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A story-based approach to the teaching of English (L2) word writing: A case study from primary education

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Abstract

This case study aimed at exploring the effects of the story-based approach in helping children to write English words in the ESL/EFL primary classroom. It employed a quasi-experiment with 44 children who were in Grade 2 in a semi-private school in Tarragona, Spain; whose English level is pre-A1 (CEFR). The students were evenly divided into two groups: the experimental group and the control group. Only the experimental group was taught by means of the story-based approach. A pre-test, a post-test, and a five-week-later exercise were used to measure students' ability of writing at word-level. The collected data were analyzed with the Mann-Whitney *U* test, the Wilcoxon signed-rank test, and the General linear model in order to identify the difference between the two groups, the effect of time and the influence of the interaction between time and treatments. The analysis provided evidence for considerable improvement in word writing in both experimental and control groups. This may account for frequency and reiteration of the written input, which came to play an imperative role in students' performance in their word writing. With a limited number of exposures to the target language that the experiment provided (six times), stories were as effective as other teaching methods designed to supply students with written input (such as games and alternate activities) in improving students' ability to write the target lexical items.

Keywords: story-based approach; word writing; spelling; vocabulary acquisition; English as a foreign language (EFL); TESOL; primary education; young learners' literacy

1. Introduction

This research explores the effect of the story-based approach in assisting children to write English words in the English as a foreign/second language (EFL/ESL) primary classroom. According to Ellis and Brewster (2014), stories are particularly adaptable to language teaching, and they have become widely used in the language classrooms since the 1990s. Stories' attributes provide students with a great amount of language exposure in both spoken and written types to decode, which can benefit learners' memory of spellings of words and lessen their difficulties of English word writing in the EFL classroom. According to Share (2008, p. 36):

> Only decoding seems to offer a sufficiently reliable means for identifying novel letter strings (owing to the fundamentally alphabetic nature of the written code) thereby providing the opportunities for (incidental) learning of the visual form (spellings) of these items.

There has been a number of studies exploring the relationship between story interventions and children's vocabulary learning (Conrad et al., 2019; Deacon et al., 2019; Korat & Shamir, 2008, 2012; Straley et al., 2016; Vadasy & Sanders, 2014; Valentini et al., 2018). Most aforementioned studies focus on the relationship between the use of stories and the amount of vocabulary that learners can gain by applying oral assessment. And there is still a shortage of research on the effect of story interventions and children's word writing. This is the reason why this study was carried out, in order to verify the impact of the story-based approach in helping children improve their word writing.[1] With this objective in mind, the research questions of the study were the following:

RQ1. Does the story-based approach help children improve their English (EFL) word-writing?

RQ2. Is the story-based approach a determining factor in developing of English word-writing in young learners?

[1] This was part of a more extensive research project about storytelling in the EFL primary classroom with a twofold aim: to study the impact of storytelling in reading comprehension and writing. The results from the experiment concerning reading have already been published in Hà and Bellot (2020).

The hypothesis for the first research question is that the story-based approach helps children improve their English word writing in the EFL classroom, and the hypothesis for the second question is that the story-based approach is a determinant factor for developing of English word-writing in young learners.

2. Literature review

2.1. The story-based approach

Stories have been originally defined as an art form as well as a form of entertainment and communication equally valuable to bring relaxation and to offer experience or wisdom passed from one generation to another (Bryant, 2009; Kocaman-Karoglu, 2015; Lipman, 1999; Pellowski, 1991). Stories encompass not only artistic features, such as characters, plot or rhyme but also information, emotions, perspectives and knowledge, all of which make them become an efficient professional tool in different disciplines, such as marketing, medicine, education, among many others (Lipman, 1999). In the field of education, even if stories are applied in various subjects, from history to mathematics (Kennedy, 1998; Walkingtonet et al., 2019), they are especially employed in the language classes for young learners as they can provide students with a great amount of language exposure so as to help them build up and develop their repertoire (Davies, 2007; Ellis & Brewster, 2014; Wright, 1995). The benefits of stories in assisting children's language development have been extensively discussed by Wright (1995), Cameron (2001), Ghosn (2002, 2013), Davies (2007), Bland (2013), Ellis and Brewster (2014), and Lenhart et al. (2017), to name but a few.

According to Davies (2007), the main advantages that stories offer in the case of teaching children are as follows:

1) stories offer children language knowledge including vocabulary, grammatical structures, and pragmatics understanding of how to use a certain language unit in a specific context;
2) stories help children develop their language skills (reading, listening, speaking and writing);
3) stories facilitate children's imagination;
4) stories help children to entertain and enjoy;
5) stories assist children to explore their own and other cultures, and by this way they can experience cultural differences to respect themselves and other persons;
6) and, finally, stories create a natural path for children to go into the world of books and reading.

To be able to assess all the aforementioned potential benefits of stories in the language class would be too ambitious and beyond the objective of this research, which is a case study limited in time and resources. Instead, this study aims to evaluate the story-based approach in helping children develop their word writing in the EFL/ESL.

According to Ellis and Brewster (2014), there is a methodology for story-based work that can be used in most classroom contexts by applying a three-stage model (Figure 1). This model allows children to plan, do and review by figuring out the activity that they are going to implement, recalling in their schema the things relevant to the story and the theme, interacting with the story, and reflecting on its meaning. Likewise, Donato and Adair-Hauck (2010) argue that a storytelling lesson can be planned using a three-part design, including pre-storytelling, while storytelling, and post-storytelling activities. Similarly, Wright (1995) proposes story-based activities, following the three stages (pre-story, during story, and post-story). According to Wright (1995), pre-story includes activities of introducing or revising new words while during story activities require students to fill in a gapped story, match sentences or number the events of the story. Post-story activities can ask learners some questions to reflect the content of the story or role play the story.

