

VOCABULARY OCCURRENCES: AN ANALYSIS OF READING PASSAGES
IN PRACTICE IN COMPREHENSION II

A MASTER'S PROJECT
BY
WILALINEE KHONGPHAN

presented in partial fulfillment of the requirements for the
Master of Arts degree in English
at Srinakharinwirot University
May 2004

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ABSTRACT

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The purpose of this study was to analyze the frequency of words appearing in an English Reading Textbook of Mathayomsuksa 5 entitled *Practice in Comprehension II* so as to assess if word level in this book was appropriate for learners or not.

Twenty-three reading passages in *Practice in Comprehension II* were used as data and then analyzed by VocabProfile program which groups words into four lists. The results of the study were that words in the 23 reading passages in the textbook contained many of the most 1000 frequent words of English (79.1%), while words in list three which include academic words in upper secondary and university texts appeared the least (3.4%). Words in list two accounted for 7.2%. Words in list four which are not in any three base lists occurred for 10.4%. Words at each word list fluctuated. The chapters did not arrange in the hierarchy according to word levels. However, it can be assumed that a passage with higher words in list three was more difficult. Furthermore, comparing words in this textbook with the word list of 851 words of Matthayomsuksa 5, it was found that there were 123 overlapping words.

การวิเคราะห์คำศัพท์ที่ปรากฏในหนังสือ *Practice in comprehension II*

บทคัดย่อ

โดย

นางวิลาสินี คงพันธ์

เสนอต่อบัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ เพื่อเป็นส่วนหนึ่งของการศึกษา

ตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาวิชาภาษาอังกฤษ

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การวิจัยครั้งนี้มีจุดประสงค์เพื่อวิเคราะห์ความถี่ของคำศัพท์ที่ปรากฏในหนังสือแบบเรียน
วิชาการอ่านภาษาอังกฤษ *Practice in Comprehension II* ของนักเรียนชั้นมัธยมศึกษาปีที่ 5 เพื่อ
ศึกษาระดับคำศัพท์ที่ปรากฏว่าเหมาะสมกับผู้เรียนหรือไม่

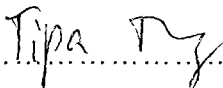
ในการวิจัยครั้งนี้วิเคราะห์บทอ่านทั้งหมดจำนวน 23 บท จากหนังสือ *Practice in
Comprehension II* โดยใช้โปรแกรมคอมพิวเตอร์ VocabProfile ซึ่งแยกศัพท์ออกเป็น 4 ระดับ
ผลการศึกษาพบว่า มีคำศัพท์ที่มีความถี่ในการปรากฏสูง 1000 คำแรกในภาษาอังกฤษ (ระดับ 1)
ปรากฏมากที่สุด ร้อยละ 79.1 ในขณะที่คำศัพท์ในระดับสาม ซึ่งเป็นคำศัพท์ทางวิชาการปรากฏน้อย
ที่สุด ร้อยละ 3.4 สำหรับคำศัพท์ในระดับสอง ปรากฏร้อยละ 7.2 และคำศัพท์ในกลุ่มที่ 4 ซึ่งเป็น
คำศัพท์ที่ไม่ปรากฏในสามกลุ่มแรก ปรากฏร้อยละ 10.4 คำศัพท์ในแต่ละระดับของบทอ่านทั้งหมด
ไม่มีการเรียงลำดับแน่นอน แต่สามารถคาดเดาได้ว่าบทอ่านที่มีคำศัพท์ระดับ 1 และระดับ 2 ปรากฏสูง
จะเป็นบทอ่านที่ง่ายกว่า นอกจากนี้เมื่อเปรียบเทียบคำศัพท์ในบทอ่านจากหนังสือกับบัญชีคำศัพท์
(word list) สำหรับนักเรียนระดับชั้นมัธยมศึกษาปีที่ 5 จำนวน 851 คำ พบว่ามีคำศัพท์ที่ปรากฏใน
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The Master's Project Committee and Oral Defense Committee have approved this Master's Project as partial fulfillment of the requirements of the Master of Arts Degree in English of Srinakharinwirot University.

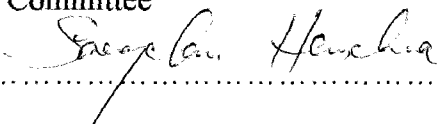
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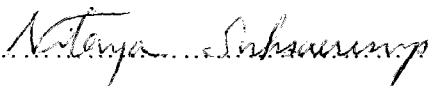
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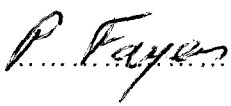
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TABLE OF CONTENTS

| Chapter | Page |
|--|------|
| 1 INTRODUCTION | |
| Background..... | 1 |
| Objectives of the Study..... | 3 |
| Significance of the Study..... | 3 |
| Scope of the Study..... | 3 |
| Definition of terms..... | 4 |
| 2 REVIEW OF THE RELATED LITERATURE..... | 6 |
| 3 METHODOLOGY..... | 13 |
| 4 RESULTS AND DISSCUSSION..... | 18 |
| 5 CONCLUSION..... | 30 |
| REFERENCES..... | 33 |
| APPENDICES..... | 36 |
| Appendix A The number of word tokens..... | 37 |
| Appendix B The number of word types..... | 38 |
| Appendix C The number of word families..... | 39 |
| Appendix D Words in the four word lists..... | 40 |

Chapter

Page

VITAE.....51

LIST OF TABLES

| Table | | Page |
|--------------|---|-------------|
| 1 | The number of words used in the sample paragraph..... | 15 |
| 2 | The number of words in passages 1-23..... | 19 |
| 3 | Frequency of content words in list one..... | 24 |
| 4 | Frequency of content words in list two..... | 25 |
| 5 | Frequency of content words in list three..... | 26 |
| 6 | Frequency of content words in list four..... | 28 |

LIST OF FIGURES

| Figure | Page |
|---|------|
| 1 The number of word types found in the four lists... .. | 21 |
| 2 The number of words from the M.5 word list appearing in the textbook..... | 23 |
| 3 The number of words occur in passages 1-23..... | 29 |

CHAPTER 1

INTRODUCTION

Background

In second language vocabulary teaching, frequency is considered a useful criterion for judging which vocabulary items should be taught (Nation. 1990: 20). Selecting words by frequency is made by taking samples from the sort of materials learners are likely to have access to, counting the items that occur most frequently, and arranging them according to their frequency of occurrence (Mackey. 1967).

Frequency counts show that vocabulary can be divided into two main groups: high and low frequency words. The most useful words for learners are high frequency words since they are found often in all kinds of materials. Learners need to know these words because they make up about 87% of an average written text. Since the items occurring most frequently are those which learners are most likely to have access to, they are selected for teaching first. In addition, the frequency and wide range of words can help learners to be familiar with the text they read. On the other hand, low frequency words which have a very narrow range are not worth teaching because students read them only once or twice in a text (Nation. 1983: 4-5).

Besides high and low frequent word levels, word repetition is also useful for learners of English since the number of times a word is read in language learning affect vocabulary acquisition. It, therefore, provides a basis for teachers and course developers to develop and design graded courses and reading texts, and prepare vocabulary tests (Nation. 1990: 20). A vocabulary count is done by making a list of the words in a

particular text or group of texts and counting how often they occur. Some of the more recent counts are done by computers to list words and count their frequency.

On vocabulary acquisition, Saragi, Nation and Meister (1978) found that words presented to learners fewer than six times were learned by half their subjects, while words presented six or more times were learned by 93%. Kachroo (Nation, 1990: 43; citing Kachroo, 1962) counted the number of occurrences of words in an English coursebook and found that words that occurred seven or more times in the coursebook were learned by most of the learners.

Apart from the first 2000 frequent words, academic words are also very important for learners in upper level because most of them plan to further their studies. There are four groups of academic words: art, science, law and commerce. Each group consists of seven sub-groups such as psychology, mathematics, history, etc (Nation, 2001: 188). It is very useful for learners at this level to learn academic words because learners who know more of these words are able to understand what they read better than learners who know fewer.

