The Effects of Storytelling on EFL Young Learners' Reading Comprehension and Word Recall

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Abstract

This study investigated the effects of contextualized storytelling as a teacher intervention on EFL young readers' reading comprehension and word recall. Drawing on Dual-Code Model and the multiple sensory approach, it was hypothesized that the multi-sensory approach, by means of storytelling, would be a better intervention than Dual-code Model in EFL reading and word retention. To test the hypothesis, 72 sixth grade students from a public primary school in Taiwan were leveled and grouped into three modes of reading: text-only reading (Group C), illustration-supplemented reading based on Dual-Code Model (Group I), and story listening plus illustrated-text reading (Group S). Story retelling tests and word recall tests were administered to see the performance differences. The results indicated that the study group outperformed the other groups in story retelling though the same effect was not found in word recall. The less proficient learners gained slightly more from this approach than their proficient peers. It was suggested that the teacher might exploit contextualized storytelling to scaffold EFL reading. Issues for further study that looks into the long-term effects of storytelling on vocabulary learning, language development, and text processing are discussed.

Key Words: contextualized storytelling, dual-code model, multi-sensory approach, teacher intervention

INTRODUCTION

As young Taiwanese learners progress in their learning of English, reading extensively has become a requisite for their language development. The increasing use of basal readers and authentic materials from English children's literature in the language classroom indicates the trend toward extensive reading activities. However, young learners may encounter difficulties when reading authentic materials, especially those imported from English speaking countries, for several possible reasons. First, compared to their native English-speaking peers, young Taiwanese learners' English lexicon may be too limited for them to have direct lexical access during language processing. That is, after decoding unknown words from a text, the letter sound correspondences, which usually would activate the reader's mental dictionary to identify and select appropriate meanings according to the context, do not

prompt the same function if the words do not exist in the learner's lexicon. At this point, decoding skills such as phonics do not help much in comprehension and thus learners still need to resort to a bilingual dictionary if the contextual clues are not sufficient for them to infer the meanings of the unknown words. The searching and guessing of new words often turn out to be an exhausting task that reduces reading fluency and even the interest.

Second, young learners in Taiwan are usually asked to read when their listening comprehension and oral proficiency barely meet the minimum requirement for social communication. However, the lack of oral language may pose a difficulty to reading. Extensive research in literacy development has pointed out that sufficient auditory input and oral language competence are basal requirements for the development of reading; oral vocabulary in fact is a predictor of reading proficiency (Anderson et al., 1985; Dyson, 1991; Hall, 1987; Saville-Troike, 1984; Steinberg, 1993). Thus, young learners need sufficient auditory input to develop phonological awareness and acquire oral vocabulary, so when they read there is a smoother transition from oral communication to print. Studies of hearing impaired children's reading development also indicate that due to limited oral vocabulary size and insufficient phonological stimulation and awareness, hearing impaired children are more likely to encounter reading difficulties than normal children, and their reading proficiency development is relatively slow and restrained (Marschark & Harris, 1996; Steinberg, 1993; Trybus & Karchmer, 1977). Similarly, insufficient auditory input from the environment handicaps Taiwanese learners in developing a lexicon of oral vocabulary and English phonological awareness. When being asked to read English stories, they may encounter difficulties if the text contains a great deal of spoken language and idiomatic expression. For instance, a sentence One night I decided to get rid of my nightmare once and for all from a children's picture book (Mayer, 1976) may cause difficulties if learners do not know what get rid of and once and for all mean even though they know every single word. Therefore, translation is still widely used in EFL classrooms to get the message across.

Third, lack of background knowledge may impede young Taiwanese learners' reading comprehension. According to the interactive reading model, learners employ their background knowledge to comprehend the text. However, a large stock of children's reading materials published in America or other English speaking countries contain strong cultural messages, which reflect regional features and customs that require more than language understanding to grasp. Thus, apart from dealing with linguistic deficiency, Taiwanese children have to face cultural differences in texts, and may need the teacher's intervention for cultural understanding.

To deal with the above possible causes of reading difficulties of young learners,

the teachers need to intervene for more than the teaching of decoding skills or translation. That is, to lay the basis for fluent reading, the teachers may need to look for new approaches that can yield more comprehensible oral input and cut down the use of translation; to scaffold EFL reading, they may need to integrate different modalities of learning, verbal, nonverbal, and sensory, to provide multiple avenues of contextual clues for meaning construction, so that students rely less on dictionary use or translation to figure out the message. This study proposes that contextualized storytelling may be an effective intervention that may increase comprehensible oral input and which employs a multi-sensory approach to help meaning construction.

