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閱讀後的互動式任務對台灣國中生字彙學習之成效

The Effects of Post-Reading Interactive Tasks on Taiwanese EFL Junior High School Students' Vocabulary Learning

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國立政治大學英國語文學系碩士在職專班
碩士論文提要

論文名稱: 閱讀後的互動式任務對台灣國中生字彙學習之成效

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論文提要內容:

第二語言學習的研究者指出，有效的單字加強練習活動可以增強學生的單字學習，然而過去相關研究的練習題形式偏重於個人學習，較缺乏同儕之間的互動學習。因此，本研究採用準實驗量化研究法，藉此探討比較閱讀後的單字互動式任務(interactive tasks)及傳統的單字練習題(vocabulary exercises)對國中生英語字彙習得(vocabulary learning)與單字學習態度(vocabulary learning attitudes)的影響。

本實驗的研究對象爲桃園縣某公立國中的兩班八年級六十三位學生，所有受試者依其原本的班級被隨機指定爲互動式任務組和傳統單字練習題組，兩組同學於每堂課都接受相同的閱讀文章和閱讀理解問題，並在閱讀之後進行不同的單字加強練習活動，每堂課合計爲 45 分鐘，歷時六堂，一共練習 25 個單字。實驗前後，兩組受試者分別進行單字測驗及單字學習態度前後測，以瞭解學生的主要單字(target words)學習情形和學習態度轉變。資料分析採用 SPSS 18.0 版本，包含描述性統計、獨立樣本和成對樣本 t 檢定、及共變數分析。

研究結果顯示: (1)在單字學習成效方面，接受互動式任務的學生明顯優於接受傳統單字練習題的學生；(2)在辨識字彙的能力(receptive vocabulary knowledge)和應用字彙的能力(productive vocabulary knowledge)方面，互動式任務明顯地有助於提升受試者在以上下文爲主的試題(選擇題和文意字彙)表現，但在無上下文的試題(中翻英和拼字)方面，兩組並無顯著差異；(3) 就受試者單字學習知識(vocabulary knowledge)質的改變而言，互動式任務組亦優於傳統單字練習題組；(4) 對於受試者的單字學習態度，兩組在認知、情意、行爲及單字練習加強活動皆有某些方面的改變。

最後，本研究認爲英語教師可以多設計以單字爲主的互動式任務來增進學生的學習，並提出建議供未來研究爲參考。

Abstract

Research into second language learning has pointed out that effective word-focused activities can facilitate students' vocabulary learning. Yet, previous studies have been mainly focused on individual learning and on lack of interaction between peers. Therefore, the study adopted a quasi-experimental research design to compare the effects of specialized post-reading interactive vocabulary tasks and traditional vocabulary exercises on junior high school students' vocabulary acquisition. Changes in learners' attitudes to vocabulary learning were also investigated.

Participants were 63 students from two eighth-grade classes in a junior high school in Taoyuan, Taiwan. The two classes were randomly assigned to the IT (interactive tasks) group and the VE (vocabulary exercises) group. Both groups received the same reading texts and reading comprehension questions, but they completed different vocabulary enhancing activities. Each class session was 45 minutes, and there were six class sessions, with a total of 25 target words for practice. To assess learners' vocabulary knowledge of the target words, the two groups took pre- and post-vocabulary tests and a vocabulary learning attitude questionnaire before and after the experiment, to see if there were any attitude changes among learners throughout the study. The collected data was analyzed using SPSS 18.0, including descriptive statistics, Independent Samples *t*-test and Paired Samples *t*-test, and analysis of covariance (ANCOVA).

The results are summarized as follows. First, in terms of vocabulary growth, students completing interactive tasks significantly outperformed those who received vocabulary exercises. Second, concerning receptive and productive word knowledge, interactive tasks were helpful in elevating learners' performance on contextualized assessments like multiple-choice questions and filling-in blanks. However, in decontextualized assessments like L1 translation and spelling, there was no significant difference between the groups. Third, interactive tasks led to better performance on learners' qualitative changes in vocabulary knowledge than did vocabulary exercises. Finally, for participants' vocabulary learning attitudes, both groups had some changes in their cognitive, affective, and behavioral learning, and in perceptions of word-focused activities.

In conclusion, the researcher suggests that English teachers design and apply more word-focused interactive tasks to enhance students' vocabulary acquisition, and provides suggestions for future research.

CHAPTER 1

INTRODUCTION

Background and Motivation

Vocabulary is a fundamental part of mastering a foreign language. With sufficient vocabulary, learners can comprehend English texts, express ideas and interact with people; otherwise, limited vocabulary may cause communication breakdowns. Since correct lexical choice is the essence of communication, helping learners develop vocabulary plays a crucial role in language teaching (Decarrico, 2001). It has been suggested that with teachers' help, effective vocabulary instruction takes place in a word-rich environment through "scaffolded wide reading, writing, and discussion" (Blachowicz & Fisher, 2010, p. 7). For this to take place, learners should have access to multiple encounters of the target words, and opportunities to practice the words in a meaningful, interactive, and communicative way; their word consciousness thus will be developed. In view of this, it is better to instruct in vocabulary explicitly and directly, so that learners can be exposed to various types of information about each word (Hinkel, 2006).

Although these important concepts of vocabulary instruction are widely known to junior high school (JHS) teachers in Taiwan, most of their teaching is still

teacher-centered (Chen, 2004), and vocabulary memorization and recitation dominate most lexical instruction. In the English class of today, students just receive word knowledge from the teacher without being involved in sufficient practice of the word's usage in a more contextualized situation. The learned words consequently are easily forgotten and are hardly retained by learners. To solve this problem, more student-centered activities should be adopted in English teaching (Chen, 2004), to provide students with meaningful practice with the target words. Knowledge about words, such as meaning, usage, grammar concepts, and learning strategies, should also be embedded in a variety of activities in classroom instruction, because this other various information is equally important to memorization exercises.

In recent years, researchers (Hulstijn, 1992; Joe, 1995; Laufer, 2003; Newton, 1995) have been discovering effective ways to facilitate learners' vocabulary acquisition. They have compared students' word learning in two conditions. One is learning words only through reading, while the other is reading plus post-reading word-enhancing activities. Results have shown that the latter demonstrates superior effectiveness for learners' word gains over the former, and that post-reading word-focused activities thus play a dominant role in building up learners' lexical knowledge and provide students with more opportunities to practice the target words. Studies in this domain include sentence writing (Keating, 2008; Kim, 2008; Lan,

2005; Laufer, 2003), text-based vocabulary exercises (Cheng, 2008; Lai, 2009; Min, 2008; Paribakht & Wesche, 1997), and composition writing (Chou, 2005; Lee & Muncie, 2006).

Though many word-focused activities have been examined, some limitations were found in previous studies, including frustrations with equalizing the frequency of exposures to target words (Min, 2008; Paribakht & Wesche, 1997), and the lack of interaction between learners while learning (Lai, 2009; Min, 2008). Since repeated exposure is a decisive component of vocabulary acquisition (Folse, 2006; Rott, 2007; Schmitt, 2008; Stuart, 2007), and receiving clarification of word meanings during an interactive task is beneficial in remembering new words (Newton, 1995; Zimmerman, 1997), a further study inspecting the effectiveness of post-reading interactive vocabulary activities is needed.

Besides, in another limitation identified in previous research, only basic receptive and productive word gain knowledge was assessed (Keating, 2008; Kim, 2008; Laufer, 2003; Paribakht & Wesche, 1997). Learners in these studies were required to report their perception of word knowledge, and make a sentence for each target word. Though this offered a quick measure of whether learners understood the words or not, this assessment seemed insufficient for testing learners' contextualized vocabulary knowledge (Folse, 2006), leaving more varied levels of vocabulary

assessment to be further administered.

In addition, most of the participants were from intermediate to high level learners of English, with the experiments set in an incidental learning condition. Without teachers' help, learners acquired words from reading and completed word-focused activities on their own. In the present research in Taiwan, however, incidental learning may have undermined JHS students' vocabulary acquisition, since their English proficiency was at the elementary level and they were learning the basic most frequent 2,000 words. If they had received no instruction from the teacher, they might have made wrong guesses or inferences of the target words from reading, which would imply that teachers' vocabulary instruction was inevitably needed.

In response to interaction between learners while learning vocabulary, Atay and Kurt (2006) proposed that post-reading interactive tasks are more effective than traditional vocabulary exercises in facilitating EFL learners of the beginning level. The tasks in their study involved learners perceiving and manipulating words in the learning process, where they negotiated word meanings while working in groups and practiced the target words in more meaningful contexts. The researchers found that most learners held positive attitudes toward vocabulary learning and were motivated to participate in the task-completing process. However, as in most of the previous

studies, no attitude change was found in students' learning after they finished these word-focused activities, and how students viewed these activities still remained unanswered.

Adding these factors together, the effects of reading plus facilitative word-focused activities deserve to be researched. In an EFL context like Taiwan junior high schools, where teaching and learning conditions are less interactive, post-reading interactive tasks appear to be helpful in developing JHS learners' vocabulary knowledge. The present study aimed to compare two vocabulary activities—interactive tasks and vocabulary exercises—with a view to seeing how these two enhanced JHS learners' lexical growth in post-reading conditions.

Purpose of the Study and Research Questions

Given the fact that interactive tasks are effective in enhancing post-reading vocabulary learning and that no vocabulary-learning research has been done on Taiwanese JHS students, the present study was designed (a) to examine the effects of post-reading interactive tasks on Taiwanese JHS students' vocabulary learning, and (b) to investigate students' attitude changes after the experiment. It is hoped that this empirical study could provide more evidence to the existing literature on the effects of post-reading interactive tasks over vocabulary exercises. Based on the

results, English teachers might incorporate these interactive tasks in their classroom contexts and come up with more creative tasks to facilitate students' lexical development.

The present study aimed at answering the following questions:

1. Do post-reading interactive tasks claim superior effectiveness in EFL learners' vocabulary learning than traditional vocabulary exercises?
2. How do post-reading interactive tasks influence EFL learners' receptive and productive word knowledge?
3. What were the changes in vocabulary knowledge between the groups?
4. Are there any changes in students' attitudes toward vocabulary learning after the experiment?

Definition of Terms

Vocabulary acquisition

Vocabulary acquisition refers to "the amount and kinds of cognitive processing that go into it" (Huckin & Coady, 1999), and is used interchangeably with the term "vocabulary learning." Learners' vocabulary acquisition is assessed by the vocabulary test scores in this study.

Word-focused activities

Word-focused activities or word-enhancing activities are teaching activities which are designed on the basis of the target words learners are required to learn, and that are believed to provide learners with more repeated exposures to the words (Laufer & Hulstijn, 2001). In this study, these enhancing activities are post-reading activities, with a view to increasing learners' exposures to the target words selected from the reading texts.

Vocabulary learning attitudes

Vocabulary learning attitudes mean learners' cognitive, affective, and behavioral responses to their vocabulary learning. These three learning domains are based on Wendon's (1991) taxonomy of language learning attitudes. The results of participants' changes in vocabulary learning attitude were measured by the attitude questionnaire, constructed and designed for the present study.

Significance of the Study

With the intention of enhancing junior high school students' lexical development, the current study answered the research questions raised above. It was hoped that the study could help language instructors to understand the effects of interactive vocabulary tasks in word acquisition, and could also offer knowledge of

learners' attitudes toward vocabulary learning and their perceptions of the tasks. The results of the proposed study may lead to three significant contributions.

First, the study serves as a learning paradigm in the EFL setting in junior high schools to enhance students' vocabulary knowledge and learning attitudes. It will help students obtain enough practice of the target words and build up communication skills between learners, since the tasks can offer near real-life use of English vocabulary.

Second, the findings may benefit in-class instructors when they feel a need to increase learners' exposures to the target vocabulary or provide students with varying word enhancements. Through this study, teachers may also introduce students to more suitable word-focused activities and may bridge the gap of learners' word knowledge and practical language use. For JHS course designers and textbook editors, the study may provide some inspiration to incorporate peer interaction and vocabulary tasks in the classrooms. It is hoped that more preferable word activities can be designed for and provided in regular instruction.

Finally, for JHS learners, the study may help them recognize the importance of vocabulary learning, encourage them to practice using the learned words to strengthen word memory, and help them gain confidence in the process of word acquisition.

CHAPTER 2

LITERATURE REVIEW

This chapter reviews research on vocabulary acquisition through reading, on lexical growth through reading plus word-focused activities, on post-reading interactive tasks and related studies on word-enhancing activities in Taiwan. Section 1 discusses lexical growth and reading as a way to pick up new words and includes L1 and L2 researchers' viewpoints on the role of reading in vocabulary acquisition. Section 2 reviews the literature concerning vocabulary learning through reading plus word-focused activities. In Section 3, interactive tasks, including their concepts and types are introduced and their benefits for accelerating students' vocabulary learning after text reading. Related research is also presented. Finally, in Section 4, the chapter ends with a brief review of some empirical studies on vocabulary learning through reading, supplemented with word-focused activities in Taiwan.

Vocabulary Acquisition

Many people consider that a word is learned when its form and meaning are acquired. Although it is true that the form-meaning link is the most essential aspect of learning a word, learners also need to know more about the lexical items, and especially about using a word in a new context (Nation, 2005). According to Nation

(2001), three aspects are involved in knowing a word. *Form* means the spoken/written form of a word and its parts of speech; *meaning* consists of the form-meaning connection, concept and referents, and word associations; *use* means that learners should know the grammatical functions, collocations, and constraints in using a word. Form and meaning are relatively more amenable to intentional learning, whereas the more contextualized aspects of vocabulary use are much more difficult to teach.

Therefore, it is suggested that vocabulary learning should consist of both "an explicit teaching component" which focuses directly on establishing the form-meaning link, and "a component which maximizes repeated exposures to lexical items," such as reading (Schmitt, 2008, p. 334). Reading provides rich contexts and exposures to the target words, for learners to acquire vocabulary. In L1 conditions, reading can facilitate word knowledge development; the majority of words are acquired gradually through multiple exposures in varied discourse contexts (Stoller & Grabe, 1993). In most cases, vocabulary gains appear to be cumulative and incremental, and learners can rely on contextual cues to successfully infer word meaning and other lexical features of the unknown words (Dubin & Olshtain, 1993). Research has also suggested that when learners know how to benefit from word families and take advantage of productive affixes for word analysis, word exposures from reading may be a primary source of vocabulary increase in L1 (Fraser, 1999).

However, for L2 developing learners, reading-only may not be an adequate strategy for lexical growth (Coady, 1997). The reading-only approach for L2 vocabulary acquisition has been challenged in many previous studies (Paribakht & Wesche, 1996; Laufer, 2005), and some L2 vocabulary research, while still appreciating the importance of learning words from reading, has pointed out some of its shortcomings. First, though learners gained some orthographic, lexical and grammatical knowledge of the target words from reading, the rate of word acquisition is slow (about 1–5 words from short texts of 1,000 to 7,000 words) (Hulstijn, 1992; Knight, 1994; Laufer, 2003). Paribakht and Wesche (1997) further described the progress of L2 vocabulary gains through reading-only as “slow and laborious” (p. 175).

Second, many unknown words, if not bold-faced to draw students’ attention, are easily ignored by readers, and most of the learners might have focused on general-gist comprehension and neglected to apperceive the target words (Fraser, 1999; Paribakht & Wesche, 2000). Even if learners notice the new words, some words may lead to wrong guesses, especially for learners of lower L2 proficiency, and especially where there is a deficiency of contextual clues (Li, 1988). Furthermore, researchers have observed that even where a learner correctly infers the meaning of the unknown words, word acquisition has not necessarily occurred. This is because once “the

immediate communicative need has been met, the learner does not undertake further mental processing of the word" (Paribakht & Wesche, 2000, p. 197).

Third, although, with sufficient exposures to the target vocabulary, learners can acquire words naturally and incidentally (Krashen, 1993), in an EFL environment, repeated exposure to the target words is often limited (Min, 2008). That is, the acquisition of new words may not be reinforced if learners do not keep encountering the words in different contexts. In such conditions, learning new words may lose out finally, and the cumulative effect on word retention, prior to re-encountering the target words, is thus questionable (Laufer, 2003). This leaves the concept of L2 vocabulary acquisition through reading with only fragile status.

Therefore, despite the fact that reading-only may account for large degree of L1 word learning, it seems that the effectiveness of reading-only for L2/EFL vocabulary development is doubtful. More enhancements should be created, to lead to better vocabulary acquisition.

Lexical Growth through Reading Plus Word-focused Activities

Since reading-only may result in few word gains, vocabulary development should be built up through other enhancements. As Nation (2001) has indicated, while learning a new word requires a gradual elaboration of word knowledge through

reading, and the capability to use it in appropriate contexts, the need for repeated and various word processing activities cannot be fulfilled only by multiple exposures from reading. Vocabulary development should be built up through other reinforcing activities. Reading complemented with other word-focused activities might be an appropriate way to facilitate word learning (Stoller & Grabe, 1993).

Previous research has emphasized the effects of vocabulary activities. For example, Joe (1995) found that tasks such as story retrieval or using target words in retelling, encouraged deeper word processing and led to better retention. In his study, adult learners attended to the various components of a target word and retrieved it in a text-based task. This higher level of word generation could facilitate learners' acquisition of the unknown words.

Likewise, in an attempt to compare vocabulary learning through reading-only and reading with a supplementary activity, Laufer (2003), Paribakht and Wesche (1997) reported that the latter achieved superior effectiveness. Learners who completed post-reading vocabulary exercises outperformed those who just learned words from text-reading. The results corroborated Nation's (2001) perspective, that EFL students should be supplied with more word-focused enhancements to draw their attention to the target vocabulary.

Since many researchers have highlighted the value of word-focused activities and recognized their positive effects, how vocabulary is learned and how learners process the new words while completing these activities, is worth discussing. As mentioned earlier, knowing a word involves knowing its form, meaning, and use (Nation, 2001). Based on this, Nation (2001) pointed out three steps for a word to be learned: *noticing*, *retrieval*, and *generative use*. The earlier steps are encompassed in the later steps. That is, retrieval happens after noticing, and both are followed by generative use of the word.

The first step, *noticing*, means that learners pay attention to a certain word and view it as a language item to be learned. The target lexical input usually appears in "decontextualization," (Nation, 2001, p. 64), i.e., separating the target word from the flow of language context where it is situated. The purpose of decontextualization is to fastly convey the meaning of the word and build up the initial form-meaning link. Aside from that, *noticing* can also involve activities like negotiating and defining word meanings. Words that were negotiated between teachers and learners are better learned than those without any negotiation (Ellis, Tanaka, & Yamazaki, 1994), and words that are explicitly explained and defined are likely to be learned (Elley, 1989; Toya, 1993; Watanabe, 1997).

As for the second step, *retrieval*, after a word is noticed, learners subsequently retrieve the word either receptively or productively in a word activity. Receptive retrieval takes place when a learner recognizes the word in a listening or reading activity and then remembers its meaning, but productive retrieval occurs when a learner has to express a word meaning in activities requiring him or her to produce the spoken or written form of a word.

In the third step, *generative use* occurs either receptively or productively when a learner meets or uses the word in a way that is presented differently from his or her previous reading. For example, if a student is familiar with the use of *miss* as in "We are all missing you already," and later encounters the phrase, "I missed the bus this morning," they are experiencing receptive generative use. In this case, learners encounter additional meanings of a learned word, but receptive generative use can also refer to collocations, grammatical uses, and metaphors. As for productive generative use, learners realize the other properties of a learned word by changing its meaning when making new sentences and producing the word in a new context. Both receptive and productive generative use are believed to be important word learning processes in L1 and L2 language vocabulary learning (Nation, 2001).

Based on the word learning steps mentioned above, post-reading word-focused activities can promote learners' vocabulary learning in four ways. First, these

activities are based on the target words and assist learners to notice them as new words to be learned. Such an encounter is viewed as an apperceived input (Gass, 1988), and this initial noticing attention to the forms/spelling of new vocabulary is essential and prerequisite for word learning (Hulstijn, 2001).

Second, when completing these word-focused activities, learners can build up form-meaning connections by means of repetition and multiple exposures to the target words. Findings from memory research (Baddeley, 1997) have suggested that immediate exposures to a word right after an initial encounter can reinforce the form-meaning link, and that repeated word retrievals in post-reading word-focused activities can help learners deliberately commit lexical knowledge to memory (Laufer & Hulstijn, 2001).

Third, these activities provide productive target word tasks, where learners can use the new words in different contexts. This repeated practice with the words can further elaborate learners' lexical information processing, optimizing word learning and retention (Hulstijn, 2001).

Finally, when learners are doing these activities, their active engagement in learning new vocabulary is motivated, and this learner involvement can trigger higher levels of word processing than reading-only. In attempting to augment learners' vocabulary acquisition through post-reading word-focused activities, the present study

adopted interactive tasks to enhance word learning among junior high school students. A detailed introduction to the tasks is furnished in the following section.

