

# Examining the role of L2 proficiency in L2 reading-writing relationships

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## ABSTRACT

The paper explores the relationship between reading and writing in young Spanish learners of EFL. Research acknowledges the reading-writing relationship, but studies dealing with L2 literacy skills are scarce, and results inconclusive. Participants were divided into a cohort of low proficient learners and another of low-mid proficient learners. Learners had to complete a reading comprehension test and write a timed composition. Results revealed that for the low proficient learners the relationship was not strong enough to be significant, whereas for the low-mid proficient learners we found a significant correlation. This finding highlights the importance of L2 proficiency in establishing the nature and magnitude of the relationship reading-writing, confirming thus previous research. The pedagogical implications of this result point to reading and writing as two separate but related instructional areas, so that they cannot be replaced by each other but should not be taught in isolation either.

**Keywords:** L2 reading proficiency, L2 writing ability, L2 proficiency, relationship reading- writing

## Examen del papel del nivel en la lengua extranjera en la relación entre la lectura y la escritura en lengua extranjera

## RESUMEN

Este artículo explora la relación entre la escritura y la lectura en jóvenes aprendices españoles de inglés. La investigación reconoce la relación escritura-lectura, pero los estudios que tratan de éstas habilidades en la L2 son escasos y los resultados inconclusos. Dividimos a los participantes en dos grupos: una de nivel bajo y otro de nivel medio-bajo. Nuestros participantes completaron una prueba de comprensión lectora y redactaron una composición. Los resultados revelaron que para el grupo de aprendices de nivel bajo la relación no era lo suficientemente fuerte como para ser significativa, sin embargo, para los de nivel medio-bajo la correlación resultó ser significativa. Este hallazgo destaca la importancia del nivel en la L2 a la hora de establecer la naturaleza y magnitud de la relación escritura-lectura. A modo de implicación pedagógica destacamos el papel de la lectura y escritura como dos áreas de instrucción separadas pero relacionadas, de manera que la una no puede ser reemplazada por la otra, pero tampoco se deben enseñar de manera aislada.

**Palabras clave:** nivel de lectura en L2, habilidad escritora en L2, nivel en L2, relación lectura-escritura.

**SUMMARY:** 1. Introduction. 2. Method. 3. Results. 4. Discussion. 5. Conclusion.

## 1. INTRODUCTION

Establishing the nature of reading-writing relationships can offer very valuable pedagogical perspectives for the L2 writing class. Reading can be very helpful in developing writing and *vice versa*. Foreign language instruction can benefit from the findings of research regarding the interconnections between reading and writing. For example, it seems a commonly acknowledged fact in the literature that the fundamental process of transfer underlies the L2 reading-writing relationship. This transfer phenomenon manifests in two ways: 1) transfer across languages of L1 literacy skills, and 2) transfer across modalities, i.e. reading to writing and writing to reading (Carson 1990, Langer and Flihan 2000). However, this transfer does not seem to be automatic and teaching can facilitate, promote and reinforce transfer contributing, thus to developing L2 literacy skills.

### 1.1. THEORIES OF READING-WRITING

Reading and writing stand in complementary distribution. Both are known as the written skills of language or literacy skills. Furthermore, in contrast to the oral skills they are the result of an effort and conscious process of acquisition especially linked to educational settings (Cameron 2003, Weigle 2002: 14). Literacy skills are of special relevance in the development of the process of second language learning, in particular in formal school contexts. Although the relationship between reading and writing seems quite straightforward, exploration of the connection between both in the second language has not yielded much research (Carson 1990: 89).

Three main theories can be distinguished as attempting to account for the relationship between reading-writing in the first language (Ferris and Hedgcock 2004, Grabe 2003, Carson 1990, Cassany 1989). The first theory is known as the directional perspective. This trend defends that reading and writing are acquired using the same mechanism or structure and that once this has been acquired for one modality it can be transferred to the other modality. Transfer, however, only proceeds in one direction, that is, either from reading to writing or from writing to reading. The determination of the direction of transfer is crucial for pedagogical concerns, since it will influence the decision of what skill to introduce first in second language teaching (Carson 1990: 89). Although there is considerable evidence for both directional models, typically the relationship is discussed in terms of the impact of reading on the development of writing (Grabe 2003: 243, Carson 1990: 89).

