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The Effect of *Word Boxes* on Jordanian Second Grade Pupils' Spelling in English

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Abstract: **This study investigated the effect of *Word Boxes* on second grade pupils´ spelling in English. The sample consisted of two second grade sections from Douqarah Co-educational Basic School in Irbid City, Jordan. (N= 33 male students and 29 female students) in the first semester of the academic year. 25 words spelling test was administered twice; once before the study to establish the equivalence between the control and the experimental groups and another at the end of the study to investigate the effect of using *Word Boxes* on students' spelling. Moreover, the results of the study revealed statistically significant differences between the students' scores on the spelling test due to the teaching technique in favor of *word boxes*. There were statistically significant differences between students' scores on the spelling test due to gender, in favor of the female group. No statistically significant interaction between the teaching technique and gender were found.**

Keywords: **word boxes, spelling, Jordanian second grade students, teaching techniques.**

1. INTRODUCTION

Spelling is an integral part of literacy education (Gentry, 1996; Zutell, 1996). Learning to spell is not simply a matter of memorizing a list of individual words or even a set of rules and procedures." Memory alone will not suffice to make a speller" (Nelson, 1990: 262). It is a complex process in at least two important ways. Firstly, learning to spell is a developmental process. Students begin by stringing random letters together. Next, they attempt to match letters to the sound they hear in words. As they begin to acquire sight vocabulary for reading, they become aware of visual patterns in familiar words such as silent letters and letter combinations. Gradually, they incorporate these patterns in their spelling. Later, children produce many conventional spellings for familiar words but still must work on how to join syllables, for example, by dropping the final " e" or doubling consonants when- ing or – ed - is added. Finally they learn to spell the complex patterns (Gentry, 1996; Henderson, 1990; Templeton & Bear, 1992).

Secondly, learning to spell is a conceptual process. Good spellers recognize differences and similarities between words. They establish categories of word types. They apply their developing concepts and strategies when they attempt to read and spell new words. They use the feedback they get from checking their attempts at reading and spelling to confirm or revise their hypotheses. Seeing words provides the information to build word concepts. Building such concepts provides the "intellectual glue" necessary for words to stick in memory and be quickly available for recognition in reading and production in spelling (Zutell, 1996).

Wilde (1990:282) contended that learning to spell should be as natural, unconscious, effortless and pleasant as learning to speak. He said that "immersing children in words is sufficient spelling instruction for many students". But, some teachers believe that spelling skills emerge naturally, that is, if they encourage children to write, their skills will automatically develop. Other teachers select spelling words for study based on children's writing or classroom reading texts or rely on spelling work books and weekly tests to help children learn to spell. Although these approaches to instruction work for many children, some may benefit from more direct instruction (Gentry, 1996). The conventional rote learning, drilling and memorization do not help children retain spelling words on a long-term basis. Children benefit from less conventional learning techniques that encourage them to explore relationships, discover the connection between letters and sounds, find word patterns and independently decode contextual meanings of words (Angelisi, 2000).

In teaching spelling, an important goal for teachers is to develop motivation for spelling and spelling consciousness (Harris, 1994). *Word Boxes* is an innovative technique to word recognition and spelling instruction that can motivate students towards spelling. This technique guides students to sound the word out or stretch out the sounds in the word which seems to be the most popular teacher response when dealing with beginning learners (Joseph, 1999). Wilde (1992) wrote that a teacher, instead of spelling words for children, should ask them to come up with spellings on their own. Various studies (e.g. Ehri& Castiglioni-Spalten, 2004; Moats, 2006) have supported that phonemic awareness and letter knowledge are the two best predictors of how well children learn to read and spell during the first two years of instruction. Children who have not mastered sound/ letter correspondences have usually not developed to the phonetic spelling stage. Morgan et al., (2016) contend that the use of effective teaching methods while working on teaching students from the different age groups is of great importance in L1 and L2 classes. Emphasizing this importance, the authors recommended the sue of *Word Boxes* as one of the effective teaching strategies teachers can use in helping students acquire the different language skills, including spelling.