In conclusion, frequency is one of the important factors for learners to learn words. To compare between high and low frequency words, high frequency words are better known and recognized because they are found often. Therefore, the first 2000 words and academic words are important for learners in upper level. As a teacher of English, the researcher is interested in the role of word frequency as a method to find out whether the textbook used in a reading course for Matthayomsuksa 5 students at Rajprachasamasai Secondary School follows the mentioned theory and provides enough vocabulary for the students or not.

Objectives of the Study

This study attempts to answer the following research questions: -

1. How many words in vocabulary levels 1, 2 and academic words are found in *Practice in Comprehension II*?
2. How is the vocabulary arranged?
3. How frequently do the target words for Matthayomsuksa 5 students occur in the textbook?

Significance of the Study

The significant advantages of this study are as follows:

1. The results of the study will be used as a guideline for teachers and material developers to select suitable instructional materials and textbooks for students at a particular level.
2. The results can be used as a guideline in foreign language vocabulary teaching and learning that aim for vocabulary acquisition.

Scope of the Study

1. This research studies the frequency of vocabulary appearing in an English reading textbook for students at Matthayomsuksa 5.
2. The samples of the study comprise 23 reading texts. Each text contains approximately 200-500 words.
3. Proper nouns and abbreviations are not investigated in this study.

Definition of Terms

1. **English reading textbook** for Matthayomsuksa 5 students refers to *Practice in Comprehension II* by Malinee Janthavimol.
2. **Content words** refer to four major word classes: nouns , verbs, adjectives and adverbs.
3. **Range** refers to the number and variety of different texts the word occurs in.
4. **Vocabulary level** is divided into five levels: the 2,000-word level, the 3,000-word level, the 5,000-word level, the academic words and the 10,000-word level (Nation, 1990). In this study, VocabProfile is used to classify the words on the basis of frequency. Thus, words are divided into four levels as follows:
 1. Level 1 contains the 1,000 most frequent words in English.
 2. Level 2 contains the second thousand most frequent words.
 3. Level 3 contains academic words.
 4. Level 4 contains words which are not found in any of the three base lists such as proper nouns and low frequent words. There are no counts for families as levels 1, 2 and 3.
5. **Word family** consists of a base word with its inflected and derived forms. For example, stimulate, stimulated, stimulates, stimulating, stimulation, stimulant, and stimulative are counted as one word family with the headword stimulate (Schmitt and McCarthy, 1997).
6. **Word Token** refers to each occurrence of words in a text that is counted. It is sometimes called a running word. For example, in the sentence 'I would like to teach when I grow up.' there are nine word tokens.

7. **Word Type** refers to a number of different words in a text. From the above sample sentence, there are nine word tokens with eight word types because we do not count the same word again. We can count the words in the sample sentence like this 'I would like to teach when I grow up.' Thus, the same word form, I, is counted only one.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

This chapter reviews the relevant literature including vocabulary knowledge, vocabulary and reading, word repetition and other related research.

1. Vocabulary Knowledge

Vocabulary learning can be divided into two systems according to its use, receptive and productive. According to Haycraft (1978), receptive vocabulary consists of “words that the student recognizes and understands when they occur in a context, but which he cannot produce correctly,” while productive vocabulary means “words which the student understands, can pronounce correctly and use constructively in speaking and writing.”

Similarly, Gairns and Redman (1986: 64) define receptive vocabulary as language items which can be recognized and comprehended in the context of reading and listening materials, whereas productive vocabulary means language items which learners can recall and use appropriately in speech and writing. It can be concluded that receptive vocabulary is the word that learners can recall its meaning when they read or listen, and productive vocabulary is the word that learners can use appropriately in speaking and writing.

Receptive vocabulary is sometimes called ‘passive vocabulary’ and productive vocabulary is sometimes called ‘active vocabulary.’ Laufer (1998: 255-271) in studying the development of passive and active vocabulary in a second language, compared two groups of EFL learners in Israel (grade 10 and grade 11, with 6 and 7 years of English

instruction) on passive, controlled or elicited active, and free active vocabulary knowledge. She found that learners in grade 11 had a much larger passive vocabulary. They knew about 3,500 word families, as opposed to 1,900 in grade 10. She indicated that an additional year of instruction affected the learning.

In reading, the essential component for learners to comprehend a text is vocabulary, which refers to receptive vocabulary. A native speaker of any language has a much larger passive vocabulary than active vocabulary. As a result, he or she can read difficult materials fluently. On the contrary, a person who studies a foreign language often has a limited passive vocabulary. The biggest problem for the advanced learner when reading is a poor passive vocabulary (Laufer. 1998). Thus, to become efficient readers, learners should recognize much larger receptive vocabulary than the productive one. These receptive words can help readers to read difficult materials fluently without stopping to consult a dictionary all the time.

2. Vocabulary and reading

Vocabulary is the best single predictor of reading comprehension. If learners do not have sufficient vocabulary, they will not comprehend what they read. The unknown words can be the obstacle to their understanding. Learners with a limited number of vocabulary cannot read well. This is the case for most learners (Nuttall. 1982).

To read academic English texts with good comprehension, and to use reading to expand vocabulary, the 2,000 most frequent words are fundamental because these words make up 80% of words in any English text. According to West (1953), the most frequent 2,000 words cover about 80% of academic text and newspapers, about 87% of words in novels, and over 90% of words in informal conversation. They are very useful, essential words in English.

However, it seems that knowing 2,000 words or 80% of words in the text is not sufficient for reading academic texts. Thus, the academic words also play an important role. The Academic Word List (Coxhead, 2000) contains 570 word families that are very useful for learners who will study English in upper secondary school or university. It contains words like theory, compile, demonstrate. These words cover about 10% in academic articles and textbooks, about 4% of the words in newspapers and less than 2% of words in novels and conversation.

If learners know the most frequent 2,000 words plus academic words, they can reach about 90% of the words they will meet in any academic text (Cobb, 2000). Text A below shows vocabulary size of someone who knows only the most frequent 2000 words.

Words that are not on the 2,000 list have been replaced by gaps:

If _____ planting rates are _____ with planting _____ satisfied in each _____ and the forests milled at the earliest opportunity, the _____ wood supplies could further increase to about 36 million _____ meters _____ in the period 2001 – 2015. (Nation, 1990:242)

Text A has 40 words, seven words are unknown which make up to 16% (7/40).

There are about 80% of words known. Thus, he/she who reads this text would get some idea of the topic.

Now, look at Text B which is the same as Text A.

If current planting rates are maintained with planting targets satisfied in each _____ and the forests milled at the earliest opportunity, the available wood supplies could further _____ to about 36 million cubic meters annually in the period 2001 – 2015.

In Text B, there are 95% of words known or 5% unknown. Thus, readers would understand through inference.

Many researchers found that reading in a second language succeeded when readers know at least 95% of word tokens in a text. One of them is Laufer (1998) who suggests that learners should be familiar with 95% of the running words in a text in order

to comprehend and learn from the text. Learners should know about 5,000 words (3,000 word families). While, Nation (1990) states that it is difficult to indicate the amount of reading for learners at a particular level. However, there are two factors that can be a guideline. They are the frequency level of the learner's vocabulary and the length of time that the memory of a meeting with a word is retained.

3. Word repetition

The easiest way to make students familiar with new words and phrases is through repetition (Haycraft. 1978: 10). Repetition can help learners to use the words fluently. Only one meeting is not sufficient to know a word, especially the second language vocabulary. There are two kinds of repetitions: spaced repetition and massed repetition.

The spacing of repetitions can help learners remember a word. According to Pimsleur (Nation. 2000: 77; citing Pimsleur. 1967), the space between each repetition should become larger; the first repetition should be encountered quite soon after the introduction of a new word and the later repetitions can be further apart. Nation (2001: 76) proposed that the difference between spaced and massed repetition involved a period of time to acquire those words. In the same total study time, say fifteen minutes, spaced repetition does not require learners to spend the whole time to repeat the words. In spaced repetition, the words are studied now, a few hours later, a day later, two days later and finally a week later. Three minutes is used each time. The learning occurs many times for learners to remember the words. On the other hand, massed repetition covers a continuous period of time to repeat the words. This method does not allow enough time for learners to encounter the words again. The words are studied once in fifteen minutes, so learners cannot continue their learning. Therefore, spaced repetition is more successful in second language vocabulary learning than massed repetition.