Contextualized storytelling is proposed by Cary (1998) as an instructional approach to help ESL learners improve their English acquisition in the U. S. Unlike traditional storytelling, a folk art that highlights the verbal performance of storytellers, contextualized storytelling is a multi-sensory approach, which relies on both verbal and nonverbal communication in the telling process. With the use of heavy props, visual aids, concrete referents for L2 vocabulary, proper prosodic delivery, and rich body language in the telling, contextualized storytelling utilizes learners' nonverbal knowledge by giving abundant contextual clues for them to grasp the language in use without the help of the mother tongue. In his study, Cary illustrates the overall positive effects of this approach on ESL learners' comprehension and retention of oral narratives. A higher degree of student engagement and a noticeable improvement in speaking are also found.

Contextualized storytelling has been adopted recently as a teaching approach in Taiwan; however, its impact on the learning of EFL reading has never been reported in the research literature. The purpose of this study, thus, was to investigate the effects of contextualized storytelling as a teacher intervention on young learners' reading by extending Cary's study to an EFL context in the realm of reading instruction. It is plausible that with this approach, the teacher can act as a medium that interprets or presents the reading content by transforming the text into auditory and visual input with a great deal of nonverbal cues through which students get a gist and an interpreted or paraphrased rendering of the text before reading. I hypothesized that contextualized storytelling might strengthen the retention of vocabulary and improve reading comprehension through the merits of multi-sensory stimulation it provides.

To test the hypothesis, this study compared the effects of reading based on contextualized storytelling with reading based on Dual-Code Model (single sensory input with image representations in the text processing) and text-only reading (no sensory input) to see the performance differences in reading comprehension and word recall. The results of this study may provide an empirical basis for the application of storytelling in EFL classrooms.

The research questions include:

- (1) Is contextualized storytelling based on a multi-sensory approach a more effective intervention than Dual-Code Model and text-only reading in EFL reading?
- (2) What are the performance differences between proficient and less proficient learners in word recall and reading comprehension with the intervention of contextualized storytelling?

LITERATURE REVIEW

The application of contextualized storytelling is based on the following theories or models and a number of invaluable findings in the research on psycholinguistics and second language acquisition.

Dual-code Hypothesis

Pavivio's (1971) dual-code hypothesis bears on the correlation of verbal and image representations in the text processing. He proposes that one remembers better if one has both verbal memory and image memory corresponding to each other. Mayer and Sims (1994) further point out that verbal materials can activate or construct visual representations or vice versa. Thus, while reading with textual-relevant illustrations, readers make inferential connections of the verbal and visual representations as well as representations from long-term memory to comprehend the text, as shown in Figure 1. The inferential connections of all the links as numbered in Figure 1 are the key to enhancing comprehension.

Therefore, when reading material is presented with text-relevant illustrations, the reader may construct the inferential connections, which can promote both comprehension and recall. The dual-code hypothesis has been empirically validated in research literature (Koran & Koran, 1980; Levie & Lentz, 1982; Paivio, Clark, & Lambert, 1998; Schallert, 1980). A pilot study conducted in Taiwan by Wang (2003) also proves that text-relevant illustrations help Taiwanese middle-school students comprehend better and recall more of the reading text; however, its effectiveness at the primary reading level remains unknown.

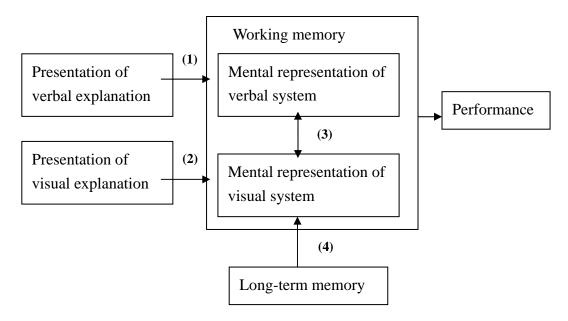


Figure 1
A Dual-coding Model of Multimedia Learning (Mayer & Sims, p. 390)

Multi-sensory Approach

As the Dual-Code Model posits an added benefit of involving visual input in reading, the multi-sensory approach may postulate a broader view, though not particularly for reading, that incorporates different modalities of learning to obtain the best possible results for learners with special needs and diversified learning styles. For language learning, multi-sensory learning has been applied to teach at-risk students and those with learning difficulties in L2 (Ganschow, Sparks, & Schneider, 1995; Sparks & Ganschow, 1993; Sparks, Ganschow, Pohlman, Skinner, & Artzer, 1992). It is also noticed that mismatched styles between learners and the teacher may cause language learning difficulties (Felder & Henriques, 1995; Oxford, Ehrman, & Lavine, 1991; Oxford, 1991). The teacher is advised to balance teaching approaches or styles that address the needs of students.