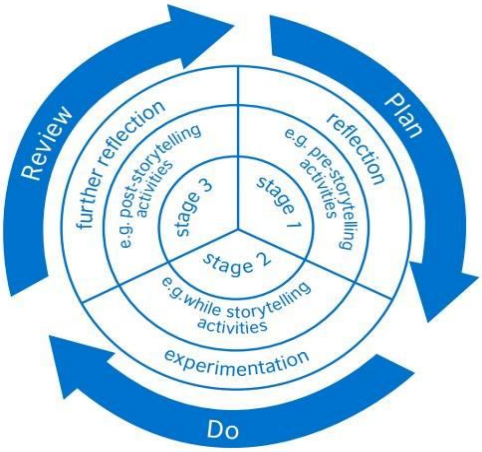


Figure 1 A three-stage model for a story-based methodology (Ellis & Brewster, 2014, p. 22)

The study by Stachurska (2013) shows that children become more involved in story sessions on condition that a variety of pre and post-story activities are employed. Additionally, the diversity of activities is an important condition to organization and student's discipline. Furthermore, VanPatten (2003) believes that

requiring learners to interact with the input can help them to maximize the intake that they can get from the input. Therefore, instead of giving students free story-telling or story-reading, a story intervention asking students to interact with stories can be beneficial for students' intake. They are reasons why this study applies the story-based approach proposed by Ellis and Brewster (2014), which is presented in detail in the sections devoted to methods and procedures.

2.2. Children's word writing

Children's word writing in the context of this paper makes reference to the child's ability of writing single words in a foreign language class. Writing single words in English correctly is a basic requirement that students need to command in order to develop not only their writing skills but also reading in the foreign language. Researchers have pointed out that word writing or word spelling has a connection with word reading (Abbott et al., 2010; Berninger et al., 2002; Schoonen, 2019). Schoonen argues that "reading and writing seem to be built on the same skills, especially linguistic and metacognitive knowledge resources" (p. 530). This implies that writing single words accurately can involve the capacity of recognizing words by sight and the capability of *orthographic mapping* (OM) proposed by Ehri (2014). According to Ehri (2014), OM is a crucial ability that students need to command in order to write single words correctly. OM can be defined as the formation of connections between sounds and letters or between spoken units and written units.

This OM theory put forward by Ehri (1992, 1995) is developed and elaborated from his theory of sight word reading, which can be defined as the "process of reading words by accessing them in memory" (Ehri, 1995, p. 116). Consequently, words that have been encountered before are read from memory; and all words can become sight words, if they have been read repeatedly. In addition, mature forms of sight word learning are alphabetic and phonological base. The capability of sight word reading requires the capacity of OM. Sight word reading develops following four phases, from pre-alphabetic or visual non-alphabetic phase (the lowest phase) to partial alphabetic phase, then full alphabetic (or full grapho-phonemic) phase and finally consolidated alphabetic (or consolidated grapho-syllabic and grapho-morphemic) phase (the highest phase) (Ehri, 1995, 2014). The pre-alphabetic phase refers to the level of connecting selected visual features of words with their pronunciations or meanings and remember these links, instead of basing on the use of letter-sound associations. During the partial alphabetic phase, sight word reading is implemented by linking some letters of a written word with sounds noticed in their pronunciations. For the third stage – the full alphabetic phase, learners read sight words by forming

full associations between letters of written words and sounds perceived in their pronunciations. Language users understand how phonemes are represented by graphemes in the spelling system. And in the last phase, users store complete information about the spellings of sight words in their memory. Therefore, when facing a variety of different words, the connections between graphemes and phonemes are consolidated. Ehri (2014) suggests that four phases in the development of OM are overlapping but sequential; and to establish the connection between written units and spoken units, learners need to have phonemic awareness.

Another theory that accounts for the process of orthographic mapping that helps learners in their word writing is the so-called "self-teaching theory of orthographic learning" put forward by Share (2008). The main idea of the theory is that learners can make up their orthographic knowledge themselves during their process of decoding printed words and connecting or mapping the printed words with their corresponding sounds. In this way learners form and retain orthographic representations in their memory. According to Share (2008), each successful mapping of written words onto their sound equivalents gives a chance to acquire the word-specific orthographic information while exhaustive mapping is critical for the establishing and building up of well-specified orthographic representations as it causes learners to notice the graphemic detail. Consequently, children independently grow their knowledge of word-specific orthography which makes the base for skilled visual word recognition. Share also notes that self-teaching of orthographic knowledge takes place unconsciously without learners' deliberation, as a "by-product of the process of decoding" (p. 36), and it seems unstoppable. In addition, it is noteworthy that the self-teaching theory denies the idea that identities of most written words can be directly taught or guessed with the support of contextual information. Self-teaching has some of the following attributes (Share, 2008):

1. Self-teaching is item-based, depending on each specific word. This refers to the consideration of item familiarity. Therefore, a critical question is how children recognize *which* words, instead of how they recognize words in general.
2. Lexicalization considers phonological recoding as a developmental process, starting at a simple one-to-one letter-sound correspondence then coming to a more complex correspondence (such as morphemic constraints between *cooked* rather than *cookt**) with more print exposure (lexicalization).
3. Early onset means that starting reading is supposed to be starting self-teaching.
4. Two components of self-teaching suggest that the process of self-teaching includes two processes.

They are phonological (the ability to recognize unfamiliar words, utilizing the knowledge of spelling-sound connections) and orthographic (refers to spelling knowledge and visual analysis). The phonological component is assumed to be the key factor generating the difference in reading ability. The contribution of visual/orthographic ability to the growth of word-specific orthographic representations depends on the successes of operating the first component, therefore visual/ orthographic component is the second component of the self-teaching process.

Ehri's (2014) theory of OM and Share's (2008) self-teaching theory of orthographic learning emphasize the role of phonological decoding and print language input for learners in order to improve their word spelling or word writing. Stories provide learners with both spoken and written language input in order to facilitate learners' mapping phonemes with graphemes, which can benefit their OM growth and learners' word writing.