Post-reading Interactive Tasks

The concept of the task has been recognized as an important element in classroom teaching, syllabus design, and assessment of learners' performance (Nunan, 2004). It has influenced pedagogical policy in ESL/EFL settings. There are many definitions of a task, due to the different interpretations. Breen (1987) defined a task as a goal-oriented activity where learners are required to achieve a goal set by the task and the target language is pragmatically used between learners for meaning negotiation. Ellis (2003) offered another definition: that a task focuses on "language use that bears a resemblance, direct or indirect, to the way language is used in the real world" (cited in Nunan, 2004, p. 3). A task can provide a simulated situation for learners to use the target language pragmatically, where they can make use of their linguistic resources and process the language to achieve a language outcome.

For Nunan (2004), a pedagogical task is "a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language" (p. 4). A task is deemed to be an enhancement for learners to recall their personal experiences as "important contributing elements to classroom learning"

(p. 1). Learners are provided with opportunities to focus both on the language and their learning process.

In summary, from the above definitions, it could be suggested that a pedagogical task entails three elements: a purpose/goal, a process of thinking and using the target language, and opportunities for information change. To accomplish the goals set by a task, the role of interaction has been highlighted. In the present study, the impact of post-reading interactive tasks on vocabulary learning was investigated. The following section introduces the concepts of interactive tasks, types of interactive task, and their benefits.

Concepts of the Interactive Tasks

Considering the interaction between learners, interactive tasks are efficient and intentionally planned instructions that make learning a mutual social experience. Learners work collaboratively to observe, share and communicate in the target language. Through peer/group interaction, they can learn how to productively practice the new words and thus speed up their word acquisition. The criteria for designing interactive tasks are as follows.

First, interactive tasks should be designed as simulated real conversations for students to practice interactive ability. In these tasks, learners can imagine themselves to be in a real situation. They are able to exchange information, opinions and ideas, as

they try to find something out, to fulfill the purpose ordained by the task. They work cooperatively to perform different tasks and promote their peer/group support and instruction (Craddall, 1993; Fathman & Kessler, 1993; Kim & McDonough, 2011).

Second, interactive tasks should provide learners an equal opportunity to start their conversation, so that learners have access to equal turn-taking in initiating, negotiating and following-up peers' contributions. While completing the tasks, both weak and strong learners should be allowed to extend themselves, to explore their full ability. Strong learners need to make themselves understood to peers with less linguistic ability; weak learners should have the ability to accomplish easier tasks at their own level.

Moreover, interactive tasks should be integrated with various language skills, and learners should be involved in meaningful work to acquire the target language. According to Willis (1996), in a task, the target language produced by learners is seen as "bringing about an outcome through the exchange of meanings" (cited in Nunan, 2004, p. 3). In one study, students did not develop native-like syntactical construction of the target language and word choice until they had appropriate practice with elaborative output (speaking and writing) and collaborative dialogue (Swain, 1995). Working with others allows learners to notice gaps between peers, to modify their

output, and internalize the target language. Such collaboration therefore can help learners to get involved in meaningful content through the tasks.

A well-organized interactive task consists of a rich context and learners with mixed-levels of language proficiency. Learners can think and manipulate the language in a more meaningful way, which helps to consolidate their own learning, and most importantly, learners are required to undertake activities that provide not only controlled production but also communicative interaction. The different types of interactive tasks are introduced as follows.

Types of the Interactive Tasks

Based on diversity of interaction while learning, interactive tasks can be divided into eight categories. A detailed description is given below.

1. *Matching activities:* These tasks are suitable for all levels of learners. Many of the tasks can be teacher-led, or are "for real beginners who need lots of exposures before having to speak themselves" (Willis & Willis, 2007, p. 85). There are two kinds of matching: *listening and matching*, and *reading and matching*. Both kinds are for learners to "recognize matching items, or to complete pairs or sets" (Pattison, 1987, as cited in Nunan, 2004, p. 58). Learners are asked to match given sentences, phrases or pictures to their

counterpart items. They can work together through pair/group work to discuss their answers.

2. *Dialogues and role play*s: These tasks can be scripted or improvised, and learners pretend to be someone else and practice the target language in a situation they are in. “If learners are given more choices of what to say or provided with a clear aim to be achieved by what they say in the role plays, they may be more willing to participate in the tasks than just repeat the given dialogues in pairs” (Pattison, 1987, as cited in Nunan, 2004, p. 58).
3. *Opinion-gap tasks:* Learners in these tasks are engaged in identifying and articulating a personal preference, feeling, or attitude in response to a given situation. Examples are story completion, discussion of a social issue, and using factual information to justify one’s opinion (Prabhu, 1987, as cited in Nunan, 2004, p. 57). This interaction is closer to casual social conversation. Learners do not need to reach an agreement since there are no objective criteria to judge what is right or wrong (Richards, 2001).
4. *Information-gap tasks:* These tasks are those in which “one student or group of students has one set of information and the other or group has a complementary set of information. They must negotiate and find out what the

other party's information is to complete an activity" (Richards, 2001, as cited in Nunan, 2004, p. 59).

5. *Jigsaw tasks:* A jigsaw task is sometimes referred to a split-information task. In a group, one student has some information while another student receives quite different information. In order to achieve an outcome, they have to combine different pieces of information to form a whole. For example, students in groups may have three different parts of a story and they have to pool their information to piece the story together, and then try to retell or predict the story. "This task is familiar to many teachers as a way of providing learners with a purpose for communication" (Willis & Willis, 2007, p. 41).
6. *Problem-solving tasks:* These are tasks which rely on learners' intellectual and reasoning powers. They are given a problem and some information. They must come up with a solution to that problem. The types and complexity of the problem will result in different processes and times taken on the task (Pattison, 1987; Richards, 2001).
7. *Decision-making tasks:* Learners are given a problem with a number of possible outcomes. They must collect and share information to arrive at one decision through negotiation (Pattison, 1987; Richards, 2001). After the decision is made, learners can read out their ideas and compare them with

other groups. “This would promote discussion and involve the groups in a short writing activity” (Willis & Willis, 2007, p. 34).

8. *Projects and creative tasks:* These tasks are normally completed with pair/group work, which involves learners in some kind of free creative work. This kind of task also tends to comprise a combination of other task types (Willis, 1996). For example, learners can learn how to make a radio program or a web-page.

In the present study, three tasks were adopted: matching activities, dialogues and role-plays, and opinion-gap tasks. These tasks particular were used for two reasons. First, considering the time spent on the tasks, since they are post-reading tasks, only about twenty minutes was left during each class instructional time. The researcher thus chose these three tasks because students could complete the tasks within the given time. Second, since the study was mainly focused on vocabulary tasks, these three tasks were designed on the target vocabulary, while the remaining five were intended to promote comprehensive skills in learners’ English proficiency. Based on these considerations, the researcher adopted these three tasks to enhance learners’ vocabulary learning and maximize their exposures to the target vocabulary, with the tasks integrated into pairs work to increase interaction between learners.

Benefits of the Interactive Tasks

In the language learning domain, interactive tasks can be used to involve learners in real language use in the classroom context. While completing the tasks, learners can get the idea of a word through meaning negotiation, use the target language for interaction, and obtain sufficient information from the contextual support provided in the tasks. Therefore, the benefits of interactive tasks are in three aspects.

First, according to Newton (2001), negotiation of meaning can facilitate the development of learning, which plays a vital role in acquiring a second language. During the tasks, learners work collaboratively to "negotiate the meaning of new items among themselves" (p. 33). They use each other as information resources rather than counting on external support. That is, when learners receive combined lexicons in a group/pair, they will "spend more time negotiating their understanding of one another's speech" (p. 35) because this coverage of L2 vocabulary is usually greater than any other lexicon provided in the task directions or teacher's guidance. After initially paying a lot of attention to the basic knowledge about the new words, they can practice using the words in a more communicative and meaningful task. In this case, teachers can combine different tasks for learners to fulfill the task goals with a view to helping them attend carefully to the meaning of the new words.

The second benefit is that the tasks are effective for influencing learners' processing of the target language. With peer or group language output exchange, this engaging in interaction is beneficial for target language development. Concerning the role of interaction, one function has been distinguished as a noticing/triggering effect, whereby Swain (1995; 2005) suggests that learners may notice the gap between their thoughts and their actual production of words, and then realize what knowledge they really lack in the target language. By obtaining feedback from peers, learners are forced to produce more accurate and precise language. This output production induces learners to modify or reproduce their language form, which in turn may lead to acquisition (Swain, 1995). Moreover, as Slavin (1995) has pointed out, the interaction between learners can help them develop positive attitudes toward learning and greatly promote their self-esteem. With interaction, they feel less anxious when working with their peers, and no hindrance will be created in their affective learning of the target language.

Finally, the contextual support elicited from the tasks is beneficial in promoting learners' performance (Skehan, Foster, & Mehnert, 1998). For example, the provision of visual cues situates learners in a real-life setting and activates their context-related knowledge to promote their task performance (Shortreed, 1993). Contextualized tasks with enough information and context discourse can be influential in word acquisition

(Stahl & Fairbanks, 1986), and this enhances learners' contextual knowledge of the words. Therefore, by the provision of contextual support, either through visual aids or discourse context, learners can acquire more language use and better understanding of the new words.

With the benefits of the interactive tasks mentioned above, it can be clearly understood that learners can experience a series of target word enhancements. They can learn to negotiate word meaning, interact with each other, and learn words in a more contextualized way. The aim of the interactive tasks is to provide an opportunity for learners to practice meaningful use of the target words.

Previous Studies on Post-reading Interactive Vocabulary Tasks

Few studies have been done investigating how post-reading interactive vocabulary tasks affect learners' word acquisition. In this section, a brief review of two related studies on the effects of interactive vocabulary activities is shown as outlined and limitations and suggestions are also presented, to highlight the need for conducting the present study.

Zimmerman's (1997) Interactive Vocabulary Instruction

Zimmerman (1997) conducted a 10-week classroom-based study to investigate the effects of interactive vocabulary activities on L2 university students. In the

experimental group (n = 18), students read their textbook first and then were asked to do interactive vocabulary activities to “clarify word meaning and illustrate appropriate usage, practice using the appropriate word form in context, and demonstrate word knowledge in either oral or written original expression by using the target words” (p. 125). On the other hand, the control group (n = 17) did not receive any special instructions, but were simply encouraged to finish their self-selected materials reading. The results indicated that students receiving interactive vocabulary instruction outperformed those who completed self-reading, in their lexical growth. It was then suggested that teachers should give more consideration to the effectiveness of interactive vocabulary instruction on students’ reading ability.

However, as Zimmerman (1997) explains, this vocabulary instruction is still not the “optimal instructional program” (p. 137) because, first, the interactive and communicative instruction of various vocabulary activities was not investigated, and the use of more contextualized exposures to language and communicative techniques is still unknown. Second, students in the control group received neither vocabulary instruction from the teacher nor any other reference books or tools to facilitate word learning. That students would wrongly guess meaning from the context and gain inferior scores on the tests was easily and undoubtedly predictable. Third, since a vocabulary checklist was used for students’ self-reporting of whether they knew a

target word or not, this could only detect learners' basic receptive and productive knowledge of the target words. As a result, this method failed to test students' lexical growth when the word was put in a more contextualized discourse.

Atay and Kurt's (2006) Interactive Vocabulary Tasks

Atay and Kurt (2006) stated that post-reading interactive tasks could facilitate learners' vocabulary learning. The experimental group (n = 30) completed a series of interactive tasks including picture-word matching, picture sequencing, sentence-making by using the target words, and group-created picture stories. In contrast, the control group (n = 32) did discrete written vocabulary exercises as post-reading activities. After this six-week experiment, both groups took the Vocabulary Knowledge Scale (VKS) (Paribakht & Wesche, 1996) as the vocabulary test, and the Cambridge Young Learners English Test (CYLET) as the reading comprehension test.

The results showed that students receiving interactive tasks demonstrated superior posttest performance to students taking the discrete written tasks. This implies, for EFL teachers, that this type of interactive task could be implemented in young learners' classroom contexts as an alternative form of vocabulary enhancement. Though young learners might revert to their native language while doing the tasks, their word learning was facilitated, no matter what language they used to understand

and communicate. Since learners had no difficulty in negotiating meaning while completing the tasks, as Atay and Kurt (2006) observed, the interactive tasks were "much more appealing to the needs and interests of young learners" (p. 267) in their vocabulary development.

Although Atay and Kurt (2006) claimed that the interactive tasks were appealing to learners, no empirical evidence was provided. Learners' responses to the interactive tasks were only from the researchers' observation. Little is known on students' self-report of their vocabulary learning attitudes and perceptions of the tasks. In view of this, further research should be conducted. Besides, the Vocabulary Knowledge Scale (VKS) (Paribakht & Wesche, 1996) was inefficient for assessing different aspects of vocabulary knowledge, such as parts of speech, word-forms, and other contextualized word use (Folse, 2006; Kim, 2008). If another kind of vocabulary measurement were adopted in further research, the effectiveness of the interactive tasks on vocabulary learning could thus be revealed.

While the post-reading interactive tasks were beneficial in facilitating learners' vocabulary development, the limitations of the above related studies can be summarized under three aspects: insufficient contextualized exposures to the words during the tasks; lack of a more contextualized vocabulary assessment to probe learners' deeper receptive and productive word knowledge; and deficient

understanding of how learners perceive and respond to the interactive vocabulary tasks. Therefore, the present study took these limitations into consideration, by adding more contextual support in the vocabulary tasks, constructing more contextualized vocabulary tests as instruments, and conducting an attitude questionnaire to investigate the effects of interactive tasks on junior high school students' vocabulary acquisition and attitude changes toward vocabulary learning.

Other Post-reading Word-focused Activities in Taiwan

In the field of ESL/EFL pedagogy, researchers have given attention to the role of post-reading word-focused activities in vocabulary gains. Several studies have been focused on the effect of a series of exercises that lead to learners' lexical growth. For example, in Cheng's (2008) study, a hierarchy of text-based vocabulary exercises (Paribakht & Wesche, 1997) was administered to see whether it had better effects than traditional worksheets (matching, word puzzle, and drawing) on elementary school students' vocabulary learning. The results showed that both groups had vocabulary gains after the experiment, with the vocabulary exercise group (n = 30) outperforming the worksheet group (n = 29). Meanwhile, the text-based vocabulary exercises had impact on learners of different English proficiency levels. For high achievers, the

vocabulary exercises were beneficial to their word learning, whereas for low achievers, no significant difference was found.

Min (2008) conducted an extension of research by Paribakht and Weshe (1997) to reexamine the effectiveness of reading plus vocabulary enhancement activities (RV) and narrow reading (NR) on high school learners' incidental vocabulary acquisition and retention. Fifty male students with intermediate English proficiency levels participated in the experiment for two hours per week over a span of five weeks. The RV group (n = 25) read selected articles and completed a variety of text-based vocabulary exercises. The NR group (n = 25) read thematically related reading texts beside the main selected article. A modified Chinese version of the Vocabulary Knowledge Scale (VKS) was used to assess learners' vocabulary gains on the immediate acquisition and retention tests. Results showed that reading plus vocabulary exercise instruction is more effective than reading-only for word acquisition and retention among EFL high school learners.

Lai's (2009) research is related to Min's (2008), where the effect of post-reading text-based vocabulary exercises on vocabulary acquisition and retention was investigated, compared to the effect of reading supplemented with other related texts. Participants were high school learners from two classes, with one English gifted class for the high proficiency group and one regular class for the low proficiency

group. Both classes were further subdivided into the reading-plus (n = 35) and reading-only group (n = 33). There were four rounds of treatment for two weeks; the two classes took an immediate posttest as the acquisition test after each round, and one delayed posttest as the retention test two weeks later. Results showed that students under the reading-plus approach had significantly more vocabulary growth, both in immediate and delayed posttests, for both the high proficiency and low proficiency groups. The studies mentioned above are summarized in Table 1 below.

Table 1
Previous Studies on Post-reading Word-focused Activities in Taiwan

Study	Participants				Word-focused activities		Instrument
	E	J	S	C	More effective	Less effective	
Cheng (2008)	V				Text-based vocabulary exercises	Traditional study sheet	VKS
Min (2008)			V		Vocabulary exercises	Reading-only	VKS
Lai (2009)			V		Vocabulary exercises	Reading-only	Multiple-choice test and filling-in blanks

Note. E = elementary students; J = junior high school students; S = senior high school students; C = college and university students; VKS = Vocabulary Knowledge Scale (Paribakht & Wesche, 1997).

However, some limitations of the previous studies are worth discussing. To begin with, in Min's (2008) and Lai's (2009) research, participants in the reading-plus

group were more involved in different levels of vocabulary manipulation, including writing out the target words, retrieving meaning when doing exercises, and filling-in blanks, whereas participants in the reading-only group just read related texts with the same target words embedded and experienced a lower level of word processing. Since the exercises in the reading-plus group required more learner involvement, the better results claimed by the text-based vocabulary exercises might be undermined. Besides, in Cheng's (2008) study, the traditional worksheet administered in the control group was not all word-focused. This would inevitably lead to less word growth than for the experimental group, who completed a series of text-based vocabulary exercises. Therefore, the effectiveness of text-based vocabulary exercises requires further reexamination, to be compared with a series of word-enhancing and contextualized activities, such as interactive tasks.

Second, the text-based vocabulary exercises focus mainly on the written form of a word; the spoken form of a word was often neglected. If interaction can be embedded in vocabulary tasks, the more learners are involved in oral experiences, the more word meanings and knowledge they will learn (Armbruster, Lehr, & Osborn, 2001). Since interacting with others while learning a word may inspire students' motivation and sense of participation in acquiring words, tasks involving interaction between learners may cause different vocabulary learning results.

Third, participants in the above studies were mostly high school learners and elementary school learners, which left the effects of word-focused activities on JHS learners unaddressed. How JHS learners would benefit from a series of post-reading word-focused activities is still unknown. Besides, in Min's (2008) and Lai's (2009) research, high school learners may be able to pick up a new word incidentally if their vocabulary size is between 3,000 to 5,000 words. It is presumed that learners at this level may infer new word meaning from given reading texts. However, for JHS students in Taiwan, whose vocabulary size is less than the basic frequent 2000 words, it might be difficult for EFL JHS learners to complete the reading and exercises without a teacher's help. Therefore, in the classroom context, a more realistic way is to combine "an explicit instruction with the post-reading vocabulary enhancement" (Paribakht & Wesche, 2000, p. 28).

In view of the limitations mentioned above, the present study aimed to compare two series of post-reading vocabulary activities, interactive tasks and vocabulary exercises, on junior high school learners' lexical acquisition and vocabulary learning attitude changes. These two series of activities were both accompanied by explicit instructions from the teacher, which could help learners to guess the correct meaning of the target words and provide them with sufficient basic word knowledge for them to carry on the word-enhancing activities.

CHAPTER 3

METHOD

The present study was intended to explore the effects of post-reading interactive tasks on junior high school (JHS) students' vocabulary gains and their attitudes toward the tasks and vocabulary learning. In this chapter, descriptions of the research design, participants, instruments, research procedures, materials, and data analysis are presented.

Research Design

Given the research purpose and research questions, the study adopted a quasi-experimental, between-groups design for the research method. The study manipulated different post-reading word-focused activities as the independent variables to investigate their effects on the dependent variables: learners' vocabulary acquisition and attitude changes toward vocabulary learning, as illustrated in *Figure 1*. Two classes were selected as the IT (interactive tasks) and VE (vocabulary exercises) groups respectively. After they took the pretest, a six-session program of vocabulary instruction with post-reading enhancements was administered. During each session, the two groups read the same reading material and completed different vocabulary activities as enhancements. The IT group was asked to complete interactive tasks

while the VE group did vocabulary exercises. The same teaching procedures was followed for the remaining five sessions and in the end, both groups took the posttest, after which learners' scores were collected and analyzed.

