Original Paper

Comparing Different Pedagogical Techniques to Teach Spelling at a Saudi High School: A Case Study

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Abstract

This study investigates whether teaching spelling to high school students using different techniques, i.e. copy, cover, compare and flip folder, would improve students' spelling. Additionally, it explores students' opinions and perceptions towards these techniques. The research conducted in Granada high school in Makkah, Saudi Arabia. Thirty-six male students participated in this study whose levels according to the course book were assumed to be B1 in the Common European Framework of Reference for Languages (CEFR). In this study, a mixed research method was used where data was analyzed quantitatively and qualitatively. The first group was taught using copy cover and compare method (CCC), which emphasizes repeated practice when errors occur in students spelling, whereas the second group was trained using the flip folder technique which is a combination of visual, auditory, and kinesthetic techniques that were believed to enhance memorization. A post-test was utilized immediately after the intervention and the results showed that the CCC group outperformed the Flip Folder group.

Keywords

Spelling, Copy-Cover-Compare (CCC), Flip Folder, Behaviorism Theory, High School, Saudi Arabia

1. Introduction

1.1 Statement of the Problem

Saudi students learning English are facing some obstacles that prevent them from becoming proficient language users (Al-Nasser, 2015). One of those problems is spelling. El-Dakhs and Mitchell (2011) stated "Saudi EFL learners suffer from serious difficulties with their English spelling despite the earlier introduction of English in schools" (p. 13). Spelling is considered as a major problem for second

language learners. It seems that word choices in students writing are altered when they do not spell words correctly. Nahari and Alfadda (2016) pointed out that learners with strong vocabulary are likely to use simpler words rather than the more complex ones since they are uncertain concerning how to spell low-frequency words.

Spelling errors in the second language can be intra-lingual or inter-lingual motivated. In the case of intra-lingual, L2 students make spelling errors because of their unfamiliarity with English language systems, comprising semantic and morphological correspondences, understanding of orthography, as well as phonological awareness. In the case of inter-lingual, spelling errors reflect interferences from the first language literacy skills upon English as a second language learning (El-Dakhs & Mitchell, 2011). That goes in line with what Russak and Kahn-Horwitz (2015) expressed that correct spelling in L2 depends on semantic, morphological, orthographic, and phonological information and knowledge. Understanding of spelling rules is an essential requirement for better writing and enhanced linguistic development among L2 students. In other words, spelling is not solely a matter of memorization, it requires extra skills in order to be produced correctly.

1.2 Purpose of the Study

The study aims to compare two different techniques of teaching spelling in a high school within Makkah Province. Utilizing two different groups and two spelling instruction techniques, this study aims to find which group exhibits the most significant improvement.

1.3 Research Question

The research will answer the following question:

1-   Which spelling technique is more effective in high schools in Saudi Arabia: copy, cover and compare (CCC) or flip folder?

1.4 Significance of the Study

There have been a number of research initiatives, which discuss errors in spelling in relation to Saudi students (see Alhaisoni, Al-Zuoud, & Gaudel, 2015; Hameed, 2015; Khan & Itoo, 2012). However, to the researchers' best knowledge, very few publications are available in the literature that address spelling instruction in Saudi Arabia. Three articles were found which applied different methods of teaching spelling in Saudi Arabia (Al-jarf, 2011; Alrwele, 2017; Nahari & Alfadda, 2016).

For many years, great effort has been devoted to study spelling instruction inside classrooms. Much research on the CCC technique has been undertaken in the last two decades, and some have concluded that it is the best method for spelling instruction (Alrwele, 2017; Skinner, McLaughlin, & Logan, 1997). CCC puts emphasis on repeated writing of new words in order to form a habit of correct spelling (Morgret, Weber, & Woo, 2001a).

On the other hand, little can be found in the literature regarding the effectiveness of flip folder technique. Flip folder, which is a variation of a technique that was proposed by Horn (1967), is defined as "systematic technique for learning the correct spelling of words by using a combination of visual, auditory, kinesthetic, and tactile procedures" (Gentry, 2004, p. 60).

