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碩士論文

台灣國小四年級學童重複聆聽故事

對無意間單字學習之探討

Incidental Vocabulary Learning from

Repeated Listening to a Story

in Fourth-Grade Children in Taiwan

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中文摘要

有鑑於英語學習在台灣日漸興盛，台灣教育部大力推動國小英語教育，以期能增進國人之國際競爭力。為培養國小英語初學者英語學習的興趣及增進學習英語的效率，念讀故事書活動儼然成為一項重要的課室活動，然而，關於重複念讀故事書對國小學童影響的研究似乎不足。

因此，本研究主要探討台灣學童所需重複聆聽故事的次數，以及他們如何從重複聆聽故事四次中，非刻意學會新單字，除了探討聆聽故事次數對英語學習的影響之外，本研究亦探討學童之英語能力對從聆聽故事書中學習單字的相關性。

本研究的對象為三十三位來自新竹市某國小同一班級的四年級國小學童。根據劍橋兒童英語認證(*Cambridge Young Learners English Test*)成績，可將這些學生的英文程度區分為高程度組和低程度組。一位以英文為母語的老師根據固定念故事的程序重複說同一故事給參與本研究的學童聽，一共四次，每次間隔三到四天。該故事是特別為此研究撰寫，故事包含八個目標假字(target pseudowords)。每一次念故事時，老師會解釋這八個目標假字的意思。在第一次、第三次、和第四次念完故事之後，學生接受一個包含圖片辨認和意義配對的單字測驗題。此單字測驗也包含八個低頻率出現的對照字組，以確保孩童每次的進步不是因為重複測驗的緣故。

研究結果顯示，所有學童皆自重複聆聽故事，以及老師對單字的解釋中習得新單字。所有孩童在聆聽第四次相同故事後，大約學會八個目標單字其中的四個。重複聆聽故事雖然使得學童在單字測驗上得到顯著進步，但是，在聆聽故事第四次後，孩童並沒有比第三次學到更多單字。

再者，本研究結果亦顯示了不同英語程度對學童詞彙學習上造成的差異。雖

然兩組學童皆隨著聽故事的次數增加，在單字測驗成績有顯著的進步，但是擁有高程度的學童顯著比低程度的學童學到更多目標單字。

本研究發現，重複念讀故事是一個可以有效促進學童單字量成長和實用的課室活動，教師在重複念讀故事活動時，能輔以講解故事中出現的單字，以促進學童對單字的理解，此外，聆聽故事可以讓低程度的學童在愉快的學習環境中，逐漸學習英文單字。本研究建議，教師可運用重複念讀故事等相關活動，提供以英文為外語學習的學童，在有意義的學習情境下學習英文單字。



ABSTRACT

This study examined the number of times required for EFL children to learn new words incidentally through repeated listening to a story four times. Of particular concern was to investigate the relationship between children's English proficiency levels and the vocabulary gains from listening to a story four times.

An intact class of 33 fourth-grade children in one urban elementary school in Hsinchu participated. These students were categorized into high and low English proficiency groups based on the *Cambridge Young Learners English Test (CYLET)*. A native English-speaking teacher, guided by scripted procedures, read a story to the whole class on four occasions, each 3-4 days apart. Eight target pseudowords were embedded in the story specifically written for this study. The story was read with the eight pseudowords explained during each session. After the first, third, and fourth reading, multiple-choice vocabulary measures, including a picture identification test and a meaning-matching test, were administered. To ensure that the children's gains were not a result of repetitive testing, eight low-frequency words were included to serve as the control words.

The findings indicated that the children learned novel words from repeated listening to the story with teacher explanation. All children incidentally learned approximately 4 out of 8 target words at the fourth listening. While repeated listening to the story led to significant word gain, listening to the story at the fourth time did not further contribute to incidental word learning. In addition, although both proficiency groups made significant word gain with the increasing number of listening, the high-proficiency children learned significantly more target words than their lower- proficiency peers.

The findings suggested that repeated listening to a story coupled with teacher explanation of new words can be a practical and effective classroom activity to

promote EFL children’s vocabulary growth. Read-aloud activities facilitate children, particularly those with lower proficiency levels, to learn new words via a supportive and language-rich environment.

In view of the findings, the present study suggests that EFL teachers should consider the necessity and benefits of repeatedly reading aloud to children and use it as a viable tool for facilitating elementary children’s literacy development within limited instruction time.



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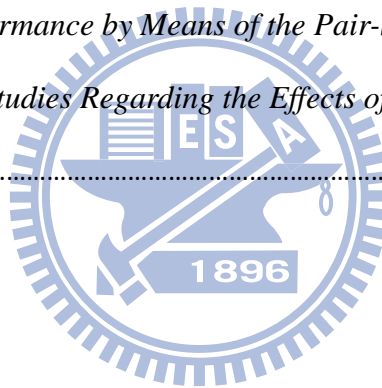
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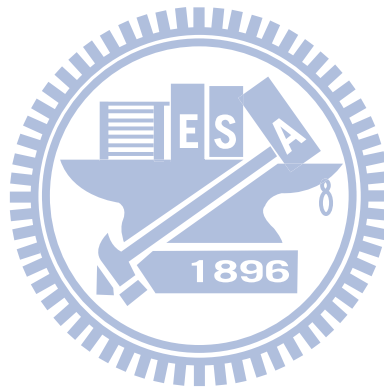
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CHAPTER ONE

INTRODUCTION

Learning English has become a prevailing trend for children in Taiwan since English has become the global language. In order to be able to compete with others, many parents are eager to buy well-known books or novels written in English. They read English picture books or storybooks to their young kids in their early childhood with the hope that they can get an early head start. When these children enter elementary school, their parents even urge their children to learn English by sending them to English cram schools, and many of them believe that English is the key for their children to succeed in the future.

In addition to parents, the Taiwanese government has been aware of the importance of English. With the aim to cultivate our children to have international views, the Ministry of Education (MOE) has been devoted to promoting English learning through the implementation of English instruction for elementary school children in the fifth and sixth grade (Ministry of Education, 2001). Four years later, in the school year of 2005, formal English instruction was further extended to Grade 3 and Grade 4 to meet national development needs. However, the guidelines for implementation of the governmental reforms were not uniformly applied. Some elementary schools in Taipei City, Hsinchu City, and Tainan City even set formal English instruction as earlier as possible, introducing English to primary students in Grade 1 and 2 in order to meet the global trends and increase international competitiveness. The focus of curriculum design for elementary school children is to provide cheerful and natural learning contexts in which they are motivated to learn English, thereby learning about world cultures and basic communication skills. Through the use of audio and visual aids, a variety of teaching activities like singing English songs and reading storybooks aloud are encouraged to develop children's

second language literacy. In this way, children are able to naturally exercise prediction and anticipation, become familiar with the rhythm, intonation, and music of the language, and most importantly, learn vocabulary and language use. Utilizing stories that convey a moral or real-world experience, colored by fascinating photos or pictures, can facilitate children to learn faster (Meyer, Stahl, & Linn, 2001).

Based on the aims of the MOE's reform, each school authority is thus encouraged to take responsibility for making use of curriculum and extra programs through which children can learn English by playing language games and read-aloud activities. In the meantime, local private institutions have also been established to meet the pressing need for learning English. Even though reading stories aloud to children is a common human activity, as well as a popular extra-curricular activity in which children are readily able to engage in the process of language learning, it is often forgotten by the time children enter elementary school. Because their own participation in reading appears to be closely related to their reading achievement, elementary school children need to be encouraged to participate in reading. Despite the MOE's reform efforts, Taiwanese children are expected to memorize as many new words as possible due to limited instruction time. Even worse, such learning contexts have diminished their motivation for learning English, compelling them to only memorize the words for a short time (Ho, 1998). They have difficulties appropriately using what they have learned in class and thus have limited basic communication skills in English, which are confined to "rote memorization" (Lin, 2001). In addition, according to the *General Guidelines of Grades 1-9 Curriculum* (Ministry of Education, 2001), by the end of Grade 6, children must be able to say 300 words, as well as read and write 180 of those 300 words. However, even if they learn all of the 300 words through formal instruction, they would probably have difficulties with authentic reading or daily-life interaction in the real world because sometimes 300

words are just not enough to comprehend written words in books or to get the messages across.

Alternatively, storybook read-aloud activities merit consideration in class and can be used as a valuable supplement to English instruction because such activities offer potential advantages to young English learners (e.g., Biemiller & Boote, 2006; Duke & Kays, 1998; Elley, 1989; Meyer, Stahl, Linn & Wardrop, 2001; Robbins & Ehri, 1994; Whitehurst et al., 1994). First, along with interesting full-color photographs or pictures, listening to stories time after time improves children's vocabulary (Robbins & Ehri, 1994; Whitehurst et al., 1994). With teacher's explanation of the unknown words, children can understand the meanings of the target words in a supportive environment in which partially unknown words are repeatedly met so that they can become consolidated. Repeated exposure to the storybooks develops children's word bank when the teacher provides a brief verbal explanation of the new or unfamiliar words (Elley, 1989). They can also learn other words that are likely to occur in real-world communication. With repeated story presentations, new words can be further reinforced visually and verbally but still keep children's interest. To a further extent, children seem to retain the words appearing in stories better than the words appearing in isolated contexts (Biemiller & Boote, 2006) because story plots are likely to bring back memories of words occurring in the story. The repetitive sentence structure appearing in stories familiarizes children not only with vocabulary, but also maintains their interest (Morrow, O'Connor, & Smith, 1990). Second, in addition to growth of vocabulary and maintaining of interest, children's oral language is expanded as they listen to stories because they have opportunities to recite rhymes and engage in discussions of the plots of stories with their teachers or peers. Third, listening, sequencing, and thinking skills are all being developed as children enjoy a story. They pay attention listening to the story being read aloud to them while

practicing how to follow the main plots. As they listen to the story again and again, children then learn how to organize the events of the story in sequence, which fosters their skills in sequencing and thinking (Duke & Kays, 1998). Fourth, children have more interest in reading by themselves if they have opportunities to listen to stories read by their teachers (Meyer, Stahl, Linn & Wardrop, 2001). Exposure to written language in stories at school age helps prepare children for learning to read by themselves because they discover that books can tell interesting stories and allow them to have experiences which may be similar or different from their own. Most importantly, storybook read-aloud activities are pedagogically efficient because such activities involve vocabulary learning, listening, and reading to occur simultaneously.

It is obvious that read-aloud activities have received attention not only by parents but by our government as well. One of the key points that emerges from the recognition of such crucial activities is solid evidence from the professionals and researchers in the field of reading. A growing number of publications and empirical studies have reported the positive contribution that storytelling can make to children's L2 vocabulary growth (e.g. Allor, McCathren, 2003; Chomsky, 1972; Elley, 1989; Elster, 1994; Goodman & Goodman, 1979; Jackie, 1989; Meyer, Stahl, Linn & Wardrop, 2001; Morrow & Gambrell, 2002; Neuman, 1999; Snow, Tabors, Nicholson, & Kurland, 1995; Stanovich, Cunningham, & West, 1998; Teale, 1986; Trelease, 1982). In assessing the literature regarding this issue, the majority of the previous research probing into the relationship between vocabulary development and storytelling has been conducted in the ESL contexts in which English is easily accessible to children even beyond their language classroom (Elley, 1989; Meyer, Stahl, Linn & Wardrop, 2001; Neuman, 1999; Reese & Cox, 1999; Robbins & Ehri, 1994). Surprisingly, few studies have investigated the effects of reading aloud to elementary children on their vocabulary acquisition despite the growing awareness of

the potential merits of such read-aloud activities. Therefore, our goal in this study is to unravel the mystery of the time spent required for the elementary children's vocabulary acquisition via storytelling.

Purposes and Significance of the Study

While considerable attention has been paid to research issues related to the beneficial effect of repeated reading aloud to children in the past, literature on issues surrounding the amount of time spent on reading aloud repeatedly to children in the L2 classroom has emerged only very slowly and in a limited way. Moreover, little is known about the effects of reading stories aloud to children in school settings, particularly at primary school level in the context of learning English as a foreign language (EFL) in Taiwan. Compared to native English-speaking children, EFL children have limited exposure to English since they might only have access to English in school settings. Due to their majority of exposure to English restricted to school, listening to stories is thus of great importance because it provides authentic and meaningful input for the EFL children who are linguistically disadvantaged in terms of the amount of input and exposure to English. In addition, for children in the EFL context, English storybook reading in schools is particularly important because it may provide EFL children with experience of listening to English stories and improve the educational chances of children with limited exposure to English. Therefore, in light of these concerns, there are two purposes of the current study. The primary purpose of this study is to extend the line of the previous research regarding the relationship between the vocabulary gains and repeated reading aloud to fourth graders over four listening sessions. Of particular concern is the extent to which children's English proficiency levels account for the variation of improvement among the participants and the amount of time sufficient for vocabulary acquisition during

the sessions of read-aloud activities. Second, pedagogical implications are discussed for elementary school teachers in EFL contexts because few studies have been conducted in such contexts, examining the effects of read-aloud activities on EFL children acquiring vocabulary through storytelling. The research questions to be addressed in this study are as follows:

1. Does exposure to novel words within the context of listening to a story lead to word learning?
2. What effects does the number of story listening have on the children's learning of new words?
3. To what extent is the children's proficiency related to their word learning?

Based on the previous literature, three hypotheses were proposed to answer the above three research questions.

Hypothesis 1. Exposure to the novel words within the context of listening to a story leads to word learning (e.g. Elley, 1989).

Hypothesis 2. Exposure to the novel words by the fourth times is likely to develop the children's knowledge of the word meanings (e.g. Robbins & Ehri, 1994).

Hypothesis 3. The higher English proficiency the children have, the better performance they may have on the vocabulary assessment (e.g. Penno, Wilkinson, & Moore. 2002).

To answer these three questions, thirty-three Taiwanese EFL children participated in the present study. At the end of each read-aloud activity, children's knowledge of the target words appeared in the story was assessed using vocabulary assessment over the four-time read sessions. It is hoped that the preliminary findings

of this study can address these questions which in turn further extend prior literature and most importantly, carry implications for EFL teachers who are able to judiciously decide the time spent reading aloud to children and use it as a viable tool for facilitating elementary children's literacy development within limited time.



CHAPTER TWO

LITERATURE REVIEW

This chapter begins first with a brief review of the importance of vocabulary. The second section of the chapter covers different approaches through which children learn vocabulary. Then, the third section illustrates the effects of listening to stories on children's vocabulary learning, which includes the research examining the number of story read aloud, the role of children's language proficiency, and the role of teacher explanation, The last section of this chapter describes the empirical studies of reading stories aloud to children on their vocabulary growth.

The Importance of Vocabulary

Numerous studies have indicated that vocabulary plays an important role in the language learning process (Cunningham & Stanovich, 1997; Penno, Wilkinson, & Moore, 2002). Vocabulary knowledge is strongly associated with academic performance (Carlo, August, & Snow, 2005; Jenkins, Matlock, & Slocum, 1989; Jenkins, Stein, & Wysocki, 1984; Folse, 2004; Nation, 2001). In addition to academic performance, empirical evidence has demonstrated that vocabulary is a strong predictor of reading comprehension (Davis, 1972). A substantial body of research documented the positive relationship between the vocabulary knowledge and reading ability, indicating that word knowledge has significant impact on reading comprehension in L1 children (Biemiller & Boote, 2006; Elley, 1989; Elley & Mangubhai, 1983; Mckeown, 1985; Nagy, & Anderson, 1984; Proctor, Carlo, August, & Snow, 2005), and adult learners of English as second language (Cho & Krashen 1994; Day, Omura, & Hiramatsu, 1991; Qian, 1999). Differences in vocabulary knowledge are correlated with competency in reading (Mckeown, 1985; Mezynski, 1983; Qian, 1999; Qian, 2002).

From the aforementioned studies, it is apparent to know that children's limited lexical knowledge reflect their difficulties in reading. That is, they have difficulties to comprehend the text because they cannot recognize the meanings of words, and finally create mental images. This deficiency in vocabulary knowledge discourages them from reading and remains them under adverse conditions in applying new words. This conclusion can also be drawn from Mckeown's findings on the importance of vocabulary in reading achievement. Mckeown (1985) examined the effect of vocabulary size on deriving meanings of unknown words through exposure to written language in 30 fifth-grade children. She found that children with larger word bank were more successful in deriving the meanings of unknown words than those with smaller word bank. She claimed that ability in vocabulary knowledge was associated with the competency of learning unknown words from contexts of reading. The findings of Mckeown's study were consistent with Shefelbine's (1990) who investigated the factors that accounted for learning from the written texts. He concluded that sixth-grade children with the richest vocabulary knowledge at outset learned relatively more new vocabulary than those with poorest vocabulary knowledge. The reasons why those with poorest vocabulary knowledge had difficult expanding their vocabulary were that they could not figure out the meanings of those new words by their own when it comes to learning independently. Such situations, according to Shefelbine, would further create the vicious circle for those with poorer initial entering vocabulary. These empirical data make it plain that vocabulary development and reading success are mutually enhancing through a reciprocal relationship. This notion has stressed the dynamic aspects of reciprocity that vocabulary knowledge contributes to reading development and reading promotes vocabulary knowledge.