If reading materials with text-relevant illustrations exemplify the Dual-Code Model, contextualized storytelling denotes the multi-sensory approach by supplementing auditory input and nonverbal cues to present texts. The auditory input means the expressive rendering of text including paralinguistic and prosodic features such as intonation, pitch, rhythm, appropriate paces of delivery, voice quality, and pauses; nonverbal cues are demonstrated by the body language of the storyteller such as facial expressions, gestures, postures and body movements. All of these, along with visual aids such as props and pictures, bring life to the language and give rich contextual clues for learners to construct and infer the meaning of text before and during the reading.

Given the added avenues of language input based on a multi-sensory approach, the Dual-Code Model may be modified for contextualized storytelling, as shown in Figure 2. This modified model illustrates the transformation of reading text into various sensory input avenues.

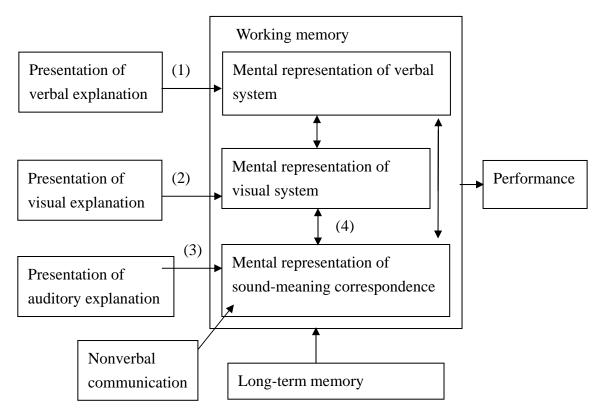


Figure 2
The Modified Dual-Code Model with Multi-sensory Approach

If reading derived from the Dual-Code Model can benefit learners, one may wonder whether the multi-sensory approach could bring greater benefits because of the added input avenues. The research into storytelling in language or literacy learning finds positive effects of this latter approach for native English speakers and ESL learners as shown in the following part.

Storytelling and Language Learning

The benefits of storytelling in children's development of literacy have long been recognized (Brand & Donato, 2001; Cooper, Collins, & Saxby, 1992; Glazer & Burke, 1994; Jennings, 1991; Mallan, 1991; Myers & Hilliard, 2001; Trousdale, 1990). As mentioned before, sufficient auditory input and oral language competence are basal requirements and crucial prerequisites for reading development. Storytelling offers a great deal of auditory input through social narrative interaction that incorporates more

sophisticated linguistic features than conversation (Dyson, 1991; Grugeon & Gardner, 2000; Hall, 1987; Nelson, 1989).

It is also found that children expand their vocabulary in regular story listening experience because of a broad range of words they encounter through stories and the ways the vocabulary is presented (Cooper, Collins, & Saxby, 1992; Elley, 1989). A number of studies indicate that to enhance vocabulary learning, learners must be able to visualize, listen to, articulate, and make semantic association of the new words (Ellis & Beaton, 1995; Hatch & Brown, 1995; Hill, 1994; Kelly, 1992; Papagno, Balentine, & Baddeley, 1991; Schouten-van Parreren, 1992). When new words are presented in the contextualized storytelling based on the multi-sensory approach, they are introduced through flash cards, pictures, concrete referents, or the storyteller's body language, and are connected to each other in the storyline. Thus, the contextualized storytelling seems to provide an encouraging framework for vocabulary learning.

In terms of grammar learning, storytelling may serve as a steppingstone to the learning of syntax as it demonstrates grammatical and syntactic features in meaningful context. As Mallan (1991) points out, storytelling demonstrates a varied use of tense and linking devices in organizing ideas. With a deliberate design of learning activities, the teacher can draw learners' attention to specific linguistic features in the story presentation (Taylor, 2000; Wajnryb, 2003).

Furthermore, storytelling is an art of oral literature, which consists of literary elements and the convention of what we call story grammars such as settings, plots, actions and solutions. Through regular storytelling, children develop a story schema that has been proved to be a scaffolding mechanism for reading and listening comprehension and information retrieval (Jennings, 1991; Pahl, 1987; Turetzky, 1982). When accompanied by comprehension questions and retelling strategies, storytelling enhances literal, inferential and critical aspects of learning (Mallan, 1991).