37

Therefore, this study was carried out to compare these two techniques in the Saudi context. While CCC has been found to be useful and was recommended to be implemented in our Saudi context (Alrwele, 2017), nothing was reported about using flip folder as a medium for spelling instruction in Saudi Arabia.

1.5 Research Design

The present study is based on a positivist paradigm. That is, the research follows a quantitative approach to collect data through a pre-test and post-test to make a decision regarding the best of these techniques. At the beginning, a pre-test was administered, followed by an intervention for nine days. After the intervention, a post-test was conducted and compared with the pre-test results and with the other group to see if there was any improvement after the intervention.

1.6 Sampling and Participants

Due to the nature of the researchers' job (teaching), a convenience sample was used in this study. Therefore, the teacher was teaching spelling as well as carrying out the research. A convenience sample means that the participating students are selected based on their availability and convenience (Creswell, 2014). The participants of this research were second-grade high school students from Makkah city in Saudi Arabia. Students' age ranged from 16 to 18 years old. They were divided into two groups; each group consisted of 18 students. Students took a pre-test followed by spelling instruction for 15 minutes in each class. A post-test was administered after students completed 135 minutes of instruction.

2. Literature Review

2.1 Spelling Definition

Spelling in its simplest definition means "forming words with the correct letters in the correct order, or the ability to do this" (Cambridge Dictionary, 2017). Keuning and Verhoeven (2008) described spelling as:

"A complex written language skill that draws upon a number of language abilities and knowledge. Phonological skills appear to be critical, in addition to orthographic knowledge, memory for word images (mental orthographic images), awareness of morphological structures and semantic relationships (i.e., knowledge of word parts and related words), as well as knowledge of spelling rules" (as cited in Van Staden, 2010, p. 13).

2.2 Should Spelling be Taught Explicitly?

Few scholars have asserted that spelling should be integrated into other subjects such as reading and writing, and there is no need for developing a specific course for spelling (Schlagal, 2002). It is believed that spelling is acquired through extensive reading and writing. Krashen (1989) has argued that reading would allow students to develop spelling ability. He stated that free reading would result in better spelling, which supports the Input Hypothesis theory. The Input hypothesis theory states that learners acquire language when they receive comprehensible messages. Thus, spelling as a part of the language will be learned as learners receive comprehensible input, in this case reading.

On the other hand, several researchers have emphasized the need of explicit spelling instruction (see e.g., Graham & Santangelo, 2014; Reed, 2012; Roberts, 2011; Schlagal, 2002; Sullivan & Thomas, 2007; Westwood, 2005, 2014). They stated that spelling should be introduced to learners as soon as possible. Advocates of this approach believe that teachers should modify spelling instruction to students' current level. Language instructors should also direct their students attention towards "not only to words which sound alike and look alike, but also—and very importantly—to words which look alike and do not sound alike, e.g., one, done, gone, bone" (Peters, 1985; as cited in Sullivan & Thomas, 2007, p. 11).

2.3 Why English Spelling is Difficult for Arab Learners?

It has been observed that Arab students are facing difficulties when they are spelling English words. Several studies have discussed this problem and traced the causes of it (see e.g., Abu-Rabia & Taha, 2006; Al-bereiki, 2016; Al-Busaidi & Al-Saqqaf, 2015; Al-sobhi, Rashid, Abdullah, & Darmi, 2017; Sawalmeh, 2013; Trimasse, 2016). Those authors have considered English spelling a daunting and a difficult skill, particularly to learners whose first language is not English, such as Arab students of English. Linguistic differences between the Arabic and English writing systems are possibly the primary cause of poor spelling amongst Arab students. The Arabic writing system is regular; for instance, there are virtually consistencies between Arabic letters and sounds, unlike English. On the other hand, the lack of connection or a close similarity between English graphemes and phonemes makes the English writing system more difficult. As a result, the English writing system tends to create difficulties for Arab students and consequently most of these learners fail to spell out English words correctly (Al-sobhi et al., 2017).