Sipe (2001) described the use of *Word Boxes* to help students hear the individual phonemes in the words they are attempting to spell. Word boxes, a technique that Clay (1993) incorporated into the comprehensive Reading Recovery Program, are an extension of the Russian psychologist Elkonin (1973) sound boxes. The *Word Boxes* employs a scaffolding approach for developing phonemic awareness, word identification and spelling skills. The teacher models the task, shares it with a child, and gradually guides a child toward completing it independently with feedback (Joseph, 1999). *Word Boxes* consists of three phases: segmenting sounds, matching letters to sounds, and writing letters. These three phases can be combined during any given lesson. When that happens, students systematically segment sounds, make letters to sounds, and spell words (Joseph, 2002). When analyzing traditional remedial programs, Spiegel (1995) suggested that children make the most rapid progress when decoding work which is explicit and systematic. During word boxes instruction, the teacher introduces and explains the letter correspondence being taught (i.e. the /ai/ pattern), and models how to sound out, spell, and blend the target word using word boxes as a scaffold: this is explicit instruction. As the teacher models, she or he works through each step in a planned, progressive sequence: this is systematic instruction. This explicit systematic instruction, according to Joseph (1998/1999), is particularly important when working with poor spellers. In the same vein, Maddox and Feng (2013) concluded that the use of Word *Boxes* was effective in making students learn how to spell as this teaching strategy is based on providing real world learning environments for students so as they can interact with the learning content, and then resort on their previous knowledge to improve their reading and writing skills in English as a foreign language.

Statement of the Problem:

In spite of all of the efforts which the Jordanian Ministry of Education (MOE) has made to improve school children abilities in English, they still face difficulties in learning that language. Teachers and parents complain that school children are weak in English writing and spelling. One of the reasons for this weakness could be the teaching techniques. One of the techniques that may be effective in teaching spelling is the word boxes.

Purpose of the Study:

Realizing the importance of spelling for pupils in the basic grades to read and write correct English in the future, the researchers concerned about how children learn to spell and how to teach them to do so most effectively. The researcher investigated the effect of the word boxes on Jordanian Second grade pupils' spelling in English to change from the traditional method for teaching spelling. In this study, the researcher compared the scores of the spelling test of the control group taught through the traditional method with the experimental group taught through word boxes in order to provide empirical evidence that may support or reject the use of word boxes in teaching spelling.

Question of the Study:

The study attempted to answer the following main question:

Are there any significant differences (at□□=0.05) in second grade pupils´ mean scores in the spelling test due to the teaching technique (*Word boxes*, Traditional method), gender (Male, Female) and interaction between them?

Significance of the Study:

Great emphasis is placed by the Jordanian Ministry of Education on teaching English to young children, but some pupils find English spelling difficult because it is irregular and phonemically based. This study is expected to explain for English language teachers and supervisors how word boxes is a suitable and effective technique for teaching spelling based on the

results of the this study and the results of other studies on word boxes. Word boxes can be suitable tool that reinforce phonological, segmentation and orthographic awareness. The use of word boxes in the teaching process tends to concentrate on the pupils' role as the center of learning, rather than the teacher's, get them actively involved in teaching process and to decode novel words.

2. REVIEW OF RELATED LITERATURE

The following section is a review of related studies that examined the effect of word boxes instruction technique on various language arts.

Devault and Joseph (2004) investigated the effectiveness of repeated readings coupled with word boxes on reading fluency performance for a sample of high school students who had severe delays in reading. Word Boxes instructional was incorporated with repeated readings to provide the students with a concrete corrective feedback strategy for attempting to identify words unknown to them. Word boxes coupled with repeated reading were directed implemented individually to students. The instructor to student directed intervention sessions lasted about 15 – 25 minutes each for approximately 5 days per week. Students were given 1 minute to read the passage. The instructor recorded all words read incorrectly or omitted then taught the words read incorrectly using a word boxes as sessions progressed, student appeared to increase the number of words read correctly per minute during initial readings of passages. By the end of the study, all students were reading passages two grade levels beyond their independent reading level.

Even though the research studies by Joseph dealt with native speakers of English, there has been very little research conducted on non- native speakers of English.

Baniabdelarhman (2004) investigated the effectiveness of word boxes on Jordanian EFL fifth grade students. He found that no significant interaction between the teaching technique of spelling and gender. He revealed that there was no significant difference in students' spelling scores due to gender. He found a significant difference between students' scores in spelling due to the technique of instruction and that students spelling scores in the word boxes were significantly higher than the student's scores in the traditional method.