The number of repetitions of words affects vocabulary acquisition. Thornbury (2002: 24) states that the words occur at least seven times are known by most of the learners. The result is similar to the study of Kachroo and Crothers and Suppes (Nation, 1990: 43-44; citing Kachroo, 1962 and Crothers & Suppes, 1967) stating that six or seven repetitions are necessary to ensure learning. Thus, the words occurring only once or twice are not enough for learners to remember and learn them.

4. Related research

Vocabulary is recognized as central to any language acquisition, native or non-native languages. As for vocabulary, many English vocabulary studies had been conducted on word lists and word frequency counts

Kimwangtako (1978: 80-83) reported that there were 3,036 new general English words in Fundamental University Physics. These words had never appeared in the English textbooks for the upper primary, lower secondary and the upper secondary school levels. Among these 3,036 new words, 2,032 words were general English words and 1,004 words were technical English words. Therefore, the general English words to the technical English words was 2:1. In addition, out of the 2,032 new general English words, only 430 words, or 21.16%, had a high percentage of frequency of occurrence between 76-100% in West's basic word list of 2,000 words

Yodnil (1980: 34-38) found that vocabulary recognition of students was at a level related to their experiences in learning English. It was estimated that the first year students at Srinakharinwirot University, Prasarnmitr knew about 1,700 basic English words on the O'Shea General Consolidated vocabulary list. The students with 12-15

years of English in school had higher scores than those with 8-11 years of English in school.

Sujan (2000) analyzed vocabulary and lexical errors found in the first to fourth-year English majors' at Rajabhat Institute Mahasarakham and investigated if there was a vocabulary development of these students. It was found that the words in base list one were most found by all four groups of students. A much smaller number of words in base list two, base list three and list four were used. There was a high frequency of occurrence of lexical errors which showed that long learning of English in the Thai context did not help the students much to use words correctly. This also might result from the fact that English was taught through Thai, especially in primary and secondary schools, or from the lack of practice in vocabulary use outside the class. However, the number of words in base list three used by the fourth-year students was higher than the third-year students which showed that there was some development of vocabulary size.

Khaengraeng (2002) analyzed 65 letters in Ann Landers' column and found that the words appearing in the first base list were about 60-80%; the words appearing in the second base list were about 1-13%; the words in the third base list were 0-8%; the words not found in any of the three base lists were about 5-16%. Only five out of 65 letters could be useful to be used as reading material in class. These five letters consisted of the most frequent 2,000 words of English required at an adequate level of comprehension. Moreover, they contained the lowest frequency words (less than 15%)

From the research mentioned above, it can be concluded that the first 2000 frequent words are required for learners who study English as a foreign language. Besides that the academic words should be introduced. If learners know these words,

they would know a very large proportion of words in a text. The number of times the words appear influences vocabulary acquisition. Therefore, it is an important criterion for course designers to arrange reading passages in a textbook.

CHAPTER 3

METHODOLOGY

This chapter aims to give an overview of the research procedures, data collection and data analysis. The research instrument and the computer program VocabProfile, are also described.

1. Data Collection

The data were 23 reading passages from the English reading textbook of Matthayomsuksa 5 entitled *Practice in Comprehension II* by Malinee Janthavimol. Only the reading passages were analyzed excluding exercises and other activities sections. The book was published in 1999 by Thai Wattana Panich, Bangkok. It was approved for use in Thai secondary schools by the Ministry of Education in 1990 and has been used in English Language Improvement course since then. It consists of 23 passages with different contents such as news, novel, history, literature, adventure, advertisement and jobs.

2. Procedure

The following procedure was conducted in this study.

Twenty-three reading passages from the reading textbook of Matthayomsuksa 5 entitled *Practice in Comprehension II* were analyzed by Nation's Vocabprofile program to check the total number of words, to categorize words into lists and to calculate words in each lists in percentage.

3. Data Analysis

The texts were analyzed to obtain the frequency of words by using Nation's VocabProfile program of the English Language Institute, Victoria University of Wellington, New Zealand. It is a program to analyze the frequency of words occurrences within a text. There are three ready-made base lists: the first base list includes the most frequent used 1,000 words of English; the second base list includes the second 1,000 most frequent words; the third base list includes words not in the first 2,000 words of English but frequently found in the upper secondary school and university text from a wide range of subjects. All of these base lists include the base forms of words and their derived forms. They are counted for totals, types and families. The outsiders which are not found on the three base lists show totals and types. The output will report the percentage of the words marked to indicate which list they are on, or they are not on a list. The data were analyzed in percentage.

3.1 The instrument

Vocabprofile, which is a program to analyze the frequency of word occurrences within a text by Paul Nation, is used.

VocabProfile divides words into four groups by frequency:

1. Level one contains the most frequent 1,000 words of English.
2. Level two contains the second most frequent thousand word of English, i.e. 1,001 to 2,000.
3. Level three contains academic words
4. The words in group four are not found on the other lists. Proper nouns are also included in this group.

3.2 The steps in the analysis of vocabulary are:

1. Only 23 reading passages from *Practice in Comprehension II* were typed into the computer.

2. The words from passages were grouped into four levels by VocabProfile program and the number of words in each list and the percentage were calculated.

The findings are presented in table forms by the program. The information given consists of the analysis of the different words contained in the text by token, type and word family. The following table presents the results of words occurrences within a text by VocabProfile program.

Sausages were Mr. Feuchtwanger's specialty. They were so hot that Antonie used to let his customers borrow white gloves while they were eating his sausages. Without the gloves, they were too hot to touch. However, many of his customers often forgot to return the gloves and walked away with them, and with them went Antoine's profits. (*Practice in Comprehension II*, 1)

Table 1 The number of words used in the sample paragraph

| Word List | Word tokens | | Word types | | Word families |
|-----------------|-------------|------|------------|------|---------------|
| | No. | % | No. | % | |
| Base List One | 46 | 79.3 | 31 | 81.6 | 29 |
| Base List Two | 3 | 5.2 | 2 | 5.3 | 2 |
| Base List Three | 0 | 0 | 0 | 0 | 0 |
| List Four | 9 | 15.5 | 5 | 13.2 | - |
| Total | 58 | | 38 | | 31 |

The table shows that there are 58 word tokens in the sample paragraph. These running words are classified into 38 word types and 31 word families. All the words in the paragraph could be grouped into three lists. From this table, words in list one were

the most frequently found. There are 46 word tokens making up 79.3%, 31 word types making up 81.6% and 29 word families. In list two, three word tokens making up 5.2%, two word types making up 5.3% and two word families were found. There are no word tokens, word types and word families found in list three. In list four, nine word tokens making up 15.5% and five word types (13.2%) were found.

The program also provided frequency of three lists of word types and two lists of word families. Words in the sample paragraph are shown in five lists according to the computer program.

1. Word types found in list one.

| Type | Frequency | | | | |
|---------|-----------|---------|---|---------|---|
| and | 2 | profits | 1 | walked | 1 |
| away | 1 | return | 1 | went | 1 |
| eating | 1 | so | 1 | were | 4 |
| forgot | 1 | that | 1 | while | 1 |
| his | 3 | the | 2 | white | 1 |
| hot | 2 | them | 2 | with | 2 |
| however | 1 | they | 3 | without | 1 |
| let | 1 | to | 3 | | |
| many | 1 | too | 1 | | |
| of | 1 | touch | 1 | | |
| often | 1 | used | 1 | | |

2. Word types found in list two

| | |
|-----------|---|
| borrow | 1 |
| customers | 2 |

3. Word types found in list four

| | | | |
|--------------|---|-----------|---|
| Antoine | 2 | sausages | 2 |
| Feuchtwanger | 1 | specialty | 1 |
| gloves | 3 | | |

4. Word families in list one

| Type | Frequency | | | | |
|---------|-----------|--------|---|---------|---|
| and | 2 | many | 1 | to | 3 |
| away | 1 | mister | 1 | too | 1 |
| be | 6 | of | 1 | touch | 1 |
| eat | 1 | often | 1 | use | 1 |
| forget | 1 | profit | 1 | walk | 1 |
| go | 1 | return | 1 | while | 1 |
| he | 3 | so | 1 | white | 1 |
| hot | 2 | the | 2 | with | 2 |
| however | 1 | they | 5 | without | 1 |
| let | 1 | this | 1 | | |