2.3. Story interventions and their relationship with children's word writing in the language classroom

There are not many studies researching the relationship between story interventions and students' ability of remembering how to write separate words. Most studies on story interventions investigate the relationship between the use of stories or story interventions and the amount of vocabulary that learners can gain (Beck & McKeown, 2007; Coyne et al., 2007; Lenhart et al., 2017; Spencer et al., 2018; Walsh et al., 2015). Most of these studies use oral assessment with or without visual aids as the evaluation verifying children's improvement in vocabulary learning (Beck & McKeown, 2007; Coyne et al., 2007; Lenhart et al., 2017; Spencer et al., 2018). For example, students are asked to listen and point at the right picture that is described in the test, following the Peabody picture vocabulary test (Beck & McKeown, 2007; Coyne et al., 2007), or they are required to listen to the story and retell, following the *Narrative Language Measures: Listening* (Spencer et al., 2018) of the CUBED assessment (Spencer & Petersen, 2012). In another study conducted by Walsh et al. (2015), students have to read words and match them with the right pictures. The results of these studies above are the following. First, when using stories with extended instruction on the target vocabulary, a way of teaching directly meaning of the target vocabulary in context of the story, young learners can have significantly better results in learning words (Beck & McKeown, 2007; Coyne, et al, 2007). Spencer et al. (2018) also reported children's improvement in remembering the target English words with story interventions teaching the target vocabulary through the story and other additional context while Lenhart et al. (2017) confirmed that with free storytelling or story reading-aloud, only negligible vocabulary gains as

well. Second, applying highly demanding questions when reading or telling stories helps children achieve better novel vocabulary expressive scores (Walsh et al., 2015). Due to the fact that the aforementioned studies only measure students' oral vocabulary achievement, therefore, the relationship between story interventions and students' ability of writing English words is not mentioned in these studies above.

Several studies have been carried out to explore the relationship between story interventions and children's word reading or word spelling (Conrad et al., 2019; Deacon et al., 2019; Korat & Shamir 2008, 2012; Straley et al., 2016; Vadasy & Sanders, 2014; Valentini et al., 2018). Korat and Shamir (2008, 2012) reported that children who read the storybook performed progress in the meaning and reading of the words supported directly by the computer which gives them the pronunciation, explanation of difficult words in the story by using visual aids and context. Vadasy and Sanders (2014) found out that when learners are shown the target words and asked to pronounce and spell them while listening to a story, they have notably greater spelling gains. Valentini et al. (2018) reported that words tend to be learned in different aspects of phonological, orthographic, and semantic information in a story context when both their oral and written forms are given, compared with when only one form is provided. Furthermore, orthographic learning of the novel words is shown only when children were supplied with orthographic forms, indicating that only listening to the story alone did not cause the establishment of orthographic representations. Conrad et al. (2019) reported that there is evidence of orthographic learning in both readers and spellers learning stories; however, spellers outperformed readers. Deacon et al. (2019) tested if young readers (grades 1 and 2) can acquire spellings and meanings of novel words through independent story reading. Children are asked to choose the right spellings of the novel words printed on the paper instead of orally spelling them. The results show that scores for both the orthographic and semantic learning measures were higher with successful decoding than without it.

There is still a lack of studies on the effect of story interventions on students' ability of writing single English words. A majority of studies investigating the relationship between story interventions and students' vocabulary development reports the positive effect of the former on the latter in both oral speaking and word reading or word spelling. This suggests the impact of story interventions on students' ability of writing English vocabulary. From results of the previous studies, it can be seen that story interventions instead of free storytelling or story reading-aloud can create students' growth in learning vocabulary. Thus, this study applies a story intervention aiming at providing learners with more written words in order to support them in their English writing.

3. Methods

This research project involved a quasi-experiment with two groups – the experimental group and the control group. The two groups of students learnt the same topic, that is, *Wild animals*, which focuses on ten words naming ten animals including *a lion*, *a hippo*, *a boa-constrictor*, *a flamingo*, *a zebra*, *a peacock*, *a polar-bear*, *an elephant*, *a walrus*, *a leopard*; nine words naming the activities done by the animals, including *snort*, *roar*, *trumpet*, *bray*, *flute*, *yelp*, *hiss*, *bellow*, *snarl*; and a grammatical structure, that is, the modal verb *can*. The topic was covered for six lessons. The experimental group was provided with a story and the control group learnt the topic without stories. The story *Polar-bear*, *polar-bear*, *what do you hear?* created by Bill Martin Jr. (1991) was chosen to design the six story-based lessons for the following reasons. The first reason is that the topic of the story matches with the topic of wild animals. The second is that the vocabulary and the grammatical structures of the story are suitable for the level of students to understand without adaptation. The third is that the story has rhymes which can facilitate students to remember the vocabulary and its plot. Although the plot of the story is simple, it still has enough features to be considered a story, including both characters (the animals) and events made by the actions of animals and their interactions with each other in the story.

Before the lessons were carried out, students, in the two groups, had to do a pre-test which checks their ability of writing English words, basing on available letters appearing in the incorrect order. The vocabulary used in the pre-test included some from the topic of farm animals (such as a dog, a cat, a horse, a bear). The students learnt this vocabulary in their first grade. After finishing the lessons, the two groups had to do a post-test and an exercise which was carried out five weeks after the post-test. The instruments used to collect data in this experiment are tests, scores and timing (tests and scores are instruments utilized to collect quantitative data), and observations and diary (observations and diary are used to collect qualitative data). The design of this experiment is described in detail below.

3.1. Participants

This study included 44 eight-year-old students who were in grade two at *Teresianas de Jesus* primary school, which is a semi-private school in Tarragona, Spain. The students are Catalan/Spanish native speakers, and their English level was pre-A1 (CEFR – *The Common European Framework of Reference for Languages*) at the time the experiment was carried out. At their school, they learnt three English lessons per week (50 minutes per lesson) with the same teacher. The 44 students were divided into two groups (the experimental group and the control

group) having the same number of students (22 students per each group). These students were chosen to carry out this experiment because they are a homogeneous group of students with similar age, language proficiency and overall academic performance. They learnt the same academic curriculum with the same teachers under the same educational conditions. Students learnt English as the third/foreign language while being required to master both Catalan and Spanish, which are their native languages. Students need to meet the literacy requirements of the initial cycle of primary education in Spain.