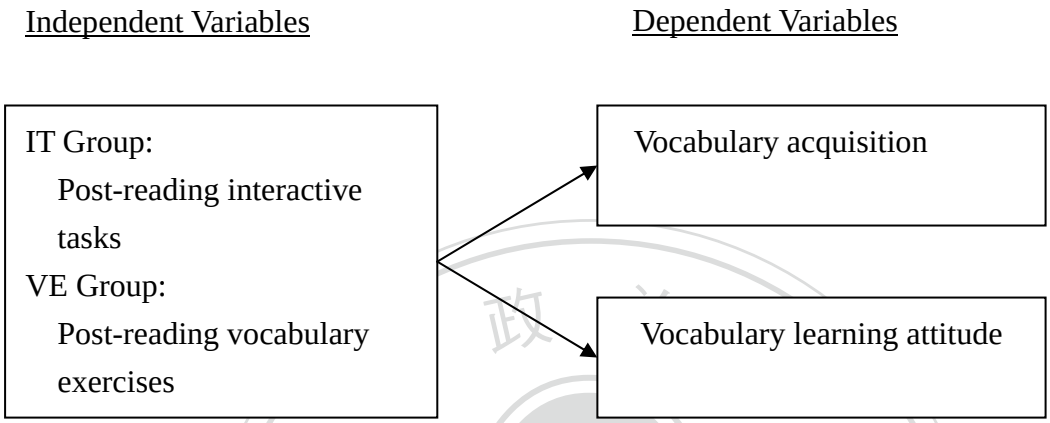

Figure 1. The Framework of the Research Design

Participants

The participants in the study were 95 eighth graders in a junior high school in Taoyuan County, Taiwan. They were selected from three complete classes and were all taught by the same teacher. One of the classes was assigned to the pilot study (n = 32) and the other two were randomly divided into the IT group (n = 32) and the VE group (n = 31) respectively. All the students were native Chinese speakers between 14 to 15 years old and were from similar social and educational backgrounds. Their English proficiency was considered to be at the beginning level. Prior to the experiment, they had learned English for at least three years in primary schools and

for one year in the junior high school. None of the students had lived in any English-speaking country before, and nor did any of them had passed the elementary level of the General English Proficiency Test (GEPT).

Instruments

Two instruments, vocabulary tests (pretest and posttest) and a vocabulary learning attitude questionnaire (VLAQ), were administered to both the IT and VE groups before and after the experiment. The vocabulary pretest (see Appendix A) aimed at ensuring that there was no significant difference between the two groups, whereas the vocabulary posttest (see Appendix B) measured the word gains between the two groups. The VLAQ (see Appendix C) was used to investigate learners' attitude changes toward vocabulary learning throughout the experiment. The instruments are as described below.

Vocabulary Tests

The vocabulary tests were designed according to Hughes' (2008) suggestion that vocabulary assessment should consist of testing vocabulary recognition and production ability. The former is mainly about testing learners' perception or understanding of the target words, including L1 translation of the target words and choosing the appropriate word for a given context. The latter requires learners to

provide correct spelling of the target words. This ability is usually tested in the form of single word spelling and gap filling. According to Rott (2007), vocabulary is best assessed in a wider spectrum of different word aspects, such as syntactic and pragmatic characteristics. Providing context in a test item can make the assessment more authentic and valid because that is how language learners meet a word, and the context can help them activate the memory of the learned word (Hughes, 2008). Taking the above factors into account, the vocabulary tests in the present study contained four sections—L1 translation, spelling, multiple-choice questions, and filling-in blanks, as follows.

L1 translation.

In the L1 translation section, a list of 10 target words was included. Students were asked to give an L1 equivalent of each given target word. The study adopted L1 translation writing because it could avoid students' guessing. For the scoring, two points were given to each correct Chinese translation or synonym, one point when the meaning was correct but the Chinese character was partly miswritten, and no point for a wrong answer. The maximum score in this section was 20 points.

Spelling.

This section was to assess learners' spelling ability. Participants were given a list of 15 Chinese equivalents of the target words and then provided with the

corresponding English words. The scoring was based on the lexical production scoring protocol (LPSP, Barcroft, 2000), which can "reflect production of both fully and partially produced words" (Barcroft, 2007, p. 719), and can measure learners' whole or partial word learning sensitively. In this study, modifications were made to the LPSP scoring system, as follows: (1) two points were given to each correct answer; (2) one point was given if learners provided half of the target word—for example, if the test-taker wrote *gatar* rather than the correct answer *gather*; (3) zero points were given if the spelling was completely wrong. The maximum score in this section was 30 points.

Multiple-choice questions.

In this section, each question item contained one to four sentences. Students were asked to read the sentences, derive the meaning from the context clues, and choose the most suitable word that fitted the context. Context clues can help learners activate their memory of a word. The answers and the distracters were of the same syntactic level and were from the 25 target words or vocabulary that participants had learned from English lessons. Two points were given to each question item, with a total score of 30 points.

Filling-in blanks.

In this section, every question item contained one or more sentences with one

word missing. The first and the last letters of the missing words were given as a hint, and the students were asked to fill in each blank with a correct spelling of the target word. The maximum score was 20 points, with the scoring criteria the same as for the spelling section.

Both the pre- and post-tests (see Appendixes A and B) were based on the 25 vocabulary words, but with different question item descriptions. Before the experiment, these two vocabulary tests were examined by two teachers from the same school. Their suggestions for test modifications are shown in Table 2.

Table 2
Suggestions for Vocabulary Test Modifications

Section	Question Item/Original Version	Suggestions
1. L1 translation	In the pretest: (No. 2) *reason*,(No. 7) *heat*, (No. 4) *plant*, (No. 9) *secret* In the posttest: (No. 3) *reason*	Provide parts of speech as hints. All of these words (*reason*, *plant*, *secret*) were then cued with (n.) so that learners should give the Chinese equivalent when the word is a noun. The word *heat* was cued with (v.) as well.
2. Spelling		No modification.
3. Multiple-choice questions	In the pretest: (No. 6) The quick _____ of the fireman saved many people's lives. (A) stream (B) action (C) ocean (D) letter	→ **The fireman's quick** _____ saved many people's lives. Answer: (B) action

(table continues)

Table 2 (continued)

Section	Question Item/Original version	Suggestions
3. Multiple-choice questions	<u>In the pretest:</u> (No. 7) Sally is shy and quiet when we talk about friends' funny things because she thinks it is _____. (A) rude (B) free (C) poor (D) busy	→…about **our** friends'… (insert *our* between *about* and *friends'*) Answer:(A) rude
	(No. 14) Look! The leaves are _____ because of the wind. (A) painting (B) happening (C) falling (D) lying	because of the wind → **in the wind** Answer:(C) falling
	(No. 15) We don't have much rain these days. The _____ may dry up. (A) streams (B) bath (C) party (D) group	Add the plural mark *-s* to the choice item: (A) stream → (A) **streams** Answer: (A) stream
	<u>In the posttest:</u> (No. 4) Not all the _____ in the world do no harm to us. In Africa, some are large and men eaters. (A) plants (B) group (C) ocean (D) sidewalk	are large and men eaters→ **even** men eaters Answer: (A) plants
4.Filling-in blanks	<u>In the pretest:</u> (No. 9) A: Mom, I want to h _ _ t the cold tea…	tea→**milk**
	<u>In the posttest:</u> (No. 3) John has a good study h _ _ _ t…	study habit→**studying** habit

After the tests were modified, the researcher administered both tests in a pilot study class. With SPSS version 18.0, Cronbach's alpha coefficients for the vocabulary pre- and post-tests were .953 and .918 respectively, suggesting that the two tests had relatively high internal consistency in test reliability. Thus, no further modification

was made after the pilot test.

Vocabulary Learning Attitude Questionnaire (VLAQ)

The vocabulary learning attitude questionnaire (VLAQ) was intended to collect data of participants' attitude changes toward vocabulary learning before and after the experiment. The design of VLAQ was primarily based on Wendon's (1991) taxonomy of language learning attitudes (cognitive, affective, and behavioral domains) because it provided a very comprehensive classification. The researcher revised some question items from Lin's (2007) and Chao's (2006) questionnaires, and also added questions about the word-focused activities, to probe learners' perceptions of these word enhancements. Most of the revisions were based on participants' learning background and the researcher's teaching experiences; therefore, the question items in the VLAQ were mainly related to participants' learning habits and experiences. The questionnaire consisted of 35 items and was divided into three sections (as shown in Table 3), and to make sure the participants fully understood the question items, a Chinese version was given to participants (see Appendix C).

Table 3
List of the Three Sections in the VLAQ

Section	Question Numbers	Researching Area
(1)	Q1~Q15	Cognitive and affective attitude aspects
(2)	Q16~Q25	Behavioral attitude aspects
(3)	Q26~Q35	Learners' responses to the word-focused activities

As shown in Table 3, in the VLAQ, Section 1 (Nos. 1~15) dealt with the cognitive and affective aspects. The former is related to learners' understanding and abilities in learning vocabulary, including what learners believe about certain ways of learning vocabulary, whereas the latter evaluated their positive or negative feelings toward vocabulary learning. This section is mainly focused on learners' perceptions of the role of vocabulary in learning English and how they feel toward the in-class instruction, including the content, supplementary information and teaching materials. Section 2 (Nos. 16~25) was concerned with the behavioral aspects and explored participants' vocabulary learning habits and learning process. Learners were asked to report their vocabulary learning behaviors, to provide teachers with information about how students acquire and retain words after class. The final section (Nos. 26~35) investigated participants' responses to the word-focused activities (IT and VE), and the question items here only related to the teaching process, tasks and exercises used in the present study. A four-point scale ranging from strongly agree to strongly disagree was adopted, to show participants' responses to each statement item.

For better test validity, the VLAQ was also examined by two experienced school teachers, to make the questionnaire more reasonable. Their suggestions for text modifications set out in Table 4, with the Chinese version shown in Appendix D.

Table 4

Modifications Made in the VLAQ

Section	Question Item/Original Version	Suggestions
(1)	(No. 3) I think it is not difficult to understand English words.	→I think it is **a little** difficult to understand the English words said by the teacher.
	(No. 4) I think it is important to use words for communication.	→I think **using learned words to communicate with others is important**.
	(No. 5) I think reading texts can enlarge my vocabulary size.	→I think reading more **English** texts can enlarge my vocabulary size.
	(No. 8) I feel easy and relaxed when I learn new words.	→I feel **nervous** when I learn new words.
	(No. 11) I think it is important to be able to speak English words.	→ It **does not matter** if **I cannot** speak English words.
(2)	(No. 17) I keep practicing speaking or writing English words to enlarge my vocabulary size.	→Divide No. 17 into two questions items. (No. 17) I keep speaking English vocabulary aloud to increase familiarity with the words. (No. 18) I keep writing English vocabulary to increase familiarity with the words.
	(No. 19) I often review the words I have learned.	→ I review words I learned before or after the tests.
(3)		No modification.

As for the feasibility of the VLAQ, most students responded to the question items in the correct manner. Among 32 collected data from the pilot study, only one was invalid, because the student assigned the same value to each question item.

Therefore, the data of 31 valid questionnaires were used for reliability analysis with SPSS version 18.0. The internal-consistency reliabilities of the whole questionnaire and each section were measured by Cronbach's alpha coefficients. The results are shown in Table 5.

Table 5
Internal-consistency Reliability of the VLAQ

Section	Number of Items	Cronbach's alpha
(1) Cognitive and affective attitude aspects	15	.731
(2) Behavioral attitude aspects	10	.902
(3) Learners' responses to the word-focused activities	10	.873
Total Items in VLAQ	35	.929

Generally speaking, reliability coefficients of .70 are considered acceptable for research use, and coefficients over .90 are considered excellent for research (George & Mallery, 2003). The Cronbach's alpha was .731 for cognitive and affective attitude domains, .902 for the behavioral attitude domain, and .873 for learners' responses to the activities. All the reliability coefficients were over .70, and the Cronbach's alpha was .929 for the entire attitude questionnaire, ensuring high consistency in students' responses to the questionnaire. No further modification was made henceforth.

Research Procedure

The research procedure was divided into two stages (see *Figure 2*).

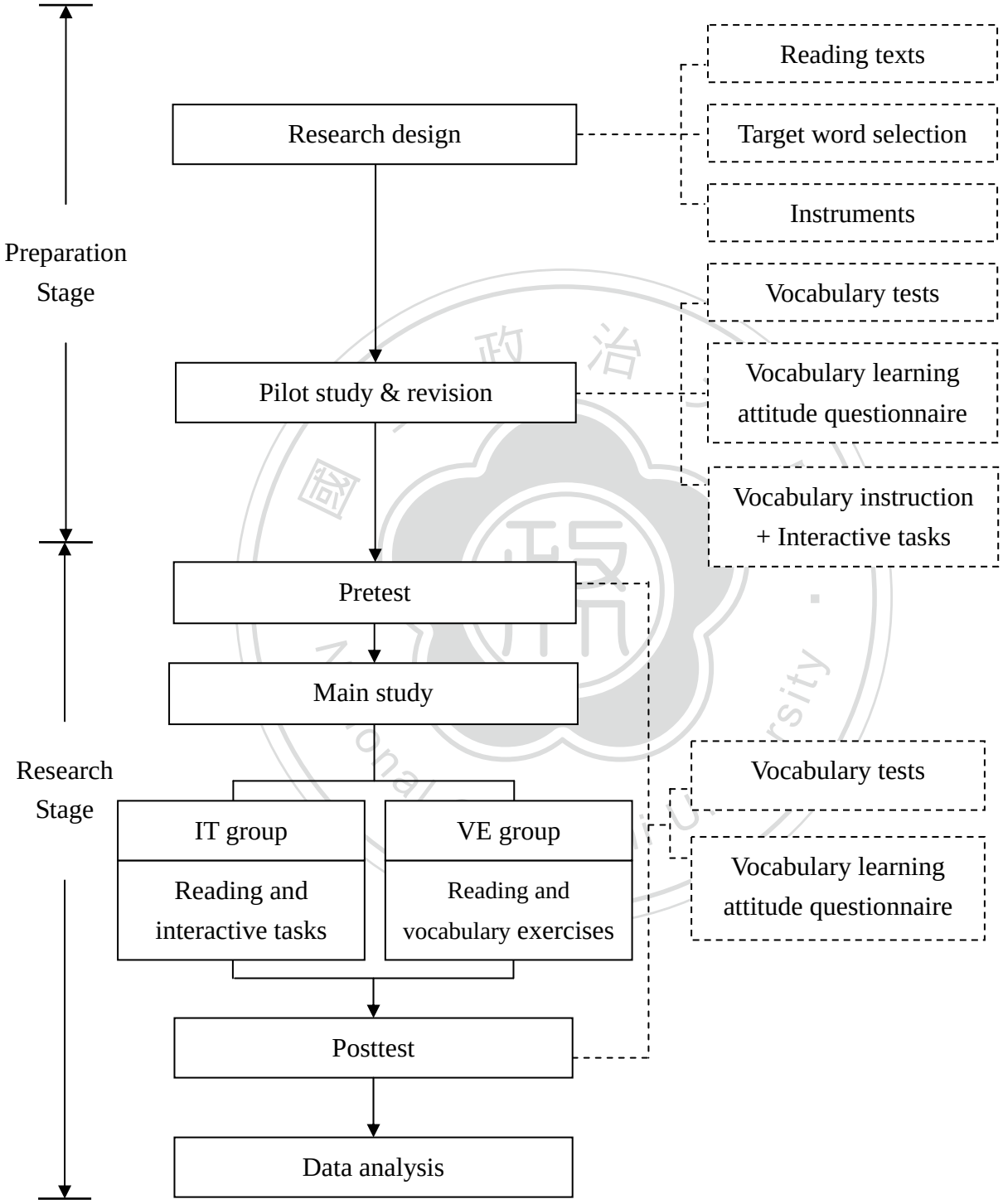

Figure 2. Flow Chart of the Research Procedure

In the preparation stage, the researcher selected the reading texts and identified the target words. Confirmation of the vocabulary checklist (see Appendix E) was made, to ensure that students did not already know these words. After the known words were excluded, the instruments (vocabulary tests and questionnaire) were designed. In the pilot study, the reliability and validity of the two instruments were measured. Then, the researcher administered the vocabulary instruction to the pilot study group. Instrument revision was made in light of the results, and the instruction of the post-reading interactive tasks was modified accordingly.

In the research stage, two classes of the main study took the pretest, including one vocabulary pretest and a vocabulary learning attitude questionnaire (VLAQ). The vocabulary test was administered in two separate parts. The first part consisted of translation and spelling sections, whereas the second part was in the form of multiple-choice questions and filling-in-the-blanks sections. After students finished the first part, the test sheets were reclaimed before learners proceeded with the second part. The test sheet reclamation was to avoid answer-copying, because the target words tested in Part 1 overlapped those in Part 2. That is, the words tested in the translation were tested again in the filling-in blanks section, and the words tested in the spelling section also appeared in the multiple-choice questions. After completing the vocabulary pretest, students took the VLAQ.

One week later, in the main study, the two classes were randomly assigned to the IT (interactive tasks) and VE (vocabulary exercises) groups. A six-session experiment was then administered. In each class session, both groups read the same reading text, but completed different post-reading word-enhancing activities. All the materials were reclaimed, to avoid learners' further review after class. After the whole experiment, learners took the posttest (vocabulary posttest and attitude questionnaire), and finally, statistical tools were adopted to analyze the data.

Teaching Procedures

There were two teaching stages in each class session: (1) text reading with vocabulary instruction, and (2) word-focused activities (see Table 6).

Table 6
Teaching Procedures in Each Class Session

Teaching stages	Procedures
Stage 1 (25 mins)	Text reading and vocabulary instruction
Stage 2 (20 mins)	Word-focused activities
	IT group:
	Doing three vocabulary interactive tasks.
	VE group:
	Doing three vocabulary exercises.

In Stage 1, both groups were given the same reading text and vocabulary instruction. In Stage 2, the two groups were asked to do different vocabulary activities. Further detail on these stages follows.

Teaching Stage 1: Text Reading and Vocabulary Instruction

Twenty-five minutes were allocated to this stage, and students in both groups read the same reading text, with four to five target words embedded (see Appendix F). The teacher first introduced the topic of the text and asked some pre-reading questions to elicit students' background knowledge of the topic. Then, the teacher explained the reading text and target words, which were distinguished in boldface (see Appendix F). When explaining the target words, the teacher provided model sentences and deliberately avoided too much syntactic grammar instruction. After reading the text, the students completed the comprehension questions and then checked answers with the teacher.

Teaching Stage 2: Word-focused Activities

At this stage, with a view to facilitating learners' target word acquisition, the groups were asked to complete different word-focused activities. The IT group was required to do a series of interactive tasks, while the VE group finished vocabulary exercises.

(1) Interactive Tasks for the IT Group.

Students in the IT group completed three interactive tasks in pairs, including: (a) matching activities, (b) pair-created dialogues, and (c) opinion-gap tasks, as follows.

a. Matching activities: This was a picture-and-word matching activity (see Appendix G). Students worked in pairs and then checked answers with the teacher. Then, they read the text again and sequenced the target words according to the order of occurrence in the reading text. The students then read aloud sentences which contained the target words.

b. Pair-created dialogue: There was a dialogue with a set-up context and some missing lines (see Appendix G). Students worked in pairs and used the target words to complete the dialogue. After that, they practiced the dialogue with each other.

c. Opinion-gap task: The students were asked to complete a survey of several questions offered in the study sheet (see Appendix G). These questions were designed on the basis of the target words in each reading topic. Each student walked around the classroom to interview their classmates. They had to ask different classmates and write down their names and answers on the sheet. After finishing the three tasks, the teacher asked some students to practice the dialogues, and some volunteer students to share the results of their survey.

(2) Vocabulary Exercises for the VE Group.

The VE group finished three vocabulary exercises after the text reading (see Appendix H). The first exercise was definition finding. Students read each definition statement and wrote down the related target word. Then, students unscrambled the sentence in the second exercise, and they were required to make a sentence for each target word in the final section. Students were asked to do these exercises individually, and then checked their answers with the teacher.

Teaching Materials

According to Blachowicz and Fisher (2010), people learn new words easily in situations where these words occur in meaningful contexts. To provide students with enough contexts for vocabulary learning, six appropriate reading texts were selected for both the IT and VE groups (see Appendix F). Unknown words from the reading were selected as the target words. A detailed description of the texts and target words is as follows.

Reading Texts

Based on the selection criteria (learners' interest and instructional appropriateness) suggested by Hsu (2005), the researcher selected six thematically different reading passages from authentic texts on the market. All of the texts were

from *Reading on with Aesop's Fable*, Levels 2 and 3, (Park, ed., 2007) published by Eduplanet, Korea. These texts were about nature and ethics and were considered to be interesting and educational for the students, because most students prefer natural science to other subjects in the school, and because articles with ethical issues can teach students moral values. The topics in the texts were relevant to students' background knowledge and subject learning, rendering them appropriate for instruction. Information on the six selected reading materials is listed in Table 7.

Table 7
Six Selected Reading Materials

Title	Topic	Words	Text Coverage
1. Rain from the Sky	explains how the rain falls from the sky.	93	94.6%
2. Liar, Liar	discusses why people tell lies, and if people keep doing so, how lying could become a habit.	82	95.1%
3. The King of Beasts	describes the life of lions and raises learners' awareness about protecting these animals, because more and more people are killing them.	80	95.0%
4. Crime	tells that every country makes laws to protect people. The police are called to catch criminals.	83	95.1%
5. Wise Animals	introduces the wise animals—chimpanzees.	85	95.2%
6. Manners	expresses the importance of being polite.	81	95.1%

With respect to the texts' length and difficulty, the researcher adapted the six reading texts for the study. The texts were from 80 to 93 words and were of similar length to the reading texts used in participants' English textbooks (75~98 words long). The ratio of the target words in each text was around 5%, and the remaining unknown words were accompanied by Chinese translations, allowing participants to maintain approximately 95% text coverage and text comprehension. Such a text coverage ratio is suggested in classroom language learning settings with teachers' instruction and support (Matsuoko & Hirsh, 2010; Waring & Takaki, 2003).