5. Word families in list two

| | |
|----------|---|
| borrow | 1 |
| customer | 2 |

In conclusion, the 23 reading passages from *Practice in Comprehension II* were analyzed to access the words used on the basis of frequency by a computer program, VocabProfile. The program grouped words into four lists. List one includes the first 1,000 most frequent words, list two includes the second 1,000 of most frequent words, list three includes academic words which are frequently used in the upper secondary and university texts, and list four are words which are not found in any three lists. The data were analyzed and calculated in percentage.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter presents the results of the study which are discussed according to the research questions stated in chapter one:

1. How many words in vocabulary levels 1, 2 and academic words are found in *Practice in Comprehension II*?

2. How is the vocabulary arranged?

3. How frequently do the target words for Matthayomsuksa 5 students occur in the textbook?

1. How many words in vocabulary levels 1, 2 and academic words are found in *Practice in Comprehension II*?

From the 23 reading passages in *Practice in Comprehension II*, all the words were analyzed in terms of word tokens, word types and word families by using the VocabProfile program. Those word tokens, word types and word families were grouped into four lists: list one (the 1,000 most frequent words), list two (the second thousand most frequent), list three (academic words) and list four (words not found in any of the three lists). The results are presented in Table 2

Table 2 The number of words in passages 1-23

| Word List | Word tokens | | Word types | | Word families |
|------------|-------------|------|------------|------|---------------|
| | No. | % | No. | % | |
| List One | 8462 | 79.1 | 1365 | 49.6 | 789 |
| List Two | 765 | 7.2 | 428 | 15.5 | 319 |
| List Three | 361 | 3.4 | 236 | 8.6 | 186 |
| List Four | 1108 | 10.4 | 724 | 26.3 | - |
| Total | 10,696 | | 2,753 | | 1,294 |

Table 2 shows that the number of word tokens found in all passages was 10,696 words. These words were classified into 2,753 word types and 1,294 word families. All the words in the 23 passages were grouped into the four lists. From this table, words in list one were most frequently found. There were 8,462 word tokens (79.1%), 1,365 word types (49.6%) and 789 word families (60.97%). In list two, 765 word tokens (7.2%), 428 word types (15.5%) and 319 word families (24.65%) were found. In list three, 361 word tokens (3.4%), 236 word types (8.6%) and 186 word families (14.38%) were found. In list four, 1,108 word tokens (10.4%) and 724 word types (26.3%) were found. (See the frequency of the four lists of word types and three lists of word families in Appendix D).

From Table 2, it can be concluded that the 23 passages provided coverage of the vocabulary of the most 2,000 frequent words which are mostly basic and simple words. These words in the passages were suitable basic vocabulary for learners who learn English as a foreign language. These passages also contain some academic words which prepare learners for their further study. Therefore, this book is appropriate for Matthayomsuksa 5 students who study at secondary level. (See word tokens, word types

and word families found in each reading passage in four ready-made word lists in the Appendix A, B, and C).

2. How is the vocabulary arranged?

Only word types were studied to answer this question. The reason is that EFL learners may not know all derivations of individual word; for example, learners may know the word occur, but they may not know the word occurrence. Therefore, it is appropriate to study how the word types in the textbook are arranged. Figure 1 presents the four lists of word types from all reading passages.

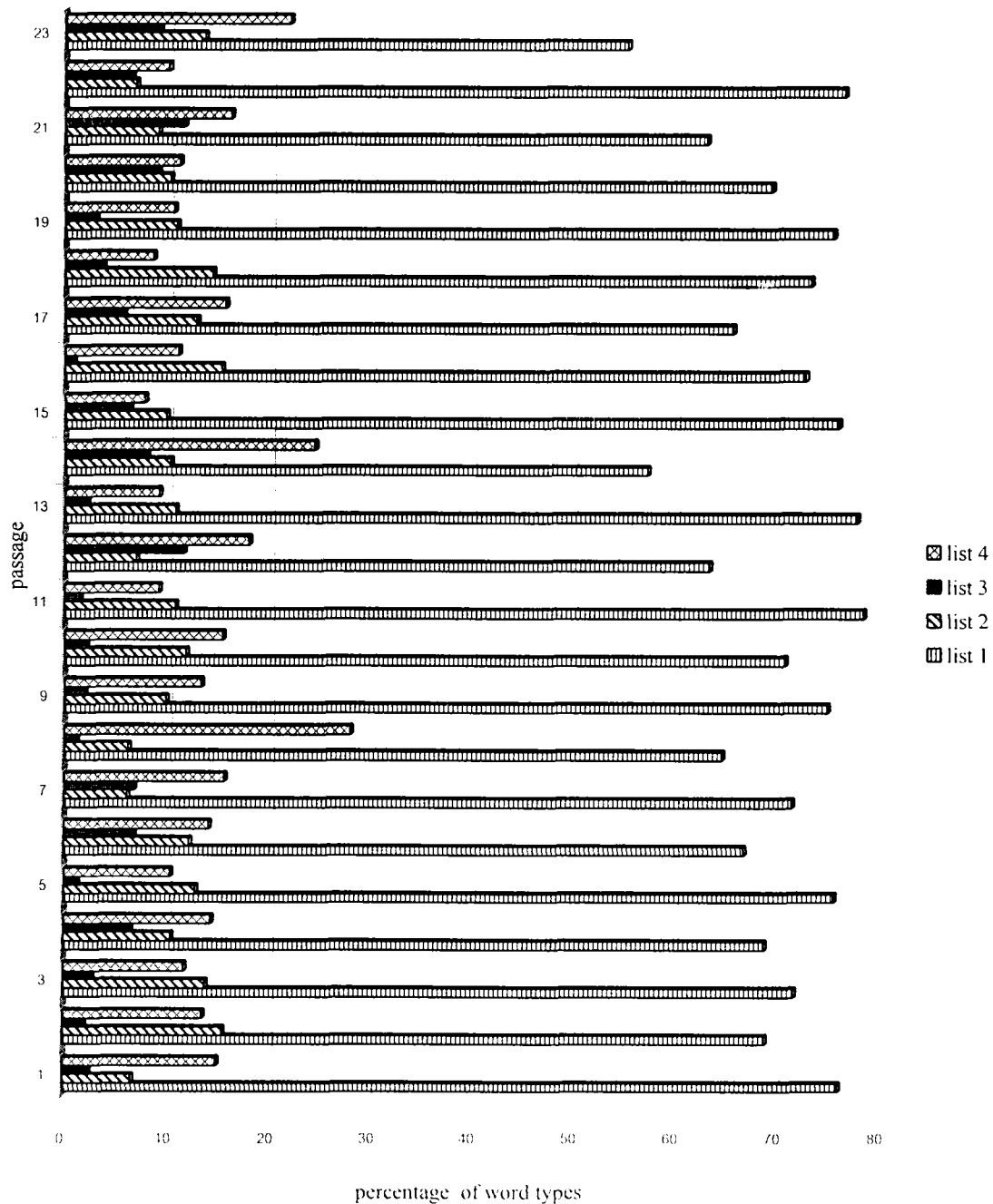


Figure 1 The number of word types found in the four lists.

It can be seen that the percentage of word types at each word level of the 23 passages considerably fluctuated. The proportion of the four lists in each passage developed with different rates. The highest number of words appeared in list one, followed by list four, list two and list three respectively. That is a large proportion of

words in every passage came from the first list. Words in this group are important for learners because they are the most frequent. However, words in list two (the second 1,000 most frequent words) are also important. According to Nation (1990: 19), the words from these two lists occur about 87% of the running words in a text. Words in list three that are the academic words showed the least proportion. According to Nation (1990: 19), words in this group account for 8% of the running words in any academic text.