Fender (2008) has also examined the association between reading skills and spelling knowledge amongst a group of 16 intermediate-level Arab learners of English as a second language (ESL) and a matching comparison group of twenty-one intermediate-level learners of English in an English for academic purposes program (EAP). The results showed that the Arab students scored significantly lower on the spelling test and the reading comprehension test than the other group. He found that Arab students are struggling to master the English spelling system. He concluded that the Arabs had difficulties spelling multisyllabic words that include patterns across syllables (e.g., customer, bottle, success) and derivational spellings (e.g., decision, knowledge, responsible).

Additionally, Allaith and Joshi (2011) examined the influence of some aspects of the Arabic phonological system on spelling words. The researchers found that the absence of some consonants in Arabic such as /p/ and /v/ could impede spelling accuracy in English. They also noted that since those sounds do not exist in Arabic, students tend to replace them with their nearest counterpart /b/ and /f/. Thus, it sheds light on the importance of phonological awareness for second language spelling.

It has been asserted that the absence of some English sounds in Arabic made it difficult for students to select the correct letters. Saigh and Schmitt (2012) studied spelling errors of 24 native Arabic speakers enrolled in EAP program in the UK. Student's levels ranged between intermediate and

39

upper-intermediate. They were asked to proofread 80 sentences to find spelling errors, if there was any. The results indicated that the participants relied extensively on phonological processing (letter-phoneme representation) as a result of transferring Arabic orthographic and literacy skills. In addition, vowels confusion, especially with short vowels played a vital role in students' errors. The researchers also discovered that students confused between /b/ and /p/ as the latter does not exist in the Saudi Arabic language and concluded that students commit these errors due to the effect of negative transfer from L1.

More specifically, Deacon (2017) investigated the "Vowel Blindness Hypothesis" (VBH), a term that was coined by Ryan and Meara (1991) which accounts for English spelling problems for Arab students of English. Vowel Blindness Hypothesis assumed that Arab students were less likely to identify short vowels due to their absence in the Arabic language. The stronger version of the hypothesis suggests that vowel omission is more frequent than vowel insertion. Deacon found that there was lack of evidence for a specific vowel blindness effect, even if the VBH is valid; it is not the main problem for spelling difficulty. He asserted that the main problem for Arab students is the lack of knowledge of grapheme to phoneme.

2.4 Spelling in Saudi Arabia

To the best of the researchers' knowledge, most of the studies conducted in Saudi Arabia to date discussed the types of spelling errors of Saudi students (Al-Jarf, 2008; Alhaisoni, Al-Zuoud, & Gaudel, 2015; El-Dakhs & Mitchell, 2011; Hameed, 2015; Sawalmeh, 2013). In other words, those studies were mainly focusing on spelling as a final product.

2.5 Spelling as a Product

Alhaisoni et al. (2015) examined the English spelling errors of 122 male and female EFL students studying at Ha'il University, Saudi Arabia. Students' ages ranged from 18 to 20 years. Those students were asked to write a well-organized essay on one of four proposed topics. The researchers classified the learners' spelling errors into transposition, insertion, substitution, and omission. The study findings demonstrated that the Saudi learners committed approximately 1,189.0 spelling errors. Those students committed 429 (34.90%) substitution errors and 462 (39.60%) omission errors, representing the highest proportion of all spelling errors. The researchers found that wrong pronunciation and improper usage or application of vowels had caused most of these spelling errors. They declared that the learners' interference of their mother tongue, and the irregularity of English spelling that is coherently noticeable in the lack of connection between English graphemes and phonemes, are the two major reasons of poor spelling in Saudi Arabia.

On the other hand, Albalawi (2016) examined the common spelling errors committed by eighty Saudi female learners who studied English as a crucial prerequisite to start their academic studies in Prince Fahad Bin Sultan University, Saudi Arabia. The study findings indicated that the learners committed 4.30% of transposition errors, which was the smallest percentage of spelling errors reported; substitution errors committed were 28.90% and 59% omission errors, which was the highest percentage

40

of all the spelling errors reported. The study found that mother tongue interference; irregularities of the orthographic English system, mispronunciations, and incorrect utilization of English vowels were the causes of the learners' spelling errors.