Further support for vocabulary as one of the important factors in the language

learning process is found in research on listening (Rubin, 1994). Since vocabulary knowledge is assumed to be closely related to listening comprehension, it was also helpful to investigate the extent to which vocabulary size would have impact on listening to oral language. A growing number of first language studies have examined factors that affect children's learning of new vocabulary while listening to stories (e.g., Collins, 2005; Reese & Cox, 1999; Morrow, 1988; Morrow, O' Connor, & Smith, 1990; Rice, 1990; Robbins & Ehri, 1994; Whitehurst et al., 1994). All of these aforementioned studies confirmed that vocabulary size is one of the major variables in language learning progress. They found that L1 children with varying vocabulary size attain knowledge about new words from listening to stories, but children with higher vocabulary levels are able to progressively learn more new words from repeated exposure to the stories than those with lower vocabulary levels do. Robbins & Ehri (1994) concluded from their study of children listening stories in L1. As they pointed out, the larger vocabulary at outset the children have, the greater gains the children will make after listening to stories. It is plausible speculation that L1 children with a higher level of vocabulary knowledge will assist their listening abilities, which might develop their skills in reading subsequently. Given that the importance of vocabulary leads to listening development for L1 learners, it may well be that vocabulary learning for L2 learners is particularly important since learning L2 words involves much more than memorizing words into memory.

From this section, the importance of vocabulary was introduced. In the next section, different ways of word learning were reviewed to see how vocabulary can be learned from direct instructions and incidental contexts. The essential components for a good vocabulary instruction were also discussed to capture the interplay between pedagogy and the process of learning.

Ways of Word Learning

There is considerable disagreement among researchers with respect to the ways through which the learners' word learning experiences may have contributed to their vocabulary growth. Research has suggested three essential ways that make word learning possible. Among the three ways, direct vocabulary instruction was found to be the fastest way to impart vocabulary knowledge to the learners (Kameenui, Carnine, & Freschi, 1982). Direct instruction involves the use of definition, synonyms, drills, mnemonics and possible assigned rote learning (Nagy, 2005; Nation, 1982; Stahl & Fairbanks, 1986). Even though these intentional word-learning activities appear to facilitate word learning, they might be too abstract and obscure for learners to grasp diverse meanings of each individual word, thereby resulting in the misinterpretation of word meanings in written texts or the misunderstanding of word meanings in the oral communication. Furthermore, L1 research in vocabulary learning has indicated that direct vocabulary instruction alone cannot provide solid explanations for why L1 learners can learn such large quantities of words within a short time (Jenkins, Stein, & Wycsocki, 1984; Nagy, Herman, & Anderson, 1985; Paribakht, & Wesche, 1996; Stahl & Fairbanks, 1986). Even though they may not pay explicit attention to the words to be learned or have systematic vocabulary instruction, L1 children acquire so many words at a rapid rate in the early years before they start primary school.

Another way to learn new words is through incidental learning from verbal contexts (Collins, 2005; Elley, 1989; Brabham & Lynch-Brown, 2002; Herman, Anderson, Pearson, & Nagy, 1987; Jenkins, Stein & Wycsocki, 1984; Nagy, Anderson & Herman, 1987; Nagy, Herman, & Anderson, 1985; Nation, 2001; Penno, Wilkinson, & Moore, 2002; Robbins & Ehri, 1994; Sénéchal, Thomas, & Monker, 1995). Incidental learning is defined as the learning occurs when one lacks focused attention

on learning; rather, the focal attention is to do something else such as one understands the meanings of the text read or listened to (Laufer & Hulstijn, 2001). Nation (2001) confirmed that the most important way to learn vocabulary is via guessing from contexts. It is true that the great majority of words that native speakers learn in their first language come from incidental situations. Based on the empirical evidence, it has been argued that incidentally learning words from contexts contributes to children's vocabulary growth (Jenkins et al., 1984; Nagy & Herman, 1987; Day, Omura, & Hiramatsu, 1991). Together, the results from these studies consistently indicated that children can grasp the meanings of the words to some extent either from written or oral contexts in which they encounter words incidentally. With respect to learning from written contexts, Jenkins et al. (1984) found that fifth graders can learn the meanings of the words through reading. Also, more frequent exposure to the reading materials improves vocabulary learning. These findings were in line with that of Nagy et al.'s (1985) study. According to Nagy et al., repeated exposure to new words from written contexts encourages long-term and incremental effects on children's L1 vocabulary growth. While Nagy and his colleagues' study examined the effects of *written* context for word learning, they argued that *oral* context was of paramount important for vocabulary growth, especially for young children who were primarily exposed to oral language environments in which they grasped the meanings of words from the speech of parents or teachers. In addition to learning from written contexts, subsequent studies have also provided overwhelming evidence that demonstrates the advantages of learning new words in oral contexts where children are meaningfully exposed to the words when listening to stories (Brabham & Lynch-Brown, 2002; Brabham & Villaume, 2002; DeTemple & Snow, 2003; Mckeown, & Kucan, 2002; Ozuah, Dinkevich, & Mulvihill, 2003; Sénéchal, 1997; Sharif, Sternberg, 1987). Findings from all of these studies support the ideas that children can comprehend and

develop knowledge of the word meanings under contexts of listening to stories (Meyer, Wardrop, Stahl, & Linn, 1994). Under such circumstances, repeatedly reading stories aloud to children stimulates growth in their work bank because of teacher explanations or self-learned meanings of words.

A third way that stands in between these two extremes is the combination of explicit vocabulary instruction and incidental word learning from contexts because “the number of words to be learned is too enormous to rely on word-by-word instruction” (Nagy, Herman, & Anderson, 1985; Nagy, 1988). Direct vocabulary instruction can coexist with incidental learning. They concur to create powerful environments because each one contributes to the other (Nation, 2001). This viewpoint was in line with the literature that underscored teachers’ support for incidental and intentional word learning (Jenkins, Matlock, & Slocum, 1989; Schwanenflugel, Hamilton, Bradley, Ruston, Neuharth-Pritchett, & Restrepo, 2005). Jenkins et al. (1989) addressed important claims regarding whether teachers taught word meanings directly or trained students to derive word meanings from the context. One hundred thirty five fifth-grade students in this study were divided into two groups in which each group was further subcategorized into low, medium, and high amounts of practice of these two distinct approaches. Results showed that both approaches appeared to have relative merits; however, they activated the processing for word learning in different ways. The direct instruction of the individual words effectively improved students’ understanding of specific word meanings, whereas the instruction of deriving word meanings fostered students’ abilities to use external contextual clues to learn the meanings of words. Although the latter encouraged students to gain knowledge of words independently, it presupposed that the students had sufficient vocabulary size as the basis to derive the meanings of new words encountered. Therefore, they suggested that it may be more effective to design an intensive

vocabulary program by combining these two approaches instead of depending merely on one technique. To have a useful impact on vocabulary growth, a word meaning instruction alone is not sufficient for one learner's vocabulary development. In fact, most words are not only learned from the word meaning instruction alone because it does not account for why children can pick up the meanings of words with surprising speed. Also, only few word meanings were likely to be discussed in word-meaning-only instructions.

Therefore, a stronger consensus among the discussion of this controversial issue is that both direct vocabulary instruction and incidental learning is necessary to encourage vocabulary learning (Blachowicz, Fisher, Ogle, & Watts, 2006; Graves, 2006; Nagy, 2005). Blachowicz et al. (2006) examined the relevant issues concerning vocabulary learning in the classroom and pointed out that a sound vocabulary instruction should encompass the provision of word-learning strategies by which selected words were taught intentionally to students in language- and word-rich contexts. For instance, listening to stories in supportive contexts all positively contributed to incidental and intentional word learning. In such contexts, a large number of words were directly taught during read-aloud activities, and children could pick up the words easily out of interest in stories. Teachers read stories aloud, intentionally creating a pleasant classroom atmosphere where children were curious about the new words embedded in language-rich contexts. In the meantime, teacher can explain and discuss words for children time after time. By doing so, incidental word learning is encouraged since children's focal attention has shifted from the language to the meaning itself. The children were in turn motivated to learn words spontaneously and independently. These two core elements for designing a strong vocabulary instruction supplied learners with a viable avenue to develop their knowledge of words.

It is obvious that direct vocabulary instruction alone cannot provide the opportunities for the learners to attain the depth and breadth of vocabulary knowledge, nor can a context itself alone convey immediately relevant information on knowledge of specific words (Nagy, 1988). Vocabulary should be taught from direct instruction accompanied by incidental verbal contexts. Those incidental contexts might be oral or written contexts such as exposure to the broadcasting, television, storybook reading (independent reading, shared reading, and listening to stories read aloud), and the language between peers and the teacher. For learners of English as first language (L1), incidental learning occurs naturally and it is the principal way that L1 children acquire most of the vocabulary. However, for school-aged children in EFL settings, one of the most common problems is limited amount of exposure because many do not have such conditions through which incidental learning occurs. Repeated read-aloud activities can be seen as an alternative and viable tool with respect to classroom application, especially for EFL teachers because they are thought to be the major contributor to children's vocabulary development. In such activities, vocabulary can be gained incidentally with the teacher's support for the knowledge to be learned because children can learn incidentally from spoken input while have more deliberate vocabulary-focused learning.

Vocabulary Learning from Listening to Stories

Various studies have been conducted to examine children's vocabulary learning through the process of listening to stories. In the following sections, literature on children's vocabulary development was further discussed with respect to the number of stories read aloud, the role of children's language proficiency, and the role of teacher explanation.

The Number of Times Stories Read Aloud

An increasing number of publications and L1 empirical studies have assessed the positive contribution that vocabulary learning can make to children as they listen to stories read aloud time after time. It is unreasonable to expect learners to capture meanings of words only through one-time exposure. Repeated exposure to target vocabulary is crucial because meeting each word only one time is not sufficient (Nation, 2001). Every individual word has too many aspects to be learned such as its spelling, part of speech, pronunciation, and semantic meanings. It would be better for learners to know this information so that they can use each word properly. Also, higher frequency of occurrence creates a better opportunity for the learner to learn the recurring vocabulary (Carter & McCarthy, 1988) because learners learn each word gradually; that is, the learning of one word must be viewed as an incremental process (Nation, 2001).

However, there is no general consensus on the recommended frequency of exposure to the target words. According to Jenkins et al. (1984), it is necessary to read stories aloud to children more than two times. They also claimed that the increased number of presentations led to relatively greater word learning. Later studies examined the effect of reading aloud to preschoolers and kindergartners who were exposed to the stories only one time (Sénéchal & Cornell, 1993; Sénéchal, 1997), two times (Hargrave & Sénéchal, 2000; Robbins & Ehri, 1994; Sénéchal, Thomas, & Monker, 1995), or three times (Collins, 2005; Eller et al., 1988). As evidenced, all of these studies showed that the words which occurred in the stories of each study were learned but to different extents. Among these aforementioned research, Sénéchal & Cornell's study (1993) examined whether preschoolers benefited from single storybook reading. A test was then administered to assess the children's receptive and expressive knowledge of the target words after the listening session. They indicated

that single exposure to storybook reading contributed to growth in receptive vocabulary, but not enough for producing growth in expressive vocabulary.

Similar observations involving older children have been reported by Brett et al. (1996). They supported the ideas that listening to stories resulted in positive effects on fourth-grade children's vocabulary learning if the teacher provided brief explanations of new words, but it was not necessary to read a story repeatedly if new words were explained. Brett et al. (1996) concluded that the "optimal" number of presentations of a story was not supported by consistent research evidence. While this aforementioned research involved preschoolers and kindergartners, reading aloud to L1 elementary children received less attention (Brabham & Lynch-Brown, 2002; Brett, Rothlein, & Hurley, 1996; Elley, 1989; Penno, Wilkinson, & Moore, 2002). The number of times stories read aloud in earlier research was not consistent and each study had its own rationale for the ideal number of story read aloud for children. As evidenced from the L1 research that the notion of vocabulary knowledge and the frequency of occurrence were related, that the context of story read aloud enhanced vocabulary learning, but only under certain conditions. The exploration of the ideal number of presentations of a story for elementary children in EFL contexts is particularly important in the present study because they, with limited exposure to target words, might have relatively low outside contact with incidental vocabulary.

The Role of Children's Language Proficiency

For issues concerning the role of children's language proficiency, research has also shown that children's language proficiency level made a strong contribution to children's subsequent vocabulary gain from listening to stories (Elley, 1989; Robbins & Ehri, 1994; Se'ne'chal, Thomas, & Monker, 1995). "The word-knowledge gap" (Stahl, 2005) is likely to begin early when children enter school because they might

have different early language learning experiences. Children with varying abilities in vocabulary may have consequences for children's future cognitive and reading development. Elley's study (1989) showed that children with lower proficiency levels made more gains in vocabulary than those with higher proficiency levels. One possible interpretation, as acknowledged by Elley, was that ceiling effects might have account for the outcomes as children with lower proficiency levels may stand a better chance than children with higher proficiency levels as they have much more room for improvement.

On the contrary, further investigations of the effects of repeated listening to stories on children vocabulary learning yielded contradictory findings. Robbins and Ehri's findings (1994) confirmed that the children's word knowledge is extended when they listened to stories, but higher-proficiency children learned more vocabulary than the lower-proficiency children. In a similar study, Penno, Wilkinson, and Moore (2002), though with first-grade children, also confirmed Robbins and Ehri's findings that children learned vocabulary as they listened to stories. Once again, individual difference in language proficiency was important predictor as it was consistently related to children's performance in later measurement; that is, children with higher proficiency levels outperformed than children with lower-proficiency levels on the post-tests measuring children's learned word knowledge in receptive and expressive ways. Even if the findings of the aforementioned studies remain tentative and are not conclusive for the role of children's language proficiency, they provide general ideas about the interplay between children's vocabulary development and their language proficiency.

The Role of Teacher Explanation

In addition to considering the relationship between children's proficiency levels

and vocabulary gain from listening to stories, the issue of how children learn vocabulary with teacher explanation of words during read-aloud activities can also be investigated more directly. The role of teachers is key to children's vocabulary learning because it is the teacher who mediates children's learning processes by employing instructional techniques that catch children's attention such as read-aloud activities. Teacher explanation serves as a scaffold to expedite vocabulary learning during the process of reading aloud to children. Without teacher explanation, it might be hard for children to understand the meaning of the words and possibly the messages of the stories. Also, under such conditions of support, children with smaller vocabularies can benefit more from read-aloud activities. Reading to children is highly recommended, although the outcome achieved is unclear (Smith, 2004). Leung and Pikulski (1990) conducted a study examining the effect of reading stories aloud on kindergarten and first grade students' vocabulary acquisition. Also, they investigated the effect of frequency of storybooks retelling on their vocabulary acquisition. Pre-tests and post-tests were administered to both experimental and control group. One week after the pre-test, two picture storybooks were read to children individually in the experimental group. After the listening session, children in the experimental group were pretend to read and then retell the stories by using books with only the pictures three times over two weeks. A post-test was administered in the third week to both groups one week after the retelling tasks was completed. The frequency and the correct use of the target words were coded. The findings indicated that the second retelling task enhanced the children's vocabulary acquisition, whereas the third retelling task did not seem to make any difference in the use of the target words. However, the pre- and post-test vocabulary measures did not yield statistically differences even though children in the experimental and control group demonstrated their improvement in the vocabulary. The possible reason might be that the teacher

did not explicitly teach the target words for the children in the experimental group; rather, both groups were only exposed to the words. Leung and Pikulski's finding confirmed the importance of teacher explanation about vocabulary because children may not be able to figure out the meaning of words as they are read to. If the teacher can supplement story reading with simple vocabulary explanation, then the results of Leung and Pikulski's study are likely to be different.

In comparison with younger learners, Brett et al. (1996) examined the effects of three conditions on fourth-grade elementary school children's vocabulary learning during storytelling: listening to stories with or without a brief explanation of unfamiliar target words, and having no exposure to the stories or vocabulary (control group). The participants were 175 fourth-grade elementary school children from 6 classrooms in 2 urban elementary schools in Miami, Florida. A pretest of the 10 target words was given to all three groups. Teachers in the story-with explanation group and the story-only group read stories to the students over a period of 5 school days, whereas teachers in the control group did not have any exposure to the books or the target words. A posttest was administered to all three groups the day after the story had been read. Six weeks later, a delayed posttest was given. Similar to other studies, they found that L1 children could increase their vocabulary knowledge if the teacher provided brief explanation of the target word as the children listen to the story; however, their results revealed that listening to the same story only once was sufficient for children's vocabulary acquisition if new words occurred with brief explanation during the process of storytelling. Even though this study demonstrated that it was likely that the L1 children could benefit from listening to stories with teacher's brief explanations of the target words, it still remains unclear whether children in the EFL context could also produce such significant gains in vocabulary with the support of teachers.