From the 23 passages, list 1 and 2 covered about 67%-89% of the total, whereas words in list three covered about 1%-11% and words in list four covered about 8%-28%. Comparing passage 1 with passage 23, words were presented incrementally. Passage 23 seems to be more difficult than passage 1 because the two passages arranged in order of word frequency. That is passage 1 contained higher percentage of words in list one than passage 23, while passage 23 contained higher percentage of words in list three and list four than passage 1.

3. How frequently do the target words for Matthayomsuksa 5 students occur in the textbook?

In order to answer this question, words in the textbooks were compared with the M.5 vocabulary list, English syllabus of the Department of General Education (1992), to obtain the number of overlapping words (only the content words were studied to get the frequency of word repetition). Figure 2 presents the results of the overlapping words.

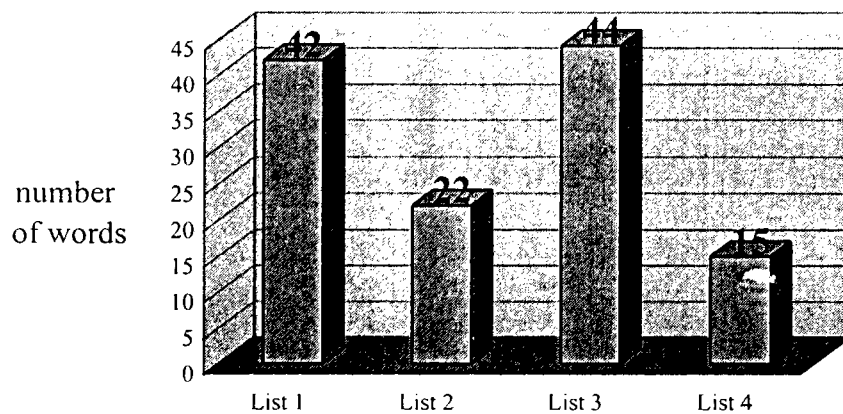


Figure 2 The number of words from the M.5 word list appearing in the textbook

From the analysis, it was found that 123 words (122 content words and 1 function word) from vocabulary list for Matthayomsuksa 5 students in English syllabus appeared in the passages. As seen in Figure 2, these words were grouped into the four lists. There were 42 words in list one, 22 words in list two, 44 words in list three and 15 words in list four.

Nation and Waring (1997: 9) state that knowing enough content words allows a good degree of comprehension of a text. Also, the number of times the words appeared affects vocabulary acquisition. Learners need to meet a new word several times in order to acquire it. Repeated meetings can strengthen and enrich previous knowledge of the word. Table 3 to 6 show the occurrence of content words found in passages 1-23.

Table 3 Frequency of content words in list one

| Rank | Words | Frequency | Appearances in passages 1-23 |
|-------------|--------------|------------------|-------------------------------------|
| 1 | still | 11 | 4,8,13,14,16,17,19 |
| 2 | over | 9 | 1,7,8,11,12,13,15,22,23 |
| 3 | last | 8 | 4,13,16,23 |
| 4 | course | 6 | 5,8,19,23 |
| 5 | able | 5 | 5,6,18,19,22 |
| 6 | base | 4 | 7,20 |
| 7 | development | 4 | 12,20,23 |
| 8 | character | 3 | 1,8 |
| 9 | sight | 3 | 13 |
| 10 | whenever | 3 | 2,9,13 |
| 11 | accept | 2 | 18,19 |
| 12 | agency | 2 | 14 |
| 13 | ancient | 2 | 8,14 |
| 14 | apply | 2 | 12 |
| 15 | claim | 2 | 1,2 |
| 16 | demand | 2 | 18,20 |
| 17 | simply | 2 | 16,23 |
| 18 | associate | 1 | 23 |
| 19 | attempt | 1 | 4 |
| 20 | choice | 1 | 18 |
| 21 | classify | 1 | 15 |
| 22 | continue | 1 | 13 |
| 23 | cross | 1 | 6 |
| 24 | degree | 1 | 12 |
| 25 | due | 1 | 7 |
| 26 | expense | 1 | 12 |
| 27 | honour | 1 | 12 |
| 28 | influence | 1 | 7 |
| 29 | judge | 1 | 12 |
| 30 | literature | 1 | 23 |
| 31 | mass | 1 | 16 |
| 32 | nation | 1 | 9 |
| 33 | native | 1 | 22 |
| 34 | peace | 1 | 23 |
| 35 | record | 1 | 3 |
| 36 | represent | 1 | 12 |

Table 3 (continued)

| Rank | Words | Frequency | Appearances in passages 1-23 |
|------|----------|-----------|------------------------------|
| 37 | settle | 1 | 3 |
| 38 | spot | 1 | 11 |
| 39 | stage | 1 | 22 |
| 40 | suppose | 1 | 19 |
| 41 | surprise | 1 | 9 |
| 42 | wound | 1 | 7 |

As seen in Table 3, the highest frequency of words in list one occurred 11 times, whereas the lowest frequency was only 1 time. Note that words in list one were most found in passages 12 and 23. However, words in list one were not found in passage 10 and 21 (Words in passage 12 were apply, degree, development, expense, honour, judge, over and represent. Words found in passage 23 were associate, course, development, last, literature, over, peace and simply).

Table 4 Frequency of content words in list two

| Rank | Words | Frequency | Appearances in passages 1-23 |
|------|-----------|-----------|------------------------------|
| 1 | pause | 4 | 13,16,19 |
| 2 | guard | 3 | 21,22,23 |
| 3 | patient | 3 | 14,15 |
| 4 | decay | 2 | 14 |
| 5 | pity | 2 | 22 |
| 6 | qualify | 2 | 22 |
| 7 | ashamed | 1 | 16 |
| 8 | burst | 1 | 16 |
| 9 | courage | 1 | 20 |
| 10 | defend | 1 | 20 |
| 11 | delighted | 1 | 13 |
| 12 | handle | 1 | 5 |
| 13 | imitate | 1 | 17 |

Table 4 (continued)

| Rank | Words | Frequency | Appearances in passages 1-23 |
|------|-------------|-----------|------------------------------|
| 14 | neglect | 1 | 14 |
| 15 | oppose | 1 | 13 |
| 16 | overcome | 1 | 20 |
| 17 | perform | 1 | 13 |
| 18 | performance | 1 | 2 |
| 19 | sample | 1 | 14 |
| 20 | slope | 1 | 13 |
| 21 | suspect | 1 | 19 |
| 22 | worship | 1 | 16 |

It can be seen from Table 4 that the highest frequency words in list two appeared four times. Five words in this list occurred in passage 13. They were delighted, oppose, pause, perform and slope. Words in this list were not found in passages 1,3-13 and 18.

Table 5 Frequency of content words in list three

| Rank | Words | Frequency | Appearances in passages 1-23 |
|------|-------------|-----------|------------------------------|
| 1 | research | 4 | 14,15,23 |
| 2 | unique | 3 | 3,21,23 |
| 3 | aid | 2 | 12 |
| 4 | assume | 2 | 14 |
| 5 | authority | 2 | 23 |
| 6 | available | 2 | 17,22 |
| 7 | conference | 2 | 23 |
| 8 | primary | 2 | 14,23 |
| 9 | promote | 2 | 21,22 |
| 10 | release | 2 | 23 |
| 11 | role | 2 | 22 |
| 12 | scheme | 2 | 12,14 |
| 13 | substitute | 2 | 18,22 |
| 14 | assist | 1 | 21 |
| 15 | automatic | 1 | 14 |
| 16 | capacity | 1 | 6 |
| 17 | concentrate | 1 | 19 |

Table 5 (continued)

| Rank | Words | Frequency | Appearances in passages 1-23 |
|------|--------------|-----------|------------------------------|
| 18 | conduct | 1 | 14 |
| 19 | constant | 1 | 18 |
| 20 | contact | 1 | 12 |
| 21 | contemporary | 1 | 8 |
| 22 | contrast | 1 | 10 |
| 23 | definite | 1 | 20 |
| 24 | derive | 1 | 20 |
| 25 | display | 1 | 23 |
| 26 | emphasize | 1 | 22 |
| 27 | energy | 1 | 14 |
| 28 | evidence | 1 | 19 |
| 29 | exhibition | 1 | 14 |
| 30 | external | 1 | 23 |
| 31 | initial | 1 | 23 |
| 32 | instance | 1 | 18 |
| 33 | investigate | 1 | 14 |
| 34 | investment | 1 | 22 |
| 35 | link | 1 | 23 |
| 36 | mental | 1 | 6 |
| 37 | obvious | 1 | 17 |
| 38 | potential | 1 | 14 |
| 39 | predict | 1 | 23 |
| 40 | require | 1 | 4 |
| 41 | source | 1 | 14 |
| 42 | style | 1 | 7 |
| 43 | undertake | 1 | 12 |

Table 5 reveals similar results. That is, the highest frequency of words appeared four times. Words in this list were most frequently found in passage 14 and 23. Eleven words in passage 14 were assume, automatic, conduct, energy, exhibition, investigate, potential, primary, research, scheme and source. Words found in passage 23 were authority, conference, display, external, initial, link, predict, primary, release, research and unique. Passages 1, 5, 9, 11, 14 and 16 did not contain words in this list.