In sum, storytelling helps young English speaking learners progress from oracy to literacy and teachers are strongly encouraged to utilize the benefits of storytelling in their classrooms. Even storybook reading, a simple version of storytelling that does not demand much of the teacher's interpretation, can make a big difference in children's learning (Sulzby & Teale, 1991; Trostle & Hicks, 1998).

Nevertheless, for EFL learners, the teacher's interpretation of a story is essential to children's comprehension because oral reading directly from a text is merely incomprehensible noise to students before they have acquired sufficient lexicon and oral language. Thus, unlike traditional storytelling that focuses mainly on verbal communication, the teacher needs to employ a great many of nonverbal cues to perceptualize the message that the story is to convey, especially for young learners who may strongly rely on these contextual clues to comprehend the story (Cary, 1998).

In understanding the significance of storytelling in language learning, considerable attention has been paid to storytelling as an approach worth pursuing for the teaching of English in Taiwan. Books and articles that guide ESL or EFL teachers to conduct English storytelling into their classrooms are increasing in number as more and more teachers attempt to integrate this approach in their practice (Ellis & Brewster, 1991, 2002; Roney, 2001; Wilhelm & Wilhelm, 1999; Wright, 1995). A growing number of discussions and studies have been conducted to look at the plausibility of storytelling in EFL classrooms (Chang, 2000; Lin, 2003; Yao, 2003). However, empirical studies are still relatively few in number. As Fitzgibbon and Wilhelm (1998) comment, a lack of scholarly investigation and discussion on storytelling and its benefits gives no specific pedagogical details for teachers to effectively link storytelling into their teaching objectives and incorporate storytelling in their lesson plans. In-depth investigation into the influences of storytelling on EFL/ESL learning and teaching is needed as Fitzgibbon and Wilhelm (1998) suggest:

Qualitative and quantitative studies focusing on specific linguistic, interpersonal, and cognitive aspects of storytelling are needed. Interdisciplinary research would be particularly helpful in understanding the full benefits of storytelling from both a teaching and a learning perspective. Research on cultural differences, teaching styles, and learning styles in relationship to storytelling are certainly worthy area of investigation. (p. 29)

Thus, extending Cary's (1998) study that unravels the effects of storytelling on ESL learners and elaborating from Wang's (2003) pilot study that reveals the beneficial influences of Dual-Code Model on EFL reading comprehension, this study added another experimental study to the literature by investigating whether the similar positive impact of storytelling found in emergent literacy learning of English native speakers or ESL learners may be found on EFL young learners.

METHOD

Participants

The study chose sixth graders (age 11) as subjects based on two considerations: (1) their more advanced development of story schema for reading comprehension, and (2) the vocabulary size needed for story reading and listening. Four classes of sixth graders (N = 129) from a public school were given a modified Dolch Basic Sight Vocabulary test in order to select similar numbers of proficient and less proficient learners. This test, though is not recent (first developed in 1936), is well recognized in the United States as an assessment for primary reading. Its impact on reading

instruction and the research of reading fluency is also influential (Robinson, 2004). The testing procedure followed closely the directions outlined in Shanker and Ekwall's (1998) *Locating and Correcting Reading Difficulties* (pp. 257-259). Due to the huge value of the standard deviation obtained from the testing results (65.2), the cutoff scores that separated proficient and less proficient learners were set at twenty points above and below the mean score (128). As a result, thirty-six proficient students and the same number of less proficient students were selected.

The students were then randomly assigned to three groups for different modes of reading. The statistics showed that there was no difference among the groups in their average sight word scores (F = .09, p = .92). The control group (Group C, n = 24) read the text-only story without illustrations or storytelling; illustration-supplemented group (Group I, n = 24) took a Dual-Code approach and read the text with illustrations. The study group (Group S, n = 24) adopted a multi-sensory approach by means of contextualized storytelling; they listened to the story before reading the illustrated text.

Being familiar with contextualized storytelling techniques and having some teaching experience in primary school, I was the storyteller for this study. The props and visual aids for the storytelling, however, were made by an assistant under my advice and at my request.