Empirical Studies of Reading Aloud

Within the extensive literature on the issue of reading development, there are many studies dealing with the effects of reading aloud to preschoolers (e.g., Collins, 2005; Reese & Cox, 1999; Morrow, 1988; Morrow, O' Connor, & Smith, 1990; Rice, 1990; Robbins & Ehri, 1994; Whitehurst et al., 1994); nevertheless, only a few isolated recent efforts have continued to address repeated reading aloud to elementary-school children (Elley, 1989; Brabham & Lynch-Brown, 2002; Jenkins, Stein & Wysocki, 1984; Nagy, Anderson & Herman, 1987). Interventions in a series of studies were administered to facilitate the process of vocabulary acquisition but differed in the nature of the participants, the number of books read, the numbers of repeated readings, the number of word meanings assessed, the number of words taught per day, and the interaction styles between the storyteller(s) and the audiences. Moreover, the majority of these studies usually administered multiple-choice vocabulary pretests and posttests to assess the extent of the new vocabulary gains after the intervention (Collins, 2005; Elley, 1989, Brabham & Lynch-Brown, 2002; Jenkins, Stein & Wysocki, 1984; Nagy, Anderson & Herman, 1987; Reese & Cox, 1999; Robbins & Ehri, 1994).

Hargrave & Sénéchal's study (2000) addressed important claims regarding whether preschool children with limited expressive vocabulary skills benefited from the storybook read aloud twice. Thirty-six 4-year-old children were divided into two reading conditions: dialogic-reading condition and regular book-reading condition. Teacher in the dialogic-reading condition gave feedback and asked open-ended questions, whereas teacher in the regular book-reading condition did not employ the dialogic techniques and just read in a conventional way. The results demonstrated that both group made significant gains in vocabulary from the pre- to post-test, but

children in the dialogic-reading condition made more progress than children in the regular book-reading condition. However, their finding should be carefully interpreted in two aspects. First, as Hargrave and Sénéchal noted, the duration of the read-aloud sessions in the dialogic-reading condition were longer than that in the regular book-reading condition. Second, children in the dialogic-reading condition attended more often than children in the regular book-reading condition.

A similar finding emerged from a later study conducted by Robbins and Ehri (1994). They conducted a study to answer three research questions: (1) whether the effects of listening to stories would improve six-year-old kindergartners' knowledge of the target words; (2) whether exposure to target words four times would influence their vocabulary learning; (3) and whether their prior vocabulary level would influence their gain in vocabulary. Thirty-three native-speaking English kindergartners were nonreaders identified by their teachers for the participation of the study. Based on scores on the Peabody Picture Vocabulary Test-Revised (PPVT-R; Dunn & Dunn, 1981), these children were divided into three groups (i.e., children with low, middle, and high PPVT-R scores) in which they were randomly assigned to hear one of the two stories twice. The data collection sessions were conducted individually with each child, and each of them completed a multiple-choice posttest measuring his or her receptive vocabulary knowledge of 22 words. These 22 words included 11 target words presented in the story and 11 control words not included in the story. Some target words, however, occurred twice during each read-aloud session, and some appeared only once. The results indicated that listening to stories contributed modestly to children's vocabulary gains if they could be exposed to the target words at least four times. Moreover, it was shown that children with higher vocabulary level acquired more words than children with lower vocabulary level. The researchers also suggested that words occurring most frequently in the stories

generated better learning during the process of storytelling. This study was nevertheless without limitation since the imbalanced distribution of the target words (i.e. verbs, nouns, and adjectives) illustrated in stories might potentially yield inadequate stimuli. Therefore, it was hardly to draw a valid conclusion in terms of the possibility of the learning of the target words with different grammatical categories.

As for the studies conducted with elementary children, for example, in Elley's first study (1989), one hundred sixty-eight 7-year-old New Zealand children heard stories read aloud three times. He hypothesized that the children in his first study would acquire the meanings of the new words over seven days when they listened to the stories but without any teacher explanation of these words. The result indicated that story reading aloud did provide a good source for vocabulary acquisition. In his second study, he further addressed this issue with an experimental design. One hundred twenty-seven 8-year-old children in New Zealand were also read three times. The children in the experimental group were read with explanation of the target words while the children in the control group were read without such facilitation. The findings from both studies supported the hypothesis that pupils could incidentally acquire vocabulary whether with or without teacher explanation of unfamiliar words. However, children with lower ability outperformed those with higher ability. It was likely due to the ceiling effects as more able children had fewer opportunities for gains in word knowledge.

Brabham and Lynch-Brown (2002), furthermore, reported the similar findings in accordance with Elley's. They investigated the effects of different read-aloud styles on vocabulary, literal and inferential comprehension of information from the stories. Those read-aloud styles included just-reading, performance-reading, and interactional-reading styles. Among the 246 participants, 117 were first graders and 129 were third graders. Results from the experimental comparison revealed that all

three read-aloud styles yielded pre-to-post gain via the context of incidental vocabulary learning; nevertheless, interactional reading group produced more word learning than the other two groups adopting just-reading and performance-reading styles.

Similarly, Penno, Wilkinson, and Moore (2002) conducted an experimental study in which the effect of listening to two stories three times on first graders' vocabulary growth was evaluated. The vocabulary acquisition was assessed using two measures: a multiple-choice pre-and posttest and a retelling task. To assess children's familiarity with the target words, data on the possible vocabulary gains from pre- to posttest were collected from the multiple-choice tests. The retelling task was designed to measure the children's ability to use target words as well as to generalize these words in the contexts of retelling. The results demonstrated that the children in both groups acquired word meanings incidentally as they listened to the stories. In addition, differences in ability were evident since children with higher ability performed better than those with lower ability on the multiple-choice test and on the retelling of stories; however, children under the explanation conditions improved more from pre- to post-test than those under the no-explanation conditions. Moreover, it was evident that children with different entering abilities contributed to different performance since children with higher ability performed better than those with lower ability on the multiple-choice test and the retelling of stories. Different from other studies, this study not only assessed children's learning of target words from listening to stories, but also further examined whether children would generalize the use of these words after listening to stories. This study was nevertheless not without limitations. For instance, the mean age of the participants in the experimental group was different from that in the control group. The age might be the possible reason that induced differential effect of the ability to learn the target and generalization words, thus leading to the Matthew

effect.

Compared to L1 learners, children in the L2 contexts receive relatively limited exposure to new words. Researchers in the following studies took advantage of storybooks read aloud and further examined its effects on L2 learners' vocabulary learning. Collins (2005), for instance, was interested in how seventy Portuguese preschoolers who were second language learners of English acquired sophisticated vocabulary from listening to storybooks three times over a period of three weeks. Several variables accounting for the variance in ESL preschoolers' English vocabulary acquisition from listening to stories were taken into consideration: treatment, initial L1 level, initial L2 level, home reading practices, age, and gender. Materials consisted of eight picture books that shared similar contents. All participants involved in his study were assigned to either experimental (with rich explanations) or control groups (without rich explanations) by the pretest measuring their receptive vocabulary in L1 and L2. After the third listening session, a posttest, based on the Peabody Picture Vocabulary Test-III (1997), was completed individually. The results demonstrated that the treatment, initial L2 level, and the frequency of reading practices at home influenced significantly the acquisition of new vocabulary. Initial L1 level did not make significant contributions to new vocabulary acquisition. Nevertheless, Collins suggested that, regardless of children with higher or lower initial L2 level, providing explanations of new target words during storybooks read aloud to children were helpful.

In sum, it is obvious that repeated reading aloud to children along with brief verbal explanations of word meaning accelerates the speed of vocabulary acquisition even though children's initial work bank might diverge greatly. Listening stories from teacher's spoken input is an effective instructional tools for vocabulary expansion.

CHAPTER THREE

METHOD

The Study

In the present study, the focus is on the learners' development of word knowledge over four-time listening sessions. In order to investigate the relationship between the vocabulary gain and repeated reading aloud to fourth-grade children, the following three essential research questions are addressed. First, does exposure to new words within the context of listening to a story lead to word learning? Second, what effects does the number of story listening have on the children's learning of new words? Third, to what extent is the children's proficiency related to their word learning? All participants were pretested to determine their entering word knowledge by using their English proficiency test scores. Next, during the intervention phase, the participants listened to a story by the use of the colorful pictures shown on PowerPoint slides. The reading style adopted in this study served as a fundamental way to create a supportive learning environment in which the children's knowledge of words was readily detected after listening to the story. Finally, the participants received vocabulary assessment which included picture identification test and meaning-matching test after the first, third, and fourth listening session. The story consisted of eight pseudowords which were the target words the participants were expected to pick up. To ensure that the children's gains were not a result of repetitive testing, eight low-frequency words not in the story were included to serve as the control words. Background questionnaire was designed to obtain information on the participants' prior English learning experiences and the amount of time spent learning English in addition to formal education. This chapter firstly describes the participants. The details on the materials, vocabulary assessment, data collection procedures, data analysis, and expected results are discussed.

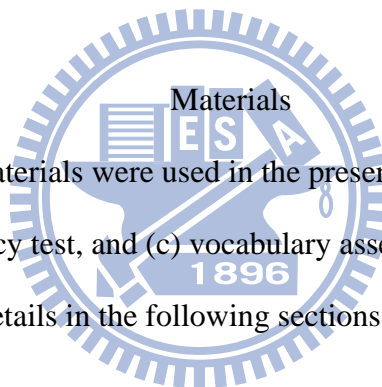
Participants

Thirty-three native Chinese-speaking children were recruited from one fourth-grade classroom in one public elementary school in HsinChu City, the northern part of Taiwan. However, due to absences, only 23 children completed all of the listening sessions of the present study. The children spoke English as their foreign language (EFL) and they were all native speakers of Mandarin-Chinese with an average age of ten.

The participants in the present study had at least one-year experience of learning English as a major subject at school. According to Ministry of education, the curriculum goal for elementary school is to integrate listening, speaking, reading, and writing into English curriculum. Thus, story reading using the pictures or realia is encouraged to employ during the learning periods which facilitates the third and fourth graders to cultivate their abilities in English. In Hsinchu City, English formal education starts in the third year of elementary schools. During Grade Three to Six, the participants have three 40-minute English instructions per week for a total of 120 minutes. Among the three periods of English, two periods are primarily taught by a local Mandarin teacher with English education specialization; the other is by native speaker of English with formal education certificates. One of the English textbook used by the participants was *Welcome to Content Area Reading Level B*, a version that integrates English reading and school subjects, such as science, social studies, language arts, and mathematics (Hoffman, 2004). The series *Welcome to Content Area Reading* were divided into six levels which were specifically designed for the young children using English as a target language to read. The other textbook used is *World Kids Level One*, which combines listening, speaking, reading, and writing with exciting language activities, games, songs and chants (Procter & Graham, 2008). *World Kids* includes six levels for learners of English and combines the world cultural

literacy into English instruction.

The participants of the present study were further categorized into high and low English proficiency groups based on the scores obtained from the Cambridge Young Learners English Test (CYLET) scores: listening test, reading test, and writing test. Chinese is the primary language in most of the families' homes. The school and the participants' parents were approached and agree to participate in the present study by signing consent forms (see Appendix A and B). Information on participants' backgrounds was collected and analyzed using an index including English learning experiences and the amount of time spent learning English in addition to formal education.



Three types of materials were used in the present study: (a) target words and story; (b) English proficiency test, and (c) vocabulary assessment. Each type of materials is elaborated in details in the following sections.

Target Words and Story

Target words. Eight target words introduced in the story were created through the use of The Phonotactic Probability Calculator (Vitevitch & Luce, 2004). Those words were orthographically and phonotactically legal, but were associated with meaningless letter strings. The eight words used in this study were identified as words with high phonotactic probability in American English because those pseudowords consist of high-probability segments as well as sequences of segments. The primary reason why the present study adopts pseudowords instead of real words is to ensure that any gains in vocabulary knowledge are a result of the experience of listening to the words in the story rather than in other contexts. The target words presented in the

story include four nouns (i.e. fap, spok, tas, and vit), two adjectives (i.e. driny and flisty), and two verbs (i.e. smig and woop). The length of the words, ranging from three to six letters, consists of one syllable. Among the eight target words, two appeared nine times, four appeared four times, and another two appeared twice in the story.

A list of the target words was given in Table 3.1.

Table 3.1

Target Words Appearing in the Story

Target Words	Grammatical Categories	Frequency	Example
fap	noun	4	“A little fap named Willy is different from everybody else,...
spok	noun	9	In the P.E. class, all faps like to play a game called spok .
tas	noun	9	When his classmates see Willy’s tas , they all stop and stare at him.
vit	noun	4	Everybody thinks the vit is very cool and they like Chucky very much.
driny	adjective	4	What an ugly and driny thing you have on your head!”
flisty	adjective	2	It’s shinny and flisty .
smig	verb	4	When he tries to hit the spok with his head, the tas would smig the spok and miss the goal.
woop	verb	2	He can woop his vit and hit the spok into the goal.

Story. Willy and Chucky is a story including approximately 502 words (See

Appendix C). The story was presented in colorful pictures shown on the PowerPoint slides and was narrated by a native English-speaking teacher. This story was written based on three principles for textual support proposed by Dubin and Olshtain (1993) to construct a text that attracted the children's attention and provided contextual support for incidental word learning. For example, the children can easily extend his "extratextual knowledge" or background knowledge when listening to the story involving the school sport competition. Second, semantic information is available both globally and locally between the lines because the text is cohesive and coherent. The children can readily guess the meanings of the target words from the contextual clues in the story. The third element offers syntactic support for the narrative text that sticks the isolated sentences together while showing the relationship between the pieces of information. Therefore, along with those textual supports, the storyline is direct and easy for comprehension. The story was narrated four times along with the colorful pictures shown on the PowerPoint slides. The book includes 23 plates without any words. Additionally, the storybook has clear illustrations that young readers should not have difficulties following along. For instance, with the pictorial support, the children may have better understanding of how the main characters feel by the expressions on their faces.

The book includes 23 colorful plates in which details of key moments are described. The story illustrates the events of two aliens who are different from everybody else. Due to the sport competition between schools, the main characters went through opposite experiences. A climax is reached when Willy eventually took part in the competition. As he wins the victory for his school team, everybody starts to admire him. The action signifies personal growth and change which teaches audiences that practice makes perfect and that one should not readily give up his goals. This storyline is familiar to children, thereby promoting children's genuine participation in

the process of read-aloud activities.

English Proficiency Test

The Cambridge Young Learners English Test (CYLET) is a commercial language test that has been specifically developed by International Learning, Teaching and Evaluation Agency (ILTEA) for Taiwanese children with ages ranging from six to fifteen years old. Based on children's English learning context and cognitive development, CYLET is an adequate and appropriate measure of children's English proficiency which has been validated by the Ministry of education. There are three levels in the CYLET: elementary (i.e., Starters), intermediate (i.e., Movers), and advanced (i.e., Flyers) level, which aim to measure younger English learners' listening, speaking, reading, and writing skills (International Learning, Teaching and Evaluation Agency, ILTEA, 2005). After the teachers' verification, the test of intermediate level was selected for our participants. Prior to the intervention, The CYLET was administered to the children to assess their English proficiency and to categorize them into high and low proficiency groups. On average one assessment session was normally completed within 20 minutes. At the initial stage of each assessment, the researcher provided clear guidance in Chinese for the participants.

Pictures and texts in the CYLET serve the main triggers that assess the participant's ability to response to the aural and visual stimuli. Also, each section in the CYLET is well-structured in terms of its page layouts and clear test instructions. For instance, one or two training item was given prior to each subcategory in each assessment session. Due to the anticipated time constraints of administering a battery of the subtests of CYLET, only listening test, reading test, and writing test were employed in the present study. The listening test includes five parts that require test-takers to listen for (1) lexical items and verbal phrases, (2) specific information,

(3) lexical items and verbal phrases in past tense, (4) specific information while ticking the box under the right picture, and (5) the lexis and corresponding position. Reading and writing tests are combined together as only one session and divided into six parts: (1) understanding definitions, (2) comprehending short texts, (3) identify appropriate responses, (4) complete a short narrative text with picture clues, (5) answer the comprehension questions with a short story and picture clues and, (6) choose words with accurate grammatical usages.

