

The Nature of Vocabulary Repetition in Graded Readers

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Abstract

Graded readers are one of the main resources to foster reading skills and vocabulary development of second language learners. This study aims to investigate the nature of vocabulary repetition in graded readers, which is the key factor for incidental vocabulary learning. Three intermediate-level graded readers were randomly selected and used to create a corpus for analysis using the Range programme. Only the content words in the graded readers were classified into the 1st General Service List (GSL), 2nd GSL, and Academic Word List. Then the numbers of repetitions of the word families in each list were calculated. The findings show that most of the words in the 1st GSL are repeated more than 10 times, which seems to be promising for incidental vocabulary learning; however, words in the other two lists do not seem to be adequately repeated. Opportunities for incidental learning of these low less repeated words are limited. Implications for using graded readers to reinforce fluent reading by exposing learners to recycling of known vocabulary are discussed.

Introduction

English is typically regarded as an essential skill for students of all levels, as it is a tool for acquiring new knowledge both in a school context and outside the classroom, in real-life situations. In order to learn English effectively, one fundamental condition to support the learning process is rich language exposure. However, in countries such as Thailand, students and others have limited exposure to English in their daily lives. As a result, most Thai students have few opportunities to use English outside of class. English then must be acquired through other tools or media, such as classroom practice, films, extensive reading or other pedagogical materials. These methods, especially reading, play a significant role in Thai students' ability to learn English as they provide the input necessary for learners to pick up the language.

Research suggests an increase in learners' levels of language proficiency after extensive reading experience. Extensive reading, therefore, has been widely used to support students' learning and language improvement. Extensive reading is a means of giving students the time, encouragement, and materials to read for pleasure, at their own level, allowing them to read as many texts as they can, without the pressures of testing or marks (Davis, 1995). In other words, extensive reading is an approach to language learning, by the means of a large amount of reading. In such a programme, students are encouraged to select and read any books or other materials that they want. The materials used, therefore, vary widely. The range could be from authentic texts such as newspapers and magazines to specially crafted texts such as graded readers, which come in different levels and themes.

The use of extensive reading and graded readers

Graded readers are popular extensive reading materials. They include books of various genres such as drama, romance, thriller, science, adventure, and crime, classics of literature, biographies, factual reports, and profiles (Hill & Thomas, 1988; Hill, 2001). These books are specially created for learners of foreign languages. They may be simplified versions of existing works or original stories, and they can be fiction or non-fiction (including a wide range of stories in many modes). Graded readers are different from conventional books because they use a controlled lexicon to grade the books into different levels, so that they stay within a carefully limited vocabulary range (Nation, 2001). This limits the amount and level of vocabulary items that appear in the materials. The books can also be structurally controlled, by which sentence length and structure are adjusted or simplified. Graded readers may also utilise information control, which guides the storylines in a series. They are produced by several different publishers, and are divided into different levels based on the number of headwords used. For example, the Oxford Bookworms series has six stages, ranging from a vocabulary of 400 headwords at stage one to a vocabulary of 2,500 headwords at stage six. Penguin's graded readers have seven levels, ranging from a vocabulary of 200 headwords at "Easy Start" to a vocabulary of 3,000 headwords at "Advanced Level".

These important features of graded readers assist learners in selecting suitable reading materials. The levels indicated by the publishers provide a rough guideline for students to consider the degree of readability of the materials, especially in terms of vocabulary. In other words, graded readers facilitate learners in choosing books that correspond to their level.

Vocabulary studies have shown that the more words in a text a reader knows, the greater the degree of comprehension that is possible (Nation, 2001; Schmitt, Jiang & Grabe, 2011). Hu and Nation (2000: 422) suggest that coverage of 98 percent is required to gain "adequate unassisted comprehension of the text". This figure implies that there is one word in every 50, or around six words on every page, that are unknown to readers. Beyond this, students need help or support for full understanding. Research by Laufer (1989) states that at least 95 percent coverage is needed to allow reasonable comprehension of a text.

Nation (2006) also estimated the amount of vocabulary needed for learners to perform particular receptive activities by suggesting the numbers of word families they need to know. Word families are words that share a common base to which different affixes are added. For example, the words 'work', 'workers', 'working' and others in the same base are regarded as 1 word family. Nation (2006) suggested that learners need around 6,000 word families to read novels written for teenagers, to watch movies, and to participate in friendly conversation. To read newspapers, novels, and some academic texts, around 8,000 - 9,000 word families are needed. These figures of vocabulary

coverage of the input texts strengthen the perceived importance of basic vocabulary knowledge in reading.