Table 6 Frequency of content words in list four

| Rank | Words | Frequency | Appearances in passages 1-23 |
|------|------------|-----------|------------------------------|
| 1 | clue | 8 | 6 |
| 2 | dial | 3 | 5 |
| 3 | elementary | 2 | 22 |
| 4 | aggressive | 1 | 20 |
| 5 | alarm | 1 | 23 |
| 6 | amateur | 1 | 2 |
| 7 | career | 1 | 22 |
| 8 | cylinder | 1 | 23 |
| 9 | fame | 1 | 7 |
| 10 | fascinate | 1 | 2 |
| 11 | import | 1 | 19 |
| 12 | incredible | 1 | 3 |
| 13 | novel | 1 | 7 |
| 14 | sense | 1 | 23 |
| 15 | superior | 1 | 19 |

Table 6 shows that the word clue appeared most frequently in list four. Passage 23 contained three words from this list. They were alarm, cylinder and sense. Passages that words in list four did not occur were passages 1, 4, 8-18 and 21.

Interestingly, the M.5 word list contains the 15 low frequent words which seem to be unnecessary for learners at this level. Probably, the Department of General Education will have to reconsider what words should be included in the list.

Figure 3 presents a clearer picture of the number of content words occurring in each passage.

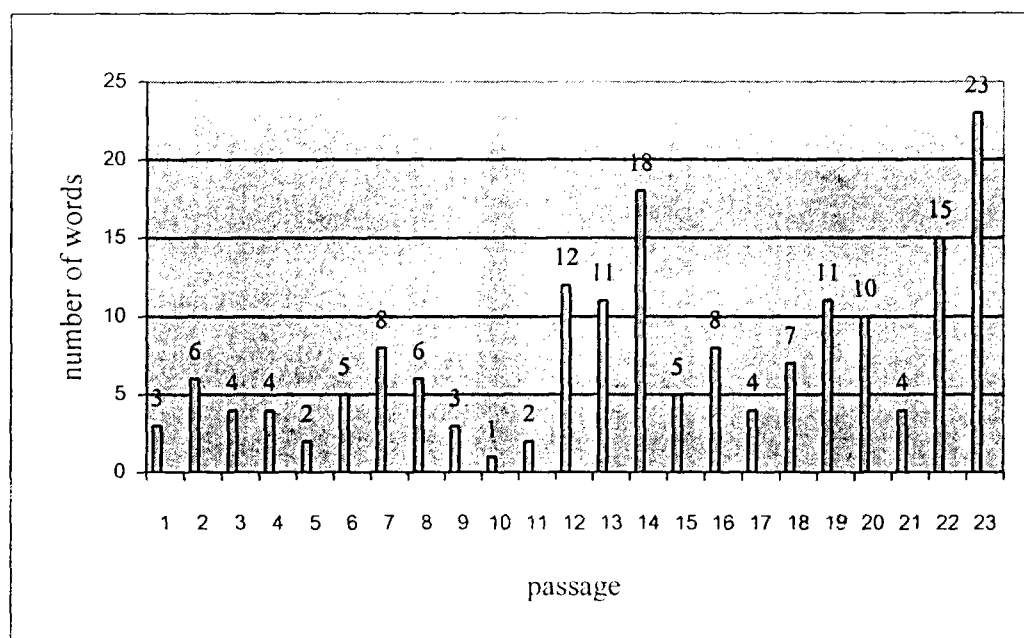


Figure 3 The number of words occurring in passages 1-23

The results showed that one hundred and twenty-two content words were found in all passages. Passage 23 contained the highest number of words from the four lists, 23 words. Passage 10 contained the least, one word. It can be said that passage 23 provided most words from the M.5 word list.

In sum, there were 122 content words found in the four lists ranging from 1 to 5 times of occurrences. Only five words presented at least six times which are a threshold for learners were found to acquire. They were still (11), over (9), last (8), course (6) and clue (8). Due to the fact that the number of word repetitions affects vocabulary learning. The repetition of words will help learners to remember and reinforce the retention of words (Nation & Coady, 1988). Only one meeting for the students is not sufficient. Learners need to meet words often (at least 6 times) in order to learn them. The target words in this textbook did not provide enough opportunity for learners because only five words appeared 6-11 times.

CHAPTER 5

CONCLUSION

As mentioned, frequency is a useful criterion for judging which vocabulary items should be taught. In addition, the more frequently learners meet and use the words, the better they can maintain.

Twenty-three reading passages from *Practice in Comprehension II* were analyzed by a computer program VocabProfile to find out how many words in vocabulary levels 1, 2 and academic words were presented to the learners. Then, they were analyzed to see how the words were arranged. The repetitions of words were also studied. All 23 reading passages were analyzed and calculated in percentage.

1. Conclusion

1. How many words in vocabulary levels 1, 2 and academic words are found in *Practice in Comprehension II*?

It was found that the total number of word tokens, word types and word families from the 23 reading passages were 10696, 2753 and 1294 respectively. The highest number of word tokens, word types and word families were words in base list one (the first 1,000 most frequent words). They were 8462, 1365 and 789 respectively. The number of word tokens, word types and word families found in base list two were 765, 428 and 319 respectively. The number of word tokens, word types and word families found in base list three were 361, 236, and 186 respectively. The number of word tokens and word types found in list four were 1108 and 724.

Words in list one (the first 1,000 most frequent words) were the highest number found in every passage, while words in list three (academic words which are frequently used in the upper secondary and university texts) were the least number

found in every passage. They were 0.4%-7%. The results indicated that reading passages 1-23 provided coverage of the vocabulary of the most 2,000 frequent words which are suitable for learners who learn English as a foreign language. Academic words were found not more than 8% but it was enough for learners in the secondary level.

2. How is vocabulary arranged?

It was found that the percentage of word types at each word level in passages 1-23 considerably fluctuated. The number of words at each level was not shown in the hierarchy of frequency.

3. How frequently do the target words for Matthayomsuksa 5 students occur in the textbook?

It was found that 123 words (122 content words and 1 function word) from the M.5 vocabulary list appeared in the 23 passages. One hundred and seventeen words appeared with the frequency ranging from 1-5. According to Saragi, Nation and Meister (1978), words presented six or more times were learned by 93% of learners. However, only five of the target words in this book were presented 6-11 times. All of them were words in list one, including such words as still, over, last, course and clue.

2. Implication

1. Vocabulary should be one factor to be considered in selecting passages for learners at particular level.

2. To provide the opportunity for learners to acquire the target words, word repetition should be taken into account.

3. Limitations of the Study

The study has some limitations as follows:

1. This study focused solely on the vocabulary of the reading passages in the textbook. Other parts such as the exercises that learners have to meet in their studying were not studied.

2. There was not any measurement of the students' knowledge of vocabulary. Thus, it would be impossible to study vocabulary development.

3. Suggestions for Further Studies

1. A further study should compare another English reading textbooks of Matthayomsuksa 5 to fully understand the difficulty of the textbook.

2. There should be a measurement of learners' vocabulary size to know their vocabulary proficiency.

In conclusion, words from the 23 reading passages provide sufficient vocabulary for students at this level. As known, frequency plays an important role in vocabulary acquisition. Therefore, teachers need to make a decision about what words are worth teaching. However, the target words appeared less frequently as it should be (many of the target words appeared only once). Thus, it is the task of the teachers to provide students input and find suitable learning strategies to deal with those words.

