcto: Me lo pasé genial en Hawái.

**SV, Concordancia sujeto y verbo:** El sujeto y verbo no coinciden en género y/o número.

Incorrecto: Luis y Alberto está en casa.
Correcto: Luis y Alberto **están** en casa.

**RECUERDA:**

1. Si cambias una parte de la oración, puede que tengas que cambiar otra parte también.
2. No marco todos y cada uno de los errores. Sería inconveniente. Intento marcar los errores más importantes.
3. A veces, hay varias maneras de corregir un error.