Many are the researchers that highlight the relevance of reading in the development of writing skills (e.g. Tsang 1996). Weigle (2002: 27) has echoed Hayes (1996) stating that reading is a central process in writing, and Cassany (1989: 52) concludes from an extensive review of studies that reading comprehension is the language skill most closely linked to writing, and that it is the pedagogical task that seems most effective for acquiring the written mode. By the same token, Krashen (1985, 1988, 1989, 1993), who is one of the most important contenders in

this theoretical current, believes that extensive and pleasure reading has a relevant impact on L2 writing abilities and argues that considerable extensive reading, over time, will lead to better writing abilities which cannot be acquired successfully by practice in writing alone without the support of reading (see also Tsang 1996, Grabe 2003: 248, Hyland 2003: 17). Cassany (1989: 63) also follows the same line of opinion when he defends that “reading has been shown to be the only viable way to acquire writing, because it relates the learners with the texts that contain all the knowledge they require”<sup>1</sup>. Moreover, Carson (1990: 88) contends that “reading passages will somehow function as primary models from which writing skills can be learned, or at least inferred”, therefore, he believes that reading exercises or reading practice can be understood as the appropriate input for the acquisition of writing skills.

Following this very same line of reasoning, reading is considered to be central to the process of the development of writing skills, because it represents a valuable source of content information and of examples of real and good language. Research has pointed out several ways in which reading contributes to writing by providing a) the linguistic content for writing through source texts, especially it feeds learners with vocabulary<sup>2</sup> (Grabe 2003: 244, 249, Hyland 2003: 17, Vandrick 2003, Weigle 2002: 27-28, Campbell 1990, Cassany 1989: 97), b) authentic, real and correct instances of language use (Hyland 2003: 17, Vandrick 2003, Cassany 1989: 63-80), c) rhetoric models of information organization in the target language (Grabe 2003: 246, Carson 1990: 88, Cassany 1989: 63-80), and d) skills and strategies for the acquisition of writing (Grabe 2003: 247, Hyland 2003: 17, Weigle 2002: 27, Cassany 1989: 63-80).

However, as Carson (1990: 90) notes the transfer of reading skills into writing abilities may not necessarily be automatic and it is highly possible that it depends on instruction to proceed. Furthermore, especially for second or foreign language acquisition, proficiency in the target language plays a determinant role in how this transfer from reading into writing may occur (Grabe 2003: 248, Carson 1990: 94).

The second main theory that explains the interactions between reading and writing is the non-directional hypothesis. This hypothesis contends that reading and writing derive from the same cognitive processes and believes that transfer can occur simultaneously in either direction, so that an improvement in writing leads to an improvement in reading and *vice versa* (Shanahan 1982, Grabe 2003: 247, Carson 1990: 90).

The last hypothesis, the bi-directional hypothesis, sees reading and writing as “interactive but also interdependent” (Carson 1990: 92), which implies multiple

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<sup>1</sup> This is my translation from the original in Spanish:

*La lectura se muestra como la única forma viable de aprendizaje [de la escritura] porque pone en contacto al aprendiz con los textos que contienen todos los conocimientos que necesita.*

<sup>2</sup> Krashen (e.g. 1989) advocates for extensive and pleasure reading as the most effective way of acquiring vocabulary.

relations whose nature may change depending on language proficiency (Carson 1990: 92).

Empirical evidence from research in the mother tongue reveals interesting insights into the reading-writing relationship. Three main statements have been made from research findings (Grabe 2003: 246, Carson 1990: 88):

- 1) Better readers are better writers.
- 2) Better writers read more than poorer writers.
- 3) Learners exposed to more models of print text tend to produce better texts in syntactic and rhetoric terms.

These theories of the development of the literacy skills are designed based on L1 data, and they assume a fully developed oral and general language system (Carson 1990: 94). However, this is not the case for foreign language learners and differences in reading-writing relationships in the foreign language are to be expected. The key issues underlying the emergence of literacy skills in the foreign language are L2 proficiency and L1 literacy skills.

For second and foreign language learners the interactions reading-writing may not be so straightforward, and other factors, like proficiency in the target language, L1 literacy skills, or mother tongue rhetorical preferences, may also play a relevant role. The fundamental phenomenon in L2 literacy development is transfer. Transfer occurs in two modalities: 1) from L1 literacy to L2 literacy, and 2) from L2 reading to L2 writing (see Carson 1990, Langer and Flihan 2000). For the first modality of transfer, L2 proficiency has been proved a crucial factor, so that for transfer to happen from L1 to L2 literacy skills, a certain, but variable, threshold level of proficiency in the foreign language must have been attained (Carson 1990). However, the issue of how L2 proficiency affects the transfer from L2 reading skills to L2 writing skills is still in need of further research.