Materials

Two stories, *Ice Cream* and *Dragons and Giants*, from Arnold Lobel's (1976, 1979) *Frog and Toad* series, were chosen as the reading texts for this study for several reasons. First, the stories were well-illustrated with pictures that illustrated part of the stories, but readers still needed to read the text in order to get the complete message. Second, the author kept a consistent writing style in the series with the same characters and similar settings; thus it was appropriate for this study to use different stories from the series for pre-test and post-test, preventing the students from recalling more words from reading the same story. Third, the reading level and length of the stories, about 350 words in each story, are fairly controlled for target readers of grades one to three, which might be challenging but manageable for young Taiwanese students in this study, for their average sight word score (128) was comparable to the benchmark of second graders (about 146) in the United States.

Two assessments were developed to measure the performances due to the different modes of reading. The first one was word recall tests that probed the subjects' word retention after reading. The word list used for the test comprised 50 words with 50% of them selected from the story and the other 50% distracting words; the full score was 100. The words were selected according to the following elements

of story grammars: (1) setting, (2) characters, (3) initiating events, (4) internal response, (5) plans or attempts, (6) direct consequence and (7) ending (Stein & Glenn, 1979), to ensure a balanced selection from each part of the story. The subjects were asked to check the words that they remembered from the story right after reading.

The second assessment was story retelling that looked into the subjects' overall comprehension of the reading text. After reading, the subjects were asked to retell the story in English or Chinese if they did not feel comfortable or capable of telling the story in English. The full score for the retelling was 40 points that covered the abovementioned elements of story grammar (see Appendix).

Procedures

Two experiments were conducted to measure the performance differences. The actual procedures of data collection were:

- The first reading experiment and assessment. Group C read the text-only story, while Group I read the same story with illustrations and Group S first listened to the same story interpreted by the storyteller and then read the illustrated text. To rule out the influence of time constraints on reading comprehension, no specific time limit was set for any group. Given the individual differences in word decoding and meaning inferring in the story reading, the students were told that they could take as much time as they needed to finish the reading. They could signal the research assistants and handed in the story paper when finished reading then proceeded to the next task, which was word recalling. For the study group, the storytelling took about 10 minutes, and the reading part finished in about 20 minutes. It was noticed that the time spent on reading for Group S was shorter than Group I; unexpectedly, Group C finished the reading first¹. After finishing the word recall test, story retelling proceeded with individual recording. The word recall test and story retelling stopped when the students said that they had finished the tasks. The research assumption here was that if more avenues of input resulted in better word retention and reading comprehension, Group S would outperform Groups I and C, while Group I would perform better than Group C.
- (2) The second reading experiment and assessment. The purpose of the second experiment was to verify the effectiveness of storytelling. It was to see whether the performance changed after storytelling intervened in Groups C and I. It was assumed that if storytelling was consistent in its influence, Groups C and I

¹ Although Groups C and I were given sufficient time to finish the reading, some students, especially those from Group C still handed in the story earlier than Group S. It could be that the lack of visual and nonverbal cues impeded the top-down process; however, the bottom-up process did not lead to comprehension needed for further reading; thus the reading was aborted by those subjects.

would improve their performances compared to their first reading, and the performances of the three groups would be comparable in this experiment. All three groups in this experiment listened to the story first before reading the illustrated text. This procedure was the same as the first experiment conducted in Group S. The word recall test and story retelling were proceeded as in the first experiment.

The procedure for storytelling was roughly divided into two parts: pre-telling and telling, as described in Table 1. In the pre-telling part, guessing strategies were demonstrated and key words taught. The purpose was to guide the students into the new approach and ease anxiety about listening to English stories without any translation. The telling part focused on getting the message across; thus, visual aids and nonverbal cues were applied to facilitate comprehension. The interaction between the storyteller and the students was maintained continually in order to monitor the students' understanding.

Table 1
The Storytelling Procedure

	Pre-telling		Telling
1.	Encourage and model guessing	1.	Use visual aids and nonverbal cues to help
	strategies to ease anxiety.		students follow the storyline.
2.	Reveal the story title and some	2.	Refer to the key words when encountering
	of the pictures or objects to		them to help comprehension.
	arouse curiosity; and ask	3.	Inquire understanding during the telling by
	students to guess what the story		asking the students questions. Paraphrase
	might be.		and more nonverbal cues are used if
3.	Pre-teach the key words: about		necessary.
	10-15 words are taught in each	4.	Ask the students to predict the next
	story.		happenings.
		5.	Interact with the students by involving
			them in the storytelling, e.g., chant the
			refrains or give comments.

Two raters evaluated the taped retelling performance with inter-rater reliability coefficients of 0.98 and 0.94 in first and second tests. The data obtained was analyzed by SPSS 11 for the statistic results.