Hilte and Reitsma (2006) examined the effects of spelling pronunciation and visual preview for skilled and less skilled spellers with varying ages (grade 3,5and 6).Reading skills were taken into account. In a four week computer based training, the efficacy of spelling pronunciations and previewing the spelling patterns on learning to spell loan words was examined. The findings appear to indicate that spelling pronunciation and allowing a visual preview can both be effective ways to learn correct spellings of orthographically unpredictable words, irrespective of age or spelling ability.

Using a sample of (22) first grade students, both Maddox and Feng (2013) compared the effectiveness of whole language instruction and phonics instruction on improving reading fluency and spelling skills. The researchers developed a whole language instruction and phonics instruction teaching programs and used them to teach the sampled students reading fluency and spelling skills. Reading fluency and spelling skills pre-posttest were employed to identify the effectiveness of both teaching programs. It was found in the study that there were no statistically significant differences in the effectiveness of both instructional programs on improving fifth grade students reading fluency and spelling skills. There was a slight difference, in favor of the phonics instruction group, in students' pretest spelling scores, indicating that this phonics instruction was more effective in improving spelling skills.

Graham and Santangelo (2014) reviewed previous studies examining the different instructional programs used for improving students; reading and spelling skills. The sample of the study consisted of (53) previous study found in the different educational programs. The study concluded that the use of different instructional programs was very effective in improving spelling skills among students from the various grade levels. The study also confirmed that female students benefited more compared to males in the acquisition of spelling skills.

In another study, Keesey, Konrad and Joseph (2015) examined the effectiveness of using Word Boxes on improving phonetic awareness, letter- sound correspondence and spelling skills among a sample of at risk kindergarten students. The study employed one experimental group design as the sample of the study (N=3) was taught phonetic awareness, letter-sound correspondence and spelling skills using *Word boxes*. To test the effectiveness of the instructional program, a phonetic awareness, letter- sound correspondence and spelling skills pre- post tests were administrated to the students. The results of the study indicated that Word Boxes was significantly effective in improving the three students' phonetic awareness, letter- sound correspondences and their spelling and reading skills.

Morgan et al., (2016) studied the effectiveness of using Word Boxes on improving first grade students' decoding and spelling skills. The sample of the study was African American students (2 boys and 1 girl) enrolling in one urban school. To achieve the objectives of the study, a Word Boxes based instructional program was developed and students were taught using it decoding and spelling skills. To test the effectiveness of the instructional program, a decoding and spelling skills pre- posttests were administrated to the sample of the study. It was found in this study that the three students greatly improved in their decoding and spelling skills due to the use of Word boxes instructional program and that they retained these skills after two months as shown in the follow up tests.

In conclusion, while the studies of *Word boxes* instruction have been conducted with individual, small group (Morgan et al., 2016; Keesey, Konrad & Joseph 2015), and limited whole-class instruction, except for some studies such as (Maddox & Feng ,2013), using primarily simple spelling word patterns (consonant-vowel-consonant: CVC), there has been very limited research conducted with large groups of students, on other types of word patterns, or with a population of non-native English language speakers. In addition, there is no research that the researcher found investigating the effectiveness of word boxes as it relates to the spelling of targeted words outside a traditional spelling list. In fact, the researches conducted by Joseph (2002) and Devault and Joseph (2004) are the only researches study found conducted in the United States that specifically uses word boxes with a whole class of students. Also no research was found on word boxes that focus on EFL population except Baniabdelrahman´s study (2004). In the researches conducted by Joseph and Baniabdelrahman, they invite future studies to replicate the procedures used in order to establish more conclusive findings.

Subjects of the Study:

The subjects of this study consisted of two second grade sections from Douqarah Co-educational Basic School in the first semester of the academic year 2016-2017. The first section consisted of 17 male students and 14 female students. The second section consisted of 16 male students and 15 female students.

The first section was assigned to represent the control group and was taught by the traditional method. The other section was assigned to represent the experimental group and was taught by the Word boxes. Table 1 shows the distribution of the subjects based on study group.