In *Figure 3* below, the readability of the six reading texts was also measured by the Fry Formula, developed by Edward Fry (1968, 2002).

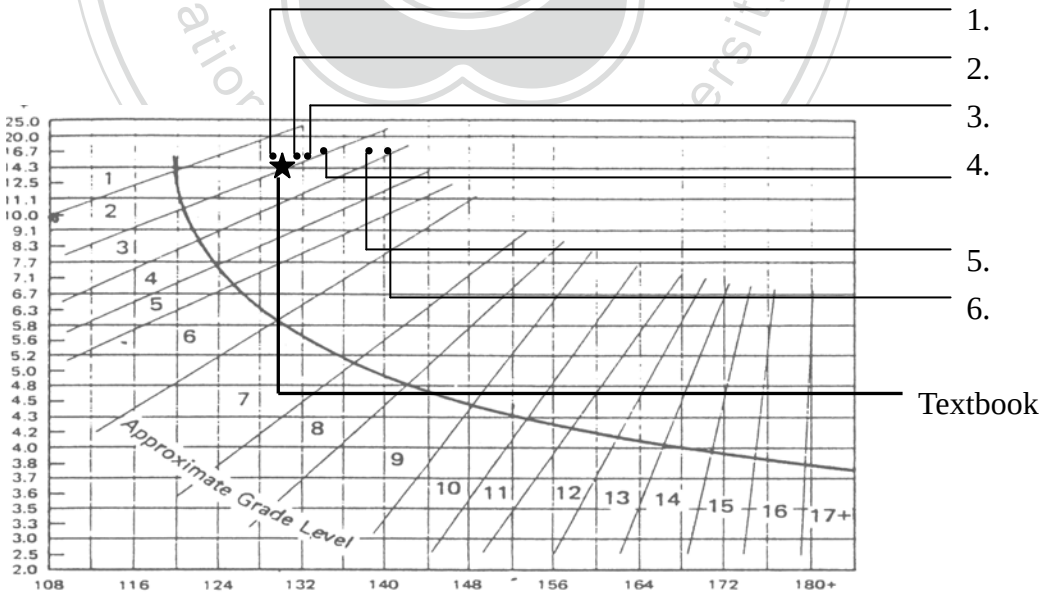

Figure 3. Readability of the Reading Texts

As for grade reading level, grade scores with larger ordinal numbers are less understandable and accessible to readers. When several texts' readability indexes fall in the same grade level area, the farther an index is plotted, the more reading difficulty the text carries. Accordingly, the teaching order of the selected texts was: (1) Rain from the Sky, (2) Liar, Liar, (3) The King of Beasts, (4) Crime, (5) Wise Animals, and (6) Manners. To ensure participants' understanding of the content, four multiple-choice comprehension questions were attached at the end of each text.

Target Word Selection

Three criteria were adopted in the target word selection. First, as Laufer (1990) suggests, nouns, verbs and adjectives are easier to learn than adverbs because adverbs are less common in our daily lives. It was then decided to select nouns, verbs, and adjectives as the target words. Second, the selected target words should not be included in the textbooks normally used by the participants, and none of them should have been familiar to the participants prior to the experiment. Third, the target words should be within the most frequent 2,000 word list issued by the Ministry of Education (MOE), because these 2,000 words are required to be learnt by junior high school students. With regard to the three selection criteria, the researcher first chose 31 candidate words that were expected to be unfamiliar to the students.

To make further confirmation that these words were novel to the participants,

the researcher engaged another class, with similar English proficiency, to complete an unknown words checklist (see Appendix E) before the pilot study. The students were required to mark the words they had seen before and also to write down the Chinese meaning if they knew it. The words reported as having been unseen previously, or for which the wrong Chinese meaning was supplied by 100% of the students, were the final target words for this study.

After students completed the checklist, 25 words were selected, and they were classified according to the embedded reading texts and parts of speech (see Table 8). The first text contained 5 target words and the rest had 4 target words in each text. The target words were bold-faced in the reading texts (see Appendix F) to draw students' attention to them (Min, 2008). As for the unselected possible unknown words, they were either replaced by known words or supplemented with Chinese meanings below the reading text.

Table 8

The Twenty-five Selected Target Words

Title of the Texts	Target Words		
	Nouns	Verbs	Adjectives
1. Rain from the Sky	ocean	fall, gather, heat	stream
2. Liar, Liar	habit, reason, secret	lie	
3. The King of Beasts	group, wild	hunt, protect	
4. Crime	law	break, exist, avoid	
5. Wise Animals	language, tool, plant		clever
6. Manners	action	respect	polite, rude

Data Analysis

The study was intended to compare the effects of two post-reading word-focused activities on learners' vocabulary growth and their changes in attitude toward the activities. Participants' test scores were analyzed using SPSS 18.0, and the significance levels were set at .05 and .01. The statistical analysis was as follows.

First, an Independent Samples *t*-test was used to decide whether the interactive tasks claimed better influence on students' word learning. How these activities affected students' performance on receptive and productive word knowledge was also examined. Moreover, to answer questions concerning learners' attitude changes toward their vocabulary learning, the Independent Samples *t*-test was used to compare the responses between the two groups, and a Paired Samples *t*-test was conducted to discover learners' attitude changes within each group.

Second, to decrease error variances in this quasi-experiment, a one-way analysis of covariance (ANCOVA) was used to compare the adjusted mean scores between the IT and VE groups. This was to detect a true difference among learners and provide a more complete understanding of the true effects of the word-focused activities intervention.

Third, for the analysis of learners' qualitative word gains, the distribution of scores over their recognition and production ability performance was calculated. The

percentage of unknown words (those that had not been learned through the whole intervention), of partially known words (those that had been answered correctly either in recognition or production sections), and of fully known words (those that have been known both receptively and productively), were all calculated, based on learners' responses to the test items. The results from the two groups were both compared and elucidated.

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CHAPTER 4

RESULTS

This chapter covers two main results of the present study. In the first section, the test scores from the vocabulary pre- and post-tests are presented, to examine the effectiveness of post-reading interactive tasks on vocabulary learning. In the second section, the results of the questionnaire are shown in order to understand participants' responses to vocabulary learning and their perceptions of these word-focused activities.

The Effects of Post-reading Interactive Tasks on Vocabulary Acquisition

The test scores from the vocabulary pre- and post-tests reveal that participants receiving vocabulary interactive tasks had significant word gains after the experiment. The test results are presented in three parts. In the first part, participants' descriptive pre- and post-test statistics are reported, and the scores from both groups are analyzed using Independent Samples *t*-test. To reduce error variances within the groups, an analysis of covariance (ANCOVA) was conducted to further explain the differences of the mean scores between the groups. The alpha level was set at .05 for tests of significance. In the second part, participants' vocabulary gains were further evaluated

by examining their test performance in four kinds of vocabulary assessment (L1 translation, spelling, multiple-choice questions, and filling-in blanks). Comparison of these scores was made to show the effectiveness of treatment for the two groups. In the third part, the percentages of students' unknown, partially known and fully known (receptive and productive) words were calculated to show the changes in vocabulary knowledge between the groups.

Participants' Performance on the Vocabulary Pre- and Post-tests

This part is about the word gains of the IT (interactive tasks) and VE (vocabulary exercises) groups. As mentioned earlier in Chapter Three, the vocabulary pretest measured learners' baseline knowledge of the target words, while the posttest was treated as a vocabulary acquisition test, measuring participants' vocabulary gains after the experiment. The descriptive statistics for participants' performances on the vocabulary pre- and post-tests are presented in Table 9.

Table 9
Descriptive Statistics for the IT and VE Groups

Group	N	Pretest		Posttest		Gain
		Mean	*SD*	Mean	*SD*	
IT	32	5.81	3.23	63.09	23.27	57.28
VE	31	5.93	2.56	47.32	26.38	41.39

As can be seen, in the IT group, the mean score of the pretest was 5.81 (*SD* = 3.23), which increased to 63.09 (*SD* = 23.27) in the posttest. Meanwhile, in the VE group, the mean score increased from 5.93 (*SD* = 2.56) to 47.32 (*SD* = 26.38). These results showed that the mean differences for word gains were 57.28 (IT) and 47.32 (VE). It seems that, compared to the pretest, where participants gained low mean scores, both groups made some vocabulary gains on the posttest, with the IT group demonstrating higher mean difference than the VE group. With a view to further understanding the effectiveness of interactive tasks, whether the score differences of the two groups reached a significant level or not are analyzed in Table 10.

Table 10
Comparison of Vocabulary Test Scores between Groups

Test	IT Group (n = 32)		VE Group (n = 31)		*t*	*df*
	Mean	*SD*	Mean	*SD*		
Pretest	5.81	3.23	5.93	2.56	–.17	61
Posttest	63.09	23.27	47.32	26.38	2.52*	61

*$p < .05$

Table 10 lists the results of the Independent Samples *t*-test for the vocabulary pre- and post-tests. In the pre-test, no significant difference was found between the IT and VE groups (*t* = –. 17), ensuring that both groups, prior to the experiment, were at the same knowledge level for the target words. However, in the posttest, the IT group

gained higher scores than the VE group, and the difference between the two groups reached a significant level (t = 2.52, p < .05), which implies that learners who completed interactive vocabulary tasks acquired more words than those who finished vocabulary exercises.

To exclude error variances from the pretest within the groups, a one-way ANCOVA was used to compare the mean difference between the groups (IT and VE) with the pretest as covariate to adjust the mean scores obtained from the vocabulary posttest (see Table 11). This way of analysis can directly reflect the relation between the independent variable (instructional vocabulary activities, IT and VE) and the dependent variable (vocabulary posttest) without any influence from the control variance.

As reported in Table 11, the results of the one-way ANCOVA for vocabulary test scores show that the difference between the two groups' vocabulary posttest was significant (F = 6.93, p < .05). The results indicated that the IT group significantly outperformed the VE group. The post-reading vocabulary interactive tasks thus are proved to be effective in EFL students' vocabulary learning.

Table 11

One-way ANCOVA for Effects of IT and VE on Vocabulary Tests

Dependent Variable: Vocabulary Posttest

Source	*SS*	*df*	*MS*	*F*
Pretest (Covariate)	2563.66	1	2563.66	4.38
Between Groups (IT and VE)	4051.61	1	4051.61	6.93*
Within Groups (Error)	35103.83	60	585.06	
Total	234476.00	63		

*$p < .05$

Test Performance on Receptive and Productive Word Knowledge

For a language learner, acquiring a word includes having both word recognition and production abilities (Hughes, 2008). This section answers the second research question and discusses whether the difference between participants' vocabulary recognition and production performance reached a significant level in the vocabulary tests.

The vocabulary test used in the study consisted of four word assessing sections to measure participants' vocabulary knowledge. The first and third sections were target word translation and multiple-choice questions, to test students' word recognition ability, whereas the second and fourth sections attempted to assess their word production ability through spelling and filling-in blanks. To further understand how participants performed in these two kinds of word knowledge, a comparison is

displayed in Table 12. The sum-scores added up from translation and multiple-choice questions sections represented recognition ability, while the sum-scores of spelling and filling-in blanks represented word production ability.

Table 12
Comparison of Participants' Vocabulary Recognition and Production Ability in the Vocabulary Tests

Vocabulary Knowledge	Test	The IT Group (n=32)		The VE Group (n=31)		*t*	*df*
		Mean	*SD*	Mean	*SD*		
Recognition Ability	Pretest	5.56	2.91	5.61	3.24	–.07	61
	Posttest	32.75	11.39	25.03	12.98	2.51*	61
Production Ability	Pretest	.25	.67	.32	.91	–.36	61
	Posttest	30.03	12.42	22.29	14.12	2.31*	61

*$p < .05$

As shown in Table 12, an Independent Samples *t*-test revealed a statistically significant effect of interactive tasks on facilitating students' word recognition and production knowledge. In the pretest, no significant difference was found between the two groups concerning these two word knowledge abilities, but in the posttest, significant differences were among learners. In testing recognition ability, the mean score of the IT group ($\overline{X}$ = 32.75, *SD* = 11.39) was higher than that in the VE group ($\overline{X}$ = 25.03, *SD* = 12.98). The T-value between the two groups was significant (*t* =

2.51, $p < .05$), demonstrating that the IT group acquired significantly more receptive knowledge of the target words than the VE group. Similarly, the mean score of testing production ability also reached significance ($t = 2.31$, $p < .05$), indicating that participants in the IT group ($\overline{X} = 30.03$, $SD = 12.42$) could use the target words more productively than the VE group ($\overline{X} = 22.29$, $SD = 14.12$).

To further analyze participants' word acquisition, an examination of the scores of each word assessing section on the vocabulary tests is shown in Table 13.

Table 13
Comparison of Participants' Performance on Four Kinds of Vocabulary Assessment

Word Assessing Section	Test	The IT Group		The VE Group		*t*	*df*
		Mean	*SD*	Mean	*SD*		
Recognition Ability:							
Translation	Pre	.38	.79	.45	1.00	–.24	61
	Post	11.75	5.09	9.94	6.68	1.23	61
Multiple-choice	Pre	5.19	2.91	5.03	2.82	.22	61
questions	Post	21.31	7.30	15.09	7.94	3.23**	61
Production Ability:							
Spelling	Pre	.06	.35	.13	.72	–.47	61
	Post	18.00	8.07	13.90	9.56	1.84	61
Filling-in blanks	Pre	.18	.59	.19	.60	–.04	61
	Post	12.03	4.96	8.38	5.47	2.77**	61

Note. IT group (n=32) and VE group (n=31). Pre = pretest; Post = posttest. The total scores of each section were 20, 30, 30 and 20 respectively.
**$p < .01$

This statistical analysis shows that the IT group performed better and obtained higher scores in each section than the VE group. As can be seen, in the multiple-choice questions section, the IT group gained the mean score of 21.31 (*SD* = 7.30) in the posttest, which was much higher than that of the VE group (15.09, *SD* = 7.94), and reaching significant difference ($t = 3.23$, $p < .01$). In a similar vein, the mean scores in the filling-in blanks section (for the IT, $\overline{X} = 12.03$, *SD* = 4.96; for the VE, $\overline{X} = 8.38$, *SD* = 5.47) were also found statistically significant ($t = 2.77$, $p < .01$). However, in the translation and spelling sections, which were to test basic word recognition and production ability respectively, no significant difference was found between the two groups. Comparatively speaking, the results showed that the IT and VE were both helpful for students to acquire basic receptive and productive word knowledge, but the interactive tasks were significantly more effective than the vocabulary exercises in enhancing learners' contextual word knowledge.

Changes in Participants' Word Knowledge

This part answers the third research question, which addressed the impact of the two instructional word-focused activities on participants' changes in vocabulary knowledge of the 25 target words. Given the fact that there were 25 target words for 32 students in the IT group and 31 students in the VE group, there were altogether 800 and 775 responses in the two groups for both the pre- and post-tests respectively.

Since both receptive and productive knowledge of each target word were tested, learners' responses to each target word were divided into three levels of vocabulary knowledge: unknown, partially (either receptive or productive) known, and fully (both receptive and productive) known. Table 14 presents the frequency and percentage distribution of the three levels of vocabulary knowledge.

Table 14

Participants' Responses to Three Levels of Vocabulary Knowledge

Group	Test	Word knowledge			
		Unknown	Partially known		Fully known
			Receptive	Productive	
IT	Pretest	708	91	1	0
		(88.5%)	(11.4%)	(0.1%)	(0%)
	Posttest	165	151	101	383
		(20.6%)	(18.9%)	(12.6%)	(47.9%)
VE	Pretest	684	87	4	0
		(88.3%)	(11.2%)	(0.5%)	(0%)
	Posttest	277	156	112	230
		(35.7%)	(20.1%)	(14.5%)	(29.7%)

Note. In both the pre- and post-tests, the total responses in the IT group were 800 and 775 in the VE group.

As can be seen, learners' vocabulary knowledge of the target words can be categorized into three levels. The first level was unknown vocabulary status, where participants gained zero points on a target word they could apply neither receptively

nor productively. The second level was partially known status, which was further divided into only receptively known (scoring two points in receptive knowledge but zero points in productive knowledge) and only productively known (scoring two points in productive knowledge but zero points in receptive knowledge). The last one was fully known status, where learners gained a total of four points for a word after success with both receptive and productive knowledge.

As Table 14 shows, in the pretest, the two groups' responses converged on unknown words (88.5% and 88.3% respectively), followed by partially known words with 11.5% (11.4% + 0.1%) in the IT group and 11.7% (11.2% + 0.5%) in the VE group. The percentage of partially known words was the sum of only perceptive known and only productive known words. None of the target words was both receptively and productively known in the pretest, thus constituting zero percentage. The findings suggested that participants in both groups were at a similar vocabulary knowledge level; they did not know most of the target words prior to the experiment.

In the posttest, however, the picture varied. In the IT group, the percentage of unknown words decreased from 88.5% in the pretest to 20.6% in the posttest, resulting in a decrease of 67.9% (88.5% – 20.6%) in unknown words. This decrease in unknown words caused vocabulary gains in partially known and fully known status for the IT group. The percentage of only receptively known word knowledge

increased 7.5 % (18.9% – 11.4%), and in a similar vein, there was an increase of 12.5% (12.6% – 0.1%) on only productive word knowledge. As for the fully known status, surprisingly, there was a surge of 47.9% compared to the unknown status on the pretest, which means near half of the target words were both receptively and productively known in the IT group after the experiment.

The VE group yielded similar patterns of reductions in unknown words and increase in the partially known and fully known status of the target words from the pretest to posttest. For the words that were not learned, over one-third (35.7%) of words remained unknown, whereas only about one-fifth (20.6%) of words were unknown in the IT group. This implies that there was a comparatively lower decrease in the percentage of unknown words (52.6%, compared with 67.9% for the IT group). For the partially known words, an increase of partially known words (34.6%, composed of 20.1% from receptively known and 14.5% from productively known) was found. This was similar to the findings in the IT group. Both groups claimed a small increase in this word knowledge level, with nearly one-third of the words partially known. However, as for the fully known status of the target words, in the VE group, there was only a 29.7% percentage increase over the unknown status of the pretest. Only near one-third of target words were acquired both receptively and productively, far less than those in the IT group, where nearly half of students'

responses converged in this vocabulary knowledge status.

To sum up, the findings suggested that the interactive tasks showed superior effectiveness in elevating learners' vocabulary knowledge from unknown to fully known status, while in the VE group, on the contrary, the outcomes were not so effective, though the vocabulary exercises still helped learners to acquire words.

Participants' Attitude Changes to the Vocabulary Learning Questionnaire

The questionnaire was intended to discover participants' attitude changes after the experiment. Three sections concerning vocabulary learning were included: (1) the cognitive and affective learning domain (Q1~Q15), (2) the behavioral learning domain (Q16~Q25), and (3) learners' perceptions of the post-reading word-focused activities (Q26~Q35), with a total of 35 question items in the questionnaire.

Comparison of Learners' Attitude Changes between Groups

Table 15 indicates the comparisons of learners' vocabulary learning attitude changes between groups.

Table 15

Comparison of Learners' Vocabulary Learning Attitude Changes in Each Section between Groups

Section	The IT Group		The VE Group		*t*	*df*
	M	*SD*	*M*	*SD*		
Section 1 (Q1~Q15) Cognitive & Affective Learning						
Pretest	39.81	5.89	42.51	5.09	–1.95	61
Posttest	41.09	4.86	43.54	6.85	–1.65	61
Section 2 (Q16~Q25) Behavioral Learning						
Pretest	26.31	5.86	28.00	7.23	–1.02	61
Posttest	24.31	5.42	25.68	6.90	–.87	61
Section 3 (Q26~Q35) Word-focused Activities						
Pretest	27.43	4.66	29.09	4.65	–1.41	61
Posttest	28.06	5.35	29.77	6.82	–1.11	61

As can be seen in Table 15, from the three vocabulary learning constructs, both groups held positive attitudes in sections one and three in the posttest, whereas their mean scores in section two were lower. The Independent Samples *t*-test also revealed no significant difference for the total mean scores of each section. To further investigate how the two groups responded to each question item, the results are displayed for the three sections, as shown in Tables 16 to 18.

(1) Cognitive and Affective Attitude Changes between Groups.

Table 16 displays a comparison of learners' cognitive and affective responses (Questions 1~15) to their vocabulary learning between groups.