RESULTS

Results of the First Experiment

The first word recall test showed that the hypothesis that contextualized storytelling might strengthen the retention of vocabulary was not supported. Contextualized storytelling did not influence the performance of word recall, and no significant statistical difference was found among the group performances (F = .44, p = .65) in the analysis of variance (ANOVA). See Table 2 for the descriptive statistics.

Table 2
Descriptive Statistics of the First Word Recall Test

GROUP	M	n	SD	Minimum	Maximum
Study	68.92	24	14.33	46.00	94.00
Illustrations	70.75	24	11.69	46.00	88.00
Control	67.42	24	10.87	52.00	92.00
Total	69.03	72	12.28	46.00	94.00

The Pearson correlation analysis showed that the word recall performance actually correlated with the subjects' proficiency levels ($r^2 = .62$) but not with the groups ($r^2 = .05$). That is, the proficient learners accurately recalled more words from the story than the less proficient learners, and storytelling did not make much difference in the outcome.

However, in the story retelling part, significant differences were found in ANOVA among groups, as shown in Table 3. Despite the similar performances in the word recall test, the mean scores of Groups I and C (M = 15 and 8 respectively) were far behind the study group (M = 30). As predicted, multiple avenues of input did result in better comprehension. Thus, without the assistance of illustrations and storytelling, Group C could barely comprehend the reading text.

Table 3
Analysis of Variance for the First Story Retelling

	SS	df	MS	F	p
Between Groups	5795.81	2	2897.90	55.21	.00
Within Groups	3621.92	69	52.49		
Total	9417.72	71			

In the case of the proficient learners, their performances in word recall did not yield any difference despite the different modes of reading; yet, the retellings were significantly different, as shown in Table 4.

Table 4

Analysis of Variance for the First Word Recall and Story Retelling of the Proficient Learners Exposed to Different Reading Modes

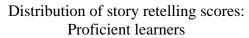
		SS	df	MS	F	p
First recall	Between Groups	180.22	2	90.11	.87	.43
	Within Groups	3400.67	33	103.05		
	Total	3580.89	35			
First retell	Between Groups	2322.63	2	1161.32	17.93	.00
	Within Groups	2137.79	33	64.78		
	Total	4460.42	35			

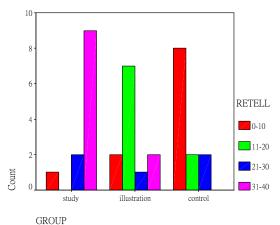
For the less proficient learners, the same phenomenon was found (Table 5). There was no statistical difference among groups in word recall; however, the differences in story retelling were significant. With the intervention of the contextualized storytelling, the reading comprehension score of the less proficient learners in the study group was close to that of the proficient ones (28.30 vs. 30.96).

Table 5
Analysis of Variance for the First Word Recall and Story Retelling of the Less Proficient Learners Exposed to Different Reading Modes

		SS	df	MS	F	p
First recall	Between Groups	98.00	2	49.000	.55	.58
	Within Groups	2953.00	33	89.485		
	Total	3051.00	35			
First retell	Between Groups	3547.17	2	1773.583	67.44	.00
	Within Groups	867.83	33	26.298		
	Total	4415.00	35			

Moreover, if we look into the distribution of story retelling scores in the proficient and less proficient students by leveling the scores into four sublevels, the intervention of the contextualized storytelling seemed to upgrade some less proficient learners to the highest level (above 30) of the story retellings (Figure 3).





Distribution of story retelling scores: Less proficient learners

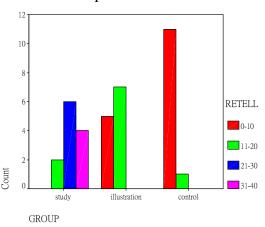


Figure 3

Distribution of the Story Retelling Scores in Proficient and Less Proficient Learners

Results of the Second Experiment

The results of the second word recall test showed that, similar to the first experiment, there was no significant difference among groups in ANOVA analysis, as shown in Table 6 (mean scores for Groups S, I, and C were 68, 72, and 64), and no significant difference was found between the first word recall test and the second one in the t-test analysis of the paired sample (t = .41, p = .68). That is, the students' performances on word recall remained consistent regardless of the intervention of storytelling.