With a vocabulary size of 2,000 words, a learner knows 80 percent of the words in a general text, which means that one word in every five words (approximately two words in every line), is unknown. Research has shown that this ratio of unknown to known words is not sufficient to allow reasonably successful guessing of the meaning of the unknown words (Liu & Nation, 1985). This amount of vocabulary knowledge is thus inadequate for unassisted reading. Readers need more than 2,000 words to successfully read general texts on their own. This is in line with Nation (2001), who states that learners who know the 2,000 high-frequency word families on in the General Service List (GSL) will know about 87.4 percent of the tokens in most works of fiction, which is much less than the minimum 95 percent of coverage learners need in order to read and comprehend a text.

These findings from vocabulary research highlight the rationale of graded reader designs in controlling the vocabulary input to ensure that readers at different levels can find a book within the range of their existing vocabulary for the desired text coverage. For example, an easy level of graded readers can be written to contain only the first 1,000 words in the GSL so that beginning readers can manage it. They could read graded readers at this level until they have gained sufficient vocabulary to move on to a higher level, like graded readers containing words from the second 1,000 words in the GSL.

There are several advantages of using graded readers for extensive reading. Reading graded readers helps improve reading skills, language use, and knowledge, and increases enjoyment of language learning (Nation, 1997).

First of all, extensive reading helps students improve reading by reading a wide range of texts for pleasure. A large amount of reading practice contributes to fluency in reading (Nation, 2009). While reading extensively, learners focus on content and meaning. They do not have to intensively tackle every single word in the text, which presents a good chance to develop fluent reading and other strategies like coping with unknown words, making predictions, etc. Therefore, the more the students read, the better readers they become.

Students also gain new knowledge of the world from reading. As students are exposed to an input-rich and enjoyable environment, their knowledge of content and language will increase (Hedge, 1985). For readers that have limited experience and knowledge of the world, extensive reading provides an opportunity to see the world through a different pair of eyes, thus expanding their knowledge.

Furthermore, students will feel greater motivation and develop a more positive attitude towards learning a second language (Pazhakh & Soltani, 2010). As students read more extensively, they may become more interested in learning

about a language and culture. In turn, they become more motivated to read texts and become independent readers. Susser and Robb (1990) compared attitudes of students in an extensive reading group and a skill-oriented reading group. The results showed that the extensive reading group perceived their homework to be more interesting, and that extensive reading can bolster students' positive attitude towards reading.

Importantly, extensive reading helps learners become better readers by increasing their exposure to words, which enhances incidental vocabulary learning (Day & Bamford, 2002). The different levels of graded readers offer comprehensible input to different learners. Since the vocabulary in a graded reader is restricted to a certain level, it ensures that new words are limited, and that the words are presented in context. Repeating a word in multiple contexts ensures sufficient language data or input required for acquiring it. The more the learners see a word, the better the chance that they will understand and learn the word. Therefore, students' vocabulary knowledge is significantly improved as they are gradually exposed to more new words repeatedly, and acquire vocabulary incidentally from reading (Cho & Krashen, 1994). Day, Omura & Hiramatsu (1991) report that incidental vocabulary learning occurred among both high school and university students in Japan when they read silently for entertainment in the classroom.

Since the aims of extensive reading are best achieved only if what is read suits the learners' proficiency levels, matching learners with the right level of graded reader is necessary (Wanarom, 2008). Material that is either too easy or too difficult bores learners and impairs their motivation to read and learn. Graded readers of a suitable level offer learners suitable conditions for incidental vocabulary learning, which includes repeated encounters with words and opportunities to consolidate what they already know, and to extend it (Nation, 1997).

Incidental learning and vocabulary learning

Since vocabulary seems to be a key indicator in predicting comprehension, studies on vocabulary learning have gained much attention from scholars seeking to understand how vocabulary is learnt and how lexical sizes could be expanded. Research points towards the effectiveness of incidental vocabulary learning (Coady, 2001; Leowen, 2005; Laufer, 2006; Ahmad, 2011; Webb & Macalister, 2013). Incidental learning is the process of learning something without the intention of doing it. It can also mean learning one thing while the primary objective is to learn another. The focus of learning is on meanings or semantic features rather than language analysis (Schmidt, 1994). By these definitions, vocabulary learning from extensive reading can be called incidental learning, as it is a byproduct rather than for the explicit purpose of reading (Hulstijn, 2001; Waring & Takaki, 2003). When

learners try to understand the embedded meanings in contexts, the acquisition of words occurs subconsciously (Paribakht & Wesche, 1999).