Similarly, Hameed (2016) examined the spelling errors that Saudi learners committed in English while writing. Data was gathered from 26 Saudi EFL university students through a fifty-word dictation. The analysis of the learners' responses revealed that spelling errors concentrated on the words containing silent letters, diphthongs, as well as vowel sounds. Approximately 93% of the responses turned out to be incorrect. Moreover, students transferred their mother tongue knowledge (e.g., as being a phonetic-based language) to their English learning experiences. The results indicated that substitution errors had the highest proportion, followed by transposition as well as omission and insertion errors, respectively.

In another study, Albalawi (2016) investigated and categorized the spelling errors of the preliminary-year Saudi learners at Tabuk University. The respondents comprised 45 EFL learners. The spelling errors of the students were categorized into addition and omission errors, and substitution. The study found that the differences between the sound systems of Arabic and English languages, as well as the non-phonetic nature of English spelling were associated with the student's spelling errors.

Al-Jarf (2008) administered dictation, listening comprehension, and decoding tests to 46 EFL freshman students at King Saud University in Riyadh, in an attempt to discover whether their spelling ability correlates with their listening comprehension and decoding skills. The findings showed that 41.5% of the words were misspelled on the dictation test. Her study revealed that good spelling is related to good listening comprehension and decoding skills.

2.6 Spelling as a Process

Two articles have been found that discuss different techniques of teaching spelling in Saudi schools. The first study was conducted by Nahari and Alfadda (2016) in one of Riyadh's private schools. Forty-two female sixth graders participated in the study. Students undertook five weekly tests to measure the efficacy of visualization strategy to teach spelling in comparison to the assign-and-test method. The researchers found that implementing visualization technique to teach spelling had resulted in a significant improvement, in contrast to the other method. The second study was conducted by Alrwele (2017) in a public school in Riyadh. One hundred twenty-two eighth-grade female students participated in the study. Students were divided into two groups: one group received instruction via CCC method, whereas the other group was trained using the assign-and-test method. The post-test results indicated that the CCC group surpassed the other group, and showed greater gains in spelling accuracy. She concluded that implementing CCC method was practical in terms of money and time, helped students work independently, and can be used in any English class, regardless of students' levels.

2.7 Techniques of Teaching Spelling:

One of the oldest and still-used method of teaching spelling was designed by Horn (1967). This method

is a combination of "visual, auditory, kinesthetic, as well as an emphasis on recall" (Horn, 1967, p. 19). By doing so, the teacher will be assured that different learning styles have been practiced and that students will learn best by joining those styles in one session.

A variation of Horn's method used nowadays by teachers is called flip folder (Gentry, 2004) (see Appendix A). Flip folder steps are the same as Horn method's and they are as follows:

1. Pronounce the word.

2. Look carefully at each part of the word as you pronounce it.

3. Say the letters in sequence.

4. Attempt to recall how the word looks, then spell the word.

5. Check this attempt to recall.

6. Write the word.

7. Check the spelling.

8. Repeat the above steps if necessary.

Another technique of teaching spelling that has been proven effective is copy cover and compare (Alrwele, 2017; McLaughlin, Skarr, Derby, Meade, & Williams, 2012; Skinner, McLaughlin, & Logan, 1997). CCC is a self-managed technique where students can practice new words, receive immediate feedback, and self-correct their errors (McLaughlin et al., 2012). It puts much emphasis on repeated practice by requiring students to rewrite the misspelled words three times (Heron, Okyere, & Miller, 1991). Repetition is considered one of the most important elements of learning spelling (Roberts, 2011). Repeated writing is supposed to be helpful if students pay full attention to the task and have the intention to correct their errors (Westwood, 2014). Moreover, CCC has been also proven effective with other subjects, such as math and reading (Alrwele, 2017).

Students who practice spelling using CCC follow four steps (Reed, 2012; Skinner et al., 1997) (see Appendix B).

First, students look at a word that is presented in a list.

Second, they cover the word using a blank card and write the word from their memory.

Third, they remove the card and compare the spelling.