Vocabulary Assessment

The primary function of the vocabulary assessment was to investigate the participants' knowledge of the target words in two major aspects by the use of the visual and verbal stimuli. The paper-and-pencil vocabulary assessment included a meaning-matching test and a picture identification test in multiple-choice formats (See Appendix D and E). The former one was to measure the ability to match the meanings of the target words with the most appropriate response item that has the corresponding synonymous meaning in Chinese. The latter one was to assess the ability to choose the most appropriate picture from the other distracters that depicts the action or the subject of one specific target word. Both tests assessed the participant's receptive knowledge of the target words because tests that measure children's productive knowledge of words (for example, making a sentence using the target words or selecting the corresponding synonymous meaning in English from the multiple-choice test) were a more challenging task for those who have rather limited English proficiency. In addition, the treatment effect may thus be diminished due to the difficulty of the test of productive knowledge. Both tests included the same 16 words, eight of which appeared during each listening session. To ensure that the children's gains were not a result of repetitive testing, the other words not appearing

in the story served as the control words that were adopted from English textbooks in the senior high school level (See Appendix F). Those words were regarded as relatively low-frequency words for the participants based on the teachers' verification. As for the response items in the vocabulary assessment, each multiple-choice question comprised the correct answer, two distracters, and an "I don't know" option. The order of the response items in the vocabulary assessment was randomized to minimize practice effects. More details on the meaning-matching test and the picture identification test are discussed as follows.

Meaning-matching test. In addition to the test elicited by the pictures, there was a meaning-matching test which was devised to gauge the knowledge of the target words. The meaning-matching test includes 16 words identical to the picture identification test, half of which appear in the story while the others do not. However, considering EFL children's still-developing English abilities, Chinese word definitions were used instead of English. The response items were the corresponding synonymous meanings of the target words in Chinese. For instance, for the word "*flisty*", the corresponding response items was "閃亮的" (which means "*shinny*" in English), which is the most appropriate answer for the word "*flisty*". The other distracting response choices for "*flisty*" include "醜的" (which means *ugly* in English), and "美麗的" (which means *beautiful* in English). There was also an "I don't know" option for the children who do not know the exact corresponding meaning of the target words. By providing this test, the researcher can have a better understanding of whether the understanding of the target words is learned both in English and Chinese. Furthermore, the researcher can adequately assess children's knowledge of the target words and minimize the influence of limited L2 on their performance, especially for the factor of guessing in testing. More precisely, this test was designed to avoid the negative possibilities that the children might run the risk of not being able to understand the meanings of the

distracters just because of their relatively limited English ability.

Picture identification test. Picture identification test was used in this study to measure the participants' vocabulary knowledge using a 16-item multiple-choice vocabulary test administered at the end of the first, third, fourth listening session during the 3-week period. The 16-item multiple-choice vocabulary test was designed to measure the children's familiarity with the meanings of the target words occurred during the listening sessions. Participants were assessed on 16 words, half of which appear in the story while the others do not. Half of the words were presented as the control words which did not appear in the story. By doing so, the participants would not be aware of which words were the target ones examined by the researcher. Also, it was assumed that there were only gains in the target words rather than the control words over the four-time listening sessions. Four nouns, two adjectives, and two verbs that were regarded as the control words were adopted from English textbooks in the senior high school level as distracters. These words were the high-frequent English words for senior high school students set by the Ministry of Education. The reason for the adoption of those control words was to ensure that the participant's gain in the test is less likely a result of repetitive testing. Also, they were regarded as relatively low-frequency words for the participants based on the teachers' verification. The test items of each question included pictorial response items that are similar in phonetic information (e.g., *braid* vs. *bread*), in semantic information (e.g., *navel* vs. *nostril*), and in spelling (e.g., *acne* vs. *ace*). There were three pictorial choices for each target word and an "I don't know" option. The children needed to choose the most correct picture that represented each target word from the other distracters. Moreover, the "I don't know" option allows each child to select from thus decreasing the likelihood of guessing if they really do not know the answer. The test items of the 16 words and their corresponding answers in each question were ordered randomly each time during

the three testing sessions in order to minimize the practice effects.

Each correct answer was given one point for each question. The order of the questions and the test items of each question appeared in the meaning-matching test and the picture identification test was randomized at each assessment session. Therefore, the responses the participants produced in each assessment session were dissimilar. More information regarding the scoring is described in the Data Analysis session.

Data Collection Procedures

The data collection was carried out during the first semester of the school year. The experimental and testing periods lasted approximately one and a half months. The present study was conducted during the participants' self-study periods following the procedures described. Two weeks prior to the read-aloud activities, school and parental permission were obtained. Also, brief demographic information was obtained on the participants' prior English learning experiences and the amount of time spent learning English in addition to formal education. Two weeks prior to the first listening session, the children received an English proficiency test which is to assess their listening, reading, and writing skills in English.

During each listening session, a native English-speaking teacher showed the participants the pictures of the story via PowerPoint while reading the story aloud to the children. Children did not have previously been exposed to the book because the story is specifically created for the present study. Additionally, the teacher followed specific story reading protocols; that is, he read the story to the whole class according to scripted procedures. The primary function was to ensure that any story reading interactions between the teacher and the participants was under control. For instance, there was no discussion about the story other than explanations of the target words

provided by the teacher. Following Penno and Wilkinson's (2002) and Biemiller and Boote's (2006) procedures, children-led discussion was kept to minimum so as not to distract their attention and not to interrupt the teacher-led word explanations.

Each read-aloud activity took approximately 10 to 15 minutes. At the beginning of each listening session, a brief introduction of the story was given. For the first listening session, for instance, "Today I am going to read you a very interesting story about two aliens, Willy and Chucky. When I'm reading the story, I want all of you to be very good listeners. Good listeners listen to the story quietly and carefully.

Sometimes, when I am reading the story, I will stop and tell you what some of the words mean. If you have questions, we can talk about them when we finish reading the story, OK?" The story was read by the teacher four times with the meanings of the pseudowords explained during each listening session. For example, for the word *spok*, the teacher provided explanation such as "*Spok* is an exciting sport. All aliens like to play this sport at school." The teacher also pointed to the picture and mimicked the action to clarify the meaning of the target words.

For the subsequent three listening sessions, the teacher initiated the story with a brief introduction to the whole class, for instance, "Today I will read the story about Willy and Chuck again. This time you can listen to me carefully and I will explain some words. I will ask you some questions at the end of the story. Remember, you can get candies if you can answer a question correctly." It should be noted that the reading style adopted in this study served as a fundamental way to create a supportive learning environment in which the children's knowledge of words was readily detected after listening to the story.

After the read-aloud activity, a vocabulary assessment was administered to the whole class at the end of the first, third, and fourth listening session in order to understand the participants' incidental learning of the target words. The decision

regarding in which sessions the vocabulary posttests were administered was apparently an arbitrary. However, given the potential pedagogical implication, the present study decided to assess the participants' knowledge of target words immediately after listening to the story in certain sessions to present a linear effect of repeated story listening over time. To reduce a fatigue effect to certain extent, the vocabulary assessment in the second listening session was deliberately skipped. Each assessment session ranged from 10 to 15 minutes. During each assessment session, the researcher explicitly instructed the children to choose the "I don't know" option if they really do not know the answer instead of making a guess. Moreover, the children were guided to choose the most correct answer from the four test items that are orthographically, phonetically, or semantically similar.

Comprehension questions and language games were provided at the end of each listening session and were regarded as a way to capture the children's attention and to have them concentrate on listening to the story repeatedly. For the four read-aloud activities, each data collection session lasted about 30 to 40 minutes and was conducted at roughly three to four days intervals.

The chronological sequence for data collection is illustrated in Table 3.2.

Table 3.2

Chronological Sequence in Data Collection

Time frame	Activities
	Give consent form for school and parents
	Demographic questionnaire
Week 1	English proficiency test
Week 2	Listening session 1 and vocabulary assessment 1
Week 3	Listening session 2
Week 4	Listening session 3 and vocabulary assessment 2
Week 5	Listening session 4 and vocabulary assessment 3

Data Analysis

The purpose of the present study is to investigate the relationship between the vocabulary gain and repeated reading aloud to fourth-grade children over four-time listening sessions. To carry out the goal, three questions are raised:

1. Does exposure to new words within the context of listening to a story lead to word learning?
2. What effects does the number of story listening have on the children's learning of new words?
3. To what extent is the children's proficiency related to their word learning?

Quantitative analyses were performed to answer the above three questions. The data collected include the demographic questionnaire, English proficiency test, and vocabulary assessment. Along with the descriptive analysis, additional analyses were carried out to investigate word-associated (i.e. target words vs. control words) and participant-associated factors (i.e. high-proficiency group vs. low-proficiency group) that would correlate with any gains in vocabulary.

To answer Question 1 and 2, a repeated measure ANOVA was carried out for the first, third, and fourth story-listening sessions to determine the effect of the number of story listening has on the word learning outcomes. Specifically, there was comparison among children's gain in vocabulary learning in terms of the participants' performance on each vocabulary assessment.

To answer Question 3, an initial collection of the participants' characteristics was important. Data collected from their performance on the English proficiency test would be quantitatively categorized into two groups with respect to their relation to their performance on their subsequent vocabulary assessment of word learning. The mean gain for the participants was calculated in order to understand whether those who begin with higher baseline ability improve more than those who begin with lower proficiency level. The English proficiency test conducted in the present study provided a blueprint concerning the participants' English proficiency in listening, reading, and writing.

CHAPTER FOUR

RESULTS

Overview

The aim of the present study is to examine the effects of listening to a story on EFL Taiwanese children's word learning. More specifically, this study was undertaken in order to understand the relationship between the vocabulary gain and repeated listening to a story in fourth-grade children over four story-listening sessions. The hypotheses suggested in the study were that exposure to the novel words in the story four times is likely to develop the children's knowledge of the word meanings. In addition, the children with higher English proficiency have better performance on the vocabulary assessment. The data were collected from the administration of the English proficiency test and the vocabulary assessment, which were further analyzed via a repeated-measures one-way analysis of variance (ANOVA) and an independent-samples *t*-test. The results for the various analyses are presented in the four sections. The descriptive results of English proficiency test and vocabulary assessment are first presented. The descriptive data derived from the repeated-measures one-way ANOVA was shown to compare the performances of the vocabulary assessment over the three time periods among the participants. Second, the statistic data of the vocabulary assessments were reported by means of the repeated-measures one-way ANOVA to examine what effects the frequency of exposure to the target words have on the participants' word learning. Third, an independent-samples *t*-test was conducted to compare the difference between the high and low proficiency groups over the three time periods. The last section provides a brief summary of this chapter.

Overview of Analyses

Basic descriptive information about the English Proficiency test scores, target words, and control words correctly identified at three testing sessions is presented in Table 4.1. As illustrated in Table 4.1, the preliminary analysis of the English-proficiency test scores showed a clear distribution, with a range from 11 to 45 points. For the analysis of results from the vocabulary assessments, the number of times during which the story was read was coded to represent the differences across three testing sessions.

Table 4.1

Descriptive Statistics for the English Proficiency Test Scores, Target Words and Control Words Correctly Identified at Time 1, Time 2, and Time3 (N=23)

Test Scores (Maximum scores)	<i>M</i>	<i>SD</i>	<i>Range</i>
Proficiency Scores (45)	27.13	11.44	11~45
Listening (20)	11.74	5.85	3~20
Reading & Writing (25)	15.39	6.21	5~25
Time 1			
Target Words (16)	5.09	2.76	0~12
Control Words (16)	4.13	2.62	0~11
Time 2			
Target Words (16)	7.83	3.68	0~16
Control Words (16)	4.26	2.32	0~9
Time 3			
Target Words (16)	7.39	4.09	1~15
Control Words (16)	4.43	2.63	0~9

Note. Time 1= the first story listening session; Time 2 = the third story listening session; Time 3= the fourth story listening session

The Performances of the Vocabulary Assessment

In order to investigate whether exposure to new words within the context of

listening to a story led to word learning, the repeated measure of the participants' performances over the three vocabulary assessments were analyzed by using repeated-measures one-way ANOVA to detect any statistically significant difference. In the vocabulary assessment, 20 multiple choice questions were presented including a meaning-matching test and a picture identification test. There were 32 questions for each vocabulary assessment, 16 for the target words and 16 for the control words. As presented in the last section, Table 4.1 includes a summary of the analysis in which the mean number of target words and control word correctly identified were presented over the three time periods. A one-way repeated measures ANOVA was conducted to compare scores on the target words and control words at Time 1 (the first story listening session), Time 2 (the third story listening session), and Time 3 (the fourth story listening session). The one-way repeated-measures ANOVA conducted on this data indicated that there was a significant main effect of the number of story reading on target word learning, $F(2,44) = 8.47, p < 0.001$. On the contrary, for the control words, the one-way repeated-measures ANOVA indicated no significant effect existed over the three time periods, $F(2, 44) = 0.14, p = 0.87$.

Overall, the results of the statistical analysis revealed that the participants incidentally learn the target words from repeated exposure to the story four times. Specifically, there was a statistically significant result among the three time periods across four listening sessions as determined by the one-way repeated measures ANOVA.

The Frequency of Exposure to the Target Words

The participants had exposure to the target words from repeated listening to the story four times, but there were only three vocabulary assessments after the first, third, and fourth listening sessions. To answer the question concerning the effect of the

number of story listening on the children’s learning of new words, data from the three vocabulary assessments were compared by repeated measures one-way ANOVA. As indicated in Table 4.1, for all vocabulary assessments over the three time periods, the mean number of the target words at Time 1 was the lowest at the first assessment administration.

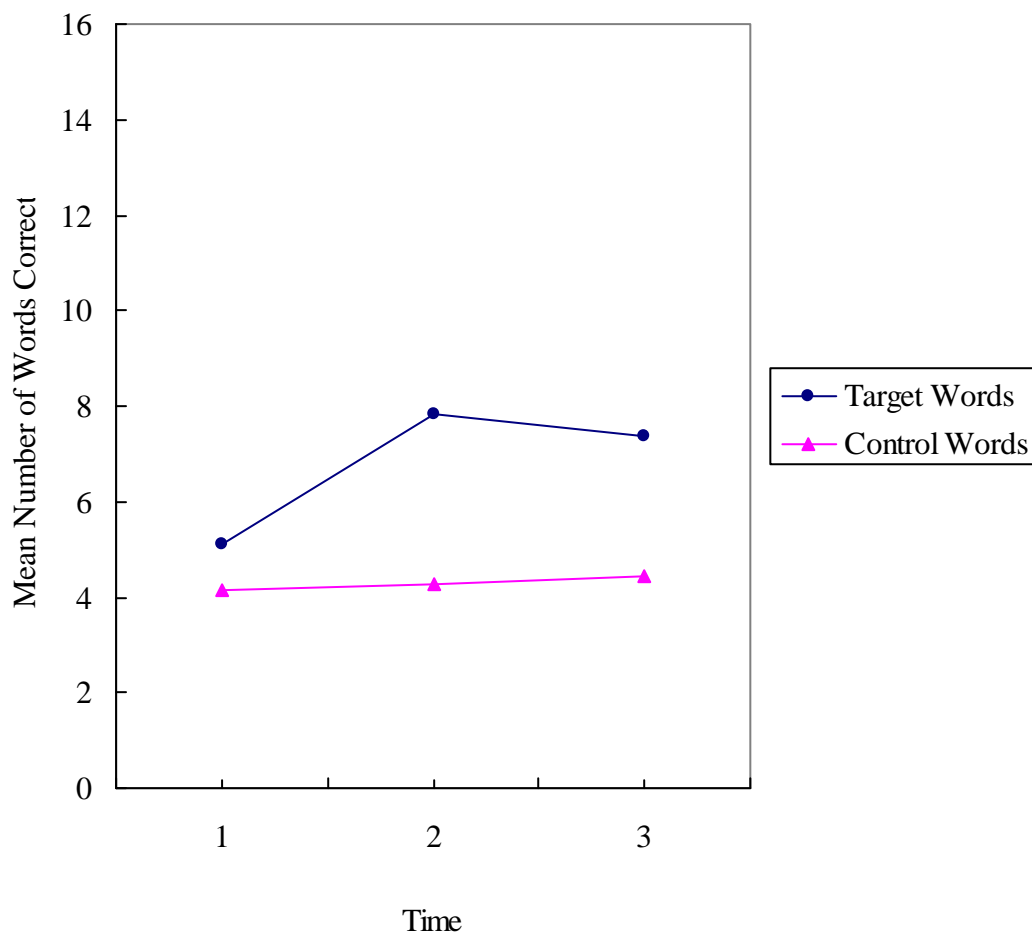


Figure 4.1 Mean number of the word meanings correctly identified by the participants on Time 1, Time 2, and Time3.

The general trend of the 23 participants’ performances over three time periods is displayed in Figure 4.1. From Time 1 (the first story listening session) to Time 2 (the second story listening session), the mean number of the target words increased rapidly

to 7.83 words. Then, after an initial increase, the mean number of the target words correctly identified dropped slightly to 7.39 words on Time 3 (the fourth story listening session). In contrast, with an overall upward trend, the mean number of the control words correctly identified remained stable from Time 2 to Time 3.