Table 1: Distribution of the Sample of the Study according to Teaching Technique

Variables		Frequency	percents
Technique	Experimental Control	31 31	50.0 50.0
	Total	62	100.0

Instrument of the Study:

The researcher developed a spelling test. It was administered to the subjects of the study before the study started in order to establish the equivalence between the control group and the experimental group. The spelling test, consisted of 25 words, was validated by a jury of experts of English for their comments. The researcher corrected the test. Four points were given to each correct word and zero for the incorrect one. The total score for the spelling test was 100. The same test was administered as a pre- posttest.

3. PROCEDURES AND DESIGN

Two instructions of teaching spelling were applied:

1- The Traditional method of Teaching Spelling:

In the traditional method, teacher follows the instructions of the teacher's book that teachers usually apply in teaching spelling which included: (a) the teacher at the beginning of each lesson wrote the new words on the chalkboard and pronounced them; (b) pupils repeated chorally and individually. After introducing the words meanings, teacher dictated these new words to the pupils on the chalkboard again individually; (c) whenever a pupil misspelled a word, s/he was corrected either by another pupil or by his/her teacher; and (d) at the end of each week there was a short spelling test of the words that had been learnt during the week. The same techniques were repeated over two months. By the end of the study, there was a spelling test that covered the words that had been taught during the study.

2- Word Boxes:

The same words that were taught to the control group were also taught to the experimental group using the *word boxes*. The following is a step-by-step description of how to implement the *word boxes* in a lesson as follows: (a) a special *word boxes* mat and plastic counters was used; (b) pupils placed counters into the divided sections of the word box rectangle; the number of counters corresponded to the number of phonemes in a specific word; (c) the teacher modeled the task by saying each spelling word slowly and placing a counter in the respective divided section of the rectangle as each sound was articulated; (d) a different colored counter was used for each different phoneme in a word; (e) the color of the counter that was used for each phoneme was unimportant; what was important was if a word contained three phonemes, the pupil identified each phoneme by a different color; (f) after the teacher modeled placing colored counters, pupils placed counters simultaneously in the respective sections of the rectangle on their *word boxes* mat while the teacher slowly pronounced each word; (g) the pupils chorally articulated phonemes in each spelling word and placed a counter in the respective sections of the *word boxes* mat; (h) after identifying each phoneme with colored counters, the pupils identified the letter or letters that spelled each phoneme.

Using their hand to count the phonemes in each word, pupils were then individually called on to identify the letter or letters that spelled each phoneme; and (i) as the pupil orally identified the sound and then the letter or letters that spelled that sound, all pupils in the class placed the letter or letters in the corresponding *word boxes* until the word was completely spelled; the teacher modeled this procedure using the chalkboard and letters. At the end of each week there was a short spelling test of the words that had been taught during the week.

The same procedures were used in teaching the spelling of the new words of every lesson over two months. At the end of the experiment, the same spelling post-test administered to the control group was also administered to the experimental group on the same day.

This is an experimental study. After checking the equivalence of the control and experimental groups, the experimental group was taught by the *word boxes* and the control group was taught by the traditional method.

The test of equivalence was conducted on all students in both control and experimental groups. All the pupils' subjects of the study sat for the spelling test on the same day; pupils' papers were corrected by the researcher. Then the scores they gave for each paper were calculated.

Data analysis:

Descriptive statistics consisting of means and standard deviations and ANOVA test with two-way analysis of variance was used to analyze the data of the study.

Equivalence of Groups:

To test the equivalence of groups, means and standard deviations for the pre test were calculated as shown in Table 2 below:

Table 2: Means, Standard Deviations and Number of Cases for the Spelling Pre-Test according to Group and Gender

Group	Gender	N	Mean	Std. Deviation
Experimental	Male	16	8.75	7.83
	Female	15	9.73	6.04
	Total	31	9.23	6.92
Control	Male	17	8.47	2.29
	Female	14	9.71	2.81
	Total	31	9.03	2.58
Total	Male	33	8.61	5.60
	Female	29	9.72	4.68
	Total	62	9.13	5.18

Table 2 shows a slight variance in the means of the pre test according to group and gender. To find out whether there were statistically significant differences in these means, one way ANOVA was conducted as shown in Tables 3.

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Table 3: Two Way ANOVA of the Pre- Test according to Group

Source	Sum of Squares	Df	Mean Square	F	Sig.
Group	0.343	1	0.343	0.012	0.912
Corrected Total	1636 .968	61			

Table 3 shows that there are no statistically significant differences at (α= 0.05) in second grade pupils' mean scores in the pre test due to group variable. There are no statistically significant differences (at α= 0.05) in second grade pupils' mean scores in the pre test due to gender variable. And there is no statistically significant interaction between Group and Gender variables. This means that there were equivalence and homogenous between the two groups.