Finally, in case of misspelling, they should rewrite the misspelled words three times.

2.8 Theoretical Framework

The presented techniques for teaching spelling (CCC and flip folder) are both different ways of enhancing students' memory to spell words correctly. In teaching most common words, students are asked to memorize them as some of them do not follow rules and patterns and can be learned only by memorization (Reed, 2012). These two techniques are based on the Behaviorism theory that states:

"Human and animal behavior can and should be studied only in terms of physical processes, without reference to mind. It led to theories of learning which explained how an external event (a **stimulus**) caused a change in the behavior of an individual (a **response**), based on a history of reinforcement" (Richards & Schmidt, 2010, p. 51).

Behaviorists believe that "learning to be the result of actions of the environment on the learner" (Fresch, 2007; as cited in Davis, 2011, p.16).

In the copy, cover and compare method, students are asked to memorize word spelling in isolation and repeat the exercise in case of errors. Practicing drilling by copying the misspelled word multiple times in class or at home is believed to lead to the habit of forming correct spelling (Morgret, Weber, & Woo, 2001b). In addition, the repeated writing of a word possibly helps the students establish a motor pattern for that word which would result in an automatic correct spelling (Westwood, 2005). Nichols (1985) explained, "Spelling is remembered best in your hand. It is the memory of your fingers moving the pencil to make a word that makes for accurate spelling" (as cited in Westwood, 2005, p. 14). Frequent writing is also supposed to be helpful in storing word spelling in the long-term memory provided that students pay attention to the task and practice a few words per session (Peters, 1974a; as cited in Westwood, 2005). Therefore, CCC puts emphasis on the repeated writing of a word in order for that word to be written automatically by the learners, especially with high frequency words.

Flip folder technique is a combination of different learning styles to maximize spelling retention. Addressing different learning techniques such as visualization, kinesthetic, and auditory, will offer repetition to students leading to memorizing the target word (Morgret et al., 2001b). Visual learners comprehend and memorize word when they see them, whereas kinesthetic learners learn best by writing the word as oppose to auditory learners who learn by listening, reading the word aloud and pronouncing each letter of the target word (Meyers, 2006). When learners practice those different modalities in one set, a coding connection will be utilized, and better memorization will be the result.

2.9 Researchers' Role

The researchers had a dual role in this study. The researchers collected the words to be included in the spelling list, provided the materials for each group (CCC sheet and flip folder), designed the tests and moderated the focus group interview. The researchers were also responsible for training students how to use these techniques and was observing how they were doing it.

3. Procedures

3.1 The Pretest

Fifteen words have been selected randomly, from the most common 36 words in the students' course book (Traveler 4), to assess students spelling. Dictation was used in this research to test spelling. The whole test lasted for 20 minutes; each student had to write only the word he heard, and each word was pronounced in a sentence, then separately. For example, I go with Ahmed every day, students write the word with.

3.2 Test Instructions

1- The test instructions were introduced to students in Arabic, and they were given a chance to ask any question regarding the test.

2- The teacher started by uttering the item's number, followed by pronouncing the target word in

43

isolation, repeating the word in a sentence, and finally saying it in isolation.

3- No part-mark was given; an item was either correct or not.

At the end of the test, the teacher collected the papers and started to mark students' answers. Any word with one misspelled letter was considered wrong. For example, students who misspell one letter in a word such as (different) would receive no mark for that word. The results were then inserted in IBM SPSS Statistics ver.20.0 (Statistical Package for Social Sciences) program to conduct the analysis.

3.3 The Intervention

The researchers have met with the participating students, before the commencement of the study, and explained the purpose and the length of the experiment. After that, he demonstrated to them how the practice was going to be, and each student received a sheet of paper or a flip folder to practice and ask any question in case they did not understand the procedures. They also were given the consent form to be signed by their guardians. Immediately after the intervention and without notice, students were administered the posttest.