Hyland (2003: 17) claims that reading contributes to writing because both involve cognitive processes of meaning construction. Nevertheless, Carson (1990) believes that the cognitive skills that underlie L2 reading and writing may not be identical and consequently reading and writing do not necessarily behave similarly. Shanahan's (1982) study puts forward that reading and writing share some characteristics, but there are still some other features that are particular to each of the literacy skills (see also Langer and Flihan 2000). Foreign language learners manifest variability as regards their reading and writing abilities, so that a good L2 reader cannot be assumed to be a good L2 writer (Grabe 2003: 250).

This paper intends to address this issue of reading-writing relationships in the foreign language. Research-related literature has put forward that there is a lack of conclusive results regarding this relationship and we intend to contribute to this area with the present study. Furthermore, we also examined the claim that an L2 good reader is an L2 good writer in light of the variable L2 proficiency.

So considering the findings of previous research, in the present study we set out to investigate the following research questions:

1. Is there evidence of a relationship between EFL reading and writing skills of Spanish learners?
2. Does L2 proficiency play a role in the establishment of the nature of the relation reading-writing?

The design and results of the study are reported below.

## 2. METHOD

### 2.1. PARTICIPANTS

A total of 254 learners of EFL participated in the study. These were native speakers of Spanish. Participants were attending 6<sup>th</sup> grade of primary school and by the time of data collection they had been exposed to 629 hours of instruction in English. Entire classes were selected for the study. This means that whole classes participated in the study instead of us selecting participants randomly.

### 2.2. DATA GATHERING INSTRUMENTS

#### 2.2.1. WRITTEN COMPOSITION

Participants were required to write a composition in the foreign language. They had to write a letter to a prospective English host family and introduce themselves. They were asked to talk about their family, their home, their town, their school, their hobbies, and any other aspect they thought the host family could be interested in. Compositions were used to determine L2 writing ability of participants. Students were given 30 minutes to complete this task.

#### 2.2.2. READING COMPREHENSION TEST

A reading comprehension test was the instrument used to operationalize L2 reading proficiency of the participants. Learners had to read a passage of 190 words and answer multiple choice comprehension questions with two distracters and only one possible correct answer. Participants had to circle the appropriate end for the sentence provided, or the correct answer to the question posed. This reading comprehension test was drawn from the Cambridge KET course book, *Key English Test 1* (see Appendix A for a sample). Learners had ten minutes to read the text and answer the comprehension questions.

#### 2.2.3. CLOZE TEST

In order to ascertain the L2 general proficiency level of participants, they were required to complete a cloze test. It consisted of a multiple choice cloze test with a

passage of a total of 110 words and eight multiple choice items. This indicates that on average one word is deleted every 14 words. Test takers had to choose the correct answer from three options, the one that fills in the blank in the text. The cloze stems from Corporate Author Cambridge ESOL, 2004 (see Appendix B for a sample). The cloze procedure is a frequently used instrument to measure general language proficiency in the foreign language (see among many others Cenoz 2003, Ok 2003, Ozono and Ito 2003, Muñoz 2001, 2000).

### 2.3. PROCEDURES AND ANALYSIS

Once data were collected, compositions were rated using the ESL Composition Profile (Jacobs et al. 1981). Following the instructions of the authors, compositions were read twice. In the first reading the assessor tried to judge holistically whether the composition transmitted the message. In the second, analytic evaluation according to the descriptors took place. The *Profile* consists of five rating scales, which distinguish four levels of mastery: *excellent to very good*, *good to average*, *fair to poor*, and *very poor*. However, each of these scales is scored in a different way. Thus, the *content* scale scores up to 30, *organization* and *vocabulary* up to 20 points each, *language use* scores 25 and *mechanics* scores 5. The maximum score is 100 and the minimum is 34. Each scale obtained a single score which were then added together to give the final total score (see Appendix C for a sample of the rating scale).

Two raters assessed the compositions in order to guarantee internal validity of the measure<sup>3</sup>. Each composition was read blindly by two trained raters. When there was a disagreement of more than 10 points, a third rating was implemented. Additionally, the Pearson product-moment correlation coefficient<sup>4</sup> was calculated for interrater reliability<sup>5</sup> between the first, second, and third reader<sup>6</sup>. Results for compositions revealed a correlation coefficient of  $r = .82$ . Rater agreement procedures resulted in 55.72 % of compositions going to a third reader. The discrepancies were resolved with the input of the third rater. An average was then calculated based on the two or three different scores, and this mean was used to determine quality of composition for each composition.