Table 16

Comparison of Participants' Cognitive and Affective Vocabulary Attitude Changes between Groups

Question Item	Test	IT Group		VE Group		*t*	*df*
		M	*SD*	*M*	*SD*		
1. I think learning English vocabulary is important to English learning.	Pre	3.25	.84	3.52	.68	–1.38	61
	Post	3.38	.66	3.39	.84	–.06	61
2. I feel interested when I learn English vocabulary.	Pre	2.69	.82	2.94	.85	–1.18	61
	Post	2.81	.78	2.94	.96	–.56	61
3. I think it is a little difficult to understand the English words said by the teacher.	Pre	2.44	.67	2.61	.92	–.87	61
	Post	2.50	.72	2.45	.85	.24	61
4. I think using learned words to communicate with others is important.	Pre	2.91	.93	3.13	1.02	–.91	61
	Post	3.00	.76	3.19	.87	–.94	61
5. I think reading more English texts can enlarge my vocabulary size.	Pre	2.81	1.03	3.19	.87	–1.58	61
	Post	2.81	.90	3.16	.93	–1.51	61
6. When I read English texts, I want to learn the new words as soon as possible.	Pre	2.41	1.04	2.55	.85	–.59	61
	Post	2.69	.93	2.87	.96	–.77	61
7. When thinking of learning new words, I feel very happy.	Pre	2.22	.87	2.42	.89	–.91	61
	Post	2.25	.72	2.55	.85	–1.51	61

(table continues)

Table 16 (continued)

Question Item	Test	IT Group		VE Group		*t*	*df*
		M	*SD*	*M*	*SD*		
8. I feel nervous when I learn new words.	Pre	2.06	.76	2.16	.86	–.48	61
	Post	2.22	.75	2.58	.92	–1.71	61
9. I often feel bored when thinking of learning new words.	Pre	2.34	.79	2.26	.97	.39	61
	Post	2.47	.84	2.48	.85	–.07	61
10. I feel troubled because I often forget the words I learned.	Pre	2.91	.93	3.03	.88	–.55	61
	Post	2.81	.97	2.97	.91	.66	61
11. It does not matter if I cannot speak English words.	Pre	2.28	.92	1.94	.89	1.51	61
	Post	2.25	.84	2.13	1.02	.513	61
12. I like the teacher's in-class vocabulary instruction.	Pre	2.94	.76	3.00	.63	–.35	61
	Post	3.00	.84	3.39	.67	–2.02*	61
13. I like the supplementary information of word usages provided by teachers.	Pre	3.06	.72	3.19	.65	–.76	61
	Post	2.94	.76	3.10	.94	–.74	61
14. I think the provided sentence examples can help me learn new words.	Pre	3.09	.73	3.16	.69	–.38	61
	Post	3.06	.67	3.19	.79	–.71	61
15. I like the in-class materials or worksheets provided by the teacher.	Pre	2.66	.70	2.87	.96	–.10	61
	Post	2.84	.72	2.97	1.02	–.56	61

Note. Pre = pretest; Post = posttest.

*$p < .05$

Prior to the experiment, the two groups had similar learning attitudes toward vocabulary learning, and the VE group recorded higher scores. In the posttest, although both groups held more positive attitudes in many question items than they

did in the pretest, the VE group still achieved higher scores.

However, lower scores were obtained in some of the participants' posttest responses. Further discussion of the mean score changes is as follows. To begin with, the two groups held different attitudes toward the role of vocabulary learning in question items 1, 2, 5, 10, and 11. Concerning vocabulary acquisition as an important role in learning English (Item 1), the mean score in the IT group increased from 3.25 to 3.38 in the posttest, while the mean score in the VE group decreased from 3.52 to 3.39. This shows that in the posttest, some learners in the VE group did not view learning English vocabulary as being as important as they had thought in the pretest.

In a similar vein, for whether learners felt interested in English vocabulary learning (Item 2), the IT group gave higher mean scores in the posttest ($\overline{X}$ = 2.81) than they did in the pretest ($\overline{X}$ = 2.69), but in the VE group, there was no change of mean score throughout the experiment. Learners in the VE group did not have obvious attitude changes in terms of their learning interests in English vocabulary.

With respect to the reading texts (Item 5), the VE group adopted a negative attitude to the role of text reading as a way of magnifying vocabulary size (Mean score decreasing from 3.19 to 3.16), while the IT group held the same attitude throughout the experiment, with the mean score of 2.81 in both the pre- and post-tests; but this score was still lower than that in the VE group.

As for question item 10, a negative question concerning learners' vocabulary retention, both groups addressed lower mean scores in the posttest, which suggests that these activities were helpful for memorizing the new words, because these two word-enhancing activities could provide multiple and diverse word exposures to impress participants with the target vocabulary. With regard to question item 11, also a negative question focusing on English word speaking ability, both groups had lower scores in the posttest, suggesting that the importance of English word speaking ability had been highlighted in both groups.

Aside from learners' perceptual changes of the role of vocabulary learning, the two groups had quite different viewpoints concerning the vocabulary instruction (question items 3, 13 and 14) throughout the experiment. For teacher's language use in class (Item 3), the VE group at first felt it was more difficult to understand the English words said by the teacher ($\overline{X}$ = 2.61 in the VE group; $\overline{X}$ = 2.44 in the IT group), but in the posttest, their attitudes changed. The VE group manifestly found it less difficult to listen to the spoken English words ($\overline{X}$ = 2.45 in the VE group; $\overline{X}$ = 2.50 in the IT group). As for the supplementary information on word usage (Item 13), it seemed that both groups did not prefer to receive the word knowledge provided in class, because the mean scores in the posttest were lower than those in the pretest. However, surprisingly, for the sentence examples provided in class (Item 14), the VE

group seemed to show slightly more preference, indicating that they thought these examples were more helpful for them to learn new words than for learners in the IT group.

In the matter of significant attitude changes, learners' preferences for teachers' in-class vocabulary instruction (Item 12) showed a striking difference (t = –2.02, p < .05). While both groups responded positively in the posttest, the VE group showed more affirmative support. This indicates that students in the VE group had a significant preference for vocabulary instruction.

(2) Behavioral Attitude Changes between Groups.

Table 17 provides a comparison of learners' behavioral attitude changes (Questions 16~25) between the groups. As can be seen, participants in both groups gave higher scores to most of the question items in the posttest. It seems that the two word-focused activities (IT and VE) may have exercised some influence over learners' vocabulary learning behaviors. A significant difference on vocabulary pragmatic use (Item 23) was also found between the two groups. In the pretest, the mean scores in the IT and VE groups were 2.69 and 2.48 respectively, while in the posttest, the mean score of the IT group increased to 2.87 while that of the VE group decreased to 2.38. This difference reached a significant value (t = 2.29, p < .05), indicating that students in the IT group preferred to put the English to real use and

would like to use the words to communicate with others, more than the VE group.

Table 17

Comparison of Participants' Behavioral Vocabulary Attitude Changes between Groups

Question Item	Test	IT Group		VE Group		*t*	*df*
		M	*SD*	*M*	*SD*		
16. I often encourage myself to learn more English vocabulary.	Pre	2.28	.89	2.68	.79	–1.87	61
	Post	2.78	.75	2.97	.81	–.78	61
17. I keep speaking English vocabulary aloud to increase familiarity with the words.	Pre	2.50	.88	2.77	.81	–1.29	61
	Post	2.91	.69	2.97	.95	–.30	61
18. I keep writing English vocabulary to increase familiarity with the words.	Pre	2.50	.84	2.58	.85	–.38	61
	Post	2.91	.78	2.71	.97	.89	61
19. I review words I learned before or after the tests.	Pre	2.75	.88	2.84	.97	–.38	61
	Post	2.81	.82	3.00	.93	–.85	61
20. I can relate the learned words to my life experiences.	Pre	2.69	.74	2.55	.96	.65	61
	Post	2.72	.85	2.94	.96	–.95	61
21. To enhance word memory, I would use the new words to do sentence making practice after class.	Pre	2.34	.79	2.52	1.06	–.73	61
	Post	2.50	.88	2.65	1.11	–.58	61
22. To learn new words, I would spend time reading English texts.	Pre	1.97	.86	2.39	1.05	–1.73	61
	Post	2.56	.84	2.81	.91	–1.11	61
23. I like to use the learned words to talk to friends.	Pre	2.69	.78	2.48	1.00	.91	61
	Post	2.87	.89	2.38	.83	2.29*	61
24. I can make up a story by using the words I learned.	Pre	2.16	.81	2.23	.92	–.32	61
	Post	2.19	.74	2.39	.84	–1.00	61
25. I often actively observe and modify my vocabulary learning.	Pre	2.44	.80	2.65	.99	–.92	61
	Post	2.56	.80	2.74	.97	–.80	61

Note. Pre = pretest; Post = posttest.

*$p < .05$

(3) Perceptual Changes of Word-focused Activities between Groups.

Table 18 shows the results of learners' responses to the word enhancements.

Table 18

Comparison of Participants' Perceptual Changes of Word-focused Activities between Groups

Question Item	Test	IT Group		VE Group		*t*	*df*
		M	*SD*	*M*	*SD*		
26. I think doing vocabulary activities can increase my interest in learning English vocabulary.	Pre	2.88	.91	3.03	.85	–.71	61
	Post	2.97	.70	3.13	.99	–.75	61
27. I think doing vocabulary activities can deepen my impression of the words.	Pre	2.75	.84	2.97	.84	–1.03	61
	Post	3.16	.52	3.16	.86	–.03	61
28. I think doing vocabulary activities can help me learn words.	Pre	2.97	.65	3.26	.63	–1.79	61
	Post	3.09	.69	3.16	.86	–.35	61
29. I think it is difficult to finish vocabulary activities.	Pre	2.38	.55	2.35	.80	.12	61
	Post	2.50	.57	2.68	.91	–.93	61
30. I liked the vocabulary activities provided in class.	Pre	2.88	.71	2.94	.77	–.32	61
	Post	2.72	.85	2.87	.89	–.70	61
31. I think doing vocabulary activities can increase my interest in speaking English.	Pre	2.59	.91	2.87	.72	–1.34	61
	Post	2.53	.88	2.84	.82	–1.43	61
32. I think doing vocabulary activities can help me memorize new words.	Pre	2.66	.76	2.71	.90	–.26	61
	Post	2.91	.78	3.06	.85	–.77	61
33. I can understand word usages from the vocabulary activities.	Pre	2.84	.68	3.10	.65	–1.51	61
	Post	2.88	.61	3.03	.84	–.86	61
34. I can practice using English from the vocabulary activities.	Pre	2.75	.76	2.97	.75	–1.14	61
	Post	2.75	.88	2.87	.96	–.52	61
35. I think doing vocabulary activities can build up my confidence in learning English.	Pre	2.63	.87	3.00	.78	–1.80	61
	Post	2.69	.69	2.97	1.02	–1.28	61

Note. Pre = pretest; Post = posttest.

As shown in Table 18, for the vocabulary activities provided in each group, the IT group responded positively to most of the questions while the VE group gave lower scores to most question items in the posttest. Since some negative results were found, the mean score changes are worth further understanding. Firstly, for whether the word-focused activities could help participants learn words (Item 28), the mean score in the IT group ($\overline{X}$ = 3.09) was higher in the posttest, suggesting that learners held supportive attitudes of interactive tasks as post-reading vocabulary enhancement. However, the VE group responded negatively to the vocabulary exercises (Mean score decreasing to 3.16), which implies that these exercises may not be an effective way to enhance learners' lexical improvement.

Second, concerning whether learners liked the activities or not (Item 30), the mean score in the IT group decreased from 2.88 to 2.72, and the VE group responded similarly to this question, from 2.94 in the pretest to 2.87 in the posttest. Since both groups gave lower scores after the experiment, this implies that the activities in both groups may not be engaging to some of the learners, though they thought the activities were effective in deepening their impression of the words (Item 27).

In a similar vein, for increasing learners' interests in speaking English (Item 31), both groups consistently did not think the activities could arouse their interest in speaking English. For the IT group, the mean score decreased a little from 2.59 to

2.53 while the VE group decreased from 2.87 to 2.84. The mean scores reduced in the posttest for both groups, suggesting that these word-focused activities may not have been appealing as an encouragement to speak English.

Moreover, learners' responses in the VE group to some question items were not as positive as those in the IT group. For whether learners could understand the word usages from the activities (Item 33), the mean score in the VE group decreased from 3.10 to 3.03, but in the IT group, there was a small increase, from 2.84 to 2.88. As to whether learners could practice using English from the vocabulary activities (Item 34), the mean score in the VE group similarly dropped from 2.97 to 2.87, while there was no mean score change in the IT group. For learners' confidence building in learning English (Item 35), learners in the IT group responded positively in the posttest ($\overline{X}$ = 2.69), with a slightly higher mean score increase ($\overline{X}$ = 2.63 in the pretest), whereas learners in the VE group addressed a lower mean score in the posttest ($\overline{X}$ = 2.97) than they did in the pretest ($\overline{X}$ = 3.00).

Based on the results above, it is suggested that the interactive tasks may be beneficial in helping learners practice using English and boosting their confidence in learning English.

Comparison of Learners' Attitude Changes within the Groups

In addition to investigating the attitude changes between the two groups, further analysis was conducted, to discover how each group changed their learning attitudes throughout the experiment. Table 19 displays learners' responses to the attitude questionnaire in three vocabulary learning domains: cognition and affection, behaviors, and learners' perceptions of the post-reading word-focused activities.

Table 19
Comparison of Learners' Vocabulary Learning Attitude Changes in Each Section within the Groups

Section	Pretest		Posttest		*t*	*df*
	M	*SD*	*M*	*SD*		
Section 1 (Q1~Q15) Cognitive & Affective Learning						
IT Group	39.81	5.89	41.09	4.86	.95	62
VE Group	42.51	5.09	43.54	6.85	.67	62
Section 2 (Q16~Q25) Behavioral Learning						
IT Group	26.31	5.86	24.31	5.42	1.43	62
VE Group	28.00	7.23	25.68	6.90	1.29	62
Section 3 (Q26~Q35) Word-focused Activities						
IT Group	27.43	4.66	28.06	5.35	.49	62
VE Group	29.09	4.65	29.77	6.82	.46	62

As shown in Table 19, for each group's attitude changes throughout the experiment, no significant difference was found in the above three sections. This shows that the two word-focused activities (IT and VE) had no striking influence on learners' responses to these three domains of vocabulary learning attitudes. As well, a further item of analysis may display a clearer picture of each group's responses to every question. Results are shown in Tables 20 to 22.

(1) Cognitive and Affective Attitude Changes within the Groups.

Table 20 provides a comparison of each group's cognitive and affective attitude changes before and after the experiment.

Table 20
Comparison of Participants' Cognitive and Affective Vocabulary Learning Attitude Changes within the Groups

Question Item	Group	Pretest		Posttest		*t*	*df*
		M	*SD*	*M*	*SD*		
1. I think that learning English vocabulary is important to English learning.	IT	3.25	.84	3.38	.66	–.66	62
	VE	3.52	.68	3.39	.84	.66	60
2. I feel interested when I learn English vocabulary	IT	2.69	.82	2.81	.78	–.62	62
	VE	2.94	.85	2.94	.96	.00	60
3. I think it is a little difficult to understand the English words said by the teacher.	IT	2.44	.67	2.50	.72	–.36	62
	VE	2.61	.92	2.45	.85	.72	60
4. I think using learned words to communicate with others is important.	IT	2.91	.93	3.00	.76	–.44	62
	VE	3.13	1.02	3.19	.87	–.27	60

(table continues)

Table 20 (continued)

Question Item	Group	Pretest		Posttest		*t*	*df*
		M	*SD*	*M*	*SD*		
5. I think reading more English texts can enlarge my vocabulary size.	IT	2.81	1.03	2.81	.90	.00	62
	VE	3.19	.87	3.16	.93	.14	60
6. When I read English texts, I want to learn the new words as soon as possible.	IT	2.41	1.04	2.69	.93	–1.13	62
	VE	2.55	.85	2.87	.96	–.14	60
7. When thinking of learning new words, I feel very happy.	IT	2.22	.87	2.25	.72	–.16	62
	VE	2.42	.89	2.55	.85	–.59	60
8. I feel nervous when I learn new words.	IT	2.06	.76	2.22	.75	–.83	62
	VE	2.16	.86	2.58	.92	–1.85	60
9. I often feel bored when thinking of learning new words.	IT	2.34	.79	2.47	.84	–.61	62
	VE	2.26	.97	2.48	.85	–.98	60
10. I feel troubled because I often forget the words I learned.	IT	2.91	.93	2.81	.97	.39	62
	VE	3.03	.88	2.97	.91	.28	60
11. It doesn't matter if I cannot speak English words.	IT	2.28	.92	2.25	.84	.14	62
	VE	1.94	.89	2.13	1.02	–.79	60
12. I like the teacher's in-class vocabulary instruction.	IT	2.94	.76	3.00	.84	.76	62
	VE	3.00	.63	3.39	.67	–2.34*	60
13. I like the supplementary information on word usage provided by teachers.	IT	3.06	.72	2.94	.76	.68	62
	VE	3.19	.65	3.10	.94	.47	60
14. I think the provided sentence examples can help me learn new words.	IT	3.09	.73	3.06	.67	.18	62
	VE	3.16	.69	3.19	.79	–.17	60
15. I like the in-class materials or worksheets provided by the teacher.	IT	2.66	.70	2.84	.72	–1.05	62
	VE	2.87	.96	2.97	1.02	–.39	60

*$p < .05$

As can be seen in Table 20, learners' responses to Questions 1~15 had obvious mean score changes throughout the experiment. In the IT group, learners addressed higher scores to most of the question items. They felt less troubled in remembering the learned words (Item 10) and tended to realize the importance of their ability to speak English words (Item 11), because the mean scores were lower in these two negative question items. But in question item 5, they held the same attitude to the reading text as a way of enlarging their vocabulary size. This may suggest that other word-enhancements, aside from reading only, might complement junior high school learners' lexical growth. As for the in-class supplementary word information (Item 13), both groups addressed lower mean scores in the posttest, indicating that more adjustments should be made in presenting word knowledge for language learners.

In the VE group, learners also held positive attitudes to most of the question items, and question 12 even reached a significant difference ($t = –2.34$, $p < .05$). It seems that learners in the VE group showed a significant preference for the vocabulary instruction after the experiment. This corresponds to the results that they thought the provided sentence examples were helpful to learn new words (Item 14) and liked the in-class materials or worksheets (Item 15). As for other attitude changes, first, the VE group felt less frustrated in understanding the English words provided by the teacher (Item 3) since the mean score decreased in this negative question item, and

second, similar to the IT group, the VE group also felt less troubled in keeping the learned words in mind (Item 10). It may be inferred that both the interactive tasks and vocabulary exercises were effective vocabulary enhancements for learners.

However, different from the IT group, there was no attitude change concerning learners' interests in English vocabulary (Item 2). This indicates that learners in the VE group, in the posttest, though obtaining a higher mean score, did not have positive responses on learning interest. Besides, learners in the VE group had lower mean scores on question items 1, 5, and 13 in the posttest. They thought vocabulary was less important in learning English (Item 1), degraded the role of reading texts as a means of building up vocabulary size (Item 5), and disliked the supplementary word information in class (Item 13). Judging from this, it can be inferred that the in-class word knowledge instruction may require further modification for language learners.

(2) Behavioral Attitude Changes within the Groups.

Table 21 lists a comparison of behavioral changes within the groups. As can be seen, in the IT group, learners responded positively to all the question items in the posttest, and four of the items reached a significant difference in the posttest (Items 16, 17, 18, and 22). First of all, for whether learners would encourage themselves to learn more English vocabulary (Item 16), the significant level was at –2.43 ($p < .05$),

Table 21

Comparison of Participants' Behavioral Vocabulary Attitude Changes within the Groups

Question Item	Group	Pretest		Posttest		*t*	*df*
		M	*SD*	*M*	*SD*		
16. I often encourage myself to learn more English vocabulary.	IT	2.28	.89	2.78	.75	–2.43*	62
	VE	2.68	.79	2.97	.81	–1.26	60
17. I keep speaking English vocabulary aloud to increase familiarity with the words.	IT	2.50	.88	2.91	.69	–2.05*	62
	VE	2.77	.81	2.97	.95	–.87	60
18. I keep writing English vocabulary to increase familiarity with the words.	IT	2.50	.84	2.91	.78	–2.00*	62
	VE	2.58	.85	2.71	.97	–.56	60
19. I review words I learned before or after the tests.	IT	2.75	.88	2.81	.82	–.29	62
	VE	2.84	.97	3.00	.93	–.67	60
20. I can relate the learned words to my life experiences.	IT	2.69	.74	2.72	.85	–.16	62
	VE	2.55	.96	2.94	.96	–1.58	60
21. To enhance word memory, I would use the new words to do sentence making practice after class.	IT	2.34	.79	2.50	.88	–.75	62
	VE	2.52	1.06	2.65	1.11	–.47	60
22. To learn new words, I would spend time reading English texts.	IT	1.97	.86	2.56	.84	–2.79**	62
	VE	2.39	1.05	2.81	.91	–1.67	60
23. I like to use the learned words to talk to friends.	IT	2.69	.78	2.87	.89	.87	62
	VE	2.48	1.00	2.38	.83	.47	60
24. I can make up a story by using the words I learned.	IT	2.16	.81	2.19	.74	–.16	62
	VE	2.23	.92	2.39	.84	–.72	60
25. I often actively observe and modify my vocabulary learning.	IT	2.44	.80	2.56	.80	–.62	62
	VE	2.65	.99	2.74	.97	–.39	60

*$p < .05$, ** $p < .01$

indicating that learners who received interactive tasks tended to be aware of the important role of vocabulary in English learning and tried to encourage themselves to learn more English words.