Table 4.2

A Post Hoc Analysis of the Vocabulary Assessment on the Target Words at Time 1, Time 2, and Time3

(I)Time	(J) Time	Mean Difference(I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference (a)	
					Lower Bound	Upper Bound
1	2	-2.739(*)	.600	.000	-4.295	-1.183
	3	-2.304(*)	.828	.033	-4.450	-.159
2	1	2.739(*)	.600	.000	1.183	4.295
	3	.435	.700	1.000	-1.378	2.248
3	1	2.304(*)	.828	.003	.159	4.450
	2	-.435	.700	1.000	-2.248	1.378

Based on estimated marginal means

*The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

As for further analyses of these data, *post hoc* analysis directly compared the performances at each vocabulary assessment over the three time periods. Table 4.2 displayed the comparisons of the target words scores among the three time periods. As Table 4.2 shown, *post hoc* tests revealed that although the scores at Time 2 was

significantly higher than that at Time 1 ($p < 0.001$), scores at Time 3 was not significantly different from Time 2 ($p = 0.54$). The data displayed in Table 4.2 indicated that most of the pairs were shown with a statistically significant difference; however, the only pair between Time 2 and Time 3 was found to be no significant difference.

In general, the results of the repeated-measures one-way ANOVA suggested that the participants' word knowledge increased as they listened to the story over the four listening sessions. According to the *post hoc* analysis, although there was no significant difference found between the third and fourth listening, a significant difference was showed between the first and the third listening. The results indicated that the participants had already learned more target words, based on the significant improvement of the performances from Time 1 to Time 2. However, it can be concluded that while repeated listening to the story led to a significant word gain, novel word learning seemed to stagnate at the fourth listening. In other words, listening to the story at the fourth time did not further contribute to incidental word learning.

Proficiency Levels and Vocabulary Gains

The analysis of the English proficiency test scores emerged two proficiency groups. A cut-off point at 24 points was set to divide the participants into two groups. Those who scored below the cut-off point formed a low proficiency group, whereas those who scored above the cut-off point formed a high proficiency group.

In order to explore the relationship between the participants' proficiency levels and their vocabulary gains, an independent-samples *t*-test was applied to examine whether there was a significant difference ($p < 0.05$) between the mean scores of the target words for the low and high proficiency groups over the three time period. Table

4.3 summarizes the comparisons of the low and high proficiency groups' performances on target words over the three time periods. As shown in Table 4.3, the results indicated that there was a statistically significant difference at Time1 for the low ($M=3.75$, $SD=1.60$) and high proficiency groups ($M=6.55$, $SD=3.08$, $t(21) = -2.70$, $p = 0.01$). For the scores of the target words at Time 2 and Time 3, a similar pattern was found. Regarding the scores at Time 2 and Time 3, there was also a significant difference for low (Time 2: $M=5.83$, $SD=2.33$; Time 3: $M=5.83$, $SD=2.68$) and high proficiency groups (Time 2: $M=10.00$, $SD=3.72$; $t(21) = -3.25$, $p = .004$; Time 3: $M=9.91$, $SD=3.94$, $t(21) = -3.47$, $p = .002$). It could be concluded that the low proficiency group did learn significantly fewer words than the high proficiency groups across the four storybook listening sessions.

Table 4.3

Comparison of the High and Low Proficiency Groups on Vocabulary Assessment Performance by Means of the Independent Samples t Test

Proficiency	Mean	SD	N	t	p
TW1(Time1)					
Low	3.75	1.60	12		
High	6.55	3.08	11		
				-2.70	0.017
TW2(Time2)					
Low	5.83	2.33	12		
High	10.00	3.72	11		
				-3.25	0.004
TW3(Time3)					
Low	5.08	2.68	12		
High	9.91	3.94	11		
				-3.47	0.002

Note. TW = Target Words

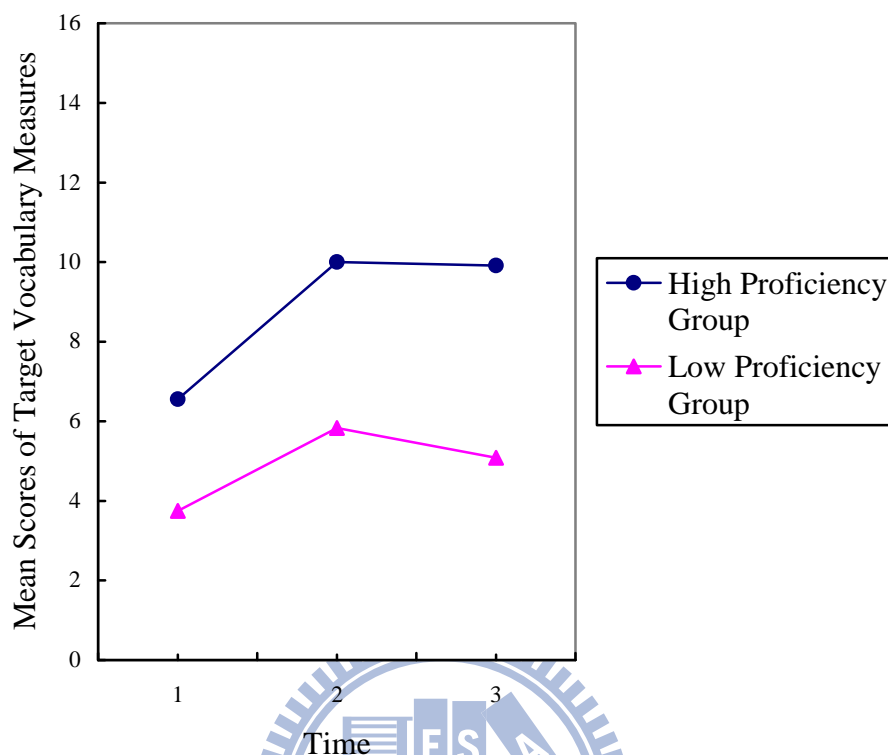


Figure 4.2 Mean scores of target vocabulary measures by the high and low proficiency groups at Time 1, Time 2, and Time3.

Figure 4.2 presents the results of the high and low proficiency groups' performances over the three time periods. As observed in Figure 2, the high proficiency group generally performed better than the low proficiency group over the three time periods. Both groups reached their peak performance at Time 2, although the decreases were not significant. Specifically, for the high proficiency group, from Time 1 to Time 2, the mean number of the target words correctly identified increased rapidly to 10 points. Then the mean number of the target words dropped slightly to 9.91 points at Time 3. Similarly, for the low proficiency group, the mean scores of the target words correctly identified increased to 5.83 points from Time 1 to Time 2. Then the mean points of the target words also dropped slightly to 5.08 points at Time 3.

To further evaluate the impact of the intervention on the scores of children from the high and low proficiency group, a paired-samples *t*-test was on conducted. As shown in Table 4.4, the results of the paired-samples *t*-test indicated that there was a significant increase in vocabulary scores from Time 1 (For low proficiency group: $M=3.75$, $SD= 1.60$; For high proficiency group: $M=6.55$, $SD=3.08$) to Time 2 (For low proficiency group: $M=5.83$, $SD=2.33$, $t(11)= 2.97$, $p< .05$; For high proficiency group: $M=10.00$, $SD=3.72$, $t(11)= 2.97$, $p< .05$). Both proficiency groups made significant word gain with the increasing number of listenings; however, the high-proficiency children learned significantly more target words than their low- proficiency peers.

Table 4.4

*Comparison of the High and Low Proficiency Groups on Vocabulary Assessment Performance by Means of the Pair-Samples *t* Test*

Proficiency Group	Mean	SD	95% Confidence Interval of the Difference			<i>t</i>	<i>df</i>	Sig. (2-tailed)
			Std. Error	Lower	Upper			
Low								
Pair 1 TW 1 - TW 2	-2.08	2.43	.70	-3.63	-.54	-2.97	11	.01
Pair 2 TW 2 - TW 3	.75	2.73	.79	-.99	2.49	.95	11	.36
High								
Pair 1 TW 1 - TW 2	-3.46	3.27	.99	-5.65	-1.26	-3.51	10	.01
Pair 2 TW 2 - TW 3	.09	4.04	1.22	-2.62	2.80	.076	10	.94

Note. TW= Target Words

In general, according to the results of the *t*-tests, while both high and low proficiency groups were shown to have made significant progress over the three time periods, the high proficiency group generally made more progress than the low proficiency group.

Summary of the Results

In this chapter, the data collected were analyzed using a repeated-measure one-way ANOVA and independent- and paired samples *t*-tests. The overall results related to the three research questions are summarized as follows:

1. Does exposure to new words within the context of listening to a story lead to word learning?

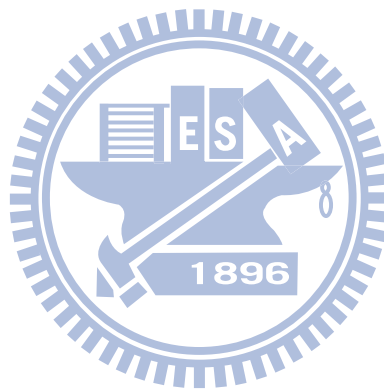
In the present study, the vocabulary assessment was employed to assess the participants' word learning from listening to the story across three time periods. The results show that there was a significant increase from Time 1 to Time 3. That is, the participants improved their knowledge of the target words as they listened to the story four times.

2. What effects does the number of story listening have on the children's learning of new words?

The results indicate that repeated listening to the story has significant effect on children's learning of the new words. However, as evidenced by the *post hoc* analysis, there was no significant difference in the performances of both groups between Time 2 and Time 3. Therefore, listening to the story at the fourth time did not further contribute to incidental word learning compared to that at the third listening.

3. To what extent is the children's proficiency related to their word learning?

In general, children' performances in the vocabulary assessments are associated with their proficiency levels. In addition, even though the performances of each groups in the vocabulary assessment slightly declined at Time 3, the high proficiency group significantly outperformed the low proficiency group over the three time periods.



DISCUSSION

The main thrust of the present study was to examine Taiwanese EFL children's development of word knowledge over four-time story listening sessions. The study specifically investigated the relationship between the vocabulary gains and repeated reading aloud to fourth-grade children. In considering the issue, the three research questions along with their corresponding findings were summarized. The first research question raised examined whether exposure to new words within the context of listening to a story lead to word learning. The findings showed that exposure to novel words within the context of listening to a story led to word learning on average. All children incidentally learned approximately 4 out of 8 target words at the fourth listening. Next, the second research question focused on the effect of the number of story listening had on the children's learning of new words. The findings indicated that although repeated listening to the story led to significant word gains, listening to the story at the fourth time did not further contribute to incidental word learning. Third, the final research question was asked to examine the extent to which the high- and low-proficiency children differed in their performance in the vocabulary assessments over the three time periods. The current study found evidence that the children in the high proficiency group significantly learned more words than those in the low proficiency group over the three time periods. This chapter discusses the findings of the present study and how they could shed light on the children's incidental vocabulary learning from contexts. Finally, conclusions are presented and suggestions are made for further research.

Children's Word Learning from Exposure to New Words by Listening to Stories

The current study provided evidence that EFL fourth-grade elementary children can learn novel words within the context of listening to a story. The evidence lends

support to the hypothesis that exposure to novel words within the context of listening to a story accounts for children's word learning. This finding echoes — and in fact expands by focusing on EFL rather than only ESL students — the results of previous studies which indicate that children do incidentally learn new words from repeated exposure to them within rich and meaningful contexts (Brabham & Lynch-Brown, 2002; Brett, Rothlein & Hurley, 1996; Eller, Papas, & Brown, 1988; Elley, 1989; Meyer, Wardrop, Stahl, & Linn, 1994; Penno, Wilkinson, & Moore, 2002; Robbins & Ehri, 1994; Sharif, Ozuah, Dinkevich, & Mulvihill, 2003; Sénéchal, 1997; Whitehurst, Crone, Zevnbergen, & Schultz, Velting, & Fischel, 1999).

The abovementioned literature related to this issue has suggested the importance of accelerating children's vocabulary learning through repeated listening to stories. Evidence supporting this conclusion also comes from the results of a qualitative study of vocabulary development (Eller, Papas, & Brown, 1988). Eller et al. (1988) explored the relationship of repeated storybook reading to vocabulary development. Twenty children from the middle class homes were read two stories for three times. After simply listening to the story each time, the children were asked to retell the story. Their oral retellings were then audiotaped and transcribed to examine the effects of repeated storybook listening on children's incidental word learning. These were analyzed based on a coding scheme that specified five levels of word knowledge. The results indicate that the appropriate use of the target words during the second and the third retelling was significantly more than that during the first retelling. Eller et al.'s exploratory study suggests that reading storybooks aloud to children offered advantages to children as they can incidentally learn new words from read-aloud activities and increasingly enhance their knowledge of the target words with repeated exposure. Especially noteworthy is the fact that even without direct vocabulary instruction, exposure to new words from listening to stories contributed to the

children's vocabulary learning.

Leung and Pikulski (1990) reported findings that were generally in accord with all the aforementioned studies. Although replicating the Eller et al. (1988) study by utilizing the same two picture storybooks, they, using pre-test and post-test design, examined the effects of repeated listening to stories on children's vocabulary knowledge of 20 target words occurring in the stories. Unlike the other studies related to the effects of read-aloud practice, they also examined the effect on vocabulary acquisition of frequency of student retellings of the stories they listened to. Prior to the read-aloud activities, a vocabulary pre-test was administered to both the experimental and the control group. While children in the control group did not listen to stories, the children in the experimental group were read two storybooks, three times, over two weeks. The teacher just read stories aloud to the children in the experimental group without providing any instruction of the target vocabulary. After each read-aloud activity, the children in the experimental group were asked to retell the story with a picture-only storybook. Also, a vocabulary post-test was administered to both groups that required them to tell the meanings of the 20 target words after all read-aloud activities were completed.

The results revealed that the second retelling was significantly different from the first retelling, whereas the third retelling was not significantly different from the second retelling. This finding led the authors to conclude that the children's use of the target words by the second retelling was similar to that by the third retelling, showing that the retelling stories twice is likely sufficient to enhance vocabulary acquisition. A more surprising result was found as there was no significant difference in the performance on the vocabulary measures between the two groups (i.e. the ability to define the target words). A possible reason might be that a total sample size of 48 children was not enough to show the differences between two groups. One more

factor that could have contributed to a difference in results between Leung and Pikulski's findings and others is that there are no brief explanations of the target words in Leung and Pikulski's study. The participants in Leung and Pikulski's study are just exposed to the story without the teacher's explanations of the words. The lack of explanations of words would produce such blurred results as children in the experimental group were only exposed to the target words. Although there might be other speculation about their study, Leung and Pikulski's findings seem to imply that repeated exposure to stories simply improve children's word learning to some limited extent. Most importantly, from statistical aspect of analysis of their data, their findings suggest that merely repeated exposure to the stories does not contribute to incidental word learning.

Compared with Leung and Pikulski's study, the present study included specially designed story and target pseudowords to further detect children's knowledge of words after listening to the story without outside exposure. It was found that repeated readings of a story to children have positive effects on children's vocabulary learning. As evidenced in the present study, the results of the vocabulary assessments over the four-time listening sessions showed that the mean number of the target words correctly identified by participants increased as the participants had more exposure to the target words. Specifically, compared to the first vocabulary assessment, the 23 participants' overall mean number of the target words of the second vocabulary assessment was 7.83. It suggests that the participants had already incidentally learned approximately 4 out of 8 target words at the fourth listening. Hence, the findings are broadly in accord with the results of Elley's (1989) and Brett et al's (1996) studies. Both studies suggested that listening to stories contributed to ESL elementary school children's word learning. It seems that primary school children can be involved in the process of listening to the story while incidentally learn new words meaningfully

embedded in the story. As children are able to encounter the same vocabulary many times from repeated listening to stories, repeated exposure to stories can provide L1 children with increased opportunities that enhance and enrich their knowledge of words (Nation, 2001). In comparison with L1 children, children in an L2 context are indisputably in need of such repeated exposure to the target language through educational experiences.

Frequency of Storybook Listening on Children's Word Learning

Consistent with the hypothesis, positive effects on the children's word learning were found after each repeated listening. The results demonstrated that children can learn more target words with increasing exposure to the target words in story. Furthermore, it is interesting to note that listening to the story for the fourth time, compared with that of the third time, did not yield higher learning probabilities for the children in the present study.

A number of previous studies have suggested that children of different ages respond differently to repeated exposure to a story. Repeated exposure to a single book or different books generally encourages children's word learning (Biemiller & Boote, 2006; Elley, 1989; Penno et al., 2002; Robbins & Ehri, 1994; Senechal, 1997, Senechal & Cornell, 1993). According to Robbins and Ehri (1994), children in kindergarten profited more from listening to a story four times than listening to a story only twice. Nevertheless, they suggested that four-time exposure to the story alone seemed to ensure the learning outcomes for learning words from contexts, but not guaranteed for higher rates of learning outcomes. Other researchers such as Biemiller and Boote (2006) have reported that reading books either two times (once with meaning explanations) or four times (thrice with meaning explanations) to children in kindergarten and Grade 1 increases the opportunities for them to learn word meanings.

Specifically, regardless of whether or not the target words are taught, children in both kindergarten and Grade 1 benefit from listening to stories. Biemiller and Boote (2006), however, concluded that it was not clear whether reading aloud four times generated more advantages for Grade 2 children because they acquired similar percentages of word meanings when listening to stories both two and four times.