Thirty-six words were practiced during the nine days experiment, four words per session. Students were given 15 minutes to practice those four words. The posttest consisted of 15 words that have been derived from the spelling test. Words were chosen to cover the whole content that is at least one word from each teaching session. The test procedures were the same with the pretest and it took around 17 minutes to be completed. Students' papers were collected and marked where each correct answer received a score of one and each incorrect answer was scored zero. The results were then inserted in IBM SPSS program to be analyzed.

3.4 Validity and Reliability

As for the validity of the pretest, since the test relies on a word list derived from the students' course book, it means that it has a content validity. Face validity was assured as the test comprised dictation, which has a face value and is considered to be a valid technique for testing spelling (Westwood, 2005). As for the posttest validity, it is considered valid because the items are tested directly, and all tested words were derived from the list that students have been trained on which makes the test has content validity.

The tests content and format were evaluated and approved by three English-language teachers who have at least seven years of experience in teaching English.

4. Results

The pretest was administered to serve as a baseline for the experiment. Moreover, the test results were used to identify the two homogeneous groups out of the four groups. The two groups' results can be said to be reliable as Cronbach's Alpha results showed a high reliable number (above 8).

A test of normality (Shapiro-Wilk Test) was conducted before the comparison of groups scores, in order to select the most appropriate test in this case (T test or Mann Whitney test). The test results showed that the CCC and flip folder group scores were not normally distributed (Sig. = 0.007, Sig. = 0.003)

44

respectively, where (p < 0.05) (see Appendix C). This rejects the null hypothesis of assumed test normality and indicates that the pretest data was not normally distributed.

Since the test data was not normally distributed, the Mann-Whitney test, a nonparametric test, was used with the groups pretest to analyze the difference between their scores. The test results showed that statistically there is no significant difference between the CCC group (Mdn = 2.0) (see Tables 1 and 2) and the flip folder group (Mdn = 1.0) U = 148.000, p = 0.653 which is higher than (0.05).

Table 1. Descriptive Statistics (Pretest and Posttest)

	N	Std. Deviation	Minimum	Maximum	Percentiles 25th	50th (Median)	75th
Pretest CCC	18	3.73860	.00	11.00	.7500	2.0000	8.0000
Pretest Flip Folder	18	3.64297	.00	11.00	.7500	1.5000	6.0000
Posttest CCC	18	3.90282	4.00	15.00	5.0000	8.5000	12.2500
Posttest Flip Folder	18	4.65545	.00	14.00	1.0000	3.0000	6.5000

Immediately after the last session intervention, the posttest was administered. The posttest comprised 15 words that were selected randomly to measure the participants' progress during the experiment.

The coefficient reliability results for both groups are above .8, which means that the test is internally reliable.

4.1 Between Subjects

For the posttest scores, the data was not normally distributed (see Appendix D). According to the normality test the significance level for the CCC group was (p = 0.075) and the flip folder group (p = 006) which means that flip folder group scores were not normally distributed (lower than 0.05) therefore Mann-Whitney test was used.

The Mann-Whitney test indicated that the CCC group (Mdn = 8.50) outperform the flip folder group (Mdn = 3.0) U = 67.0, p = .003 (see Table 2).

Table 2. The Mann-Whitney U Value and Significance Level of the Pretest Scores of CCC and Flip Folder Groups

Test Statistics	Pretest
Mann-Whitney U	148.000
Wilcoxon W	319.000
Z	-.449-
Asymp. Sig. (2-tailed)	.653
Exact Sig. [2*(1-tailed Sig.)]	.673[b]

a. Grouping Variable: Group; b. Not corrected for ties.

45

4.2 Within Subjects

To measure each group progress, before and after the experiment, Wilcoxon Signed Ranks Test was used because the data was not normally distributed. The results indicated that the CCC group posttest scores, (Mdn = 8.5) were statistically significantly higher than the pretest scores (Mdn = 2.0), Z = -3.13, p = .002. Whereas the flip folder group performed better (although non-significantly) in the posttest (Mdn = 3.0) compared to the pretest, (Mdn = 1.5), Z = -1.19, p = .231 (See Tables 3).

Table 3. Test Statistics.