To answer the question of the study, *Are there any statistically significant differences (□=0.05) in second grade pupils' mean scores in the spelling post test due to the teaching technique (Word boxes, Traditional method), gender (Male, Female) and the interaction between them?*, means and standard deviations were computed as presented in Table 4.

Table 4: Means, Standard Deviations and Number of Cases of the Spelling Post Test according to Teaching Technique and Gender

Group	Gender	N	Mean	Std. Deviation
Experimental	Male	16	83.75	12.71
	Female	15	91.60	7.26
	Total	31	87.55	11.01
Control	Male	17	73.41	12.43
	Female	14	80.86	15.62
	Total	31	76.77	14.22
Total	Male	33	78.42	13.43
	Female	29	86.41	13.02
	Total	62	82.16	13.73

Table 4 shows a slight variance in the means of the spelling test according to Group and Gender. To find out whether there are statistically significant differences in these means, two way ANOVA was conducted and the results are shown in Table 5.

Table 5: Two way ANOVA of the Spelling Post Test according to Teaching Techniques, Gender and Interaction between them

Source	Sum of Squares	df	Mean Square	F	Sig.
Group	1713.108	1	1713.108	11.285	0.001*
SEX	901.818	1	901.818	5.941	0.018*
Method * SEX	.631	1	.631	.004	0.949
Error	8804.432	58	151.801		
Corrected Total	11506.387	61			

**** Significant at α= 0.05***

Table 5 shows that there are statistically significant differences (at α= 0.05) in second grade pupils' mean scores in the spelling test due to the teaching technique variable in favor of the Experimental Group (F=11-285, P=0,001).There are statistically significant differences (at α= 0.05) in second grade students mean scores in the spelling test due to their gender in favor of the females. And there is no statistically significant interaction between the teaching techniques and Gender variables. (For more clarification see figure 1 below).

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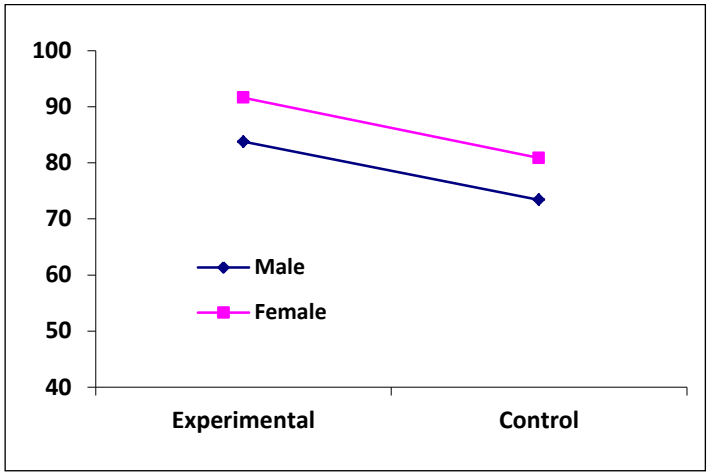

Figure 1: Interaction between Gender and the Teaching Techniques

The interaction figure shows that there was no interaction between the teaching technique and gender, as seen in the figure, the females' performance in the *word boxes* was better than the males. The figure also indicates that the *word boxes* had a great effect in improving the performance of both male and female pupils in spelling.

4. DISCUSSION

The results of the study showed that there was no significant interaction between gender and the teaching techniques. The study revealed significant effect for the *word boxes* technique on pupil's spelling test scores .It further revealed that the use of the *word boxes* was more effective in improving second grade pupils´ spelling in English than the tradition one. The *word boxes* group performed better because they were internalizing word knowledge rather than memorizing spellings. *Word boxes* helps fix phoneme-grapheme correspondences in pupils minds, this technique supports pupils spelling, reading and writing development. This technique is recommended to be taught in first grade but it is also helpful with second and third grade pupils who missed the fundamentals in earlier grades. Children need to learn the letter sounds and letter names. Fluency with letter names and forms facilitates spelling and is an indicator that children are likely to develop oral reading fluency. So letters should be taught directly and systematically. (O´Connor and Jenkins, 1995).