Moreover, concerning learning behaviors to increase familiarity with the words (Items 17 and 18), the IT group showed greater willingness to keep reading out (t = –2.05, p < .05) and writing English words (t = –2.00, p < .05) to enhance their vocabulary learning, with the mean scores showing significant difference. For the habit of writing English words (Item 18), the mean score in the IT group ($\overline{X}$ = 2.91) was even higher than that in the VE group ($\overline{X}$ = 2.71), suggesting that the IT group had changed their learning strategies, compared to what they usually did, before the experiment. Finally, concerning word learning from reading (Item 22), the IT group showed that they would like to spend more time reading English texts, displaying a striking effect of the interactive tasks on their active reading (t = –2.79, p < .01).

In the VE group, although learners gave higher scores to most of the questions in the posttest, no significant difference was found throughout the experiment. The mean score of item 23 decreased, indicating that learners who received vocabulary exercises showed less preference for using learned words to talk to friends. To sum up, both the interactive tasks and vocabulary exercises had a better influence on participants' vocabulary learning behaviors, since both groups had supportive

responses in the posttest.

(3) Perceptual Changes of Word-focused Activities within the Groups.

Table 22 displays each group's responses to the word-focused activities. As can be seen, learners in the IT group had higher mean scores on most question items, indicating that they held positive attitudes to the interactive tasks. For whether the word-focused activities could deepen learners' impression of the words (Item 27), a significant difference ($t = –2.32$, $p < .05$) was found after the experiment. This shows that doing these enhancing tasks may be an effective way of facilitating their learning.

However, for the vocabulary activities provided in each group, some negative results were found. In the IT group, first, no attitude change was found in question item 34, which implies learners did not think they could practice using the target words from the vocabulary activities. Second, concerning whether learners like the activities or not (Item 30), the mean score in the IT group decreased; similarly, the interactive tasks may not be helpful in triggering their interest in speaking more English (Item 31), since lower mean scores were also found in the posttest.

In the VE group, more than half of the question items were assigned lower mean scores, which indicates that doing vocabulary exercises might not be the best way to enhance learners' word acquisition. As shown in Table 22, learners showed less preference for these activities (Item 30) and did not think the vocabulary

exercises could arouse their interest in speaking English (Item 31). These negative results were also found in the IT group, suggesting that both the IT and VE enhancements may not have been appealing enough to encourage learners to build up their spoken English. Besides, learners in the VE group placed lower value on the vocabulary exercises, since they did not think these activities were helpful for their lexical growth (Item 28) and they could not understand most of the word usages provided from the exercises (Item 33). As for whether learners could practice using English from the vocabulary activities (Item 34), the mean score in the VE group decreased, indicating that learners did not consider the vocabulary exercises to be a way for them to practice using English. Finally, the VE group also devalued the vocabulary exercises because they thought these activities did not help to elevate their confidence in learning English (Item 35). From the results of this section, it seems that learners responded more positively to the interactive tasks than to vocabulary exercises as word-retention enhancements after the experiment.

To sum up, for the changes of learners' attitudes in each group, it appears that the interactive tasks influenced the IT group mostly in their behavioral learning and positive perceptions to the task effectiveness. As for the vocabulary exercises, though the VE group preferred the teacher's instruction and had lexical growth to a certain extent, no further significant influences were found in their learning attitudes.

Table 22

Comparison of Participants' Perceptual Changes of Word-focused Activities within the Groups

Question Item	Group	Pretest		Posttest		*t*	*df*
		M	*SD*	*M*	*SD*		
26. I think doing vocabulary activities can increase my interest in learning English vocabulary.	IT	2.88	.91	2.97	.70	–.46	62
	VE	3.03	.85	3.13	.99	–.40	60
27. I think doing vocabulary activities can deepen my impression of the words.	IT	2.75	.84	3.16	.52	–2.32*	62
	VE	2.97	.84	3.16	.86	–.90	60
28. I think doing vocabulary activities can help me learn words.	IT	2.97	.65	3.09	.69	–.75	62
	VE	3.26	.63	3.16	.86	.50	60
29. I think it is difficult to finish vocabulary activities.	IT	2.38	.55	2.50	.57	–.90	62
	VE	2.35	.80	2.68	.91	–1.48	60
30. I liked the vocabulary activities provided in class.	IT	2.88	.71	2.72	.85	–.89	62
	VE	2.94	.77	2.87	.89	.31	60
31. I think doing vocabulary activities can increase my interest in speaking English.	IT	2.59	.91	2.53	.88	.28	62
	VE	2.87	.72	2.84	.82	.17	60
32. I think doing vocabulary activities can help me memorize new words.	IT	2.66	.76	2.91	.78	–1.31	62
	VE	2.71	.90	3.06	.85	–1.59	60
33. I can understand word usages from the vocabulary activities.	IT	2.84	.68	2.88	.61	–.19	62
	VE	3.10	.65	3.03	.84	.34	60
34. I can practice using English from the vocabulary activities.	IT	2.75	.76	2.75	.88	.00	62
	VE	2.97	.75	2.87	.96	.44	60
35. I think doing vocabulary activities can build up my confidence in learning English.	IT	2.63	.87	2.69	.69	–.32	62
	VE	3.00	.78	2.97	1.02	.14	60

*$p < .05$

CHAPTER 5

DISCUSSION

The preceding chapter presented the results of junior high school (JHS) learners' vocabulary growth under the post-reading interactive tasks (IT) and vocabulary exercises (VE) conditions. Results indicated that learners' vocabulary development benefited strongly from the interactive tasks on both receptive and productive word knowledge, and that learners experienced certain attitude changes toward vocabulary learning. This chapter draws upon the findings to answer the four research questions of the present study.

Effects of Interactive Tasks on Vocabulary Gains

The first result of the study showed that students in the post-reading interactive tasks (IT) group and vocabulary exercises (VE) group both gained certain lexical growth in the target words, indicating that reading supplemented with related word-enhancing activities could facilitate learners' target vocabulary acquisition (Stroller & Grabe, 1993). Then, as revealed in Tables 10 and 11, students receiving IT instruction outperformed those who received VE instruction in the posttest. This finding confirms previous research that, whereas the VE enhancement resulted in modest lexical growth, the IT enhancement resulted in superior gains in the target

vocabulary (Atay & Kurt, 2006) and helped students gain more receptive and productive knowledge of the target words, especially building up their contextual word knowledge.

Higher Learner Involvement in the Vocabulary Interactive Tasks

The vocabulary acquisition for both groups might be attributed to several reasons. As a whole, although the IT and VE groups were both exposed to each target word four times in the class instruction (one in the reading text, the other three in the interactive tasks for the IT group and in the vocabulary exercises for the VE group), participants experienced different levels of word processing, since these multiple exposures to the target words entailed degrees of learner involvement.

For the first word encounter, both groups met the target word in the reading context and also received vocabulary instruction from the same teacher. They guessed the word meaning from the context, and the contextual knowledge could be connected to the knowledge learners already had. This is the most basic and important strategy for word learning (Nation, 2001), but it can result in wrong inferences (Li, 1988) especially for unsuccessful learners. To make sure learners had a correct understanding of the target words, the teacher provided supplementary word knowledge, such as parts of speech, usages, and example sentences. Learners passively received target word information, and no further word processing was

involved.

For vocabulary enhancement, the other three word encounters were incorporated in each group's post-reading word-focused activities. The IT group completed three interactive tasks, while the VE group finished three vocabulary exercises. The first word-focused activity in both groups was a matching exercise. For learners of English, picture-word matching (as in the IT group) is considered more useful than definition-word matching (VE group) in terms of establishing word form and meaning connection (Lan, 2005). Once the link is easily constructed, word acquisition is better facilitated among learners.

For the remaining two word encounters, both groups used the target words to complete two sentence-level activities. In the IT group, students completed a dialogue and did a survey (opinion-gap task), where they interacted with their partners, and speaking of English in dialogue was thus encouraged. This peer interaction could render higher learner involvement and is believed to promote EFL learning (Kim & McDonough, 2011). Certain types of task may draw out more collaborative interaction, which would help learners retain and elaborate on the target words. Words that were negotiated in an oral activity could be acquired better than words without negotiation of meaning (Ellis, et al., 1994; Newton, 1995). As for the VE group, however, learners worked on exercises like unscrambled sentences and sentence

making. While doing these exercises, learners were less involved in processing the target word meanings, but more time was spent on the words' syntactic properties like grammar (Kargozari & Ghaemi, 2011).

Interactive Tasks with Three Steps for Word Learning

As a matter of fact, it was not surprising that the IT group performed significantly better than the VE group in the posttest. The interactive tasks were contextualized for learners to notice, retrieve, and use the target words. These three steps are crucial for a word to be learned (Nation, 2001). The first activity, picture-word matching, elicited noticing of the target words, which is essential to establish form-meaning links in an easier way. The second activity, dialogue-completing, evoked learners' retrieval of word meaning from the context, and tapped into their receptive knowledge, which further encouraged learners to use the target words practically, in both written and spoken forms. When trying to figure out an appropriate word to fix in the dialogue, learners paid attention to the words in the set context, with immediate opportunities to use them in communication (Newton, 2001). As for the last activity, opinion-gap tasks, learners were encouraged to express their opinions or recall their personal experiences by using the target words. This tapped into learners' knowledge to use the new words productively.

As for the VE group, however, the vocabulary exercises remained at the

sentence level, with fewer context clues, no word negotiation or opinion exchange. Learners just experienced noticing and using the target words, and this may have had a less powerful influence on word learning.

Summing up, it could be inferred that the interaction and contextualized activity required in the IT enhancement not only engaged learners in different levels of learner involvement but also provided insights for reexamining the task types' effects on learners' performance, since some work may elicit deeper mental processing of words than other work (Watanabe & Swain, 2007).

Effects of the Interactive Tasks on Vocabulary Recognition and Production

In respect of students' receptive and productive word knowledge, as shown in Table 12, the IT enhancement demonstrated significantly greater effectiveness than the VE enhancement. To further examine learners' performance on the four kinds of vocabulary assessment (see Table 13), both word-focused activities were effective in building up learners' basic word knowledge (L1 translation and word spelling), whereas the IT group significantly outperformed the VE group on contextual receptive and productive lexical knowledge (multiple-choice questions and filling-in blanks).

A partial explanation may lie in the input variable (available knowledge for

learners) in the series of word-focused activities. The provision of rich contexts in the IT group could situate students in a more natural setting and activate their context-related knowledge (Kim & McDonough, 2011), while the single sentence exercise in the VE group may be restricted to the sentence level in word acquisition. As Skehan, Foster, and Mehnert (1998) have pointed out, more contextual support from the tasks could influence learners' performance in task-based activities, and contextualized tasks could have a better influence on word acquisition (Stahl & Fairbanks, 1986).

For contextualized tasks provided in the IT group, the dialogue-completing task could enhance learners' contextual knowledge of the target words, and through role playing, the verbal aspects of word learning could help learners to develop communicative competence in listening and responding. These learned concepts of target words can be gathered together for practical experiences. In contrast, in the VE group, without sufficient contextualized activities, learners did the unscrambled sentence exercises, which depended on grammatical competence rather than contextual word retrieval for better consolidation of lexical knowledge and practical word use. Learners may thus fail to be involved in deeper mental processing in acquiring the target words.

Besides, given the density of the negotiation activity, the opinion-gap tasks in

the IT group were more personalized, tapping into the interaction of learners' feelings, ideas, and personal experiences. While completing the tasks, learners presented their opinions and demonstrated reasoning ability, which is a kind of cognitive demand that would "generate negotiation of meaning sequences with significantly higher density" (Martyn, 2001, as cited in Nunan, 2004, p. 90). Learners were then put in more challenging communicative situations. With such "higher cognitive demand and more complex communication" (Nunan, 2004, p. 90), opinion-gap tasks would facilitate more word learning than the other tasks or exercises in the present study.

Effects of Interactive Tasks on Vocabulary Knowledge Changes

To accurately display learners' qualitative vocabulary gains, the present study compared the effectiveness of post-reading interactive tasks and vocabulary exercises on the changing distribution of lexical knowledge acquisition, as shown in Table 14. In accord with the findings in the previous sections, the IT group acquired more target words than the VE group in the posttest. A higher percentage of fully known status was exhibited in the IT group, in approximately half of the students' responses, whereas this status was only demonstrated in one-third of the learners' responses in the VE group, leaving a third of words still unknown. The finding implies that the interactive tasks had a greater effect than the vocabulary exercises in boosting

learners' receptive and productive knowledge status. One possible reason for the result could be that the interactive tasks encompassed multiple repetitions and exposures to the target words in different contexts; this plays a significant role in vocabulary acquisition (Stahl & Fairbanks, 1986), and these higher levels of word processing tasks could involve learners in developing abundant vocabulary depth, causing more correct responses to both the receptive and productive vocabulary knowledge, with higher scores in word gains.

Even if the IT enhancement led to greater vocabulary gains in both receptive and productive knowledge, learners in the VE group still had acquired a certain number of the target words. As displayed in Table 14, the VE group yielded a slightly greater percentage of partially known words (20.1% in words only receptively known and 14.5% in words only productively known) than did the IT group (18.9% in words only receptively known and 12.6% in words only productively known). The receptive knowledge here, referred to learners' ability to provide Chinese equivalents to the target words or to choose the correct word in multiple-choice questions, tapping learners' semantic knowledge of the target words. Likewise, productive knowledge referred to learners' ability to provide correct spellings or fill in the blanks with the correct target words, examining learners' orthographic knowledge. The vocabulary exercises could bridge form and meaning links, and learners in the VE group still

could acquire both semantic and orthographic knowledge of the words; this echoes Min's (2008) and Lai's (2009) research. However, in the present study, the effectiveness of vocabulary exercises was challenged, since the interactive tasks seemed to demonstrate higher levels of word processing as post-reading enhancements.

Learners' Responses to the Vocabulary Learning Attitude Questionnaire

In addition to comparing the two word-enhancing conditions (IT and VE) on learners' word acquisition, the present study also investigated learners' attitude changes toward vocabulary learning and examined specifically whether their attitudes varied across topic areas (cognitive and affective domains, behaviors, and word-focused activities). The results were in accord with previous research in the following aspects, regardless of different language focus and learning contexts.

Learners' Attitudes toward Vocabulary Learning

As can be seen in Table 16, both the IT and VE groups had similar views on vocabulary learning, in the following aspects. For the positive attitudes, they both felt happy when thinking of learning new words (Item 7), felt less troubled in memorizing the words (Item 10), realized the importance of using learned words for communication (Item 4), and put more emphasis on their English speaking abilities

(Item 11). However, for the negative attitudes, learners expressed their nervousness (Item 8) and boredom (Item 10) when learning new words. These results may be attributed to learners' proficiency levels, learning motivations, and their perceptions of learning English. Although learners had diverse affective attitude changes in vocabulary learning, both the IT and VE enhancements still benefited learners with lexical growth.

As for participants' different views on vocabulary learning, several interesting findings were worthy of further discussion. Learners in the IT group tended to recognize the role of vocabulary in acquiring a language. They started to realize that vocabulary is an important element in learning English (Item 1) and felt more interested in learning English vocabulary (Item 2), while the VE group degraded the importance of vocabulary and displayed no attitude changes concerning their learning interests. A possible explanation for these group differences is that when the IT group practiced using the target words or expressed their opinions during the interactive tasks, they may have noticed the gap between their thoughts and their actual production (Swain, 1995; 2005). When learners suffer from such language breakdowns, they may tend to put more emphasis on the practical use of vocabulary and further realize that vocabulary is the essence of language learning. Through interactive tasks, oral production may help them internalize the target words and then

facilitate their word acquisition. Since learners had successful word gains from the task, they may have tended to feel more interested in learning English words.

Learners' Attitudes toward English Speaking Ability

Although the IT and VE groups both recognized the importance of using vocabulary for communication (Item 4), they had different views on their English speaking abilities. As can be seen in Table 17, when asked if they liked to use the learned words to talk to friends (Item 23), the IT group showed a striking preference for this way of learning, since a significant attitude change was found between the groups. One possible reason could be that the interactive tasks offer learners more chances to practice speaking English, which could be appealing to EFL learners who do not have sufficient opportunities to use English for communication (Atay & Kurt, 2006).

Learners' Attitude Changes to Their Learning Behaviors

Throughout the experiment, both the IT and VE groups had similar attitude changes concerning their vocabulary learning behaviors. Generally speaking, both groups showed a willingness to relate the target words to their life experiences (Item 20), practice doing sentence-making exercises to enhance their word memory (Item 21), and make up a story by using the target words (Item 24). They would also review words before or after the tests (Item 19) and actively observe and modify their ways

of learning (Item 25) (see Table 17).

Aside from this, the present study also found that learners in the IT group even had several significant behavioral changes throughout the experiment. For example, the IT group reported that they would encourage themselves to learn new words (Item 16), and to some degree, to develop habits of memorizing words, such as keeping on speaking words aloud (Item 17) and writing English words (Item 18). It is likely that learners considered interactive tasks to be better ways of negotiating meaning (Long, 1996) and enhancements that elevated their learning motivation and self-esteem (Slavin, 1995), given the peer feedback and pressured output generated in the tasks (Swain, 1995). Moreover, another significant finding showed that the IT group would spend time reading English texts to learn new words (Item 22). It seems that wide reading, word-rich contexts, and multiple exposures to the words, can be effective for learners' lexical growth (Blachowicz & Fisher, 2010; Krahsen, 1993). However, in regard to question item 5, the IT group had no attitude change concerning reading more texts to increase their vocabulary size. Such ambiguous findings could be further examined in future research.

Learners' Attitudes toward Vocabulary Instruction

For vocabulary instruction, although the teacher provided the same vocabulary defining and explaining procedures in both groups, learners held different attitudes

toward it. To begin with, although the IT group responded positively to the teacher's in-class vocabulary instruction (Item 12), it was surprising that the VE group showed a significant preference for this. Possible reasons might be that learners in the VE group liked the in-class materials or worksheets (Item 15), and while doing the exercises, some top students tried very hard to make novel and interesting sentences. This helped them appreciate the language and creativity. Besides, the VE group felt that it was less difficult to understand the teacher's spoken English words (Item 3) and thought that the provided sentence examples could help them learn new words (Item 14), while in the IT group, negative responses were found to the above two question items (Items 3 and 14; see Table 16).

However, concerning the supplementary word knowledge provided by the teacher (Item 13), both groups scored lower means on this item. The researcher reexamined the instructions and drew some possible reasons for this. First, for some students, the learning load may be too much for them to acquire the target words. If they had received too much information in short time, they may not have had enough time or opportunity to process the target words. Second, the provided information may not have been interesting enough to draw the learners' attention. It can be inferred that individual learner differences may result in such attitude changes with regard to learners' learning styles, strategies, and affective factors while learning the

words (Ellis, 1994; Robinson, 2002; Skehan, 1998).

Learners' Responses to the IT and VE Enhancements

For the word-focused activities, both the IT and VE groups had similar views toward most of the question items (see Table 18). For positive attitudes, they both agreed that doing these word-enhancing activities could increase their interest in learning English vocabulary (Item 26), helping their word memory (Item 32), and further deepening their impression of the target words (Item 27). This implies that both enhancements had exerted a certain beneficial influence on learners' word acquisition. This is in accord with the claim that reading together with other word-enhancing activities can facilitate word learning (Laufer, 2003; Nation, 2001; Stoller & Grabe, 1993; Paribakht & Wesche, 1997).

However, for negative attitudes, both groups found it difficult to complete these two kinds of word-focused activities (Item 29), showed less preference for the activities (Item 30), and did not think their interests in speaking English were enhanced (Item 31). The reason for these results might be that for some learners, the task difficulty was a little beyond their abilities, so that they felt frustrated while doing the activities. As can be seen in Table 22, the VE group obviously felt it was a little difficult to understand word usages from the vocabulary exercises (Item 33), and this may have undermined their confidence-building in learning English (Item 35).