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<sup>3</sup> We have to thank at this moment the members of the GLAUR group for their collaboration in the assessment of the compositions

<sup>4</sup> Data were normally distributed; therefore we used the Pearson product-moment correlation coefficient measure.

<sup>5</sup> For very thorough discussions about the validity of different measures of interrater reliability, especially for ratings using the *ESL Profile*, we refer the reader to Polio 1997, Campbell 1990, Cherry and Meyer 1993, Kroll 1990

<sup>6</sup> When the third rater was required, the correlation was calculated between the two nearest scorings, i.e., score rater 1 - score rater 3, or score rater 2 - score rater 3. When scores were not tallied, correlation coefficients are and  $r = .641(\text{rater 1-rater 2})$ .

The reading comprehension test was scored and one point was given to each correct answer up to a maximum of seven points. The cloze test was also corrected for right answers up to a maximum of eight points, one for each correct answer. Learners were then divided into two groups depending on the results of the cloze test. The first group was made up of the learners that scored from 0 to 4 points on the cloze; learners in this group were considered to be low proficiency. Participants who scored from 5 to 8 points on the cloze test constituted the second group. These were mid-low proficiency learners.

Descriptive and inferential statistical tests were performed in order to find out more about the relationship between L2 reading proficiency and L2 writing ability. Results from the reading comprehension question and the composition analysis were correlated for each of the two proficiency groups. Spearman correlations were used, because the samples were not normally distributed. We use the statistical package SPSS 15.0 to carry out the statistical analysis.

### 3. RESULTS

First, account will be given of the results of descriptive statistics concerning general L2 proficiency, L2 reading proficiency and L2 writing ability. Table 1 offers the descriptive statistics for the variable general L2 proficiency. Of the 254 participants a total of 169 or 66.54 % were classified as low proficiency and obtained a mean of 2.88 correct responses. This group is made up of those subjects who obtained a score in the cloze test that stayed in the low-half of the scoring range; that is between 0 and 4 points. The rest of the participants (83 or 32.67 %) conforms the mid-low proficiency group with an average of 5.57 correct answers with a maximum of 8 and a minimum of 5 points, which is the high half of the scoring range. Proficiency differences are significant with learners assigned to the low proficiency group scoring significantly lower than those in the mid-low group. A non-parametric means comparison test was carried out since the sample did not meet the normality assumption ( $Z = -13.13$ ,  $p = .000$ ).

	<b>Low</b>	<b>Mid-Low</b>
<b>N</b>	169	83
<b>Mean</b>	2.88	5.57
<b>SD</b>	1.03	0.84

Table 1. Descriptive statistics for scores on cloze test

The low proficiency group scored a mean of 65.02 points on the Profile and the mid-low proficiency group scored 70.35 from a maximum possible of 100 and a minimum of 34 points. A non-parametric test of means comparison revealed that this difference is significant, i.e. the writings of the mid-low proficiency learners obtained significantly higher quality judgements than those of the low proficiency group ( $Z = -4.8$ ,  $p = .000$ ). Regarding the results on the reading comprehension tests,

we observe that mean scores are very similar between low and mid-low proficiency learners with averages of 2.18 and 2.88, respectively. In order to ascertain whether this difference was significant, a non-parametric test of means comparison was performed. This test revealed that the difference is significant with mid-low proficiency learners obtaining significantly higher scores on the reading comprehension test than low proficiency learners ( $Z = -3.36$ ,  $p = .001$ ). The results of means and standard deviations for the variables L2 reading proficiency and L2 writing ability are shown in Table 2.

		Low	Mid-Low
Writing ability	Mean	65.02	70.35
	SD	8.24	8.52
Reading proficiency	Mean	2.18	2.88
	SD	1.11	1.52

Table 2. Descriptive statistics for scores on reading comprehension test and Profile

Correlation analysis show that for low proficiency learners the relationship between L2 reading proficiency and L2 writing ability is not significant in statistical terms ( $r = 0.81$ ,  $p = .297$ ). However, with the group of the more proficient learners correlations turned out to be significant ( $r = 0.314$ ,  $p < .01$ ). Results of inferential statistics are presented in the following table.

	Low	Low-mid
Spearman rho	0.81	0.314*

\* Significant at  $p < .01$

Table 3. Correlations reading-writing for low and low-mid learners

The R-squared of the correlation coefficient of the significant relationship shows a modest relationship accounting for 9.85 % of the variance and leaving more than 90 % of the reading-writing relationship unexplained.