Test Statistics		
	Posttest - Pretest CCC	Posttest - Pretest Flip Folder
Z	-3.138-[b]	-1.198-[b]
Asymp. Sig. (2-tailed)	.002	.231

a. Wilcoxon Signed Ranks Test; b. Based on negative ranks.

To sum up, teaching spelling using CCC technique has improved students level in spelling. Comparing the median of pre- and posttest showed that the CCC group have benefitted from the technique, whereas there was not a big improvement in the flip folder group. Therefore, it can be concluded that CCC is better than flip folder technique.

5. Discussion

The study findings indicated that students who were trained using CCC technique have displayed greater improvement in spelling accuracy than those who used flip folder as spelling teaching technique. Before the intervention, students' scores were very similar but after the intervention, the CCC group scored more than the flip folder group in the posttest. This could be attributed to the efficacy of applying the CCC technique in the class.

This improvement could be linked the number of repetition that students practice in case of misspelled words. That is, in the CCC technique, students rewrite the misspelled word three times in order to cement it in their memory as oppose to the flip folder technique where students write the misspelled word once after checking it. In other words, copying words three times have successfully led to habit formation.

The findings of this research support the evidence that the CCC technique is a more effective technique in teaching spelling. The findings also add to the literature in regard to the efficacy of the CCC as class-wide intervention (see e.g., Alrwele, 2017; McLaughlin et al., 2012; Skinner et al., 1997).

5.1 Research Limitation

•   Since the sample was selected based on convenience, the results cannot be generalized, but it would serve as an indication of what is best for students. Further research is recommended to teach

different students from different educational regions, and different stages (junior-high, or elementary school).

•   Length of the study might have an effect on students' performance, for example, if the study lasted for 20 sessions, we might have encounter different outcomes.

•   Although students have not been notified that there will be a test at the end of the intervention, still time of measurement could have effect on students' results. That is, the posttest was administered immediately after the intervention, therefore students might still memorize some words, if the posttest was administered a month later, and we may have encountered different results.

•   Before the commencement of the intervention, students were made known that they will participate in research. Therefore, their performance may have been affected by the Hawthorne effect, which means that students might behaved differently because they knew they were participating in a study (Perry, 2005).

5.2 Recommendation

It has been acknowledged earlier that Saudi students suffer when they write because of their inadequate knowledge of spelling, thus spelling has to be introduced to students as early as possible. The Ministry of Education should include spelling lessons in each course book and train students with different approaches in order to maximize their learning. There should be spelling section in each unit where students can practice the new words introduced in the lesson to help them master spelling and become good readers. Once spelling is officially introduced in the course book, students will take it seriously and allocate extra time to study and practice those words.
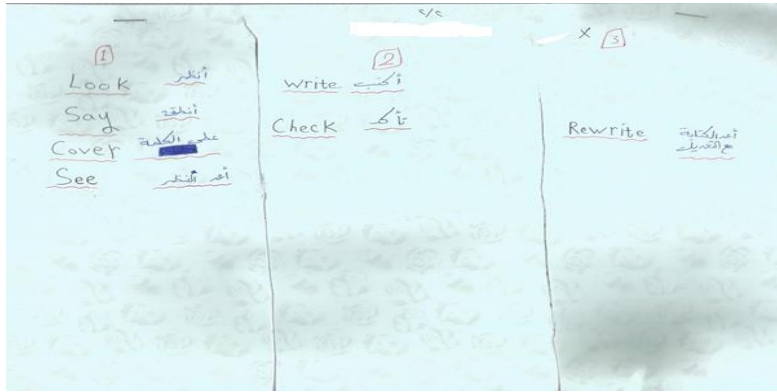
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Appendix A

Appendix B

Appendix C

Tests of Normality (Pretest)							
	Group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pretest	CCC group	.289	18	.000	.845	18	.007
	Flip Folder group	.248	18	.005	.821	18	.003

a. Lilliefors Significance Correction.

Appendix D

Tests of Normality (Posttest)							
	Group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Posttest	CCC group	.135	18	.200[*]	.907	18	.075
	Flip Folder group	.186	18	.099	.842	18	.006

*. This is a lower bound of the true significance. a. Lilliefors Significance Correction.