Many studies have explored the effects of extensive reading on incidental vocabulary learning (Coady, 2001; Horst, 2005; Webb, 2007). Although these studies used different methodologies, they produced the same finding: Incidental vocabulary learning does occur from reading. Incidental learning generally occurs through extensive reading when readers encounter a word again and again in input-rich environments, although it may occur at a rather slow rate (Coady, 2001). Readers can learn a word's meanings in its various contexts. They can also naturally acquire other information about a word, such as how it is spelled, how it is inflected or how it appears in different forms such as a verb, noun or adjective, etc. If learners continue to see words repeated incidentally and deliberately, and in a variety of forms, they will become more and more increasingly familiar with the words, can retain them and finally are able to actively use them in different contexts (Nation, 2009). The amount of repetition, or the number of times that a word is repeated, is a key factor for incidental learning. Research clearly shows a strong relationship between repetition and vocabulary learning (Pellicer-Sanchez & Schmitt, 2010). However, there is no consensus regarding a fixed minimum number of repetitions required to ensure learning (Huckin & Coady, 1999; Nation, 2014).

Waring and Takaki (2003) found that at least eight repetitions in a reading text were needed for a 50 percent chance of remembering a word three months later. Webb (2007) found that at least 10 repetitions were required. In his study, the subjects that encountered the target words more than 10 times showed a better grasp of different aspects of word knowledge than the groups that received fewer exposures. This study focused on rich knowledge of the words including spelling, associations, syntax, grammatical functions, forms and meaning mapping both receptively and productively. In another study, Pigada and Schmitt (2006) explored how a learner of French gained different aspects of vocabulary knowledge (i.e. spelling, meaning and grammatical usage) by means of extensive reading. In this study, the exposures to the 133 target words ranged from one occurrence to more than 20 occurrences. The results indicated that there was the least gain in knowledge of word meanings for words with a single exposure, and spelling was the most strongly enhanced gain even with a small number of exposures. Their study also showed that there was a noticeable increase in knowledge for words with more than 10 occurrences.

Also, Zhang and Qi (2009) combined qualitative and quantitative research methods and investigated whether seven weeks of extensive reading improved four participants' two aspects of word knowledge: spelling and meaning. The study yielded detailed, though discouraging results: extensive reading could facilitate incidental vocabulary acquisition with an average acquisition rate of 21.6 percent for spelling and 15.5 percent for meaning. Exposure frequency affected word gains to a greater extent, with a significant

difference between words appearing 1-3 times (16.7%) in the texts and those appearing 4-5 times (26.3%). Words that appeared 10-19 times demonstrated the highest acquisition rate (29.3%). The study showed that a greater number of repetitions is likely to be a more effective strategy for acquiring and remembering vocabulary. The more often a word is encountered in the text, the greater the extent to which the word becomes more familiar and more accessible for processing, and in the end also becomes more salient to the learner (Rast & Dommergues, 2003).

This review of literature highlights the importance of extensive reading. It reveals a clear relationship between extensive reading and incidental vocabulary learning. Also, the correlation between word repetition and the opportunity to learn that word is explicit. It is, therefore, interesting to investigate the nature of vocabulary repetition occurring in the materials used in an extensive reading programme to gain insights into opportunities for incidental vocabulary learning. In Thailand, most previous studies of the extensive reading approach focused heavily on the evaluation or success of the programme. Chaimanee (2004), for example, compared the use of external reading books and an extensive reading programme in a Thai school. Kirin and Wasanasomsithi (2010) conducted a comparative study of reading ability of undergraduates when engaged in high and low amounts of extensive reading. However, research that focuses on the characteristics of the reading materials used, such as vocabulary input in graded readers which are a primary tool of extensive reading, is quite limited. This kind of study could contribute to the understanding of the nature of vocabulary input required to promote learners' uptake or opportunities for learning the words.

The purpose of this study is to examine the nature of vocabulary in graded readers at an intermediate level. It is a corpus-based study which looks at the frequency and nature of vocabulary repetition that occurs as the basis for incidental vocabulary learning. This could contribute to better understanding of the extent to which graded readers promote vocabulary learning.