#### 4. DISCUSSION

The hypothesis that defends a directional relationship between L2 readers and writers expressed in the statement “good L2 readers will be good L2 writers” is confirmed for mid-low proficiency learners, but has to be rejected for low proficiency learners. Our first research question can be answered in two ways. So for low proficiency learners L2 reading and writing skills do not show any significant connection, whereas for mid-low learners L2 reading and writing correlate significantly, indicating that there is some interconnection between both literacy skills in the foreign language. This finding suggests that reading and writing both involve similar cognitive processes related to meaning construction (Ferris and Hedgcock 2004). Flahive and Bailey (1993) obtained similar results with a



correlation coefficient of a similar magnitude ( $r = 0.346$ ) and concluded that there was evidence of a reading-writing relationship, although most of that relationship was left unexplained by the interaction. Some other factors apart from the influence of reading on writing and of writing on reading affect the results on L2 reading proficiency and L2 writing ability measures. Likewise, Shanahan (1987), who obtained similar significant but low correlations, concludes from his results that reading and writing are not identical and that one cannot be substituted by the other in language instruction. In other words, any teaching approach should include both practice of reading and writing.

Reading and writing are complex constructs that can be measured in a number of ways and where different components may be highlighted. Shanahan (1982) considers that there are some components of reading and writing that contribute better than the rest to providing a more comprehensive description of the magnitude and nature of the relationship. He mentions spelling, large reading vocabularies of good writers, syntactic complexity, and structure or organization of the writing. One may think that the fact that we have only used one single measurement method may account for the low correlations. However, all of the variables considered by Shanahan (1982) in his research study are the writing components assessed with our rating instrument the Profile. To overcome this possible limitation we also conducted correlations with the individual components. The results of the correlations implemented to different language components and L2 reading ability of our informants concur with the findings of Shanahan (1982) (see below for the figures). Vocabulary is the component that best explains the relationship followed by language use (grammar, idiomaticity) and by discourse organization.

In light of the correlation results, we believe that the reading-writing relationship is changing in nature and magnitude. In this sense, the role of L2 proficiency, and probably most importantly of lexical competence<sup>7</sup>, is determinant in this varying relationship between the two literacy skills.

Our second research question asked precisely about the role of L2 proficiency in the nature of reading-writing relationships. Results clearly point to L2 proficiency as a determinant factor in establishing that relationship, so that for more proficient learners better readers seem to be better writers. For the less proficient this connection does not apply. From these results, we can conclude that the relationship between L2 reading and L2 writing is influenced by proficiency in the L2. In this sense, the more proficient learners are, the closer the relationship will be between these two skills. More importantly than establishing the specific role of particular

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<sup>7</sup> This statement is purely speculative, since we have not proved this relationship in the present paper. Nevertheless, bearing in mind a) the close relationship between general L2 proficiency and lexical competence, b) the relationship between lexical competence and L2 reading and writing (e.g. Qian 1999), and c) the variance imposed by L2 proficiency differences on reading-writing relationships obtained in the present paper, we dare speculate about the role of big vocabularies on reading-writing relationships. In this sense, we believe that as vocabulary knowledge expands, the reading-writing relationships get closer.

language components such as spelling, syntactic complexity or vocabulary, which are most likely to develop in parallel with L2 proficiency, is the attempt at accounting for this vital role of proficiency.

Our results come to support the observation that low level learners show very unstable interlanguage (IL) and language skills. With increasing proficiency, IL and language skills stabilize and normalize, that is, learners become more regular in their performance and L2 use. This is the reason why we believe the reading-writing relationship strengthens and regularizes with language development. Consequently, the number of external factors that may influence this relationship decreases. This might have to do with the fact that SLA is a dynamic, vibrant, and changing process which converges to regularity as it develops. General observations of instability in error production especially by intermediate FL learners may also relate to this.

Additionally, the findings of the present research concur with previous studies (Carson 1990, Hyland 2002, Grabe 2003) that found that L2 proficiency plays a relevant role in transfer processes of L1 literacy skills to L2 literacy skills and from L2 reading to L2 writing and *vice versa*. Furthermore, these authors claim that L2 proficiency is central to L2 reading-writing relationships. Carson (1990) highlights that the threshold proficiency level necessary for transfer to happen is variable and changes from learner to learner. In the present case, this threshold level must be somewhere between low and mid-low proficiency learners. This is in line with our previous comments above.

We may speculate that as learners get more proficient the reading-writing relationship becomes clearer with stronger correlations. This is in line with research in first language acquisition where reading-writing relationships became stronger across the school grades, so learners who read well, wrote well, too (Langer and Flihan 2000). However, further research in this respect is warranted. It may also be that research puts forward that once the L2 proficiency threshold level has been reached, no changes are to be produced beyond that level.