The results of the present study, reported in Table 4.1 and Figure 4.1, support the findings of these previous investigations. In the present study, children had repeated opportunities to learn the target words from listening to the story. The results demonstrate that there was a significant main effect of the number of times story was read to the students on target word learning. The *post hoc* analysis showed that although the score of Time 2 was significantly higher than that of Time 1, the score of Time 3 was not significantly different from that of Time 2. From the statistical analyses, it is believed that the participants who were provided repeated opportunities to listen to the story learned the target words within meaningful contexts. A further significant difference was found between the children's first and third storybook listenings. With respect to the last vocabulary assessment, there was no significant difference between the third and the fourth storybook listenings.

The findings of the present study suggest that repeated reading of the story aloud to the fourth-grade children led to word learning. Congruent with Penno et al.'s findings (2002), repeated exposure to a story contributed to children's word learning. With repeated learning, the children gained greater familiarity with the story and even developed abilities to utilize the words more accurately in succeeding measures that required them to retell the story. However, the present study demonstrates that word learning appeared to stagnate at the fourth listening, while the third listening of the story still resulted in incidental word learning. This is particularly relevant for older students, such as the participants in this study. A possible reason for this phenomenon

is that compared to children in lower grades, children in higher grades appear to have lower involvement in listening to a story read beyond three times. Biemiller and Boote (2006) pointed out that for young children, such as kindergarten and Grade 1 children, could in fact benefit more from listening to stories four times rather than two times, with kindergarten children benefiting most from four listening. For Grade 2 children in their study, however, the underlying causes of why they did not learn more words when listening to the story four times rather than two times were relatively vague. The present study shows similarities as Biemiller and Boote's findings because the participants did not learn more target words at the fourth listening. One possible explanation for the current findings is that children, that is, the participants in the present study, may become fatigue or bored as they listen to the story repeatedly. By the time of the fourth listening session, they might not be able to concentrate on or feel less interested in the story. It seems to make sense that the more times the children spend engaging in storybook listening, the better they are able to learn more new words. However, as a practical concern for the classroom applications, what these findings imply is that it is more beneficial for EFL children at higher grades to have more exposure to story listening, with three repeated listenings as the most beneficial. Since learning knowledge of a word is a cumulative process, it is suggested that the teacher should provide repeated attention to words by means of reading stories aloud to children (Nation, 2001). In addition, given that there might be relatively limited time for EFL children to have sufficient time listening to stories three times, it is suggested that the teacher can adopt a mixed strategy of combining repeated and single-time reading as a practical approach (Karweit & Wasik, 1996), rather than no story read-alouds at all. Most importantly, as Brett et al. (1996) and Elley (1989) suggested, it might not be so necessary to have children listen to the story so many times if the teachers could provide brief explanations of novel words

while reading stories aloud to children.

Table 5.1 summarizes the previous studies examining the effects of frequency of repeated listenings on word learning.

Table 5.1

Summary of the Studies Regarding the Effects of Frequency of Repeated Listenings

Study	Age Groups	Number of Children	Conditions	Number of Repeated Listenings
Robbins and Ehri (1994)	Kindergarten	33	Story heard or not: Low PPVT Middle PPVT High PPVT	2 or 4
Biemiller and Boote (2006)	Kindergarten Grade 1 Grade 2	43 37 32	Repeated listenings with or without word explanation	2 or 4
Penno, Wilkinson, and Moore (2002)	Grade 1	47	Repeated listenings with or without word explanation	3

Effects of Proficiency Level on Children's Word Learning

From the present study, the findings indicate that a child's proficiency level also plays a significant role in influencing a child's ability to learn new words from listening to stories. With respect to the relationship between the child's proficiency level and his/her performance on the vocabulary assessments, the *t* tests showed that the proficiency levels of children had a significant effect on the results of vocabulary assessments. The participants with higher proficiency showed an advantage over those with lower proficiency levels in the vocabulary assessments, with the comparisons between the two groups consistently showing a significant effect of the proficiency levels on word learning, $p < 0.05$. These results did fit with the predictions

that children with higher initial levels would benefit more from repeated listening to the story.

Yet, this finding contradicts Elley's study (1989) in which eight-year-old children with the lowest proficiency levels had been found to be significantly superior to their peers with higher proficiency levels as they increased their scores more from vocabulary pre- to post-tests. The children were initially divided into four groups by means of their knowledge of pre-test vocabulary. After listening to stories three times, children in the lowest group improved the most, but children with the highest group improved the least. Nevertheless, as Elley maintained, concerns regarding a ceiling effect were observed in his study as higher-proficiency children may be closer to their best possible performance, leaving little room for improvement available.

Except for Elley's findings, prior studies do correlate with the results of the present study, indicating that higher-proficiency students consistently outperformed those at the lower proficiency levels (Penno, Wilkinson, & Moore. 2002; Robbins & Ehri, 1994; Sénéchal, 1995). Penno et al. (2002) found that listening to three readings of each story contributed to children's knowledge of words. In addition to multiple-choice vocabulary tests designed to measure receptive ability, a retelling task was also administered in their study to measure the children's expressive abilities to use the novel words accurately. They found that all children benefited from repeated exposure to the storytelling, but children at higher proficiency levels consistently surpassed those at lower proficiency levels both in the measures of receptive and expressive knowledge of words.

The results of Penno et al. support, in part, the results from Sénéchal et al. (1995). They investigated the effects of children's prior vocabulary knowledge on their vocabulary acquisition. They hypothesized that children with more initial vocabulary would learn more new words from listening to stories twice because they were

assumed to possess more efficient memory processes. Prior to the first listening session, the children were classified by means of a standardized vocabulary test: high-word-knowledge group and low-word-knowledge group. These were randomly assigned to two storybook reading conditions: listening condition and labeling condition. Children in the listening condition just passively listened to the stories, whereas children in the labeling condition were asked to answer questions and label illustrations which represented the target words occurring in the stories. A comprehension vocabulary test and a production vocabulary test were administered as post-tests to assess the children's word learning from repeated listenings to stories. The results demonstrate that children in the labeling condition group learned more words than did children who were only exposed to the listening condition. Furthermore, children in the high-word-knowledge group produced more target words in the production vocabulary post-test than did children in the low-word-knowledge group. Sénéchal et al.'s findings provide convincing evidence in support of the notion that individual differences do exist and have a great impact on younger children's ability to learn new words from listening to stories. So, compared with children with lower initial vocabulary knowledge, children with higher initial vocabulary knowledge are more able to produce target words in the immediate as well as delayed post-tests and employ those newly learned words in other contexts.

Likewise, in the present study, variation existed in children's ability to learn new words from repeated exposure to the story. Although both proficiency groups of children improved significantly over time, children with a higher proficiency level learned more target words than those with a lower proficiency level. Such a phenomenon is likely to be explained by the fact that discrepancies in children's abilities to extract word meaning from context may be due to their differences in proficiency levels to a large extent (McKeown, 1985). It should be noted that the

findings of the present study may be better explained by considering the Matthew effects in reading (Stanovich, 1986; Shefelbine, 1990). This is, “the rich-get-richer and the poor-get-poorer phenomenon”. Applying this concept to vocabulary learning, children with lower abilities seem to have a severe disadvantage in learning of new vocabulary in formal education settings. Robbins and Ehri (1994) illustrated this concept by pointing to Stanovich's (1986) extensive discussion of the fact that children with lower abilities have experienced greater difficulties in reading as they lack exposure to reading materials and practice. They might be discouraged to learn new words while reading because so many unknown words are presented which hinder their reading comprehension. Furthermore, due to their insufficiencies, they might not be able to develop a better understanding of words which are already known (Shefelbine, 1990). Therefore, they have limited involvement in the process of reading-related activities, which in turn results in negative consequences in the future, such as low achievement in school or low motivation in reading. In addition to the lack of exposure and limited abilities, another problem which afflicts children from less advantaged backgrounds is that they are prone to pay less attention than did their peers with higher abilities when they have chance to learn new vocabulary. As other researchers suggest, this discrepancy between the two groups is largely attributed to how much attention is paid to vocabulary which is of paramount importance through the school years (Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006). In fact, children with higher abilities are at an advantage because they generally have better reading experience which facilitates them moving to the next level of reading. As the gap between these groups widens gradually, this corroborates the assertion that individual differences are substantial not only in learners’ vocabulary level but in their general future academic achievement as well.

In all, the above discussion favors the conclusion that proficiency levels do affect

children's vocabulary learning from repeated listening to the story, and difference in language proficiency is an important predictor as it is consistently related to children's later language performance and future academic success. As Hart and Risley noted (1995), the "vocabulary gap" has already been a perceived disparity among children from an early age and it will continue to exist over the school years (Becker, 1997). However, it is important for the teachers to scaffold and provide children, particularly children with low abilities, opportunities to learn new vocabulary from the experiences of listening to stories. Rather than just leaving children with low abilities behind, teachers should bridge such gap between children with different abilities and utilize supportive teaching approaches to make real changes happen.

Word Learning Through Story Read-aloud Activities in Rich Contexts

In addition to the number of times the story read aloud and children's proficiency levels, the present study provided an optimal story listening context in which the teacher offered the immediate explanations of the target words during reading the story aloud to the children.

As the findings of the present study demonstrate, word learning does not only accidentally happen from repeated listening to a story; rather, it is the storyteller (i.e. teacher) who reads the story aloud while providing explanations of target words unknown for or unfamiliar to children that facilitates children's word learning. For the children in the present study, teacher explanation of new words during each session offered an added advantage in word learning. These findings are generally compatible with the results of the surrounding literature on first language vocabulary acquisition. Evidence supporting this conclusion can be found in a recent study by Biemiller and Boote (2006). They summarized the results of six empirical studies (Brett, Rothlein, & Hurley, 1996; Elley, 1989; Hargrave & Senechal, 2000; Penno, Wilkinson, &

A nearly threefold increase was detected due to teacher explanation in children's potential word learning. Numerous studies have also shown that explanations of target words facilitate children's understanding of word meanings from listening to stories (e.g. Brett, Rothlein, & Hurley, 1996; Elley, 1989, Penno, Wilkinson, & Moore, 2002).

Penno et al. (2002) provided evidence for the value of teacher explanation during storytelling. They found that children made greater vocabulary gains when the teacher explained the meanings of the target words in context. In Penno et al.'s study, they examined the effect of teacher explanation of the target words on five- and six-year-old children's vocabulary acquisition. Following Elley's explanation procedures (1989), the teacher in their study provided simple synonyms of the target words when needed and brief definition of the target words. At the same time, the teacher would possibly point to the pictures or act out the meanings of the words (e.g. acting out what a "hornet" is like) to facilitate children's understanding. The results indicate that children in the experimental group made significant gains from pre- to post-test when they had repeated opportunities to listen to the stories with brief explanations of the target words, although all children had similar scores on the pre-test. They confirmed that incidental vocabulary learning from repeated listening to stories did occur, but the combination of having children's incidental learning from context and the direct vocabulary instruction was even more beneficial for children, than either approach alone. Penno et al.'s findings were consistent with the suggestions of the National Reading Panel report (NICHD, 2000) that good vocabulary instruction should blend these two approaches together to enhance

learning of new words.

Additional support is provided by Brett et al., (1996) who examined the effects of teacher explanation of target words on fourth graders vocabulary acquisition. They presented evidence that fourth graders learned new vocabulary along with teacher explanation during listening to stories, even though the children in their study only exposed to the stories only once. The children were divided into three groups: story-with-explanation group, story-only group, and control group. The results showed that children in the story-with-explanation group made significantly more gains than the other two groups in the post-test and delayed post-test, despite the fact that their pre-test scores were the lowest among all three groups. Brett et al. placed a high priority on teacher explanation and contended that there was no need for teachers to read the stories repeatedly if they provided brief explanation of the target words as the children encountered them in the stories. Although Brett et al.'s study did show that single-time story listening is conducive to fourth graders' word learning, even though they used trade books rather than graded readers.

In fact, it is not possible to say that the materials used could limit the impact of their findings. As acknowledged by Brett et al., due to the use of trade books, it was difficult to control the frequency of each target words occurred in the story, the level of word difficulty, and some other intervening variables that could possibly influence how the results of their study were finally interpreted. Yet, children still can learn new words from single-time listening to stories along with teacher explanation.

The explanation provided by the teacher proved efficacious to children's word learning during the process of listening to stories, but also beneficial to their involvement and interest. A reasonably consistent picture has emerged in the present study. Positive results are shown as the EFL children learned approximately 4 out of 8 target words by the fourth listening. The teacher in the present study helped children

gradually understand most of the meanings of the target words across four read-aloud sessions. While reading the story aloud to the children, the teacher of the present study talked about the meanings of the words. He had the children engage in the process of learning words within a supportive context in which children could have repeated opportunities to listen to the story along with the explanation of the new words, and in turn develop their comprehension of the story. As indicated by Beck and McKeown (2001), the teacher who provides read-aloud activities for children paves their way to understand the decontextualized language. Without teacher explanation, it is likely during this time that the children might not concentrate so much on the contents or new words which occur in stories. Furthermore, it has been argued that context itself is likely to mislead children to learn new words (Schatz & Baldwin, 1986), particularly for children with lower abilities who are less likely to learn new words by themselves (Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006) and apparently need teachers' guidance.

In addition to the potential advantages for providing children with the meanings of the new words, an important finding from the present study is that teacher explanation may be particularly supportive of teacher efforts to guide children's attention and participation. An interesting observation was that some participants asked for further information about the meanings of the target words. For example, one boy asked after the fourth listening whether there was actually a *fap* (an imaginary word used to describe an alien in the story) in the real world. He even attempted to apply the original plot of the story used in the present study to other contexts. Specifically, He used the target pseudowords in the present study, such as *fap*, *sming*, *flisty*, and others, to tell his own story which extends the original story scheme and provided a different ending for the story. The empirical results of the present study demonstrate that learning from context does take place, but the

inclusion of word meanings may be of crucial importance for teachers to create a better word-learning environment. It seems probable that some other methods would improve children's word learning as well; however, at present there is no document concerning this issue (Biemiller & Boote; 2006).

From what has been discussed above, one can reach a conclusion that incidental exposure to new words by listening to stories generates positive outcomes for children from different backgrounds, particularly for those in EFL contexts where exposure to the target language—English—is at modest levels. With the aid of read-aloud activities which accelerate the process of learning vocabulary, each child is likely to reach his or her full learning potential. However, while repeated listening to stories has positive impacts on children's vocabulary development and general future academic performance, excessive exposure is generally not so welcomed by children. It is suggested that repeated reading aloud one story three times at the most maximizes the benefits of read-aloud activities and enhance the teacher's efforts to help the children with different proficiency levels. Most importantly, although the effect of differences between children is overt, it is the teacher who can discern children's differences and then facilitate children's learning process by providing more explanations of words during storytelling. The need for comprehension, and for meaningful storage of vocabulary knowledge, is best built by the teacher who not only reads aloud the story, but also talks about the meanings of words.

Chapter Six

Conclusions

In order to understand the effects of repeated listening to a story on fourth-grade children's vocabulary learning, there are two purposes in the present study. The primary purpose of this study is to present evidence that repeated read-aloud activities provide EFL children with increased opportunities to incidentally learn new words from context. The second purpose is to examine the number of times sufficient for EFL children's incidental vocabulary learning, and the relationship between children's English proficiency levels and the vocabulary gains from listening to a story four times. The results demonstrated that children who listened to the story accompanied with teacher explanation learned new words from repeated listening to the story. Although listening to the story at the fourth time did not further contribute to incidental word learning, all children incidentally learned approximately 4 out of 8 target words at the fourth listening session. In addition, children in the high-proficiency group learned significantly more than their peers in the low-proficiency group. The results of the current study add to the growing literature by providing convincing evidence in support of the notion that the repeated exposure to new words from a story-based vocabulary instruction has a positive impact on vocabulary learning of children in an EFL context.

In the following sections, pedagogical implications of the study, limitations and the suggestions for future research are presented.

Pedagogical Implications of the Study

The present study has provided empirical validation for the belief that reading stories aloud to children is conducive to children's word learning. In addition, such read-aloud activities can be included in EFL primary school English instruction. The

findings carry pedagogical implications. There are four important pedagogical implications that can be drawn for EFL teachers and parents as well as governmental authorities who are concerned about reading and vocabulary development in elementary-school children. In addition, several recommendations can be made for vocabulary instruction in EFL contexts.