3.2. Procedures and materials

The procedure included three parts: story-based lessons for the experimental group, the instruction for the control group, and the administration of tests (a pre-test, a post-test and an exercise carried out five weeks after the post-test) for students of both the experimental group and the control group. In terms of the story-based lessons for the experimental group, each lesson included three stages: pre-story, during story and post-story. Before the story, some activities were organized for introducing or revising vocabulary and grammar in order to give students enough language support so that they can follow and understand the story, such as introducing the name of animals and the actions done by the animals through games like to guess the animals basing on their sounds or their actions. In addition, students were asked to guess the plot of the story and find in their background what they already know about the theme, the characters and events of the story. During the story, the experimental students had to do some exercises. The exercises were used to help students encounter, become familiar with and remember written words, including listen and order the flashcards, listen and fill in the gaps with available words, listen and match pictures with sentences. These exercises provided the answer to what students had guessed about the story before listening to it. After the story, the students were required to do some exercises aiming to review what they had learnt in the lesson. The exercises carried out after the story were also used for the control group, including: (i) circle the words naming animals in a series of letters, (ii) write the words naming animals with some given letters, (iii) spell the words. The techniques used for story-based lessons in the experiment included the use of visual aids (flashcards, total physical response-TPR) and audial support, such as expressive voice, sound and music in order to attract the students to the story and to reinforce the students' memory and their understanding of the story. The story was told by the instructor (who is the teacher in this case) and the students were given the script of the story with pictures attached with the script. The target vocabulary was highlighted in the script with small pictures attached with them.

Regarding the instruction for the control group, the students learnt the same topic as the experimental group but without the story. Their lesson followed the usual lesson that both groups were always accustomed to, including introduction of new vocabulary and grammar, followed by oral speaking drills with games, to end with writing exercises to allow students to be familiar with lexical items in written format. In the control group, the story was replaced with some games, such as *What's the missing animal?*, *What's the missing word?*, or *Simon says*, among others. In the control group, first the lesson began with the introduction or revision of vocabulary and grammar with visual and aural aids, then students played games with flashcards before doing exercises to practice writing.

The tests used for checking students' writing are based on *Cambridge English Young Learners' Tests (YLE): Starter level* in which the third part tapped students' ability of writing words, basing on some available letters with the support of images. Students were allowed to do the test in five minutes without counting the time of settling down and receiving the test. For the exercise employed five-week-later, students were required to write eight words which make approximately a half of the total number of words that they had learnt in the lessons of the experiment. They were given fifteen minutes to do the exercise and three times listening to the words. To evaluate the appropriateness of the tests and the time given to complete them, the tests were sent to both the English teachers and the primary teachers of the school to review and revise before reaching the final version.

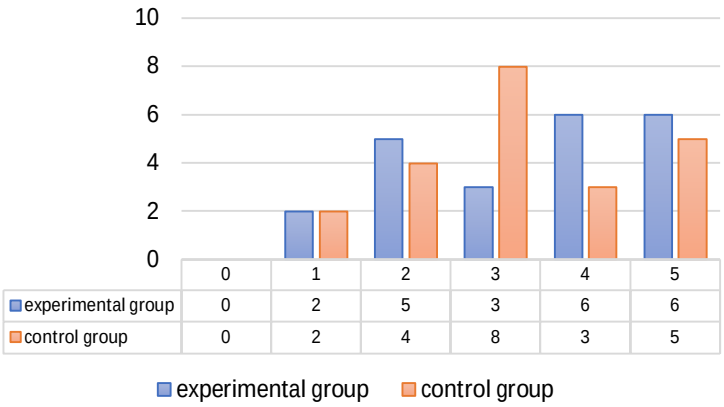
After the data from the pre-test, the post-test and the exercises were collected, the Mann-Whitney *U* test, Wilcoxon signed-rank test and General Linear Model with Repeated Measures were applied to analyze the data in order to see the differences between the control group and the experimental group in terms of their results of the pre-test, the post-test, the changes in the experimental group after learning with storytelling, as well as the impact of the interaction between time and different treatments on the post-test results of the two groups. Due to the fact that the sample size was small and the data were not normally distributed which can affect the results of parametric tests, non-parametric tests were applied after testing the homogeneity (Table 1).

Table 1 Test of homogeneity of variances

		Levene Statistic	df1	df2	Sig.
writing_pretest	Based on mean	.328	1	42	.570
	Based on median	.113	1	42	.739
	Based on median and with adjusted df	.113	1	41.424	.739
	Based on trimmed mean	.238	1	42	.628
writing_posttest	Based on mean	.058	1	42	.810
	Based on median	.045	1	42	.833
	Based on median and with adjusted df	.045	1	40.249	.833
	Based on trimmed mean	.017	1	42	.897

4. Results

In the pre-test, the students had to do an exercise which tapped their ability of writing words naming farm animals (such as a bird, a horse) with some available letters. The results of the Mann-Whitney *U* test (Figure 3) show that there was no significant difference between the experimental group and the control group ($p > .05$). The mean of the former was 3.4, and the mean of the latter was nearly 3.2.



	0	1	2	3	4	5
experimental group	0	2	5	3	6	6
control group	0	2	4	8	3	5

Figure 2 Results of the experimental group and the control group in the pre-test

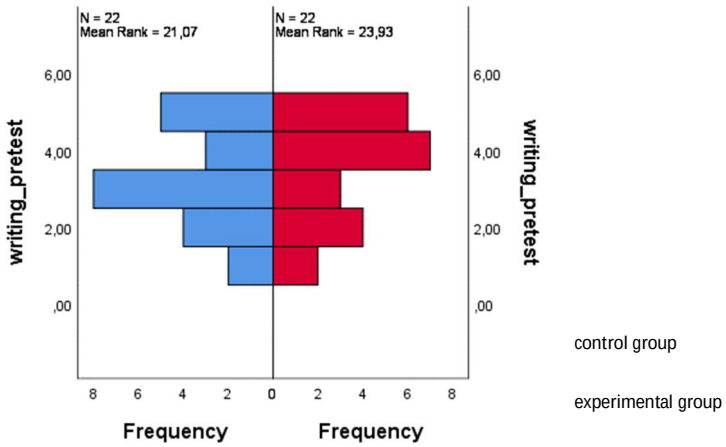
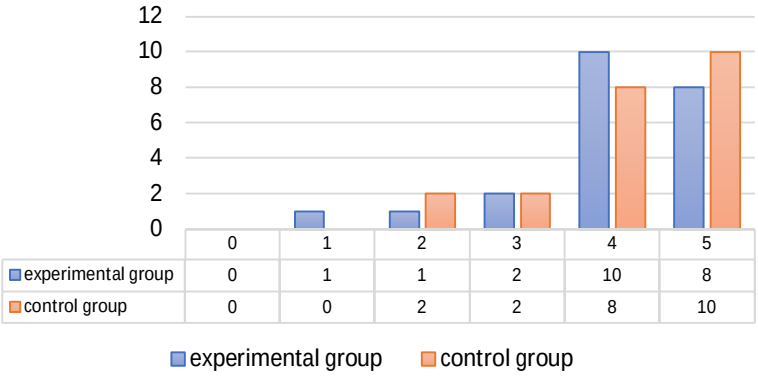