Research Question

The research question is, "What is the nature of vocabulary repetition in graded readers?" In answering this question, the findings will lead to a discussion on whether the repetition of vocabulary in graded readers is adequate to support incidental vocabulary learning.

Methodology: Graded reader selection and data analysis

This study included three graded reading books at an intermediate level, which were comprised of 59,664 running words. These books were randomly chosen from three different, leading publishers of graded readers. The first book was *Great Expectations* by Charles Dickens, and it is at level six in the Oxford

Bookworms series. Level six consists of a vocabulary of 1,800 words. The second was *Live and Let Die* by Ian Fleming, and it is at level five in the Macmillan Graded Reader series. Level five consists of a vocabulary of 1,600 basic words. The third was *1984* by George Orwell, and it is at level four in the Penguin graded reader series. Level four consists of a vocabulary of 1,700 words. These three graded readers are all classified as intermediate-level by their publishers.

The electronic versions of the books were gathered to serve as a corpus for vocabulary analysis. Then the running words were analysed by the Range programme, where they were divided into two groups: the words that matched with the British National Corpus (BNC) lists and those which were not in the lists, including proper nouns, acronyms and abbreviations. The words in the latter group were eliminated as they were not the target of vocabulary learning. After excluding the words that did not match the BNC lists, 59,664 words were taken into consideration for further analysis.

Table 1: The number of words in the three texts gathered for analysis

Texts	No. of tokens matching BNC lists
Great Expectations	20,324
1984	19,715
Live and Let Die	19,625
Total	59,664

Out of the 59,664 tokens, 34,107 were function words and 25,557 were content words. The content words made up 38.66 percent of the books, whereas function words made up 61.34 percent. This reflects the normal characteristics of a text, in which the function words far outnumber the content words.

Since the focus of this study was on vocabulary learning, only content words would be analysed further, as they are the target of vocabulary learning in general. The function words were discarded. As a result, there were only 21,491 word tokens left for further analysis. These tokens were then reduced into 1,110 families (e.g. go, goes, went, going and gone were counted as one family), and these 1,110 word families were examined for frequency of occurrence, or repetition.

Using the Range programme, these words were also classified based on the first and the second one thousand words of West's General Service List (West, 1953), hereafter referred to as the GSL, and Averil Coxhead's Academic Word List, hereafter referred to as the AWL. The frequency of word repetition and some examples of word repetition based on these three word lists will be discussed in the following sections.

Types of vocabulary coverage in the three graded readers

To analyze these three graded readers, and examine the vocabulary in the first and second one thousand words in the GSL and AWL, the Range programme was used. The findings are listed in Table 2.

Table 2: Percentage of word coverage in the three graded readers

Type of word	No. of Words (Families)	Percentage
1000 GSL	657	59.19 %
2000 GSL	428	38.56%
AWL	25	2.23%
Total	1,110	100%

Table 2 shows that most of the content words in these three graded readers belong to the first and second 1,000 words in the GSL. Almost 60 percent of them are in the first 1,000 words of the GSL. These are the most frequently used words in English and, therefore, should be considered as “must learn” words. The next group, which accounted for 38.56 percent of the content words in the books, belongs to the next 2,000 words in the GSL. These words are also English words that are vital to know. In terms of frequency of occurrence, they appear to be the “should learn” words next to the “must learn” group, and they may be considered as more difficult or less- used words. Unsurprisingly, academic words accounted for only 2.25 percent of the content words in the graded readers analyzed. As graded readers are not aimed at academic success, one could not expect words in the AWL to appear frequently in this context.

The analysis of the kind of vocabulary coverage in these three graded readers revealed that these reading materials provided good exposure for English language learners. They provide readers exposure to the most commonly or frequently used words in English, which is the basis for improving their language use.

Frequencies of word repetitions in the three graded readers

The 1,110 word families of the content words in the graded readers were further examined for their frequency of repetition. The results suggested that these content words occurred in a range of 1 to 631 occurrences. The word that occurs at the highest frequency (631 occurrences) is “say”, which belongs to the first 1,000 GSL. The words in the second 1,000 list occur from 1 to 82 times. The most frequently used word in this group is “quiet”.