First of all, according to the *General Guidelines of Grades 1-9 Curriculum* (Ministry of Education, 2001), most of the elementary-school children in Grade Three receive only two 40-minute English instructions per week. Surprisingly, children in Taiwan are merely exposed to consistent English education less than two hours per week unless their parents provide additional economic support for their English learning outside of school. In concerning that children in an EFL context has relatively limited exposure to the target language, the use of repeated readings of stories to children coupling with explanation of the target words occurring in stories is a powerful tool for increasing EFL children's vocabulary. Vocabulary instruction can be far more efficient if teachers instruct the word by embedding the target words in stories. By means of stories, EFL children can learn new vocabulary more efficiently because stories create children repeated opportunities to encounter one word more than once in sentences-related context. Also, illustrations along with narrative structure seem to serve as retrieval cues for recall of the target words occurring during the process of listening to the story (Sénéchal, 1997). Consequently, it is suggested that EFL teacher can read stories aloud to children while simultaneously explaining and associating meanings of words with picture storybooks.

Secondly, despite the facts that there is apparent discrepancy between children's English proficiency levels, EFL teachers are still advised to embed read-aloud activities in their English instruction. Read-aloud activities are not a magical panacea for English education in primary school, but it might be one way to provide a

potential trigger that stimulates children's vocabulary growth. Given the intriguing nature of the narrative itself, it is likely that children with lower proficiency levels are more likely to commit themselves to learning and get interested in English in a pleasant and supportive context because learning new words from listening to stories is fun for children regardless of their language levels. Most importantly, explanations of new words provided by teachers further provide enriched learning environment. The use of storybook in teaching vocabulary has opened up a new range of possibilities for low-proficiency children's motivation, vocabulary learning, and language development.

Third, the effect of read-aloud activities has been proved to be compounded by the inclusion of teacher explanations, which tends to positively impact children of school age, at all economic levels and all levels of proficiency. The present study has provided clear evidence to suggest that reading stories aloud in combination with teacher's explanations of word meanings promotes incidental vocabulary learning than direct vocabulary instruction alone. Supports for this view also come from recent surveys in which teachers reported the use of read-aloud activities as practical tool for building up children' vocabulary learning (Lickteig & Russell, 1993). According to Lickteig and Russel, among 183 ESL the elementary school teachers in 13 elementary schools, there were 76% teachers who read aloud daily and 100% teacher who read aloud several times weekly to elementary-school children. The survey has shown that many ESL teachers have already employed short stories to build students' vocabulary in their vocabulary instruction and read-aloud activities have already become an essential feature of their language courses. Additionally, among all teachers from 13 elementary schools, most of the L1 teachers are prone to teach vocabulary with contextual supports for children. Hence, it is hoped that EFL teachers can also take advantage of storybook-related activities to foster and accelerate EFL children's

vocabulary learning by teaching vocabulary in context, rather than direct instruction alone.

Fourth, it is highly recommended for governments to make positive changes in the national policies on English education. In bridging vocabulary gap, the government should play an active role and take a number of measures, with the emphasis on improving low-proficiency children's vocabulary knowledge. Tackling "vocabulary gap" requires the commitment of both teachers and government alike. Low-cost language courses, especially vocabulary courses involving story reading and listening on an ongoing basis, should be made available for children in need. Remedial classes can also be offered free of charge, giving those children instruction on learning vocabulary from listening to stories. By doing so, children with lower proficiency are likely to regain their self-esteem as they are encouraged to learn vocabulary under a positive environment.

The pedagogical implications suggested above, when taken together, are in favor of a view that reading stories aloud to children accompanied by teacher explanations maximizes children's potential for their growth in vocabulary. Most importantly, government authorities and teachers should concentrate more on how to create a well-designed vocabulary instruction instead of potential differences in children's innate or learned abilities. All these efforts made hinge in the long run on educational because these seem more to be a desirable goal to be achieved at the present levels of the development of primary education. The use of read-aloud activities as a teaching aid can never be underrated for it is essential to advancing rounded education in an EFL context.

Limitations of the Present Study and Suggestions for Future Research

This study provided several preliminary insights into EFL children's incidental

word learning from listening to a story. Even though the study has the undeniable merits of offering valuable insights into the read-aloud activities, it has several limitations that should be improved in future research.

First, the participants in the study were chosen not at random for they were all from an intact class. The small number of the participants makes it difficult to generalize the results to other EFL contexts. In addition, the present study used a specially designed story and target pseudowords, with the purpose of limiting the participants' outside exposure to both of them. However, for a more precise of research design, involving a control group may further enhance the validity of the study. It is hoped that future research will clarify this issue by involving a larger number of participants in their studies. In addition, most of the prior work related to this issue has involved preschoolers or younger children in primary grades; therefore, much more research is needed with older children in elementary grades, particularly those in the EFL context.

Second, one of the limitations that could have been instrumental was the formats of the vocabulary assessments. Although the order of the multiple-choice questions in each vocabulary assessment had been randomized before administration, similar formats were adopted in each vocabulary assessment to display the participants' knowledge of words. As a consequence, it was observed that some participants showed fatigue or completed it with less motivating manners, which might be one of the limiting factors came into play in the present study. More research work would be necessary to search for any possible alternatives to assess knowledge of the target words.

Third, it is important to emphasize that the other measures assessing the participants' productive use of the target words were not included in the present study. Although discussion of this issue is beyond the scope of this study, it is believed that

the investigation of children's knowledge of words in terms of productive aspect would be an interesting topic for further exploration.

Fourth, one feature of this study might be perceived as a weakness was the absence of a delayed post-test. Due to time constraints, there was no delayed post-test administered for the present study. It is less clear whether the positive effects of repeated exposure to the story disappeared over time.

Lastly, it would be helpful to include follow-up interviews in further detecting the children's knowledge of words and their attitude towards repeated listening to stories. By doing so, the study might provide a more comprehensive picture of the effectiveness of EFL elementary-school children's vocabulary learning from repeated exposure to stories.



REFERENCES

- Beck, I., & McKewon, M. G. (2001). Text talk: Capturing the benefits of read-aloud experiences for young children. *Reading Teacher*, 55, 10–20.
- Biemiller, A. & Boote, C. (2006). An effective method for building meaning vocabulary in primary grades. *Journal of Educational Psychology*, 98(1), 44-62.
- Blachowicz, C.Z., Fisher, P.L., Ogle, D., & Watts-Taffe, S. (2006). Vocabulary: Questions from the classroom. *Reading Research Quarterly*, 41(4), 524-539.
- Brabham, E. G., & Lynch-Brown, C. (2002). Effects of teachers' reading-aloud styles on vocabulary acquisition and comprehension of students in the early elementary grades. *Journal of Educational Psychology*, 94, 465-473.
- Brett, A., Rothlein, L., & Hurley, M. (1996). Vocabulary acquisition from listening to stories and explanations of target words. *The Elementary School Journal*, 96, 415-422.
- Carlo, M.S., August, D., & Snow, C.E. (2005). Sustained vocabulary-learning strategies for English language learners. In E.H. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 137-153). Mahwah, NJ: Erlbaum.
- Carter, R. and McCarthy, M. (1988). *Vocabulary and Language Teaching*. London: Longman.
- Cho, K & Krashen, S. D. (1994). Acquisition of Vocabulary from the Sweet Valley Kids Series: Adult ESL Acquisition. *Journal of Reading*, 37(8), 662-667.
- Collins, M. F. (2005). ESL preschoolers' English vocabulary acquisition from storybook reading. *Reading Research Quarterly*, 40(4), 406-408.
- Cunningham, A., & Stanovich, K. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934-945.
- Day, R. R., Omura, C., & Hiramatsu, M. (1991). Incidental EFL vocabulary learning and reading. *Reading in a Foreign Language*, 7, 541-549.
- Davis, F.B. (1972). Research on comprehension in reading. *Reading Research Quarterly*, 7, 628-678.
- Dubin, F., & Olshtain, E. (1993). Predicting word meanings from contextual clues: Evidence from L1 readers. In T. Huckin, M. Haynes, & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 181-202). Norwood, NJ: Ablex
- Duke, N.K., & Kays, J. (1998). "Can I say 'once upon a time'?" : Kindergarten children developing knowledge of information book language. *Early Childhood*

- Research Quarterly*, 13, 295-318.
- Dunn, L., & Dunn, L. (1981). Peabody Picture Vocabulary Test-Revised. Circle Pines, MN: American Guidance Service.
- Eller, R. G., Pappas, C. C., & Brown, E. (1988). The lexical development of kindergartners: Learning from written context. *Journal of Reading Behavior*, 20, 5-24.
- Elley, W. B. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly*, 24, 174-186.
- Elley, W., & Mangubhai, F. (1983). The impact of reading on second language learning. *Reading Research Quarterly*, 19, 53-67.
- Folse, K.S. (2004). Vocabulary myths: Applying second language research to classroom teaching. Ann Arbor: University of Michigan Press.
- Graves, M.F. (2006). The vocabulary book. New York: Teachers College Press.
- Hargrave, A. C., & Sénéchal, M. (2000). Book reading intervention with language-delayed preschool children: The benefits of regular reading and dialogic reading. *Journal of Child Language*, 15, 765-790.
- Herman, P.A., Anderson, R.C., Pearson, P.D., & Nagy, W.E. (1987). Incidental acquisition of word meaning from expositions with varied text features. *Reading Research Quarterly*, 22, 263-284.
- Ho, Meng-Ching (1998) Cultural studies and motivation in foreign and second language learning in Taiwan. *Language, Culture and Curriculum* 11 (2), 165-182.
- Hoffman, N. (2007). *Welcome to Content Area Reading*. Taipei, Taiwan: Bookman Books Co., Ltd.
- Jenkins, J. R., Matlock, B., & Slocum, T. A. (1989). Two approaches to vocabulary instruction: The teaching of individual word meanings and practice in deriving word meaning from context. *Reading Research Quarterly*, 24, 215-235.
- Jenkins, J. R., Stein, M. L., & Wysocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal*, 21, 767-788.
- Kameenui, E.J., Carnine, D.W., & Freschi, R. (1982). Effects of text construction and instructional procedures for teaching word meaning on comprehension and recall. *Reading Research Quarterly*, 17, 367-388.
- Karweit, N. & Wasik, B. A. (1996). The effects of story reading programs on literacy and language development of disadvantaged preschoolers. *Journal of Education for Students Placed at Risk*, 1(4), 319-348.

- Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*, 22, 1-26.
- Leung, C. B., & Pikulski, J. J. (1990). Incidental learning of word meanings by kindergarten and first grade children through repeated read aloud events. *Yearbook of the National Reading Conference*. Chicago: National Reading Conference.
- Lickteig, M., & Russell, J. (1993). Elementary teachers' read-aloud practices. *Reading Improvement*, 30, 202–208.
- Lin, Luka. (2001). *Taiwanese children's EFL vocabulary learning strategies*. Unpublished master's thesis, Tsing Hua University, Hsinchu City.
- McKeown, M. G. (1985). The acquisition of word meaning from context by children of high and low ability. *Reading Research Quarterly*, 20, 482-496.
- Meyer, L. A., Wardrop, J. L., Stahl, S. A., & Linn, R. L. (1994). Effects of reading storybooks aloud to children. *Journal of Educational Research*, 88(2), 69-85.
- Mezynski, K. (1983). Issues concerning the acquisition of knowledge: Effects of vocabulary training on reading comprehension. *Review of Educational Research*, 53, 253-279.
- Ministry of Education, R. O. C. (2001). *Grade 1-9 Curriculum Guidelines*. Retrieved December 20, 2009, from <http://search.moe.gov.tw/hysearch/cgi/redirect.exe?url=http://english.moe.gov.tw/public/Attachment/66618445071.doc&group=ZA&title=>
- Morrow, L.M. (1988). Young children's responses to one-to-one story readings in school settings. *Reading Research Quarterly*, 23, 89-107.
- Morrow, L.M., O'Connor, E. M., & Smith, J. K. (1990). Effects of a story reading program on the literacy development of at-risk kindergarten children. *Journal of Reading Behavior*, 22, 255-273.
- Nagy, W.E. (2005). Why vocabulary instruction needs to be long-term and comprehensive. In E.H. Hiebert & M.L. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 27-44). Mahwah, NJ: Erlbaum.
- Nagy, W.E. (1988). *Teaching vocabulary to improve reading comprehension*. (pp. 28-32). Newark, DE: International Reading Association.
- Nagy, W. E., & Anderson, R. C. (1984). How many words are there in printed school English? *Reading Research Quarterly*, 19, 304-330.

- Nagy, W.E., Anderson, R.C., & Herman, P.A. (1987). Learning word meanings from context during normal reading. *American Educational Research Journal*, 24, 237-270.
- Nagy, W.E., Herman, P.A., & Anderson, R.C. (1985). Learning words from context. *Reading Research Quarterly*, 20(2), 233-253.
- Nation, P. (1982). Beginning to learn foreign vocabulary: A review of the research. *RELC Journal*, 13, 14-36.
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge, England: Cambridge University Press.
- Nation, P. (2006). How large a vocabulary is needed for reading and listening? In M. Horst & T. Cobb (Eds.), *Second special vocabulary edition of Canadian Modern Language Review*, 63(1), 1-12 .
- National Institute of Child Health and Human Development. (2000). Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Paribakht, T., & Wesche, M. (1996). Vocabulary enhancement activities and reading for meaning in second language vocabulary acquisition. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 174-200). Cambridge: Cambridge University Press.
- Penno, J. F., Wilkinson, A. G., & Moore, D. W. (2002). Vocabulary acquisition from teacher explanation and repeated listening to stories: Do they overcome the Matthew effect? *Journal of Educational Psychology*, 94, 23-33.
- Procter, S. & Graham, M. (2008). *World Kids*. Korea: Kyohak KELT. Co., Ltd.
- Proctor, C. P., Carlo, M., August, D. & Snow, C. (2005). Native Spanish-speaking children reading in English: Toward a model of comprehension. *Journal of Educational Psychology*, 97, 246-256.
- Pulido, D. (2004). "The relationship between text comprehension and second language incidental vocabulary acquisition: a matter of topic familiarity". *Language Learning*, 54, 469-523.
- Reese, E., & Cox, A. (1999). Quality of adult book reading affects children's emergent literacy. *Developmental Psychology*, 35, 20-28.
- Rice, M.L. (1990). Preschoolers' QUIL: Quick incidental learning of words. In G.

- Conti-Ramsden & C. Snow (Eds.), *Children's language* (Vol. 7, pp. 171-195). Hillsdale, NJ: Erlbaum.
- Robbins, C. & Ehri, L. C. (1994). Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86(1), 54-64.
- Rubin, J. (1994). A review of second language listening comprehension research. *Modern Language Journal*, 78(2), 199-221.
- Qian, D. D. (1999). Assessing the roles of depth and breadth of vocabulary knowledge in reading comprehension. *The Canadian Modern Language Review*, 56, 282-307.
- Qian D.D. (2002). Investigating the relationship between vocabulary knowledge and academic reading performance: An assessment perspective. *Language Learning*, 52, 513-536.
- Schatz, E.I., & Baldwin, R.S. (1986). Context clues are unreliable predictors of word meanings. *Reading Research Quarterly*, 21, 439-453.
- Schwanenflugel, P.J., Hamilton, C.E., Bradley, B.A., Ruston, H.P., Neuharth-Pritchett, S., & Restrepo, M.A. (2005). Classroom practices for vocabulary enhancement in prekindergarten: Lesson plans from PAVED for success. In E.H. Hiebert & M.L. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 155-178). Mahwah, NJ: Erlbaum.
- Sénéchal, M., & Cornell, E. H. (1993). Vocabulary acquisition through shared reading experiences. *Reading Research Quarterly*, 28(4), 360-374.
- Sénéchal, M. (1997). The differential effect of storybook reading on preschoolers' acquisition of expressive and receptive vocabulary. *Child Language*, 24, 123-138.
- Sénéchal, M., Thomas, E., & Monker, J. (1995). Individual differences in 4-year-old children's acquisition of vocabulary during storybook reading. *Journal of Educational Psychology*, 87, 218-229.
- Sharif, I., Ozuah, P.O., Dinkevich, E.I., & Mulvihill, M. (2003). Impact of a brief literacy intervention on urban preschoolers. *Early Childhood Education Journal*, 30, 177-180.
- Shelfbline, J. (1990). Student factors related to variability in learning word meanings from context. *Journal of Reading Behavior*, 22, 71-97.
- Stahl, S. A. (2005). Four problems with teaching word meanings (and what to do to make vocabulary an integral part of instruction). In E. H. Hiebert & M. L. Kamil

- (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 95-114). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Stahl, S. A., & Fairbanks, M. M. (1986). The effects of vocabulary instruction: A model-based meta-analysis. *Review of Educational Research*, 56, 72-110.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-407.
- Smith, F. (1971). *Understanding reading: A psycholinguistic analysis of reading and learning to read* (6th ed.). (pp. 276). New York: Holt, Rinehart & Winston.
- Vitevitch, M. S., & Luce, P. A. (2004). A web-based interface to calculate phonotactic probability for words and nonwords in English. *Behavior Research Methods Instruments, & Computers*, 36(3), 481-487.
- Whitehurst, G.J., Crone, D.A., Zevnbergen, A.A., Schultz, M.D., Velting, O.N., & Fischel, J.E. (1999). Outcomes of an emergent literacy intervention from Head Start through second grade. *Journal of Educational Psychology*, 91, 261–272.
- Whitehurst, G. J., Epstein, J. N., Angell, A. L., Payne, A. C., Crone, D. A., & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology*, 86, 542-555.