In this sense, Shanahan (1982) found out that the relationship between reading and writing changes as reading proficiency increases. Nonetheless, he does not account for the relationship in quantitative terms, i.e. whether the correlations augment or decrease. He rather offers an explanation of the nature of the relationship in qualitative terms, regarding the components of either reading or writing that have the greatest impact on the relationship and that contribute most to explain that relationship according to proficiency level.

In line with this, our results confirmed the belief discussed above that the different qualitative components develop in parallel with L2 proficiency but influence reading ability to different but similar extents. Analysis of the correlation between reading ability and diverse L2 writing aspects such as content, organization, vocabulary, language use, and mechanics (construct basically referring to spelling and punctuation) revealed that all these aspects correlate to

similar extents to L2 reading ability<sup>8</sup>. All correlations are significant with vocabulary being the highest and content the lowest. When examined for the cohorts low and mid-low proficiency learners, correlations revealed again that for low proficiency learners the relationship is not strong enough for correlations to be significant. However, for mid-low proficient learners, all correlations are significant with vocabulary again being the highest (content ( $r = 0.244$ ,  $p < .05$ ), organization ( $r = 0.253$ ,  $p < .05$ ), vocabulary ( $r = 0.386$ ,  $p < .01$ ), language use ( $r = 0.288$ ,  $p < .01$ ), and mechanics ( $r = 0.249$ ,  $p < .05$ )). This result could be expected considering the importance of vocabulary knowledge in reading comprehension.

#### 4.1. PEDAGOGICAL IMPLICATIONS

Decisions about what activities to introduce in the EFL writing class may be influenced by the nature of the reading and writing relationship. So research about reading and writing as mutually beneficial activities has informed practical instruction. For example, reading can foster writing by providing learners with some rhetorical conventions, linguistic structures, or ideas to incorporate in writing (Langer and Flihan 2000). Tsang (1996) found that extensive reading contributes to improving writing ability even more than extended writing practice (see also Grabe 2003). This result highlights the importance of the reading-writing relationship. Likewise, instruction in writing could enhance reading ability (Shanahan 1982). Nevertheless, writing practice cannot be replaced by reading practice in the classroom or *vice versa*. Both skills are related at some point of the acquisition process but they are not identical. As a way of fostering reading-writing relationships and to encourage transfer, Langer and Flihan (2000) argue that instruction should address both reading and writing together and never in isolation. To maximize the mutually supportive relationship between reading and writing, students should engage in reading-based writing tasks that allow them to take into account reader's expectations during their composing process. From the results of the present study and of other previous investigations regarding reading-writing low correlation coefficients, they cannot replace each other in instruction. Moreover, reading is a necessary, but not a sufficient activity to teach writing and writing is necessary but not sufficient to teach reading (Shanahan 1982). So these have to be complemented with other activities in language instruction.

Furthermore, Shanahan (1982) also believes that because the nature of reading-writing relationships changes over time with increasing proficiency, instruction should also change and adapt in order to benefit both literacy skills (also Ferris and Hedgcock 2004). For example, knowledge of phonics and spelling are the most

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<sup>8</sup> Exact figures are L2 reading ability and i) content ( $r = 0.157$ ,  $p < .05$ ), ii) organization ( $r = 0.212$ ,  $p < .05$ ), iii) vocabulary ( $r = 0.220$ ,  $p < .05$ ), iv) language use ( $r = 0.216$ ,  $p < .05$ ), and mechanics ( $r = 0.163$ ,  $p < .05$ ).

important factors in the writing of L1 beginning readers. Shanahan (1982: 26) claims that: “for beginning readers, phonics instruction would have the most substantial impact upon writing achievement and that spelling instruction would have the greatest impact upon reading achievement”. As learners become more proficient in L1 reading, sophisticated vocabulary and story structure contribute most to writing achievement, and comprehension of larger units is decisive in reading proficiency. It would be interesting to determine whether these factors are also relevant in L2 reading and writing. From the results of the present study, we can suggest that EFL writing instruction should support the development of reading skills, too. Therefore, explicit instruction of writing can be enhanced by reading activities (Ferris and Hedgcock 2004). This suggestion is in line with the pedagogic principle of balanced skills integration and the eclectic approach in fashion nowadays.

Focused reading in which attention is directed to vocabulary, complex syntactic structures, spelling, or text organization, cohesion devices and ideas development can complement pleasure reading in FL teaching. Having reading activities precede writing tasks is also an interesting and effective way of putting both skills into relation and fostering the strength of the reading-writing connection, beneficial for the development of both literacy skills.