Table 3: Frequencies of word repetitions in the three graded readers

Occurrences	Types of words		
	1,000 GSL	2,000 GSL	AWL
Only once	44 (6.7%)	70 (16.36%)	5 (20%)
2-5	183 (27.85%)	209 (48.83%)	15 (60%)
6-10	73 (11.11%)	69 (16.12%)	4 (16%)
11-20	104 (15.83%)	49 (11.45%)	1 (4%)
21-99	222 (33.79%)	31 (7.24%)	-
over 100	31 (4.72%)	-	-
Total	657 word families	428 word families	25 word families

As for the content words in the first GSL, only a few of them occur only once in the three texts. Some of them appear 2-5 times (27.85%) in the texts. Others are repeated from 6-10 times (11.11%), while the majority of the words (15.83 + 33.79 + 4.72 = 54.34%) are repeated more than 10 times. These frequencies of repetitions seem to hold promise for allowing learners to notice the words and acquire them while reading (Webb, 2007).

Regarding the content words in the second GSL, a lot of words are repeated more than six times (16.12 + 11.45 + 7.24 = 34.81%). Most of the words in this category, however, occur fewer than five times, and almost 17 percent of them appear only once. This phenomenon is similar to that of the words in the AWL. Most of those appear fewer than five times.

This observation on the frequencies of word repetitions implies that the graded readers analyzed appear to best promote incidental learning of the words in the first 1,000 GSL. As for the words in the second 1,000 GSL, the frequencies of word repetitions may not be promising. Moreover, as the words in the first GSL seem to be simple or basic words and these words are repeated frequently, learners have good opportunities to recycle the words and boost their fluency in reading. Some researchers, therefore, even suggest that extensive reading is mainly for the purpose of reinforcing partially known words so that they may become fully known words, rather than building new vocabulary (Nation & Wang, 1999; Waring & Takaki, 2003).

As for the words that appear only once in the texts, they do not seem to be learnt through incidental learning. There is no repetition for 16.36 percent of the content words in the second GSL and 6.7 percent of the words in the first GSL. These words – especially if they are unknown words – need to be reinforced or highlighted to be noticed and learned intentionally.

Nature of word repetitions

In this part, 15 words were randomly sampled from the materials to provide more insight into the nature of word repetitions in the texts. While using a simple random sampling method to select the words, the researchers also tried to cover the words with low, medium and high frequency occurrences from the three types of word families in the samples. In this part of the investigation, the forms or variations of the words in the families (e.g. derivations or inflections) and the distance between each occurrence, e.g. across the page or the units, were analysed.

Table 4: Samples of word repetitions

Types of word family		Frequency of repetitions	Variations in word family	No. of variations
1000 GSL	sell	6	(v) sell sold selling	3
	difficult	7	(adj) difficult (n) difficulty	2
	run	39	(v) run runs ran running	4
	tear	48	(v) tear tears tore torn	4
	leave	52	(v) leave leaves left leaving	4
	eye	88	(n) eye eyes	2
	make	92	(v) make made making	3
	go	300	(v) go goes went gone going	5
2000 GSL	rain	6	(v) rains	1
	hide	10	(v) hide hid hidden hiding	4
	steal	13	(v) steal stole stolen stealing	4
	hit	27	(v) hit hitting	2
AWL	enormous	5	(adj) enormous	1
	intelligence	7	(n) intelligence (adj) intelligent	2
	job	10	(n) job	1

It was observed that some of the words appear in one form only, for example, “rain”, “enormous” and “job”. “Rain” is repeated six times and in two different units: units 2 and 10. In each unit, the repetitions occur on different pages, and are therefore far from each other. The same nature of repetition is observed for the word “enormous”, which occurs five times in the corpus. It is repeated far apart, in different units of the books. Similarly, the word “job” is repeated 10 times and in eight different units. This means the word is repeated twice in some units, but on different pages.

Most of the investigated words, especially verbs, occur in 2-4 different forms, for example, “hit”, “hitting”; “sell”, “sold”, “selling”; “tear”, “tears”, “tore”, and “torn”, etc. The numbers of occurrences of each form vary, and this also depends on the frequencies of repetitions of the whole family. For example,

the word “eye”, which occurs in only two inflections of a singular and plural form of “eye” and “eyes”, is repeated at a high frequency of 88 times in the corpus. The high frequency of the word repetition allows it to occur in many units, and in some units the frequency of repetition is 10 times. This degree of occurrence seems to help learners notice the word, be familiar with it and acquire it naturally.