Figure 3 Independent Mann-Whitney *U* Test for the pre-test

As can be seen from Figure 2, more students from the experimental group got 4 and 5 points (twelve students) than the control group (eight students). The number of experimental group's students getting 4 points (six students) is twice as big as the number of control group's students getting the same point, while the

number of control group's students getting 3 points (eight students) is nearly three times as big as the experimental group's students getting this point (three students). The two groups were quite similar in terms of the number of students getting 1 point, 2 points and 5 points. Seven students of the experimental group got 1 point and 2 points, while the number of students of the control group getting these points is six. Six students of the former got 5 points – the max point, while five ones of the latter got the maximum point.



	0	1	2	3	4	5
experimental group	0	1	1	2	10	8
control group	0	0	2	2	8	10

Figure 4 Results of the two groups in the post-test

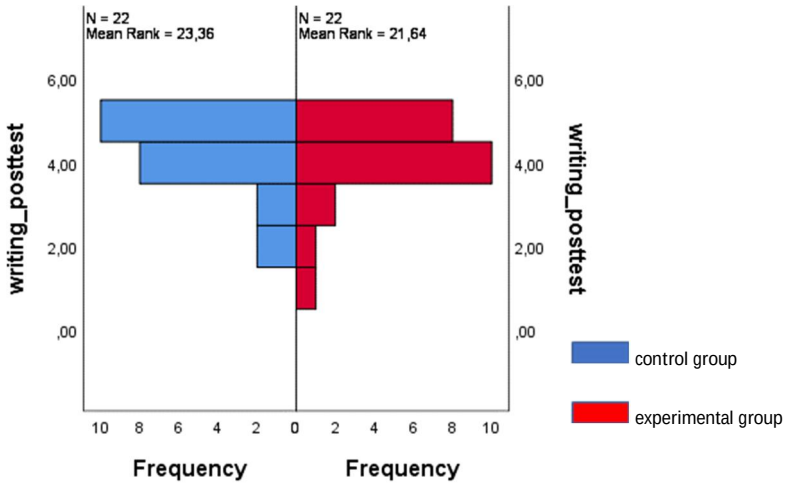


Figure 5 Independent Mann-Whitney *U* Test for the post-test

Concerning the results of the post-test which can be seen from in Figure 4, the results of the two groups did not really differ. About 80% of the students in each group scored more than 4 points. The numbers of students getting 3 and lower than 3 points of the two groups were equal (two people getting 3 points

and two people getting less than 3). The means obtained in the post-test are high in both the control group and the experimental one (4.18 for the former and 4.05 for the latter), meaning that the students were quite good at remembering how to write words naming different wild animals. The statistical analysis also proved that the two groups had similar results on the post-test ($p > .05$).

The Wilcoxon signed-rank test is used to determine whether there were any differences between the pre-test and the post-test of the two groups. The results of the test (Table 2) show that there were significant differences between the former and the latter ($p < .05$). Due to the fact that the results on the post-test were better than on the pre-test, the General Linear Model was used to analyze in depth the impact of time, the effect of treatments and the influence of the interaction between time and treatments in order to see which is the imperative determinant enhancing the results of the students from the pre-test to the post-test. Results of the General Linear Model (Table 3) show that time played an important role in students' progress ($p < .05$) while there is neither a significant impact of treatments nor the interaction between time and treatments. These two factors do not play a significant role in the higher results of students in the post-test.

Table 2 The Wilcoxon signed-rank test for the pre-test and the post-test

Related-samples Wilcoxon signed-rank test summary (experimental group)		Related-samples Wilcoxon signed-rank Test summary (control group)	
Total *N*	22	Total *N*	19
Test statistic	85.000	Test statistic	95.500
Standard error	15.435	Standard error	17.234
Standardized test Statistic	2.106	Standardized test statistic	2.060
Asymptotic Sig. (2-sided test)	.035	Asymptotic Sig. (2-sided test)	.039

Table 3 Tests of within-subjects contrasts

Measure: Method

Source	time	Type III sum of squares	df	Mean square	*F*	Sig.
time	Linear	12.375	1	12.375	12.030	.001
time * method	Linear	.920	1	.920	.895	.350
Error(time)	Linear	43.205	42	1.029		

Measure: method
Transformed variable: Average

Source	Type III sum of squares	Df	Mean square	*F*	Sig.
Intercept	1230.011	1	1230.011	733.956	.000
Method	.102	1	.102	.061	.806
Error	70.386	42	1.676		

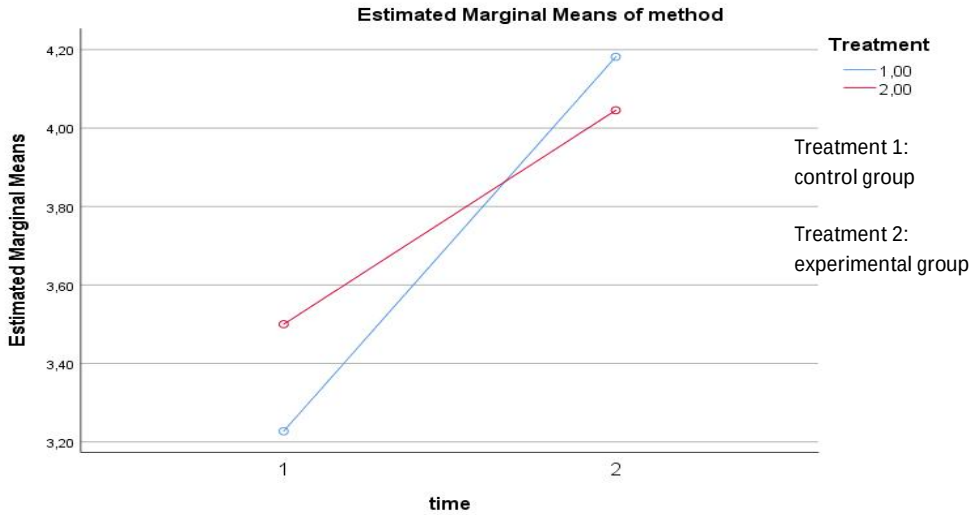
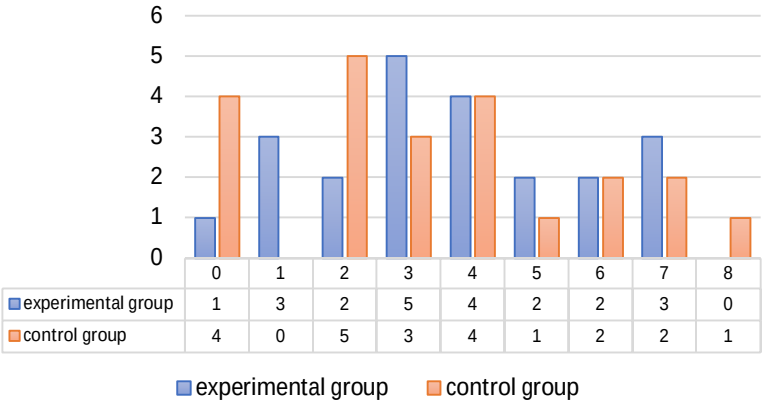