For the IT group, two interesting things are worth mentioning. First, a significant attitude change was found concerning the effects of interactive tasks in improving learners' word acquisition (Item 27); second, learners thought doing the tasks could build up their confidence in learning English (35). Two possible reasons might account for these positive attitude changes. For one, the IT enhancement involved learners in a more focused mental processing of words. Tasks with more involvement would benefit learners with better word acquisition and retention (Laufer, 2003). Learners were thus impressed by the target words during the task completion. For another reason, if words undergo meaning negotiation in an interactive task, they will be retained better than those are not negotiated (Newton, 1995). Learners can thus remember the words more easily through oral activities, control the task/situation, and organize their own actions or actions of other interlocutors. When learners interact with more capable learners, the content or ideas in the negotiation will then be internalized (Vygotsky, 1978).

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CHAPTER 6

CONCLUSION

The present study investigated the effects of post-reading word-focused interactive tasks on junior high school (JHS) students' vocabulary acquisition, and their attitude changes toward word learning. This chapter summarizes the major findings, draws conclusions in the light of the foregoing results and discussions, considers some pedagogical implications, some limitations of the study, and offers suggestions for future research.

Summary of the Study

Numerous researchers have highlighted the importance of post-reading word-focused activities in drawing learners' attention to ESL/EFL vocabulary learning (Laufer, 2003; Paribakht & Wesche, 1997). This study is in accord with previous research in the following findings. First, both the interactive tasks (IT) and vocabulary exercises (VE) contributed to word gains, but reading supplemented with IT enhancement demonstrated superior effectiveness to VE enhancement for lexical growth. Learners who completed interactive tasks acquired more words than those who did the vocabulary exercises, which chimes with Atay and Kurt's research (2006). Second, in terms of vocabulary knowledge, the IT enhancement had greater

reinforcing effects in facilitating target word recognition and production, and further provided learners with more contextual support during the tasks. Learners then obtained higher scores in contextualized vocabulary assessment, such as multiple-choice questions and filling-in blanks. Third, considering the quality of learners' vocabulary knowledge, the IT enhancement elicited more correct responses on both receptive and productive target word knowledge. The percentage of fully known status words surpassed the target words of partial knowledge status in the IT condition.

Different from previous studies on post-reading word-focused activities in Taiwan (Cheng, 2008; Lai, 2009; Min, 2008), the present study took learners' attitude changes toward their vocabulary learning into consideration, and probed their perceptions of the interactive tasks and vocabulary exercises. To be more explicit, the interactive tasks, with their collaborative interaction, could create interest among EFL learners who seldom had opportunities to use English in daily life, and learners thought the interactive tasks could deepen their impression of the target words. After the experiment, learners showed a preference for encouraging themselves to read more texts to acquire new words.

Pedagogical Implications

Several pedagogical implications can be drawn from this study. First, given the fact that the post-reading interactive tasks have shown a clear connection between collaborative interaction and vocabulary acquisition, it may be a recommended option for EFL teachers in Taiwan to incorporate the intervention of post-reading interactive tasks for learners' lexical growth. The tasks adopted in the present study were matching, dialogue-completing, and opinion-gap activities, which led to the sharing of learners' ideas and certain language outcomes to increase learners' verbal exposures to the target vocabulary. Teachers may draw on the results to design or create more interactive tasks if other specific language outcomes are desired.

However, the study does not disregard the educational value of learning words from reading. After all, reading is the primary source for lexical development (Stoller & Grabe, 1993). It has the advantage of providing sufficient context to introduce new words, and expands knowledge of a word's generative use through comprehensible texts. In other words, reading is a useful learning experience for increasing learners' vocabulary knowledge and reconstructing new meaning associations when learners meet the same word again in different contexts. Thus, for second language learners, reading has also been considered one of the main ways to acquire new vocabulary (Krashen, 1993).

But in spite of reading being the generally-known resource for vocabulary learning, in an EFL-instructional context like Taiwan, where students lack sufficient exposures to English vocabulary and have to acquire new words for school tests in a short period of time, the study points out a more facilitative and effective approach for vocabulary learning. With reading plus word-enhancing activities, learners' vocabulary acquisition is still better reinforced, especially in contextual receptive and productive word knowledge. For teachers, therefore, it is suggested that reading texts should be accompanied with interactive tasks, to make for well-balanced EFL vocabulary instruction.

As for the second pedagogical implication, it is worth mentioning that students completing the interactive tasks outperformed those who finished vocabulary exercises, indicating that tasks with more context support could help learners build up contextualized knowledge of the target words. The findings in the present study emphasize the importance of vocabulary use in contexts (Nation, 2001), and with this intention, EFL teachers can provide learners with more written or spoken contexts in the tasks, so as to expand learners' multiple exposures to the target vocabulary (Stoller & Grabe, 1993).

Finally, it may be worth noticing that the tasks adopted in each class period were focused on four to five words. It would be desirable for teachers to incorporate

the tasks and select several important words to be emphasized if there is time left after the main vocabulary instruction. When learners are exposed to these types of tasks in the target language, they can assign semantic knowledge to the expressions used for thinking in English, which in the long run could prepare themselves to interact with native speakers.

Limitation of the Study

Although the post-reading interactive tasks may be effective for facilitating EFL learners' vocabulary acquisition, the study had some limitations that should be acknowledged. First, with regard to the instruments, the study used multiple-choice questions as part of the vocabulary tests assessing learners' receptive vocabulary knowledge. There were four choices from which learners had to choose the best one that fitted the given context; this way however, may encourage guessing among learners to a certain extent. As for testing word productive knowledge, the use of letter cues in filling-in-the-blanks sections may have led students only to think of several qualified target words, prompting them to write down the correct answer quickly, without further thinking or judgment. Due to the test format of the present study, the learnability of the target words in respect of more generative word use has not therefore been reliably detected, necessarily.

Second, despite the fact that the interactive tasks were designed for learners to practice the target language, some weak learners would sometimes shift to their first language (L1) during the tasks. Although the L1 is widely deemed a useful cognitive tool in the learning of a second language (L2) in both foreign language contexts (Alley, 2005; Centeno-Cortés & Jiménez, 2004) and in immersion classrooms (Muñoz, 2005; Swain & Lapkin, 2000), it is still hoped that weak learners would try to speak out the target language. Otherwise, this may influence the value of the interactive tasks engaged in, and reduce their opportunities to speak English in this study.

Suggestions for Future Research

Since this study focused on only three types of interactive task and their effectiveness for JHS learners' vocabulary acquisition, future studies need to incorporate other interactive tasks, such as information-gap or problem-solving activities on word learning, or to compare the effects of each task on vocabulary acquisition or, further, retention, among learners with diverse levels of English proficiency.

In addition, although the current study has assessed learners' receptive and productive vocabulary knowledge in four kinds of measurements, mainly on word meaning and form, other knowledge aspects of a word, such as morphological

derivations, syntactic properties, and oral pragmatic uses still remain unexamined. Future research is therefore necessary to reflect these vocabulary knowledge components by combining quantitative and qualitative analyses and providing EFL teachers with more insights into designing and incorporating tasks that maximize EFL word learning.

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Appendix A.

Vocabulary Pretest

Class: _____ Number: _____ Name: _____

There are two parts in the test. Follow the instructions to answer the questions.

Part 1:
(1) Translation (20%): Write down the Chinese translation.

1. avoid: _____
2. reason (n.): _____
3. polite: _____
4. plant (n.): _____
5. protect: _____
6. gather: _____
7. heat (v.): _____
8. exist: _____
9. secret (n.): _____
10. language: _____

(2) Spelling (30%): Write down the English counterpart to each item.

1. 無禮的: _____
2. 荒野: _____
3. 行動: _____
4. 法律: _____
5. 海洋: _____
6. 說謊: _____
7. 習慣: _____
8. 掉落: _____
9. 打獵: _____
10. 打破: _____
11. 溪流: _____
12. 尊敬: _____
13. 群體: _____
14. 聰明的: _____
15. 工具: _____

Class: _____ Number: _____ Name: _____

Part 2:

(3) Multiple-choice Questions (30%): Read the sentences and choose the best answer.

( ) 1. When you play basketball, you can't _____ the rules.
(A) plan (B) collect (C) fall (D) break

( ) 2. Jack is not only _____ but also hard-working. He passed the test without any problems.
(A) clever (B) rude (C) difficult (D) dangerous

( ) 3. The farmer works on the farm with a farming _____.
(A) habit (B) law (C) belt (D) tool

( ) 4. Look! There is a _____ of boys dancing in front of the music store.
(A) group (B) wild (C) trip (D) school

( ) 5. Lucy: Hi, Steve. What are you doing these days?
Steve: I am _____ a job.
(A) hunting (B) working (C) looking (D) arriving

( ) 6. The fireman's quick _____ saved many people's lives.
(A) stream (B) action (C) ocean (D) letter

( ) 7. Sally is shy and quiet when we talk about our friends' funny things because she thinks it is _____.
(A) rude (B) free (C) poor (D) busy

( ) 8. Don't believe her. She always _____.
(A) falls (B) lies (C) cries (D) tries

( ) 9. My brother is going to study _____ in Harvard University. That is a famous school in the US.
(A) action (B) manners (C) tools (D) laws

( ) 10. I dream of having a large ship because I want to take a long trip on the _____ some day.
(A) tool (B) floor (C) ocean (D) action

( ) 11. I usually went to bed late when I was a teenager. Now I stop that _____.
(A) dream (B) wish (C) stream (D) habit

( ) 12. Mary helps some poor people and cooks for them. I _____ her for that.
(A) break (B) fight (C) keep (D) respect

( ) 13. There are fewer and fewer lions and tigers living in the _____ because some people kill them for money.

(A) ocean (B) wild (C) home (D) yard

( ) 14. Look! The leaves are _____ in the wind.
(A) painting (B) happening (C) falling (D) lying

( ) 15. We don't have much rain these days. The _____ may dry up.
(A) streams (B) bath (C) party (D) group

(4) Filling-in Blanks (20%): Read the sentences and write down the missing word.

_____ 1. A: Everyone likes Jane. She often says "Thank you" and "Please."
B: Yeah. A p_____e person is welcomed everywhere.

_____ 2. We wear dark glasses to p_____t our eyes from the sun.

_____ 3. You are late today. You have to give the teacher a good r_____n.

_____ 4. On Chinese New Year's Eve, my family g_____r together to have a wonderful dinner.

_____ 5. He can speak five l_____es; for example, Chinese, English, Japanese, and Korean. He is really smart.

_____ 6. The word "bonjour" is not an English word. That is, it does not e_____t in English.

_____ 7. You have to water the flowers because p_____ts can not live without water.

_____ 8. Every day, he goes out early to a_____d heavy traffic.

_____ 9. A: Mom, I want to h_____t the cold milk. Would you like some?
B: Sure. And also one cup for your father.

_____ 10. Don't tell him too much about me. He can not keep a s_____t.

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Appendix B.

Vocabulary Posttest

Class: _____ Number: _____ Name: _____

There are two parts in the test. Follow the instructions to answer the questions.

Part 1:
(1) Translation (20%): Write down the Chinese translation.

1. law: _____
2. rude: _____
3. reason (n.): _____
4. clever: _____
5. break: _____
6. stream: _____
7. wild: _____
8. respect: _____
9. exist: _____
10. habit: _____

(2) Spelling (30%): Write down the English counterpart to each item.

1. 有禮的: _____
2. 聚集: _____
3. 群體: _____
4. 植物: _____
5. 說謊: _____
6. 行動: _____
7. 打獵: _____
8. 語言: _____
9. 秘密: _____
10. 工具: _____
11. 海洋: _____
12. 加熱: _____
13. 掉落: _____
14. 避免: _____
15. 保護: _____

Class: _____ Number: _____ Name: _____

Part 2:

(3) Multiple-choice Questions (30%): Read the sentences and choose the best answer.

( ) 1. It is not _____ to talk on the cell phone loudly on the MRT.
(A) clean (B) polite (C) cold (D) poor

( ) 2. When you ride, you need to wear a jacket to _____ your skin from the sun.
(A) avoid (B) hunt (C) heat (D) protect

( ) 3. People believe that there are still many unknown fishes living in the deep _____.
(A) beach (B) group (C) ocean (D) sidewalk

( ) 4. Not all the _____ in the world do no harm to us. In Africa, some are even men eaters.
(A) plants (B) owners (C) tools (D) secrets

( ) 5. Jolin is holding a concert this afternoon. Many of her fans are _____ around to watch the show.
(A) bringing (B) gathering (C) falling (D) leaving

( ) 6. Don't tell me I am still young. The photos can't _____.
(A) mean (B) heat (C) say (D) lie

( ) 7. A: Do you speak any foreign _____?
B: Yes, I speak English and Japanese.
(A) oceans (B) languages (C) dreams (D) phones

( ) 8. Some animals, like owls and bats, _____ for food at night.
(A) hunt (B) fall (C) lose (D) treat

( ) 9. I am not a fan of parties. In fact, I _____ them as possible as I can.
(A) happen (B) guess (C) gather (D) avoid

( ) 10. A: I want to _____ up some soup for lunch. What do you think?
B: Good! I love Mom's pumpkin soup.
(A) lie (B) grow (C) heat (D) visit

( ) 11. A: Mom, I'm meeting a _____ of friends for dinner tonight.
B: When will you come home?
A: Around 10 o'clock.
(A) group (B) family (C) house (D) tool

( ) 12. Don't just tell me your dreams. You need to put your ideas into _____.
(A) reason (B) answer (C) gold (D) action

( ) 13. Don't tell Mom I have a new watch for her. Let's keep it a _____ first, and then give her a big surprise.
(A) plant (B) secret (C) belt (D) fight

( ) 14. My father is a worker. He brings a box of _____ with him everyday.
(A) tools (B) letters (C) combs (D) oceans

( ) 15. Look! A big rock is _____ from the mountain. Hope no one would get hurt.
(A) avoiding (B) attacking (C) falling (D) trying

(4) Filling-in Blanks (20%): Read the sentences and write down the missing word.

_____ 1. People buy gifts for many r_____ns. For example, I give my mother a dress for her birthday and flowers for Mother's Day.

_____ 2. Mrs. Chen often helps poor people. I r_____t her for what she does.

_____ 3. John has a good studying h_____t. He keeps notes in class.

_____ 4. A: Look! My dog, lucky, can jump, shake hands, and catch a Frisbee.
B: What a c_____r dog!

_____ 5. Many animals in Africa live in the w_____d. They do not live in the house or on a farm.

_____ 6. Dinosaurs lived in the world tens of millions of years ago. They do not e_____t in the world now. We just can see their bones in the museums.

_____ 7. You have to say "please" or "thank you" to people. Don't be a r_____e person.

_____ 8. Kids, play baseball outside, and be sure not to b_____k the windows, OK?

_____ 9. Look! Two children are catching fish in the s_____m. Let's join them.

_____ 10. People have to follow the l_____ws, and the world will be safer.

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Appendix C.

A Questionnaire on Students' Attitudes toward Vocabulary Learning

英文單字學習態度問卷

各位同學好:

這是一份關於英文單字學習態度的調查問卷，目的是想多了解你們對英文單字的學習態度。本問卷採匿名方式進行，請同學跟據事實作答，沒有所謂的標準答案。所得資料僅供個人研究之用，不會公開，請大家耐心作答。謝謝合作!!

國立政治大學英語教學研究所　　指導教授 許炳煌 博士
研究生　許巧筠

請在讀完每一個敘述後，根據你自己目前學習英語單字的情形，圈選最符合自己狀況的選項。

4 = 非常同意	3 = 同意	2 = 不同意	1 = 非常不同意

注意: (1) 請把題目看清楚後再作答，不懂的地方可以問老師。
(2) 問卷作答時間為 20 分鐘，不要漏掉任何一題喔!

第一部分: 我對學習英文單字的看法	非常同意	同意	不同意	非常不同意
1. 我覺得學習英文單字對學英文很重要。	4	3	2	1
2. 我覺得學習英文單字很有趣。	4	3	2	1
3. 我覺得聽懂老師講的英文單字有點困難。	4	3	2	1
4. 我覺得會利用學過的單字來溝通是一件重要的事。	4	3	2	1
5. 我覺得多閱讀英文文章可以增加自己的字彙量。	4	3	2	1
6. 在閱讀英文文章時，我會想趕快學會裡面的新單字。	4	3	2	1
7. 一想到要學新單字，我就會很高興。	4	3	2	1
8. 學新單字時，我會感到緊張。	4	3	2	1
9. 一想到要學新單字，我常感到厭煩無聊。	4	3	2	1
10. 我會因常常忘記學過的單字而感到困擾。	4	3	2	1
11. 我覺得不會開口說出英文單字沒有什麼關係。	4	3	2	1
12. 我喜歡老師課堂上提供的單字教學方法。	4	3	2	1
13. 我喜歡老師課堂上的單字講解方式。	4	3	2	1
14. 我覺得老師課堂上提供的單字例句能幫助學我學單字。	4	3	2	1
15. 我喜歡老師課堂上提供的單字學習教材或學習單。	4	3	2	1

第二部分: 單字學習方法	非常同意	同意	不同意	非常不同意
16. 我常勉勵自己多學英文單字。	4	3	2	1
17. 我會反覆練習**念**英文單字來增加自己的字彙量。	4	3	2	1
18. 我會反覆練習**寫**英文單字來增加自己的字彙量。	4	3	2	1
19. 我會在每次課後或考試前複習之前學過的單字。	4	3	2	1
20. 我會把學到的單字與生活經驗做結合。	4	3	2	1
21. 我會在課後用新學到的單字造句，以加深記憶。	4	3	2	1
22. 我會找機會看英文文章來學新單字。	4	3	2	1
23. 我喜歡用學過的單字和同學交談。	4	3	2	1
24. 我會串連幾個新單字，編成故事以加深印象。	4	3	2	1
25. 我會主動檢視學習單字的情形，並修正自己的學習方法。	4	3	2	1

第三部分: 我對單字練習活動的看法	非常同意	同意	不同意	非常不同意
26. 我認為做單字練習活動，可以增進我學英文單字的興趣。	4	3	2	1
27. 我喜歡做單字練習活動，以加深印象。	4	3	2	1
28. 我認為做單字練習活動能幫助我學會單字。	4	3	2	1
29. 我覺得課堂上的單字練習活動有點難。	4	3	2	1
30. 我喜歡課堂上的單字練習活動。	4	3	2	1
31. 我認為課堂上的單字練習活動可以增進我開口說英文的興趣。	4	3	2	1
32. 我認為做單字練習活動有點無趣。	4	3	2	1
33. 我認為課堂上的單字練習活動可以讓我了解新單字的用法。	4	3	2	1
34. 我能從課堂上的單字練習動中活用英語。	4	3	2	1
35. 我認為完成課堂上的單字練習活動能提升我的自信心。	4	3	2	1

謝謝你的作答!!!

Appendix D.

Suggestions for Vocabulary Learning Attitude Questionnaire Modification

英文單字學習態度問卷專家建議修正

	原本問卷試題	修改及建議
第一部分:		
我對學習英文單字的看法	第 3 題: 我覺得聽得懂英文單字不會很困難。	我覺得**聽懂老師講的**英文單字**有點**困難。
	第 4 題: 我覺得活用單字來溝通是一件重要的事。	我覺得**會利用學過的**單字來溝通是一件重要的事。
	第 5 題: 我覺得閱讀文章可以增加自己的字彙。	我覺得**多**閱讀**英文**文章可以增加自己的字彙**量**。
	第 8 題: 學新單字時，讓我感到輕鬆自在。	學新單字時，**我會感到緊張。**
	第 11 題: 我覺得能開口說英文單字是一件重要的事。	我覺得**不會**開口說出英文單字**沒有什麼關係**。
第二部分:		
單字學習方法	第 17 題: 我會反覆練習說或寫英文單字來增加自己的字彙量。	因建議分為兩題，故改為第 17 題為「我會反覆練習**念**英文單字來增加自己的字彙熟悉度。」而第 18 題為「我會反覆練習**寫**英文單字來增加自己的字彙熟悉度。」
	第 19 題: 我會時常複習之前學過的單字。	我會**在每次課後或考試前**複習之前學過的單字。
第三部分: 我對單字練習活動的看法		無意見。

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Appendix E.

Unknown Words Checklist

各位同學，請你想想是否曾看過下列單字，如果有的話，請打「○」，否則打「x」。如果你知道每個字的意思，請寫出這個單字的中文翻譯。

單字	是否看過?	中文翻譯
1. fall		
2. hunt		
3. avoid		
4. break		
5. hold		
6. understand		
7. gather		
8. heat		
9. protect		
10. lie		
11. exist		
12. follow		
13. mean		
14. plant		
15. stream		
16. dangerous		
17. polite		
18. rude		
19. clever		
20. amazing		
21. cloud		
22. ocean		
23. group		
24. wild		
25. habit		
26. reason		
27. secret		
28. law		
29. action		
30. language		
31. tool		

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Appendix F.