## 5. CONCLUSION

From the findings of the present study, we can conclude that reading and writing are related cognitive activities but that they are not identical and some other intervening factors account for the scores on L2 reading proficiency and L2 writing ability apart from their mutual influence. As learners become more proficient in the foreign language, reading-writing connections get closer. It seems reasonable to argue that L2 proficiency plays a central role in establishing the nature and magnitude of the reading-writing association. For more proficient learners, the statement “good L2 readers are good L2 writers” applies. Our results serve as further evidence to highlight the complex nature of the interaction among L2 reading and writing and L2 proficiency<sup>9</sup>. Vocabulary has been found to be the component that best explains reading-writing relationships. Having a large vocabulary will be beneficial for both reading and writing and learners with large vocabularies will be found to be in the high proficient group.

Limitations of the study can pertain to the materials and instruments used for data gathering. Replication papers with different materials could throw up interesting results.

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<sup>9</sup> Further pedagogical considerations would go far beyond the scope of this paper, but see Ferris and Hedgcock (2004) for the application of these ideas to lesson planning and writing instruction techniques.

Future research should concentrate on examining the relationship between L2 reading proficiency and L2 writing ability with learners of higher proficiency levels than the ones dealt with in the present study. The nature of the reading-writing relationship in the L2 should be subject to further analysis with focus on some more qualitative aspects such as vocabulary, spelling or syntactic complexity of text and their influence in the relationship. The influence of L1 literacy skills on the L2 reading-writing relationship should also be addressed in future studies. It could also be very interesting to devote research studies to exploring the instructional exploitation of L2 reading and writing.

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### Appendixes

COLEGIO \_\_\_\_\_ CURSO \_\_\_\_\_ FECHA \_\_\_\_\_

Tiempo  
10 minutos

APELLIDOS \_\_\_\_\_ NOMBRE \_\_\_\_\_

1) Lee el artículo sobre Ingrid McFarlane y contesta a las preguntas marcando con un círculo la respuesta correcta.

## Ingrid McFarlane Zoo Keeper



When I left school at eighteen, I got a job at a zoo as a student keeper. Now, five years later, things have changed – I have passed my exams and I am a full animal keeper.

The money is not good. I only get £9,000 a year. You have to be outside in rain and snow, which is hard work, and you get very dirty. But this doesn't matter to me because animals are the most important thing in my life!

There are a hundred monkeys and fifty deer in my part of the zoo and I give them their food and clean their houses. I also need to watch them carefully to be sure that they are all well. In fact, rhinos are my favourite animals and so last year I went to Africa with a colleague for a month to study them.

The zoo is open every day and I work five different days each week. I live in a small flat twenty minutes away and I get up at ten to seven and start work at eight. The first thing I do when I get home at quarter past five is have a shower!

#### EJEMPLO

0 Ingrid left school

A five years ago.

B nine years ago.

C eighteen years ago.

RESPUESTA

(A)

## Appendix A. Reading comprehension passage

### Reading comprehension questions

**RESPUESTAS**

21	Ingrid would like to	A	take some exams.
		B	earn more money.
		C	change her job.
22	How does Ingrid feel about working in bad weather?	A	She hates getting dirty.
		B	She doesn't mind it.
		C	She likes the snow.
23	If Ingrid doesn't check the monkeys,	A	they may become ill.
		B	they may get hungry.
		C	they may run away.
24	The animals Ingrid likes best are the	A	monkeys.
		B	deer.
		C	rhinos.
25	Ingrid travelled to Africa	A	to have a month's holiday.
		B	to visit a colleague there.
		C	to learn more about some animals.
26	The zoo is open	A	only five days a week.
		B	seven days a week.
		C	on different days every week.
27	Ingrid arrives at her flat in the evening at	A	five fifteen.
		B	twenty past five.
		C	ten to seven.



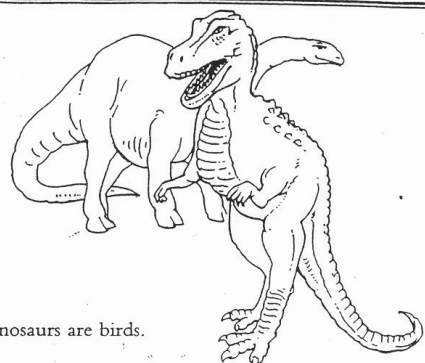
**Appendix B. Cloze Test**

COLEGIO \_\_\_\_\_ CURSO \_\_\_\_\_ Cloze Test  
FECHA \_\_\_\_\_  
 APELLIDOS \_\_\_\_\_ NOMBRE \_\_\_\_\_

- 1) Lee la información sobre los dinosaurios.
- 2) Elige la palabra que crees más adecuada (A, B ó C) para cada hueco.
- 3) Marca la respuesta correcta con un círculo en la parte de las respuestas.