Figure 6 Profile plots of the two groups in the pre-test and the post-test



	0	1	2	3	4	5	6	7	8
experimental group	1	3	2	5	4	2	2	3	0
control group	4	0	5	3	4	1	2	2	1

Figure 7 The results of the two groups in the five-week-later exercise

Regarding the five-week later exercise which asked students to write eight words that they learnt in the six lessons including: *walrus*, *flamingo*, *leopard*, *elephant*, *snort*, *roar*, *trumpet*, and *bray*, without any given letters, the results of the two groups are presented in Figure 7. As can be seen from Figure 7, it was too difficult for students in the two groups to write the words naming different wild animals and their activities without any available letters. Nearly two-thirds of the students per each group got lower than 5 points (the max point is 8). The number of students getting lower than 3 points in the experimental group and the control one is 6 and 9, separately. Nearly 25% of the students got more than 5 points in each group. It was observed that the students could remember the letters and

the sequence of letters constructing each word. However, they still forgot some elements (such as *warus* instead of *walrus* or *brai* instead of *bray*), which led to their mistakes, and only correct words were accepted and counted. Therefore, their results were under medium. The mean that the experimental group got was 3.68, while the mean of the control group was 3.37. The Mann-Whitney *U* test showed that the two groups were equally effective in remembering how to write the words that they had learnt in the six lessons (p = .594).

On the basis of the results of the pre-test, the post-test and the five-week-later exercise, it can be seen that the story-based approach helped children to progress in English word writing. However, the effect did not prove to be different from other activities providing students with written input, such as games and exercises in helping children to write English words independently and correctly. In addition, time played a pivotal role in children's growth in their English word writing.

5. Discussion

The results of the experiment answer the research questions related to the role of storytelling in helping children's word writing in the EFL class and if it is the dominant factor in students' progress. As regards the first research question, the results show that the story-based approach helped children to improve in their word writing, similar to games and exercises. However, in reference to the second research question, the results suggest that storytelling did not prove to be the determinant factor in students' significantly higher results of their word writing in the post-test. Instead, time play a crucial role in students' achievement of word writing. This can be explained in terms of the theory of orthographic mapping (Ehri, 2014), the self-teaching theory of orthographic learning (Share, 2008), and orthographic depth hypothesis (Katz & Frost, 1992).

According to the orthographic mapping (Ehri 2014), OM is enabled by phonemic awareness and grapheme-phoneme knowledge. Although word reading and word writing or spelling share OM as the key feature and imperative ability requirement, there are differences between word writing or spelling and word reading. With word reading, children have visual attributes of written words to base on to read. They have letters to see and to set up the connection between letters and sounds or between graphemes and phonemes. For writing, children do not have available visual features of written words or letters to form connections with sounds or meanings. They need to recall the visual characteristics of written words which correspond with specific meanings or sounds in their memory. On the writing exercises of the pre-test and the post-test, children were given pictures (the word's meaning) and available letters in the wrong order as the support to write words. The mechanism of writing words in the tests

can be either associating straightforward the word's meaning with its visual features that are stored in learners' memory, or linking the meaning with the pronunciation of the word, and then connecting its pronunciation with its visual attributes or connecting the phoneme with the grapheme, depending on the OM phase that learners are staying at. On the exercise administered five weeks later, children listened to the words before writing them. Therefore, they needed to link the sounds with the visual characteristics of the words, or link the phonemes with the graphemes, and/or with their meaning as well.

The fact that children got average results on the pre-test and good results on the post-test indicate that they could be in the second phase of the OM – the partial alphabetic phase. Some students getting the total mark could be at the third phase – the full alphabetic phase. It is noticeable that the phases the Ehri (2014, p. 10) mentions are overlapping and the development of OM is continuous: "Sight words are viewed as accumulating continuously in memory. It is the predominant type of orthographic connection that is distinct and that changes with development, from non-alphabetic to partial to full and then to consolidated."

Students' results suggest that they possessed knowledge of the relationship between phonemes and graphemes, but it was not complete, and their OM was still developing from the pre-test to the post-test in which time played an important role in their development. Due to the requirement of phonemic awareness and the knowledge of grapheme and phoneme as the vital factors leading to the success of word reading and word spelling or word writing, if stories only provide learners with images of written words as well as their pronunciations without raising their awareness about the connection between phonemes and graphemes or the connection between sounds and letters, they are not effective enough, like other methods providing learners with written input (such as games, exercises), in helping learners improve their word writing. However, with time and continuous and repetitive language exposure in the type of both oral and written input, learners could still develop their OM as having been shown in the results of the pre-test and the post-test. Therefore, stories (both listening and reading) should be used repetitively to provide rich language exposure for learners; in addition, while using stories, teachers can raise learners' awareness about the connection between sounds and letters in order to improve their spelling and word writing.