Table 6
Analysis of Variance for the Second Word Recall Test

	SS	df	MS	F	p
Between Groups	772.00	2	386.00	2.58	.08
Within Groups	10319.50	69	149.56		
Total	11091.50	71			

In the story retelling part, the mean scores for Groups S, I, and C were 30, 31, 30, and no difference was found among the groups in ANOVA analysis, as shown in Table 7. Apparently, the intervention of the contextualized storytelling had eliminated the performance differences among the groups and resulted in performance changes of Groups I and C in their reading comprehension.

Table 7

Analysis of Variance for the Second Story Retelling

	SS	df	MS	F	p
Between Groups	21.92	2	10.96	.52	.60
Within Groups	1464.24	69	21.22		
Total	1486.16	71			

Results of Performance Changes in Proficient and Less Proficient Subjects

If we look into the improvement of word recall in the two tests of the proficient students (n = 36), there was no significant difference between the two word recall tests in the t-test analysis for the proficient students (mean 1 = 76.60, mean 2 = 75.90, t = .41, p = .68) and the less proficient students (mean 1 = 61.50, mean 2 = 59.90, t = .87, p = .39). That is, neither the proficient nor the less proficient students made any progress in word recall tests with the intervention of storytelling. However, the improvement in story retelling was obvious in both groups (t = 6.90 and 7.00, p = .00). By computing the mean points of improvement for story retelling, the result showed that the less proficient students improved slightly more than their proficient peers in this part of assessment (Table 8).

Table 8

The Mean Points of Improvement in Story Retelling

Proficiency	n	Minimum	Maximum	M	SD
Proficient	36	-5.00	29.50	12.21	10.58
Less proficient	36	-8.50	31.00	13.63	11.68

Interestingly, of the 12 subjects whose second retelling scores dropped compared to the first ones, 11 belonged to the study group and one from Group I. The regression for the 11 students was statistically significant (t = 7.19, p = .00) in t-test analysis, even though their regression did not affect the overall performance of their group between the two retellings (the mean score for the first retelling was 29.60 and the second one was 30.50).

CONCLUSION AND SUGGESTIONS

The results of this study did not turn out to be as expected because no positive

effect of storytelling was found on word recall. However, it is highly encouraging with respect to story comprehension. The contextualized storytelling was found to be an effective intervention in reading comprehension for both proficient and less proficient students, and the less proficient students seemed to profit more from this approach. Without the help of illustrations and storytelling, the proficient students' retelling performance would not have reflected their linguistic superiority. Meanwhile, with the storytelling intervention, the less proficient students could grasp the overall meaning of the reading text almost as well as the proficient ones.

It was evident that better automatic word recognition did not ensure better reading comprehension; those in the proficient group with higher sight word scores were not necessarily independent readers. As Gough and Tumner (1986) proposed, to obtain reading proficiency, readers need two essential skills: decoding and language comprehension. The proficient Taiwanese learners in this study might have acquired the skills of decoding or word recognition, but the lack of language comprehension prevented them from constructing meaning from the text. It seemed that they had accumulated a good size of vocabulary but still could not read authentic and connected text. The apparent lack of oral language ability and input from the learning environment may defer the development of reading fluency; viable approaches such as contextualized storytelling to strengthening the oral language foundation that may pave the way for other aspects of language learning deserve our attention.

The effectiveness of contextualized storytelling that provided links to comprehension through verbal and nonverbal communication was manifested. It was found that before the storytelling, most of the students expressed worries that they would not be able to comprehend the story that was told in English only. However, when the props and visual aids were shown, the students were found to be interested and engaged in the telling; they were willing to interact with the storyteller by answering questions and predicting the storyline. They laughed at the parts that were amusing and gasped at the unexpected acts of the characters. They enjoyed the story so much that they forgot that it was told in English. This approach that utilizes the students' non-verbal knowledge or ability had satisfactorily led to a gain in general comprehension.

The hypothesis about the multi-sensory approach as a more effective intervention than Dual-Code Model and text-only reading in EFL learners' overall reading comprehension was proved in this study. As noted in the first experiment, the contextualized storytelling resulted in the best outcome of the story retelling, followed by illustration-supplemented group based on Dual-Code approach and the embarrassing performance of the control group. The results lent credence to the claim that more avenues of language input lead to better reading comprehension. The

auditory and nonverbal input offered in the storytelling might be deemed as the merits of this approach, which dramatically manifested the content and the appeal of the story. The students' affective filter was noticeably lowered and the language in use was demonstrated in meaningful context. In other words, during the storytelling the students were receiving language input with multiple senses and their attention was drawn to the message rather than isolated words and grammatical features of formal language learning.