The results of the study showed that the three skills (Segmentation, Orthographic and Phonological Skills) should not be taught as abstract and isolated skills; they should be included and taught as a functional part of the literacy experiences that are incorporated throughout the learning day. The effectiveness of the *word boxes* may be attributed to the incorporation of explicit and interactive phonemic awareness, word identification and spelling instruction that the *word boxes* instructional technique implores; in other words, because *word boxes* instruction contains phonemic and orthographic instruction, the combination of these two skills may in fact bridge an important gap that is not addressed in a more traditional phonics method. (Baniabdelarhman, 2004). Various studies have supported that phonemic awareness and letter knowledge are the two best predictors of how well children learn to read and spell during the first two years of instruction. This is consistent with Ehri and Castiglioni-Spalten´s findings (2004), Maddox and Feng (2013), who indicated that children who are taught to segment spoken words into phonemes do better in learning to read and spell than children who are not taught or given other types of instruction. When *word boxes* instruction includes the use of letters to segment phonemes in speech, pupils benefit even more in learning to segment, read and spell.

The results of the study lead support to the findings of several studies such as Joseph´s findings (1999, 2000a, 2000b and 2002) that the *word boxes* can be successfully used in large classroom contexts; Devault and Joseph's (2004) findings that the *word boxes* increases reading fluency performance among students; Baniabdelarhman´s (2004) findings that the use of *word boxes* improves EFL students' spelling and Maddox and Feng (2013) that Word Boxes is an effective instruction for improving both spelling skills and reading fluency among basic grades students.

5. RECOMMENDATIONS

1. Further research that examines the effect of *word boxes* on other skills and older students would be beneficial.

2. Further research on how students with a weak background in phonemic and phonological awareness can benefit from the type of instruction that *Word Boxes* offers.

3. A large sample of non-native English language learners would help to establish more conclusive findings.

4. Increasing the English language periods in the first four basic grades from 4 to 5 periods a week.

5. Paying more attention to spelling.

REFERENCES

[1] Angelisi, Mary Ann (2000).*Teaching Spelling: Which Strategies Work?* Retrieved May 4 2008 from http://search. ebscohost.com. (ERIC Document Reproduction Service NO. ED 440 395).

[2] Baniabdelrahman, Abdallah (2004). The Effectiveness of the Use of word Boxes Instruction on the Spelling Performance of EFL Fifth Grade Students. *Abhath AL- Yarmouk "Humanities and social Sciences Series"* 20, (4B), 297-314.

[3] Clay, Marie (1993). *Reading Recovery: A Guidebook for Teachers in Training*. Portsmouth, NH: Heinemann.

[4] Devault, Rebecca and Joseph, Laurice M. (2004). Repeated readings combined with word boxes phonics technique increases fluency levels of high school students with severe reading delays. *Preventing School Failure. 49*, (*1*). Retrieved Aug 10 2006 from EBSCO host full display database (HTML).

[5] Ehri, Linnea C & Castiglioni- Spalten, Maria (2004). Phonemic Awareness Instruction: Contribution of Articulatory Segmentation to Novice Beginners' Reading and Spelling. *Scientific Studies of Reading*, 7, (1), 25-52. Retrieved June 8 2008 from

[6] Ehri, Linnea C. (2000).Learning to read .Learning to spell: Two sides of a coin. *Topics in language Disorders, 20*, 19-36.

[7] Gentry, J. Richard (1996). Research. Five Qestions Teachers Ask about Spelling Retrieved February 12 2006 from *http://www.zanor-bloser.com/html.backup/spsupport1.html*

[8] Graham, Steve & Santangelo, Sam (2014). *Does Spelling Instruction Make Students Better Spellers, Readers, and Writers? A Meta- Analytic Review.* Springer Science + Business Media Dordrecht, 2, 1703-1745.

[9] Harris, Karen R. (1994). Learning to spell the self-regulated way. Spelling – combining well with skill. *Teaching K-8*, 24, 16-24.

[10] Henderson, Edmund (1990). *Teaching Spelling.* Boston AM: Houghton Mifflin.