The self-teaching theory of orthographic learning emphasizes the role of print input and phonological decoding in children's orthographic knowledge growth as well as notes that this process is a continuous process which lasts for years, instead of months and never stops. This process is also speedy and durable. Share (2008) after reviewing a number of studies summarizes that even few exposures (three to four) can be adequate to have reliable outcomes. This might explain why time experiencing print language is the key factor leading to

students' better results in the post-test. Time of listening and reading words (in this research, reading and listening to a story) help students develop their orthographic learning by giving them opportunities to encounter and decode printed words. In this way, learners can unintentionally acquire orthographic information, which is robustly stored in their memory and makes a foundation for their word reading or word writing. This can also explain why the two groups had similar results for the post-test and the five-week later exercise as both treatments (stories and games) provide learners with written language in a repetitive way (six lessons), which is enough for learners' orthographic learning that is rapid and durable. With sufficient frequency of exposing students to the print target vocabulary, stories cannot be differentiated from other methods supplying students with written input (such as games) in improving students' ability of writing the target words.

The orthographic depth hypothesis (Katz & Frost, 1992) suggests that readers of transparent orthographies (e.g., German, Finnish) tend to experience reading success through using graphemes-phonemes mapping than readers of opaque orthographies (such as English or French). This can happen in word writing as well, as word reading and word writing both share the OM requirement. The students of the study are Spanish/Catalan native speakers. In Spanish and in Catalan to a lesser degree, the relationship between graphemes and phonemes are straight forward. However, in English, there are different ways to pronounce letters, depending on the words. Therefore, Spanish/Catalan native speakers can find it more difficult to write English than to write Spanish. Moreover, from our observation, some participants of this study kept transferring the OM they already formed in Spanish into their English word writing, particularly in the vowels. This can explain why students faced difficulties in writing English words without any support (such as available letters) and got under medium results in the five-week-exercise later. The results of this study are consistent with the results of the research project by Calvo-Benzies (2019). Calvo-Benzies (2019, p. 21) reported that "A high number of the pronunciation mistakes made by bilingual speakers of Spanish and Galician when speaking in English can be attributed to phonological or orthographic interference from their native languages." By transferring Spanish orthography to English, students make mistakes in their writing, especially when they do not have available letters to be based on. For example, students wrote *trumpit* instead of *trumpet*, *leopod* instead of *leopard*, *esnot* instead of *snort*. From our observation, students tended to transfer the Spanish vowels to write English words (the case of *trumpit*, *esnot*). For the words *leopard, snort*, the letter *r* was usually missing.

This case study also suffers from some limitations. The frequency of the vocabulary of the two topics for children is beyond the experiment's control. However,

all students had read the words of the pre-test and the words of the post-test at least six times, which can build orthographic representations of these words in their mind as Share (2008) suggests that four times of reading vocabulary can provide reliable outcomes of orthographic representations (the store of printed words corresponding to equivalent pronunciations in speech, and referring to objects, events or actions that they represent) formed in students' memory.

6. Conclusion

This case study has explored the effects of the story-based approach in helping children to write English words in the EFL primary classroom. From the results of the study, two major conclusions can be drawn. First, the length of experiencing continuous and repetitive written input plays an imperative role in students' reform in word writing instead of treatments. Second, with sufficient frequency of exposing students to print target vocabulary (six times in this study), stories cannot be differentiated from other methods supplying students with written input (such as games) in improving students' ability of writing the target words. The study suggests that stories (both listening and reading) should be used repetitively to provide rich language exposure for learners; in addition, while using stories, teachers can raise learners' awareness about the connection between sounds and letters in order to improve their spelling and word writing. The study has clear implications for teaching practice. It contributes to confirming that time of experiencing and decoding rich language input in both oral and written types in a repetitive way helps students develop their word writing. In addition, when students are exposed to the written language with sufficient times (six times in the study), they will develop their word writing naturally, no matter what methods are being used (stories, games or others).

References

Abbott, R. D., Berninger, V. W., & Fayol, M. (2010). Longitudinal relationships of levels of language in writing and between writing and reading in grades 1 to 7. *Journal of Educational Psychology*, *102*(2), 281-298. https://doi.org/10.1037/a0019318

Adair-Hauck, B., & Donato, R. (2010). The PACE model: A story-based approach to meaning and form for standards-based language learning. In J. Shrum & E. Gilsan (Eds.), *Teacher's handbook contextualized language instruction* (pp. 216-244). Boston: Cengage Learning.

Beck, I. L., & McKeown, M. G. (2007). Increasing young low – income children's oral vocabulary repertoires through rich and focused instruction. *The Elementary School Journal*, *107*(3), 251-271. https://doi.org/10.1086/511706

Berninger, V. W., Abbott, R. D., Abbott, S. P., Graham, S., & Richards, T. (2002). Writing nd reading: Connections between language by hand and language by eye. *Journal of Learning Disabilities*, *35*, 39-56. https://doi.org/10.1177/002221040203500104

Bland, J. (2013). *Children's literature and learner empowerment*. Bloomsbury Academic.

Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Longman.

Bryant, S. C. (2009). *How to tell stories to children and some stories to tell*. The Floating Press.

Calvo-Benzies, Y. J. (2019). A preliminary study on the nature and impact of phonological and orthographic transfer in the English speech of bilingual speakers of Spanish and Galician. *Second Language Learning and Teaching*, 21-47. https://doi.org/10.1007/978-3-030-22066-2_2

Cameron, L. (2001). *Teaching languages to young learners*. Cambridge University Press.

Conrad, N. J., Kennedy, K., Saoud, W., Scallion, L., & Hanusiak, L. (2019). Establishing word representations through reading and spelling: Comparing degree of orthographic learning. *Journal of Research in Reading*, *42*(1), 162-177. https://doi.org/10.1111/1467-9817.12256

Coyne, M. D., Betsy McCoach, D., & Kapp, S. (2007). Vocabulary intervention for kindergarten students: Comparing extended instruction to embedded instruction and incidental exposure. *Learning Disability Quarterly, 30*(2), 74-88. https://doi.org/10.2307/30035543

Davies, A. (2007). *Storytelling in the classroom*. Questions Publishing.

Deacon, S. H., Mimeau, C., Chung, S. C., & Chen, X. (2019). Young readers' skill in learning spellings and meanings of words during independent reading. *Journal of Experimental Child Psychology*, *181*, 56-74. https://doi.org/10.1016/j.jecp.2018.12.007

Ellis, G., & Brewster, J. (2014). *Tell it again: The storytelling handbook for primary English language teachers* (3rd ed.). British Council.