In fact, because the influence of storytelling was so evident, it may be speculated that the students' retellings were mostly derived from the verbal and nonverbal cues of the storytelling rather than from the reading text. Thus, more evidence from empirical, qualitative, and longitudinal studies are needed to substantiate the value of storytelling in EFL reading and language development. The following issues may be worth of exploration for this purpose.

- (1) Despite the seemingly effective framework of storytelling for vocabulary learning, the findings of this study on word recall did not support the theoretical assumption. It could be that word recall was a task that demanded a sustained cognitive effort in working memory to identify words' spellings, pronunciations and meanings so that an immediate result might still favor the students who possessed better word recognition skills. On the other hand, it could be that because the subjects' attention was directed to the storyline and message, less attention was allocated to isolated words and thus affected later retrieval. In any case, in what aspect and to what extent the storytelling helps vocabulary and oral vocabulary learning and retention may need a closer study.
- (2) The contextualized storytelling may scaffold the learners into a reading text; however, how it affects the text reading process or reading fluency remains unclear. Does it speed language processing and make the decoding less laborious because of the rendering of text by the storyteller? Or, does it improve inferential comprehension because of the nonverbal cues? From informal observation during the experiments, I found that the less proficient students did not fully engage in reading the text. It could be that their vocabulary size and decoding skills were still too limited for them to read, and their comprehension was mainly derived from story reconstruction based on the cues obtained from the illustrations and storytelling. Thus, the differences of text reading process between the proficient and less proficient learners after receiving storytelling may be examined to see the impact of storytelling on the reading process.
 - (3) As noted in the second experiment, most of the students who declined in their second story retelling were from the study group. Because these students had already received storytelling in the first experiment, this disturbing phenomenon

adds a touch of uncertainty to the long-term effectiveness of this approach. A longitudinal study may help clarify the puzzling situation here. Moreover, individual differences with this approach may be considered a point for further study as well.

The process of becoming an independent and fluent reader is complex for native English speaking learners and it may be even more so for EFL learners, who may need additional assistance from the teacher in order to progress as their learning involve increasingly the use of authentic materials. The findings of this study reveal the necessity of teacher intervention in EFL reading; the teacher's story interpretation through contextualized storytelling as a multi-sensory approach could result in perceptible benefits in young learners' reading comprehension. The teacher is thus encouraged to incorporate storytelling in teaching and experience the magic of this ancient art in modern language classrooms, even though it may place some extra burden on the teaching preparation.

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APPENDIX

Story Retelling Scoring Sheet

Story retelling (40 points maximum)	Score
Setting: Time and place (4 points)	
A hot summer day, by the pond	
Characters (6 points)	
Frog, Toad, Mouse, Squirrel, Rabbit	
Initiating event/problem(s) to be solved (8 points)	
It's hot and Toad wants to get some ice-cream.	
Internal response (2 points)	
It's a good idea to get some ice-cream.	
Attempts and the happenings in the process (10 points)	
Toad got the ice-cream but it was melting.	
Toad was covered with sticks and leaves.	
Animals mistook him for a monster.	
Frog couldn't recognize him.	
Direct consequence(s) (2 points)	
Toad fell into the pond and all the ice-cream was washed away.	
Resolution and ending (8 points)	
They got some ice-cream together and sat under the tree to enjoy it.	
Total score:	

故事演說對小學生英語閱讀理解及字彙回想的影響

摘要

本研究在了解故事演說對小學生英語閱讀理解及字彙回想的影響,以 雙碼模式及多重知覺輸入為理論基礎,本研究者預測故事演說的多重 輸入模式產生較多的語言輸入因此將成就更好的閱讀理解及字彙回 想,其結果應更勝於雙碼模式。為驗證此預測,七十二位國小六年級 的學生依程度分成三組進行不同模式的閱讀:控制組閱讀文本,插畫 組閱讀附有插畫的文本,實驗組先聽故事演說再閱讀有插畫的文本。 故事複述及字彙回想測試則用來檢驗閱讀後之理解與字彙回想程 度。實驗結果顯示在閱讀理解方面實驗組優於其他兩組,但在字彙回 想的表現則無顯著差異。高程度學生及低程度學生皆因故事演說提升 閱讀理解能力,且低程度學生的進步多於高程度學生。本研究建議教 師將故事演說應用於閱讀指導。其他研究相關議題如故事演說的長期 效應、對語言發展及語料處理的影響則建議做更深入的研究。

關鍵詞: 故事演說 雙碼模式 多重知覺輸入 教師介入