However, the word “hide”, which occurs in four different variations of “hide”, “hid”, “hidden”, and “hiding”, has 10 repetitions in total, and the detailed analysis shows that it appears in nine different units in the corpus. This means each form of the word appears only once or twice, and each time in a different context, which might not be adequate for incidental learning. Moreover, as the word is an irregular verb, learners may or may not notice that the different forms of the word have the same root. More repetitions may be needed for this kind of word to be noticed and acquired incidentally.

The word with the greatest number of variations in this data sample is the word “go”, which occurs in five different forms: “go”, “goes”, “went”, “gone”, and “going”. The frequency of repetition of this word is notably high (300 repetitions), so even though the word occurs in various forms, each form is repeated several times. As a word in the first 1,000 GSL, the word occurs at a high frequency, and the detailed analysis shows that in some units it is repeated 19 times. The multiple inflections and repetitions of the word expose learners to different forms and various semantic meanings of the word, which provides a good opportunity for learning the word (Coady, 2001). Also, the word is recycled in a variety of contexts, which promotes incidental learning.

Conclusion and implications

The findings from analyzing the nature of word repetitions in the graded readers at intermediate level suggest that the materials hold promise for improving EFL learners’ vocabulary, since most of the words are repeated more than 10 times. This high number of repetitions fosters vocabulary learning. Words with high numbers of repetitions are likely to be acquired incidentally (Waring & Takaki, 2003). The more often that learners come across the words, the more familiar with the words the learners would be.

However, more detailed analysis reveals that frequency or number of repetitions alone is not adequate for considering the exposures or environments for vocabulary learning from graded readers or any other extensive reading. It is also necessary to consider the types of words that are repeated and the distance between contexts in which a given word occurs. The variations of the forms of a given word and the distance between each repetition might affect the number of repetitions of each form of the word in its family. Although a word may be repeated 10 times, if it occurs in different forms and each form appears on a different page or in different units, the repetitions may not be easily noticed.

Moreover, the words that are most frequently repeated are the words in the 1st GSL. These words are mostly basic words and the most commonly used words in English. Graded readers are, then, good materials to recycle these necessary words and thus ensure that learners have exposure to what language users need to communicate. Graded readers that match the learners' respective levels might be a good practice for exercising learners' reading fluency and to provide a sense of success for learners, rather than helping them learn completely new or unknown words where they have to guess and learn from context. When learners are exposed to vocabulary at the range of their text coverage, they get a good opportunity to experience the repetitions of frequently used English words, as in the 1st GSL, and become more familiar with these word families in different forms and contexts. These repetitions will help them read faster with more confidence and enjoyment, and have more chances to develop this vocabulary from 'receptive' modes of learning to 'productive' use later. Repetitions of high-frequency words are therefore necessary, and learners should initially focus on the development of these basic words. They could then be further developed by using a variety of strategies to deal with lower-frequency words (Coxhead, 2010).

To either recycle familiar words or learn new words, extensive reading and graded readers are important means that supply learners with opportunities to learn both language and contents from various contexts. Extensive reading, therefore, should be encouraged either in class or as part of an English or reading course, and as an outside class activity where learners can exercise their autonomy. The use of extensive reading could help ensure that students get the most out of their language learning experience and gain the ample benefits claimed by research in extensive reading (Nation, 2001).

Even though the number of word repetitions is a key factor or indicator for incidental vocabulary learning, there are still many other factors (Nation, 2014). In fact, there is no exact minimum number of repetitions that completely guarantees learning. As there are many kinds of learning (such as assisted learning, conscious learning, formal learning, etc.) and many levels of learning (such as deep learning, receptive learning, remembering, productive learning, etc.), it is not easy to determine how many repetitions are required before learners can learn words, or what details of the words can be learnt (e.g. forms, meanings, use, etc.). In addition, mastery of meanings and usage of words is a complex process and requires more than incidental learning (Cobb & Horst, 2001; Leowen, 2005; Laufer, 2006; Nation, 2006; Cobb, 2007). Therefore, in many cases deliberate vocabulary teaching is also needed to facilitate learners in developing both the depth and the breadth of their vocabulary knowledge, and to assist learners in improving both receptive and productive vocabulary. Incidental vocabulary learning and intentional learning are both important, and they can reinforce each other.

This study was intended to aid in understanding of the lexical nature of graded readers, which are important tools for learning. The repetitions and cyclical natures of content words in graded readers should not be overlooked. Teachers should encourage learners to make use of these valuable resources to boost their reading speed or fluency by familiarizing themselves with words in different contexts. Further research into the extent that learners notice the words repeated in the texts is recommended.

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