## Dinosaurs

No one has .....**0**..... seen a dinosaur. The last dinosaur died about 60 million years ago, a long time .....**28**..... there were any people on the earth. ....**29**..... knows for sure why they all died. The nearest living relatives of dinosaurs are birds.



Dinosaurs didn't all look the same. There were more .....**30**..... 5000 kinds. Some were very small, .....**31**..... others were giants. The largest were bigger than any other animals that ever lived .....**32**..... land. The Brontosaurus, for example, was twenty metres long, and it .....**33**..... plants. The Tyrannosaurus Rex was not as .....**34**....., but it was stronger. It had sharp teeth for eating meat. Also it could run fast .....**35**..... it had long back legs.

EJEMPLO	B never	C yet	RESPUESTA
0 A ever			<input checked="" type="radio"/> A

**RESPUESTAS**

28	A that	B when	C before
29	A everybody	B people	C nobody
30	A than	B that	C as
31	A as	B but	C or
32	A in	B on	C at
33	A ate	B eat	C eats
34	A bigger	B biggest	C big
35	A that	B because	C where

**Appendix C The ESL Composition Profile**

**Appendix C The ESL Composition Profile**

<b>ESL COMPOSITION PROFILE</b>				
STUDENT		DATE	TOPIC	
SCORE	LEVEL	CRITERIA	COMMENTS	
<b>CONTENT</b>	30-27	EXCELLENT TO VERY GOOD: knowledgeable • substantive • thorough development of thesis • relevant to assigned topic		
	26-22	GOOD TO AVERAGE: some knowledge of subject • adequate range • limited development of thesis • mostly relevant to topic, but lacks detail		
	21-17	FAIR TO POOR: limited knowledge of subject • little substance • inadequate development of topic		
	16-13	VERY POOR: does not show knowledge of subject • non-substantive • not pertinent • OR not enough to evaluate		
<b>ORGANIZATION</b>	20-18	EXCELLENT TO VERY GOOD: fluent expression • ideas clearly stated/ supported • succinct • well-organized • logical sequencing • cohesive		
	17-14	GOOD TO AVERAGE: somewhat choppy • loosely organized but main ideas stand out • limited support • logical but incomplete sequencing		
	13-10	FAIR TO POOR: non-fluent • ideas confused or disconnected • lacks logical sequencing and development		
	9-7	VERY POOR: does not communicate • no organization • OR not enough to evaluate		
<b>VOCABULARY</b>	20-18	EXCELLENT TO VERY GOOD: sophisticated range • effective word/idiom choice and usage • word form mastery • appropriate register		
	17-14	GOOD TO AVERAGE: adequate range • occasional errors of word/idiom form, choice, usage <i>but meaning not obscured</i>		
	13-10	FAIR TO POOR: limited range • frequent errors of word/idiom form, choice, usage • <i>meaning confused or obscured</i>		
	9-7	VERY POOR: essentially translation • little knowledge of English vocabulary, idioms, word form • OR not enough to evaluate		
<b>LANGUAGE USE</b>	25-22	EXCELLENT TO VERY GOOD: effective complex constructions • few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions		
	21-18	GOOD TO AVERAGE: effective but simple constructions • minor problems in complex constructions • several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions <i>but meaning seldom obscured</i>		
	17-11	FAIR TO POOR: major problems in simple/complex constructions • frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions • <i>meaning confused or obscured</i>		
	10-5	VERY POOR: virtually no mastery of sentence construction rules • dominated by errors • does not communicate • OR not enough to evaluate		
<b>MECHANICS</b>	5	EXCELLENT TO VERY GOOD: demonstrates mastery of conventions • few errors of spelling, punctuation, capitalization, paragraphing		
	4	GOOD TO AVERAGE: occasional errors of spelling, punctuation, capitalization, paragraphing <i>but meaning not obscured</i>		
	3	FAIR TO POOR: frequent errors of spelling, punctuation, capitalization, paragraphing • poor handwriting • <i>meaning confused or obscured</i>		
	2	VERY POOR: no mastery of conventions • dominated by errors of spelling, punctuation, capitalization, paragraphing • handwriting illegible • OR not enough to evaluate		
TOTAL SCORE	READER	COMMENTS		