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APPENDICES

APPENDIX A

The number of word tokens in the 23 reading passages in the four word lists

| Passage | Total Words | List One | | List Two | | List Three | | List Four | |
|---------|-------------|----------|------|----------|------|------------|-----|-----------|------|
| | | No. | % | No. | % | No. | % | No. | % |
| 1 | 222 | 179 | 80.6 | 9 | 4.1 | 3 | 1.4 | 31 | 14.0 |
| 2 | 257 | 205 | 79.8 | 26 | 10.1 | 3 | 1.2 | 23 | 8.9 |
| 3 | 286 | 227 | 79.4 | 29 | 10.1 | 4 | 1.4 | 26 | 9.1 |
| 4 | 230 | 174 | 75.7 | 19 | 8.3 | 10 | 4.3 | 27 | 11.7 |
| 5 | 267 | 221 | 82.8 | 24 | 9.0 | 2 | 0.7 | 20 | 7.5 |
| 6 | 405 | 307 | 75.8 | 46 | 11.4 | 14 | 3.5 | 38 | 9.4 |
| 7 | 566 | 456 | 80.6 | 20 | 3.5 | 23 | 4.1 | 67 | 11.8 |
| 8 | 419 | 314 | 74.9 | 18 | 4.3 | 3 | 0.7 | 84 | 20.0 |
| 9 | 354 | 291 | 82.2 | 26 | 7.3 | 4 | 1.1 | 33 | 9.3 |
| 10 | 336 | 265 | 78.9 | 24 | 7.1 | 4 | 1.2 | 43 | 12.8 |
| 11 | 96 | 77 | 80.2 | 7 | 7.3 | 1 | 1.0 | 11 | 11.5 |
| 12 | 597 | 444 | 74.4 | 32 | 5.4 | 47 | 7.9 | 74 | 12.4 |
| 13 | 942 | 824 | 87.5 | 48 | 5.1 | 8 | 0.8 | 62 | 6.6 |
| 14 | 746 | 531 | 71.2 | 59 | 7.9 | 37 | 5.0 | 119 | 16.0 |
| 15 | 378 | 313 | 82.8 | 26 | 6.9 | 20 | 5.3 | 19 | 5.0 |
| 16 | 796 | 641 | 80.5 | 82 | 10.3 | 3 | 0.4 | 70 | 8.8 |
| 17 | 369 | 269 | 72.9 | 41 | 11.1 | 12 | 3.3 | 47 | 12.7 |
| 18 | 507 | 435 | 85.8 | 42 | 8.3 | 9 | 1.8 | 21 | 4.1 |
| 19 | 538 | 440 | 81.8 | 37 | 6.9 | 18 | 3.3 | 43 | 8.0 |
| 20 | 398 | 298 | 74.9 | 25 | 6.3 | 22 | 5.5 | 53 | 13.3 |
| 21 | 378 | 300 | 79.4 | 20 | 5.3 | 23 | 6.1 | 35 | 9.3 |
| 22 | 685 | 582 | 88.4 | 23 | 3.5 | 23 | 3.5 | 30 | 4.6 |
| 23 | 1158 | 831 | 71.8 | 93 | 8.0 | 69 | 6.0 | 165 | 14.2 |

APPENDIX B

The number of word types in the 23 reading passages in the four word lists

| Passage | Total Words | List One | | List Two | | List Three | | List Four | |
|---------|-------------|----------|------|----------|------|------------|------|-----------|------|
| | | No. | % | No. | % | No. | % | No. | % |
| 1 | 121 | 92 | 76.0 | 8 | 6.6 | 3 | 2.5 | 18 | 14.9 |
| 2 | 148 | 102 | 68.9 | 23 | 15.5 | 3 | 2.0 | 20 | 13.5 |
| 3 | 145 | 104 | 71.7 | 20 | 13.8 | 4 | 2.8 | 17 | 11.7 |
| 4 | 154 | 106 | 68.8 | 16 | 10.4 | 10 | 6.5 | 22 | 14.3 |
| 5 | 156 | 118 | 75.6 | 20 | 12.8 | 2 | 1.3 | 16 | 10.3 |
| 6 | 205 | 137 | 66.8 | 25 | 12.2 | 14 | 6.8 | 29 | 14.1 |
| 7 | 263 | 188 | 71.5 | 16 | 6.1 | 18 | 6.8 | 41 | 15.6 |
| 8 | 243 | 157 | 64.6 | 15 | 6.2 | 3 | 1.2 | 68 | 28.0 |
| 9 | 203 | 152 | 74.9 | 20 | 9.9 | 4 | 2.0 | 27 | 13.3 |
| 10 | 195 | 138 | 70.8 | 23 | 11.8 | 4 | 2.1 | 30 | 15.4 |
| 11 | 65 | 51 | 78.5 | 7 | 10.8 | 1 | 1.5 | 6 | 9.2 |
| 12 | 284 | 180 | 63.4 | 20 | 7.0 | 33 | 11.6 | 51 | 18.0 |
| 13 | 369 | 287 | 77.8 | 40 | 10.8 | 8 | 2.2 | 34 | 9.2 |
| 14 | 400 | 229 | 57.3 | 41 | 10.3 | 32 | 8.0 | 98 | 24.5 |
| 15 | 192 | 146 | 76.0 | 19 | 9.9 | 12 | 6.3 | 15 | 7.8 |
| 16 | 334 | 243 | 72.8 | 51 | 15.3 | 3 | 0.9 | 37 | 11.1 |
| 17 | 210 | 138 | 65.7 | 27 | 12.9 | 12 | 5.7 | 33 | 15.7 |
| 18 | 243 | 178 | 73.3 | 35 | 14.4 | 9 | 3.7 | 21 | 8.6 |
| 19 | 265 | 200 | 75.5 | 29 | 10.9 | 8 | 3.0 | 28 | 10.6 |
| 20 | 197 | 137 | 69.5 | 20 | 10.2 | 18 | 9.1 | 22 | 11.2 |
| 21 | 198 | 125 | 63.1 | 18 | 9.1 | 23 | 11.6 | 32 | 16.2 |
| 22 | 248 | 190 | 76.6 | 17 | 6.9 | 16 | 6.5 | 25 | 10.1 |
| 23 | 568 | 314 | 55.3 | 77 | 13.6 | 52 | 9.2 | 125 | 22.0 |

APPENDIX C

The number of word families in the 23 reading passages in the four word lists

| Passage | Total Words | List One | | List Two | | List Three | |
|---------|-------------|----------|------|----------|------|------------|------|
| | | No. | % | No. | % | No. | % |
| 1 | 87 | 78 | 89.7 | 6 | 6.9 | 3 | 3.4 |
| 2 | 118 | 93 | 78.8 | 22 | 18.6 | 3 | 2.6 |
| 3 | 111 | 89 | 80.2 | 18 | 16.2 | 4 | 3.6 |
| 4 | 116 | 92 | 79.3 | 14 | 12.1 | 10 | 8.6 |
| 5 | 124 | 106 | 85.5 | 16 | 12.9 | 2 | 1.6 |
| 6 | 149 | 116 | 77.9 | 20 | 13.4 | 13 | 8.7 |
| 7 | 185 | 152 | 82.2 | 15 | 8.1 | 18 | 9.7 |
| 8 | 154 | 136 | 88.3 | 15 | 9.8 | 3 | 1.9 |
| 9 | 150 | 129 | 86.0 | 17 | 11.3 | 4 | 2.7 |
| 10 | 147 | 123 | 83.7 | 20 | 13.6 | 4 | 2.7 |
| 11 | 54 | 47 | 87.0 | 6 | 11.1 | 1 | 1.9 |
| 12 | 202 | 151 | 74.8 | 20 | 9.9 | 31 | 15.3 |
| 13 | 279 | 235 | 84.2 | 37 | 13.3 | 7 | 2.5 |
| 14 | 266 | 197 | 74.1 | 41 | 15.4 | 28 | 10.5 |
| 15 | 158 | 131 | 82.9 | 16 | 10.1 | 11 | 7.0 |
| 16 | 253 | 202 | 79.8 | 48 | 19.0 | 3 | 1.2 |
| 17 | 153 | 115 | 75.2 | 26 | 17.0 | 12 | 7.8 |
| 18 | 191 | 148 | 77.5 | 34 | 17.8 | 9 | 4.7 |
| 19 | 200 | 165 | 82.5 | 27 | 13.5 | 8 | 4.0 |
| 20 | 144 | 111 | 77.1 | 17 | 11.8 | 16 | 11.1 |
| 21 | 144 | 105 | 72.9 | 17 | 11.8 | 22 | 15.3 |
| 22 | 186 | 156 | 83.9 | 16 | 8.6 | 14 | 7.5 |
| 23 | 364 | 247 | 67.9 | 71 | 19.5 | 46 | 12.6 |

Notes: List 1 includes the most frequent 1,000 words of English.