Ehri, L. C. (1995). Phases of development in learning to read words by sight. *Journal of Research in Reading*, *18*(2), 116-125, https://doi.org/10.1111/j.1467-9817.1995.tb00077.x

Ehri, L. C. (1997). Learning to read and learning to spell are one and the same, almost. In C. A. Perfetti, L. Rieben, M. Fayol, C. A. Perfetti, L. Rieben, & M. Fayol (Eds.), *Learning to spell: Research, theory, and practice across languages* (pp. 237-269). Lawrence Erlbaum.

Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading*, *9*(2), 167-188. https://doi.org/10.1207/s1532799xssr0902_4

Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, *18*, 5-21. https://doi.org/10.1080/10888438.2013.819356

Elley, W. B. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly*, *24*, 174-187.

Enever, J. (2011). *ElliE: Early language learning in Europe*. British Council.

Ghosn, I. K. (2002). *Four good reasons to use literature in primary school ELT*. Oxford University Press.

Ghosn, I. (2013). Story bridge to Second Language Literacy. Information Age Publishing.

Katz, L., & Frost, L. (1992). Reading in different orthographies: The orthographic depthhypothesis. In R. Frost & L. Katz (Eds.), *Orthography, phonology morphology, and meaning* (pp. 67-84). Elsevier.

Kennedy, D. (1998). The art of the tale: Story-telling and history teaching. *The History Teacher, 31*(3), 319-330. https://doi.org/10.2307/494877

Kocaman-Karoglu, A. (2015). Telling stories digitally: an experiment with preschool children. *Educational Media International*, *52*(4), 340-352. https://doi.org/10.1080/09523987.2015.1100391

Korat, O., & Shamir, A. (2012). Direct and indirect teaching: using e-books for supporting vocabulary, word reading, and story comprehension for young children. *Journal of Educational Computing Research*. *46*(2), 135-152. https://doi.org/10.2190/EC.46.2.b

Korat, O., & Shamir, A. (2008). The educational electronic book as a tool for supporting children's emergent literacy in low versus middle SES groups. *Computers and Education, 50,* 110-124.

Lenhart, J., Lenhard, W., Vaahtoranta, E., & Suggate, S. (2017). Incidental vocabulary acquisition from listening to stories: A comparison between read-aloud and free storytelling approaches. *An International Journal of Experimental Educational Psychology*, *35*, 1-21. https://doi.org/10.1080/01443410.2017.1363377

Lipman, D. (1999). *Improving your storytelling: Beyond the basics for all who tell stories in work or play*. August House.

Marulis, L. M., & Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, *80*, 300-335.

Maynard, K. L., Pullen, P. C., & Coyne, M. D. (2010). Teaching vocabulary to first-grade students through repeated shared storybook reading: A comparison of rich and basic instruction to incidental exposure. *Literacy Research and Instruction*, *49*, 209-242.

Pellowski, A. (1991). *The world of storytelling*. H.W. Wilson.

Shamir, A., Korat, O., & Barbi, N. (2008). The effects of CD-ROM storybook reading on low SES kindergarteners' emergent literacy as a function of learning context. *Journal of Computers & Education*, *51*(1), 54-367. https://doi.org/10.1016/j.compedu.2007.05.010

Share, D. L. (2008). Orthographic learning, phonological recoding, and self-teaching. In R. V. Kail & R. V. Kail (Eds.), *Advances in child development and behavior (Vol 36)* (pp. 31-82). Elsevier Academic Press. https://doi.org/10.1016/S0065-2407(08)00002-5

Spencer, T. D., Peterson, D. B., Adelaida Restrepo, M., Thompson, M., & Gutierrez Arvizu, M. N. (2018). The effect of Spanish and English narrative intervention on the language skills of young dual language learners. *Topics in Early Childhood Special Education*, *38*, 1-16. https://doi.org/10.1177/0271121418779439

Stachurska, S. (2013). Exploiting storytelling in a young learners' classroom. In O. Majchrzak (Ed.), *Psycholonguistic langauge explorations* (pp. 165-182). Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Straley, S. G., Werfel, K. L., & Hendricks, A. E. (2016). Spelling in written stories by school-age children with cochlear implants. *Deafness & Education International*, *18*(2), 67-70. https://doi.org/10.1080/14643154.2016.1143168

Suggate, S. P., Lenhard, W., Neudecker, E., & Schneider, W. (2013). Incidental vocabulary acquisition from stories: Second and fourth graders learn more from listening than reading. *First Language*, *33*, 551-571.

Thompson, G. B., McKay, M. F., Fletcher-Flinn, C. M., Connelly, V., Kaa, R. T., & Ewing, J. (2008). Do children who acquire word reading without explicit phonics employ compensatory learning? Issues of phonological recoding, lexical orthography, and fluency. *Reading and Writing*, *21*(5), 505-537. https://doi.org/10.1007/s11145-007-9075-9

Valentini, A., Ricketts, J., Pye, R.E., & Houston-Price, C. (2018). Listening while reading promotes word learning from stories. *Journal of Experimental Child Psychology, 167,* 10-31. https://doi.org/10.1016/j.jecp.2017.09.022

Vadasy, P. F., & Sanders, E. A. (2014). Incremental learning of difficult words in story contexts: the role of spelling and pronouncing new vocabulary. *Journal of Reading and Writing*, *28*, 371-394. https://doi.org/10.1007/s11145-014-9529-9

VanPatten, B. (2004). *Processing instruction: Theory, research, and commentary*. Lawrence Erlbaum.

Walkington, C., Clinton, V., & Sparks, A. (2019). The effect of language modification of mathematics story problems on problem-solving in online homework. *Instructional Science, 47*, 499-529. https://doi.org/10.1007/s11251-019-09481-6

Walsh, B. A., Sánchez, C., & Burnham, M. M. (2015). Shared storybook reading in Head Start: Impact of questioning styles on the vocabulary of Hispanic dual language learners. *Early Childhood Education Journal*. Advance online publication. https://doi.org/10.1007/s10643-015-0708-3

Wright, A. (1995). *Storytelling with children*. Oxford: University Press.