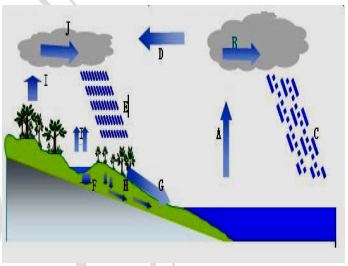
Reading Texts

Reading Topic 1

Rain from the Sky

Rain **falls** from the sky. It gives flowers life and animals water. It becomes **streams**. The streams **gather** to become rivers. And the rivers flow to **oceans**. Water cannot move to higher places. So how does the rain fall down from the sky?

The answer is the sun. The sun **heats** water. Then it becomes vapor. The vapor becomes clouds. The clouds give us the rain. It is a never ending cycle.



Word Bank:
become: 變成　flow: 流動　vapor: 蒸氣　cycle: 循環

What do you know about the reading?

( ) 1. What can't water do?
a. Water can't give plants life.
b. Water can't become vapor.
c. Water can't move to higher places.

( ) 2. What is "**it**" in line 2 in paragraph two (第二段)?
a. Sun.　b. Sky.
c. Water.　d. Cloud.

( ) 3. What does water become when heated?
a. Vapor.　b. Sun.
c. Rain.　d. Sky.

( ) 4. What does the vapor become?
a. Stream.　b. Clouds.
c. Sky.　d. Sun.

Reading Topic 2

Liar, Liar

The Bible says that God forbids men to **lie**. We know lying is bad. But there are many people who lie. People lie for many **reasons**. One may lie to cheat others. Another may lie to keep a **secret**. Or maybe to get away from punishment.

The scary thing is lying can become a **habit**. Then it is difficult to get rid of **it**. Try to remember this—more lies mean less trust.

Word Bank:
Bible: 聖經　forbid: 禁止　cheat: 欺騙
punishment: 懲罰　get rid of: 擺脫　trust: 信任

What do you know about the reading?

( ) 1. What does the Bible say?
a. God forbids you to live.
b. People lie for many reasons.
c. God forbids you to lie.

( ) 2. What is not a reason to lie?
a. To become friends.
b. To cheat others.
c. To get away from punishment.

( ) 3. What is "**it**" in line 2 in paragraph two (第二段)?
a. Secret.　b. Punishment.
c. Habit.　d. Reason.

( ) 4. What is true from the reading?
a. Lying can become a habit.
b. People will trust you more if you lie.
c. We know lying is bad.

Reading Topic 3

The King of the Beasts

A lion is called the king of beasts. Lions are very strong animals. They can **hunt** almost anything. There are some animals they don't hunt. They are elephants, rhinoceros, hippopotamus, and giraffes. These animals are either too big or too strong. Lions can hunt them, but **it** is dangerous.

Lions live in a **group**. People killed many lions. So we can't see many lions in the **wild**. It is time to **protect** them.



Word Bank:
called: 被稱爲　rhinoceros: 犀牛　hippopotamus: 河馬
giraffe: 長頸鹿

What do you know about the reading?

( ) 1. What can you find from the reading?
a. Lions can hunt anything.
b. Hunting elephants is dangerous for lions.
c. Lions live alone.

( ) 2. What did people do to lions?
a. People killed many lions.
b. People kept lions as pets.
c. People don't do anything to them.

( ) 3. What is "**it**" in line 5?
a. A group of lions.　b. Hunting big animals.
c. Protecting them.　d. Calling lions.

( ) 4. What isn't true from the reading?
a. A lion can be seen anywhere.
b. A group of lions can hunt an elephants.
c. A lion is called the king of the beasts.

Reading Topic 4

Crime

Every country has its own **laws**. Laws **exist** to protect people. People must follow the laws.

A criminal is a person who **breaks** them. When a crime happens, the police are called. They investigate what happened. They find out who did it. And they catch the criminal. The police make the world safer. A country would be full of criminals without **them**. And we should **avoid** breaking the laws.

Word Bank:
crime: 犯罪　　investigate: 偵查　　criminal: 罪犯

What do you know about the reading?

( ) 1. Why do governments make laws?
- a. To protect people.
- b. To hide people.
- c. To avoid people.

( ) 2. What don't the police do?
- a. The police investigate the crime scene.
- b. The police catch criminals.
- c. The police make the world more dangerous.

( ) 3. What does the last word "**them**" mean?
- a. Criminals.　　b. The police.
- c. Laws　　d. Crimes.

( ) 4. What is true from the reading?
- a. People must follow the laws.
- b. A criminal is a person who follows the laws.
- c. The police help sick people.

Reading Topic 5

Wise Animals

People are very smart. We know how to use **tools**. We can talk to each other. But how about animals? Is there a **clever** animal?

Chimpanzees are clever animals. They eat **plants**. **They** can use tools to open nuts. Chimpanzees can learn sign **language**. There is a chimpanzee named Washoe. She learned about 150 signs. There is a gorilla called Koko. She learned over 1,000 signs. Koko can understand 2,000 signs. Isn't that amazing?

Word Bank:
Chimpanzee: 黑猩猩 nut: 堅果 sign: 圖示 gorilla: 大猩猩
amazing: 令人驚奇的

What do you know about the reading?

( ) 1. What tells us that chimpanzees are smart?
a. Chimpanzees' ability to use tools.
b. Chimpanzees' ability to learn sign language.
c. All of the above.

( ) 2. What is an example of chimpanzee's tools?
a. Stone. b. Stick.
c. Hammer. d. Axe.

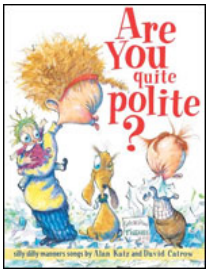
( ) 3. What is "**They**" in line 2 in paragraph two (第二段)?
a. People. b. Tools.
c. Animals. d. Chimpanzees.

( ) 4. What is not an example of a smart animal?
a. Humans. b. Chimpanzees.
c. Gorillas. d. Fish.

Reading Topic 6

Manners

Being **polite** is important. Being polite means you **respect** others. You can be polite with words. You are polite when you say "please," "thank you," and "excuse me." They all mean you think highly of **them**.



You can be polite in **actions**. You are polite when you hold doors for others. A person is **rude** when they disrespects others. A rude person is not welcomed anywhere. If you respect others, they will respect you as well.

Word Bank:
think highly of: 視爲崇高

What do you know about the reading?

( ) 1. How can you get others' respect?
- a. By being famous.
- b. By being powerful.
- c. By respecting others.

( ) 2. What is a polite action?
- a. Ignoring when others call you.
- b. Calling a person names.
- c. Waiting in a line.

( ) 3. What is "them" in line 4 in paragraph one (第一段)?
- a. Polite words.
- b. Other people.
- c. Yourself.
- d. Rude people.

( ) 4. What is not a polite sentence (句子)?
- a. Pass me the salt.
- b. Pass me the salt, please.
- c. Could you pass me the salt?

Appendix G.

Interactive Tasks for Each Reading Topic

Reading Topic 1

Class: Number: Name:

Complete the tasks with your partner.
(請和組員完成下列練習。)

✓ **Part A. Match the word with the picture (圖片配對)**

● ●heat ( )

● ●gather ( )

● ●fall ( )

● ●ocean ( )

● ●stream ( )

a. 再看一次文章，用 1~5 標出單字出現順序，並將數字填在上方括弧中。

b. 唸出文章內含有以上單字的句子。

✓ **Part B. Create a dialogue (自創對話)**

Peter and Sam went to the beach (海邊). Use the following five words to create a dialogue.

gather, ocean, stream, heat, fall

Peter: It's so hot today. Many people come to the beach, too.

Sam: Yeah, the sun is _____.

Peter: Let's _____.

Sam: Sure, why not? Hey, _____.

Peter: Be careful. You _____.

Sam: Don't worry. I _____.

✓ **Part C. Survey (問卷調查，寫下受訪的同學名字和答案。)**

Questions	Name/ Answer
1. What holidays do your family gather together?	/
2. Did you swim in a stream before?	/
3. Where did you ever fall down?	/
4. What is your favorite animal living in the ocean?	/
5. On cold days, how do you make yourself warm or heat the room?	/

Reading Topic 2

Class: Number: Name:

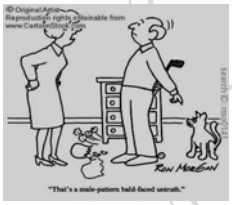
Complete the tasks with your partner. (請和組員完成下列練習。)

✓ **Part A. Picture Matching (圖片配對)**

● ●secret ( )

● ●reason ( )

● ●lie ( )



● ●habit ( )

a. 再看一次文章，用 1~4 標出單字出現順序，並將數字填在上方括弧中。

b. 唸出文章內含有以上單字的句子。

✓ **Part B. Create a dialogue (自創對話)**

Peter is copying homework in his room, and his sister, Jane, just came in. Use the following four words to create a dialogue.

,

reason, secret, lie, habit

Jane: Peter, you are copying homework again!!! Why don't you do it yourself?

Peter: Please _____. Please!

Jane: You shouldn't _____. She will be very sad. You should stop copying homework. It is not a _____.

Peter: Fine! Fine! You always have _____.

Jane: If you don't listen to me, you will learn your lesson some day. Peter, be honest. An _____ boy is welcomed everywhere.

✓ **Part C. Survey (問卷調查，寫下受訪同學的名字和答案。)**

Questions	Name/ Answer
1. Is keeping a secret difficult for you? If so, why?	/
2. Do you have some bad habits? What are they?	/
3. Did you lie to your teachers or classmates? What did you say to them?	/
4. Tell me a good reason why many people like to watch Sponge Bob.	/

Reading Topic 3

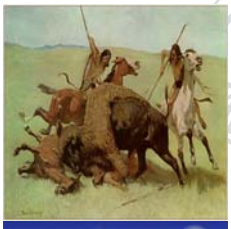
Class: Number: Name:

Complete the tasks with your partner. (請和組員完成下列練習。)

✓ **Part A. Picture Matching (圖片配對)**

● ●hunt ( )

● ●group ( )



● ●wild ( )

● ●protect ( )

a. 再看一次文章，用 1~4 標出單字出現順序，並將數字填在上方括弧中。

b. 唸出文章內含有以上單字的句子。

✓ **Part B. Create a dialogue (自創對話)**

David and Lisa are going hunting today. Use the following four words to create a dialogue.

hunt, group, wild, protect

David: Shh…Let's be quiet. There is a turkey in the bush (草叢).

Lisa: OK. Let's _____.

David: I'll count one to three, and we shoot her, OK?

Lisa: No, wait. It's not a turkey. It's a _____. We can't kill it. There are _____ over there. Let's kill them.

(A police man shows up)

Police: Hey, you two! What are you doing there? You can't hunt animals in the _____. Put down your guns, or I will have you arrested (逮捕)

David & Lisa: OK. OK. We'll listen to you, sir.

Police: You guys should take a lesson to know how to _____ _____.

✓ **Part C. Survey (問卷調查，寫下受訪的同學名字和答案。)**

Questions	Name/ Answer
1. If you have a chance to go hunting, what will you use to kill the prey (獵物)?	/
2. Did you ever see groups of animals? What are they?	/
3. Do you want to live in the wild? Why or why not?	/
4. On hot sunny days, what do you do to protect your skin (皮膚)?	/

Reading Topic 4

Class: Number: Name:

Complete the tasks with your partner. (請和組員完成下列練習。)

✓ **Part A. Picture Matching (圖片配對)**

● ●not avoid ( )

● ●break ( )

● ●not exist ( )

● ●law ( )

a. 再看一次文章，用 1~4 標出單字出現順序，並將數字填在上方括弧中。

b. 唸出文章內含有以上單字的句子。

✓ **Part B. Create a dialogue (自創對話)**

Two criminals rob (搶) money from the bank. They are running away from the police. Use the following four words to create a dialogue.

law, avoid, break, exist

A: Hurry up. The police are coming!!!

B: Look, there is a _____. Let's _____

and get inside.

(When they walk in…)

A: Oh, no. Why are there so many spider webs on the walls? Be careful.

Try _____ them.

B: The place looks scary. I think there are ghosts.

A: Don't be so silly. Ghosts don't _____.

B: Are you sure? Ahh… There is one behind you.

(A police shows up)

Police: Freeze! Don't move. Robbing a bank is against the _____.

I will put you two in the jail (監獄).

✓ **Part C. Survey (問卷調查，寫下受訪的同學名字和答案。)**

Questions	Name/ Answer
1. What do you do to avoid bad luck?	/
2. Do you believe that ghosts exist in the world?	/
3. Did you break something before? What were they?	/
4. Do you want to study laws? Why or Why not?	/

Reading Topic 5

Class: Number: Name:

Complete the tasks with your partner. (請和組員完成下列練習。)

✓ **Part A. Picture Matching (圖片配對)**

● ●plant ( )

● ●language ( )

● ●clever ( )

● ●tool ( )

a. 再看一次文章，用 1~4 標出單字出現順序，並將數字填在上方括弧中。

b. 唸出文章內含有以上單字的句子。

✓ **Part B. Create a dialogue (自創對話)**

You have a chimpanzee and a dog as pets. You are showing off (炫耀) this to your friend. Use the following four words to create a dialogue.

plant, language, clever, tool

A: Hey, look at my pets. They are _____ and _____.

B: Wow, they are cute. Where did you get them?

A: I bought them in Japan.

B: What can they do?

A: I show you. The chimpanzee is called _____. He can

_____, _____, and _____.

B: Wow he is so _____! What about the dog? What's his name?

A: He is Spot. He can use _____.

B: What do you feed them?

A: Spot eats meat, and the chimpanzee eats _____.

B: What plants does he eat?

A: He eats _____.

B: Interesting!

✓ **Part C. Survey (問卷調查，寫下受訪的同學名字和答案。)**

Questions	Name/ Answer
1. How many languages can you speak? What are they?	/
2. Please name five clever people in the world.	/
3. Did you grow plants before? What did you grow?	/
4. If you don't have a key, what tools will you use to open a door?	/

Reading Topic 6

Class: Number: Name:

Complete the tasks with your partner. (請和組員完成下列練習。)

✓ **Part A. Picture Matching (圖片配對)**

● ●rude ( )

● ●polite ( )

● ●respect ( )

● ●action ( )

a. 再看一次文章，用 1~4 標出單字出現順序，並將數字填在上方括弧中。

b. 唸出文章內含有以上單字的句子。

✓ **Part B. Create a dialogue (自創對話)**

Sam and Susan are classmates in junior high school. One day, they are fighting over food.

rude, polite, respect, action

Susan: What are you doing, Sam? Why are you eating my _____ and put _____ in it.

Sam: I am so hungry, but I just ate a little. That's not a big deal. Don't be so angry.

Susan: That's not _____. You should ask me first.

(They start to fight, and the teacher comes in)

The teacher: Hey, you two. Stop! Stop fighting.

Susan: Teacher, he ate my _____.

Teacher: Sam, this is very _____. Eating others' food without asking is not a good _____. We should learn to _____ our classmates, OK.

✓ **Part C. Survey (問卷調查，寫下受訪的同學名字和答案。)**

Questions	Name/ Answer
1. Tell me two rude actions that your classmates do in the classroom.	/
2. In your class, are there polite students? Who are they?	/
3. What can you do to respect the old people?	/
4. Please think about two actions movies that you love to watch.	/

Appendix H.

Vocabulary Exercises for Each Reading Topic

Reading Topic 1

Class: Number: Name:

Complete the vocabulary exercises on your own.
(請獨自完成以下單字練習。)

✓ **Part A. Find the correct meaning. (找出正確的意思。)**

fall	stream	gather	ocean	heat

1. _____ : to drop down from a higher place
2. _____ : a small and narrow (窄的) river
3. _____ : salt water that covers(覆蓋) large parts of the earth
4. _____ : to come together
5. _____ : to make something hot

✓ **Part B. Write the words in the correct order. (重組句子。)**

1. The Pacific / is / world. / the biggest / in the / Ocean

   _____

2. from / Water / to / a high place / falls / a low place.

   _____

3. tell / Please / to / the students / in the gym. / gather

   _____

4. quickly. / moves / in some / The water / streams

   _____

5. I / heat / am / hungry. / because / the pizza / I

   _____

✓ **Part C. Make a sentence. (請爲每個單字造句；勿與上句重複。)**

1. fall: _____
2. stream: _____
3. gather: _____
4. ocean: _____
5. heat: _____

Reading Topic 2

Class: Number: Name:

Complete the vocabulary exercises on your own.
(請獨自完成以下單字練習。)

✓ **Part A. Find the correct meaning. (找出正確的意思。)**

lie	secret	reason	habit

1. _____ : something that you often do
2. _____ : something to tell others why you do so
3. _____ : something that you don't want other people know
4. _____ : to make someone believe something that is not true

✓ **Part B. Write the words in the correct order. (重組句子。)**

1. to / is / a lie. / It / tell / bad

_____

2. reason. / me / good / Give / one

_____

3. terrible / a / for / health. / habit / Smoking / our / is

_____

4. keep / , please? / Can / a / you / secret /

_____

✓ **Part C. Make a sentence. (請爲每個單字造句；勿與上句重複。)**

1. lie: _____
2. reason: _____
3. habit: _____
4. secret: _____

Reading Topic 3

Class: Number: Name:

Complete the vocabulary exercises on your own.
(請獨自完成以下單字練習。)

✓ **Part A. Find the correct meaning. (找出正確的意思。)**

wild	hunt	protect	group

1. _____ : some people / animals or some things get together
2. _____ : to catch or kill wild animals or birds for food, sport or to make money
3. _____ : to do something to keep away from getting hurt
4. _____ : a place where few people live but there are many animals

✓ **Part B. Write the words in the correct order. (重組句子。)**

1. go / in / Some / the / people / hunting / wild.

_____

2. Wearing / glasses / can / eyes. / dark / protect your

_____

3. deer. / November / a good / is / hunt / to / time

_____

4. sky. / There / a group / airplanes / in the / are / of

_____

✓ **Part C. Make a sentence. (請爲每個單字造句；勿與上句重複。)**

1. hunt: _____
2. protect: _____
3. wild: _____
4. group: _____

Reading Topic 4

Class: Number: Name:

Complete the vocabulary exercises on your own.
(請獨自完成以下單字練習。)

✓ **Part A. Find the correct meaning. (找出正確的意思。)**

exist	avoid	break	law

1. _____ : a rule for people in the country to follow
2. _____ : to make things into small parts
3. _____ : to make something bad not to happen
4. _____ : to be real; to have life

✓ **Part B. Write the words in the correct order. (重組句子。)**

1. exist / ghosts / I / believe / world. / don't / in the

_____

2. health, / For our / we / going to / avoid / should / bed late.

_____

3. break / Don't / when you / baseball. / the windows / play

_____

4. Tony / study / in a / wants / school. / to / law

_____

✓ **Part C. Make a sentence. (請爲每個單字造句；勿與上句重複。)**

1. avoid: _____
2. break: _____
3. law: _____
4. exist: _____

Reading Topic 5

Class: Number: Name:

Complete the vocabulary exercises on your own.
(請獨自完成以下單字練習。)

✓ **Part A. Find the correct meaning. (找出正確的意思。)**

plant	language	clever	tool

1. _____ : people's words or speech
2. _____ : something you use to do a job
3. _____ : smart; having a quick mind
4. _____ : something growing on the earth, but it can't move

✓ **Part B. Write the words in the correct order. (重組句子。)**

1. clock / is an / A / tool / important / time. / for me / to keep

_____

2. can / How / languages / you / speak? / many

_____

3. student / found / the answer / A / to the / clever / question

_____

4. the plants / , and / well. / they / Praise / grow / will

_____

✓ **Part C. Make a sentence. (請爲每個單字造句；勿與上句重複。)**

1. language: _____
2. tool: _____
3. clevr: _____
4. plant: _____

Reading Topic 6

Class: Number: Name:

Complete the vocabulary exercise on your own.
(請獨自完成以下單字練習。)

✓ **Part A. Find the correct meaning. (找出正確的意思。)**

rude	polite	respect	action

1. _____ : having or showing bad manners
2. _____ : how your body moves; how you do something
3. _____ : having good manners
4. _____ : think highly of other people

✓ **Part B. Write the words in the correct order. (重組句子。)**

1. back to / is / Talking / rude. / your teacher

_____

2. his ideas. / people / respect / Gandhi / Many / and

_____

3. each other. / should / polite / be / People / to

_____

4. action / do / Which / movie / you / like?

_____

✓ **Part C. Make a sentence. (請爲每個單字造句；勿與上句重複。)**

1. polite: _____
2. rude: _____
3. action: _____
4. respect: _____