APPENDICES

Appendix A

Consent Form for the School Administration: Chinese

學校研究同意書

您好！我們是邱子容與陳湘菱，就讀於交通大學英語教學研究所。我們的碩士論文研究計畫是要了解台灣國小學生從聽故事中習得英語單字的狀況及拼字能力。在獲得貴校同意後，我們預計在學校進行研究約兩個月。

此一研究包含三個主要階段，首先，我們會請學生完成一份英文能力的測驗，藉此了解參與研究學生目前的英語程度。第二階段，我們會讀一本自編的英文故事書給學生聽，總共四次；在第一次、第二次及最後一次說完故事後，將會給學生一個簡單的字彙活動。第三階段，學生會完成音韻覺識、單字拼寫活動，最後，還會請學生依據故事內容，完成一篇短文。整個研究採樣過程將進行七到八次（每次間隔一星期），每次時間大約三十至四十分鐘，盡量以不影響孩子的正常學習為原則。

為確保參與研究學校及貴校的權益及隱私，所有研究紀錄及研究報告將使用識別號碼或匿名來替代真實姓名與校名。只有我們、指導教授及研究助理能夠調閱本研究資料，包括測驗結果或研究筆記等；所有的研究資料，如測驗結果或活動成果，將僅侷限於學術或教育使用，絕不會任意對外公開。

參與本研究須徵得學校及家長的同意。貴校及學生能隨時退出本研究，不須負任何形式的責任。研究結束後，我們將贈與貴校我們的論文研究報告，每位參與研究的學生也會獲得一份小禮物，以感謝校

Appendix A (Continued)

Consent Form for the School Administration: Chinese

方及參與學生對本研究計畫的支持與協助。

我們及我們的指導教授相信此研究能對了解學生英語能力有極大的助益，研究結果亦能提供國小英語教學相關訊息。身為英語教學所研究生，我們希望我們的專業能對貴校有所協助。若有需要，請保留此同意書複本一份。如果貴校對本研究有任何疑問，歡迎與我們聯絡，邱子容：0980-270-695，roxyjam0611@yahoo.com.tw；陳湘菱：0939-518-913，winnerling@hotmail.com；您也可以與我們的指導教授-交通大學英教所林律君老師聯絡：03-5712121 #52716，reginelin@mail.nctu.edu.tw。

敬祝
事事順心！



邱子容與陳湘菱敬上

邱子容 陳湘菱 交通大學英語教學研究所碩士生

林律君 交通大學英語教學研究所助理教授

我已閱讀並充分了解上述訊息，我身為學校代表，同意邱子容、陳湘菱在_____ (學校名稱)進行研究。我亦持有此同意書複本。

校方代表簽名：

日期：

Appendix B

Informed Consent Letter for Parents: Chinese

家長研究通知書回函

- 了解並同意參加此研究（請填寫研究參與者基本資料調查表）
家長簽名：_____
- 不同意參加此研究

研究參與者基本資料調查表

姓名：_____ 座號：_____ 年齡：_____ 性別： 男 女

1. 孩子學習英語約多久？約_____年_____月

2. 孩子在小學及幼稚園階段，有在校外學習英文嗎？

是（請填答 2-1） 否

2-1. 如果有的話，請問何時開始學習？

幼稚園小班 幼稚園中班 幼稚園大班 小一 小二

小三

3. 孩子曾學過自然發音法（phonics）嗎？ 是 否

4. 是否曾居住外國超過半年以上：

是，_____（國名及時間） 否

5. 您是否擔心過孩子語言或其它方面的發展？

是，_____（哪方面） 否

***請在簽名後，讓孩子將此回函帶到學校給老師，謝謝您！**

Appendix C

Story *Willy and Chucky*

1. Thousands of miles from the Earth, on the far far side of the universe, is a small planet. On the planet live a group of aliens called faps.
2. A little fap named Willy is different from everybody else, because he has a tas on his head and nobody else does. The tas is ugly and driny. And it doesn't look pretty.
3. One of Willy's classmates named Chucky has a vit on his back. It's shinny and flisty. Everybody thinks the vit is very cool and they like Chucky very much. So Chucky is very proud of himself, but he is not nice at all.
4. Willy goes to school like everyone. When his classmates see Willy's tas, they all stop and stare at him. Chucky points at him and laughs, "What an ugly and driny thing you have on your head!" Willy feels very very sad.
5. In the P.E. class, all faps like to play a game called spok. And Chucky is very good at this game. He can woop his vit and hit the spok into the goal. As long as Chucky plays the game, his team always wins.
6. Willy also wants to play spok with his classmates. But his tas always gets him in trouble. When he tries to hit the spok with his head, the tas would smig the spok and miss the goal. Chucky laughs at him, "What an ugly and driny thing you have on your head!" So nobody wants Willy to be in the team.
7. Every day after school, Willy practices playing the game by himself. He tries to smig the spok with his tas again and again, but he never smigs it into the goal. He says to himself, "I know I can do it!" So everyday he keeps on practicing.
8. One day Willy's class competes with the other class. The faps in the other class are very good at this game. Chucky plays very hard with his classmates but they are going to lose the game.

Appendix C (Continued)

Story *Willy and Chucky*

9. Suddenly, somebody passes the spok to Chucky. Chucky tries to woop it with his vit. He falls down and hurts his vit. It doesn't look shinny and flisty anymore. The class thinks they are going to lose the game, and everyone looks very very sad.
10. Then Willy thinks he should do something to help the team. He says to the class, "Let me play for Chucky."
11. Even though nobody thinks Willy would score any points, Willy still plays to his best. He gets his tas ready, and as the spok flies near him, he smigs it very hard. And "BOOOOOM~~" The spok flies straight into 100-point goal, which nobody in the class has done so before. Not even Chucky.
12. Everyone cheers for Willy and they lift him up on their shoulders. "Hooray!" they all shout. "Hooray for Willy's tas!" And nobody thinks Willy's tas is ugly and driny anymore. From then on, everybody likes Willy just like they like Chucky.

Appendix D
Vocabulary Assessment (Meaning-matching Test)

◎ 第一部分:請從四個選項中選出最符合題目單字的中文意思。如果真的不知道答案時,可以選擇 (D) 我不知道。

範例: It's **hot** in today.

(A) 熱的 (B) 冷的 (C) 帽子 (D) 我不知道

答案: (A)

() 1.

(A) 揮 (B) 踢 (C) 頂 (D) 我不知道

() 2.

(A) 肚臍 (B) 小說 (C) 鼻孔 (D) 我不知道

() 3.

(A) 脊椎 (B) 釘鞋 (C) 溜冰鞋 (D) 我不知道

() 4.

(A) 閃亮的 (B) 醜的 (C) 美麗的 (D) 我不知道

() 5.

(A) 粉刺 (B) 撲克牌黑桃 (C) 鼻孔 (D) 我不知道

() 6.

(A) 怪獸 (B) 外星人 (C) 機器人 (D) 我不知道

() 7.

(A) 辮子 (B) 麵包 (C) 捲髮 (D) 我不知道

() 8.

(A) 頭上長的東西 (B) 背上長的東西 (C) 背心 (D) 我不知道

() 9.

(A) 肩膀 (B) 顫抖 (C) 百葉窗 (D) 我不知道

() 10..

(A) 閃亮的 (B) 醜的 (C) 美麗的 (D) 我不知道

() 11.

(A) 扭 (B) 戒指 (C) 勒 (D) 我不知道

Appendix D (Continued)
Vocabulary Assessment (Meaning-matching Test)

() 12.

(A) 揮

(B) 踢

(C) 頂

(D) 我不知道

() 13.

(A) 運動鞋

(B) 鬼鬼祟祟的

(C) 懶懶散散的 (D) 我不知道

() 14.

(A) 登山運動

(B) 水上運動

(C) 球類運動 (D) 我不知道

() 15.

(A) 肥胖的

(B) 健康的

(C) 皮包骨的 (D) 我不知道

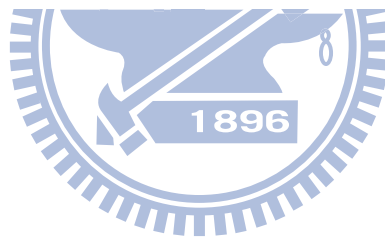
() 16.

(A) 頭上長的東西

(B) 背上長的東西

(C) 考試

(D) 我不知道

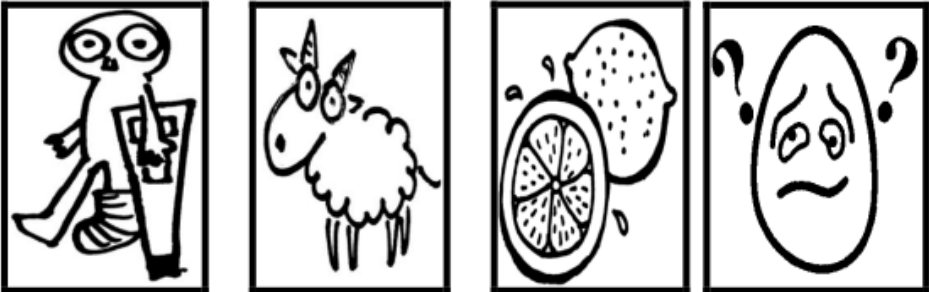


Appendix E

Vocabulary Assessment (Picture Identification Test)

◎ 第二部分: 請從四個選項中選出最符合題目單字的圖片。如果真的不知道答案時, 可以選擇 (D) I don't know

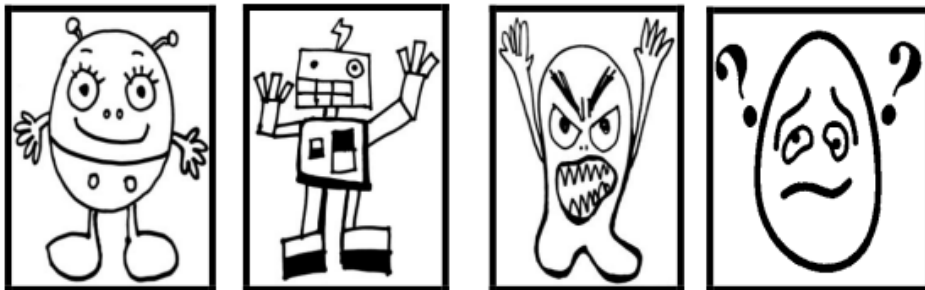
範例:
 ()
 (A) (B) (C) (D)



答案: (A)

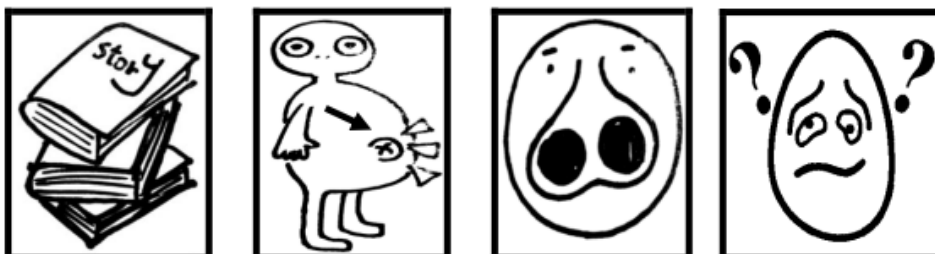
() 1.

(A) (B) (C) (D) I don't know



() 2.

(A) (B) (C) (D) I don't know



Appendix E (Continued)
Vocabulary Assessment (Picture Identification Test)

() 3.

(A)



(B)



(C)



(D) I don't know



() 4.

(A)



(B)



(C)

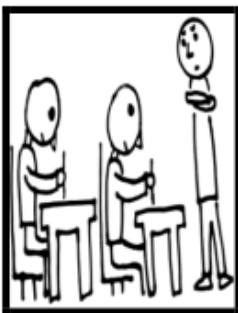


(D) I don't know



() 5.

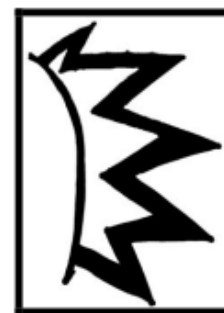
(A)



(B)



(C)



(D) I don't know



() 6.

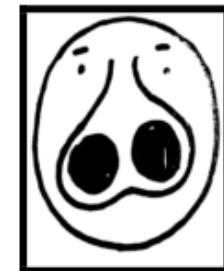
(A)



(B)



(C)




(D) I don't know



Appendix E (Continued)
Vocabulary Assessment (Picture Identification Test)

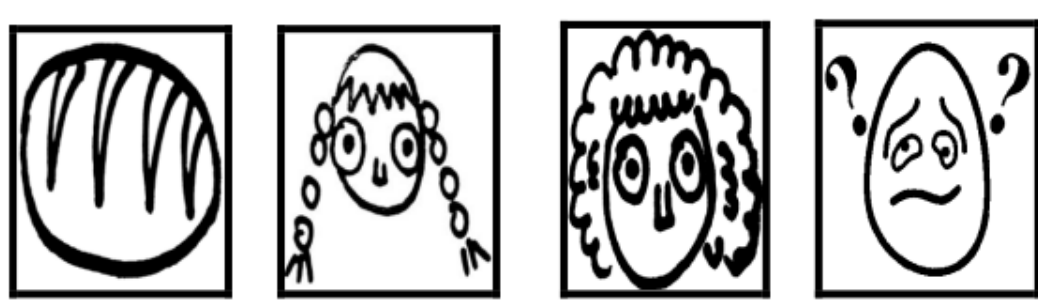
() 7.

(A) (B) (C) (D) I don't know



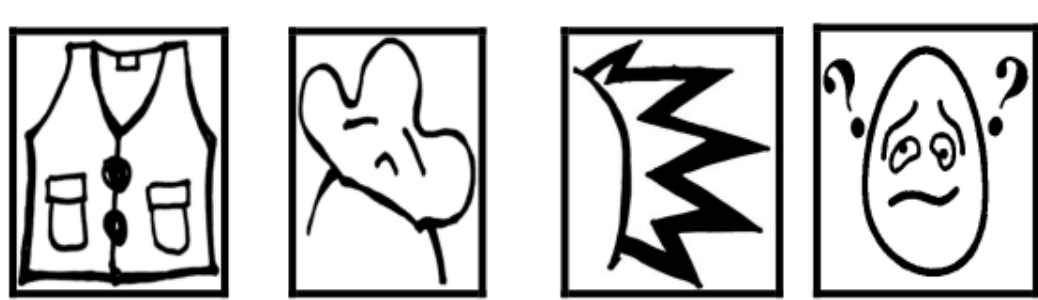
() 8.

(A) (B) (C) (D) I don't know



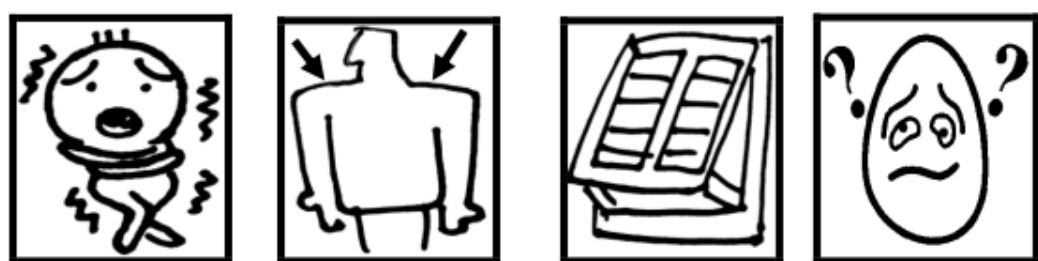
() 9.

(A) (B) (C) (D) I don't know



() 10.

(A) (B) (C) (D) I don't know



Appendix E (Continued)
 Vocabulary Assessment (Picture Identification Test)

() 11.

(A)



(B)



(C)



(D) I don't know



() 12.

(A)



(B)



(C)



(D) I don't know



() 13.

(A)



(B)



(C)



(D) I don't know



() 14.

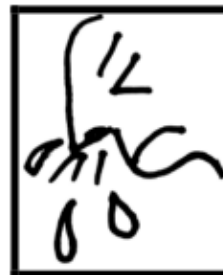
(A)



(B)



(C)



(D) I don't know



Appendix E (Continued)
Vocabulary Assessment (Picture Identification Test)

() 15.

(A)



(B)



(C)



(D) I don't know



() 16.

(A)



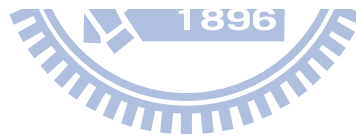
(B)



(C)



(D) I don't know



Appendix F

Eight Control Words not Appearing in the Story

Control Words	Grammatical Categories
acne	noun
braid	noun
navel	noun
spike	noun
sneaky	adjective
stout	adjective
shudder	verb
wring	verb