[11] Hilte, Maartie & Reitsma, Pieter (2006).Spelling Pronunciation and Visual Preview both Facilitate Learning to Spell Irregular Words. *Annuls of Dyslexia*, 56, (2), 301-318, Retrieved June 24 2007 from EBSCO host full display database (HTML). http://search.ebscohost.com.(ERIC Document Reproduction Service NO. EJ 672807) . *http://www.zanor-bloser.com/html.backup/spsupport3.html*

[12] Joseph, Laurice M. (1998, 1999). Word Boxes Help Children with Learning Disabilities Identify and Spell Words. *The Reading Teacher*, 42, 348-356, Retrieved August 10 2006 from EBSCO host full display database (HTML).

[13] Joseph, Laurice M. (2000a). Use word boxes as a large group phonics approach in a first grade Classroom. *Reading Horizons*, 41, 117-127.

[14] Joseph, Laurice M. (2000b). Developing first graders' phonemic awareness, word identification and spelling. A comparison of two contemporary phonic instructional approaches. *Reading research and instruction*, 39, 160, 169.

[15] Joseph, Laurice M. (2002). Facilitating word recognition and spelling using word boxes and word sort phonic procedures. *School Psychology Review*, 31, (1). Retrieved. Aug 10 2006 from EBSCO host full display database (HTML).

[16] Keesey, Susan; Konrad, Moira & Joseph, Laurice (2015). Word Boxes Improve Phonemic Awareness, Letter- Sound Correspondences, and Spelling Skills of At- Risk Kindergartners. *Remedial and Special Education, 36* (3), 167-180.

[17] Lennox, Carolyn and Siegel, Linda (1996). The developmental of phonological rules and visual strategies in average and poor spellers. *Journal of Experimental Psychology*, 62, 60-83.

[18] Levy, Betty Ann and Carr, Thomas H. (1990). Component Process Analysis Conclusions and Challenges. In T. H. Carr and B. A. levy (Eds), *Reading and its Development: Component Skills Approach*, (pp. 460-468). New York: Academic press.

[19] Maddox, Krissy & Feng, Jay (2013). *Whole Language Instruction vs. Phonics Instruction:*

[20] *Effect on Reading Fluency and Spelling Accuracy of First Grade Students*. Presentation at Georgia Educational Research Association Annual Conference, October 18, 2013. Savannah, Georgia

[21] Moats, Lousia (2006).How Spelling Support Reading .Retrieved May 18 2008 from *www.reading rockets. org/article/8845*

[22] Morgan, Sheila; Joseph, Laurice; Kanotz, Brittany; Rouse, Chriseina; Sawyer, Mary; & Institute, Aubrey (2016). The Effects of Word Box Instruction on Acquisition, Generalization, and Maintenance of Decoding and Spelling Skills for First Graders. E*ducation and Treatment of Children*, *39* (1), 21-43.

[23] Nelson, Laurie (1990).Something Borrowed, Something New: Teaching Implications of Developmental Spelling Research. *Reading Psychology*, 10, (3), pp.255-274.

[24] Sadker, David & Sadker, Myra (1994).*Failing at Fairness: How Our Schools Cheat Girls*. Toronto, ON: Simon &Schuster Inc.

[25] Sipe, Lawrence R. (2001). The construction of literary understanding by first and second graders in oral response to picture store book read aloud. *Reading Research Quarterly*, 35, 252-275.

[26] Spiegel, Dixie Lee (1995).A comparison of traditional remedial programs and reading recovery: Guidelines for success for all programs. *The Reading Teacher*, 49, (2), 86-96.Retrived April 11, 2007, from EBSCO host full display database (PDF).

[27] Stahl, Steven A. (1998). Everything you wanted to know about phonics. (But were afraid to ask). Reading Research Quarterly, 33, 338, 355.

[28] Templeton, Shane and Bear, Dibald (1992). Development of Orthographic Knowledge and the Foundations of literacy.213-230.Hillsdale, NJ: Lawrence Erlbaum Associates.

[29] Wilde, Sandra (1990). A proposal for a new spelling curriculum, Elementary School Journal, 90, 275-289.

[30] Wilde, Sandra (1992). You Kan Red This! Portsmouth, NH: Heinemann.

[31] Zutell, Jerry (1996). Research. A Student-Active Learning to Spelling Instruction. Retrieved April 2 2007 from http://www.zanor-bloser.com/html.backup/spsupport3.html