List 2 includes the second 1,000 words of most frequent words.

List 3 includes academic words.

List Four includes Low frequent words or words which are not found in any three BaseLists.

APPENDIX D

Four lists of word types and three lists of word families

1. Word types found in List One.

| | | | |
|--------------|-------------|------------|-----------------|
| a | able | above | accept |
| accept | accepted | accounts | actors |
| actually | adding | advantage | after |
| afterwards | aged | agency | agree |
| all | allowed | almost | alone |
| already | always | among | amount |
| an | ancient | and | answered |
| answering | anyone | anything | appearance |
| appeared | application | apply | are |
| arms | army | around | art |
| article | artist | arts | as |
| associated | at | attempt | away |
| b | based | be | beautiful |
| because | become | bed | been |
| began | begun | being | belief |
| believed | belonged | belonging | better |
| between | beyond | birds | blood |
| board | books | both | boxed |
| branch | bread | bright | bring |
| broken | brother | brought | build |
| building | built | businesses | businessman |
| by | c | calling | came |
| cannot | carry | case | catch |
| caught | cause | caused | causes |
| causing | central | centre | centres |
| certainly | change | changes | characteristics |
| characters | charged | charges | child |
| choices | claimed | claims | class |
| classified | clearer | close | colour |
| colours | come | companies | company |
| complete | completion | continued | controlled |
| controlling | cost | could | couldn't |
| council | counting | coursed | covered |
| cross | crowd | crying | cutting |
| daily | dangerous | daughter | day |
| deals | dear | deaths | decide |
| decided | degrees | demand | demands |
| department | describe | described | detail |
| details | development | did | didn't |
| disadvantage | disliked | distant | district |
| division | do | doctors | does |
| dog | dogs | doing | down |
| draw | drawing | drawn | drink |
| drings | dropped | due | e |

| | | | |
|------------|---------------|---------------|------------|
| each | ears | earth | easily |
| east | easy | eaten | eating |
| effective | effectiveness | efficient | either |
| else | end | enemy | enjoyed |
| enough | entered | entrance | entries |
| escaped | escapes | ever | everybody |
| everywhere | example | expenses | expression |
| extensive | eyes | fact | failing |
| fallen | familiar | families | family |
| famous | fast | fastest | father |
| feel | feeling | feelings | field |
| fighting | findings | first | flows |
| follow | foods | force | forced |
| foreigners | forgotten | forms | found |
| four | freely | friendly | further |
| g | gave | gentleman | gently |
| gifted | girl | glad | glass |
| god | gone | good | got |
| great | ground | grounds | groups |
| growing | growth | happened | happens |
| happily | happy | hard | have |
| having | he | head | heard |
| heart | heavy | here | herself |
| higher | him | his | home |
| honour | hope | hoped | hopes |
| hot | hour | hours | house |
| how | human | important | impossible |
| in | increased | independently | industrial |
| influenced | instead | interesting | introduced |
| its | joined | jointly | joy |
| judges | june | just | keep |
| keeping | kill | kind | lady |
| largely | largest | last | late |
| later | lawyers | leader | leads |
| leave | left | length | level |
| levels | lies | lift | lifting |
| like | likely | limited | line |
| lines | listening | literature | little |
| live | lived | living | local |
| locally | long | lose | losing |
| losses | loves | lying | m |
| machinery | makes | many | market |
| marketed | marriage | married | mary |
| mass | mastered | material | me |
| mean | means | members | memories |
| memory | men | might | minister |
| minutes | miss | moments | money |
| months | more | morning | most |
| mostly | mother | mountain | mountains |
| movements | moves | mr | mrs |

| | | | |
|------------|-------------|---------------|--------------|
| music | name | national | nations |
| native | necessary | necessity | need |
| needn | neither | new | news |
| newspaper | newspapers | nine | no |
| nor | northern | not | now |
| numbers | o | occasionally | occasionally |
| of | off | offer | offered |
| office | officers | offices | oh |
| old | older | once | one |
| ones | only | open | opened |
| operator | or | organize | other |
| our | out | over | paid |
| painting | part | particular | pass |
| past | pay | paying | peace |
| per | perhaps | personal | pictures |
| planned | plant | play | played |
| plays | point | pointed | poor |
| popular | position | possibilities | possibility |
| possible | post | pounds | powerful |
| powers | preparation | prepared | preparing |
| present | president | pressing | pretty |
| preventing | prevention | price | private |
| profits | progress | promising | protect |
| protecting | protection | proved | provide |
| purposes | put | putting | quality |
| questioned | questions | quite | raise |
| ranks | reach | reaching | reading |
| ready | real | realize | realized |
| realizing | really | receive | received |
| receives | recently | reconsider | records |
| reduce | reduced | reducing | refuse |
| regard | related | remain | remained |
| remembers | reported | reporters | represent |
| reserving | resulted | ride | rising |
| rivers | roll | room | round |
| run | s | safe | safety |
| sail | schools | science | seat |
| seats | seconds | secretary | seems |
| sell | September | service | setting |
| settles | seven | shake | shing |
| ship | showing | sides | sight |
| sign | silence | silver | simple |
| simply | since | singers | sir |
| sister | sit | sits | situated |
| situation | sleep | smiling | snow |
| so | social | society | sold |
| someone | something | song | south |
| southeast | speaking | speed | spend |
| spending | spent | spite | spoken |
| spots | spotted | stage | stages |

| | | | |
|------------|--------------|--------------|------------|
| standing | start | started | stations |
| step | still | stop | stopped |
| stopping | stops | stored | story |
| strangers | strength | strong | student |
| studied | studies | studying | substance |
| succeeded | successful | successfully | suffer |
| suggested | suggestion | sunlight | sunshine |
| supports | suppose | supposed | sure |
| surprise | surprising | surprisingly | sweets |
| system | systems | table | take |
| talk | talking | teach | teacher |
| teachers | teaching | tears | tentesting |
| that | themselves | then | there |
| therefore | they | thing | think |
| third | thirty | thought | thousand |
| three | threw | through | Thursday |
| Thursdays | thus | till | time |
| today | together | told | too |
| took | top | topped | towards |
| town | training | tree | true |
| truth | try | turn | turned |
| twelve | two | u | under |
| understand | unemployment | unity | unless |
| until | up | upon | upside |
| us | used | uses | using |
| value | variety | various | view |
| villagers | visitors | voters | wages |
| walked | walking | walks | want |
| wants | was | watch | we |
| wealthy | welcome | well | went |
| were | western | what | when |
| whenever | where | whether | who |
| wild | wildly | willingness | wind |
| window | with | within | wonder |
| wondered | wonderful | wondering | work |
| worked | workers | would | wounded |
| writing | years | you | young |
| younger | youngest | yourself | youth |

2. Word types found in List Two

| | | | |
|-----------|----------------|------------|------------|
| admirable | advertisements | advise | aeroplanes |
| afford | afraid | aims | amusement |
| anger | annoyed | ashamed | attend |
| attended | attract | attractive | avoid |
| baby | bell | bitterly | block |
| boldly | bottle | brains | brown |
| burst | bush | busy | camera |
| cameras | card | cat | cats |

| | | | |
|---------------|----------------|---------------|--------------|
| chains | cheapest | cheque | cheques |
| chicken | cleaning | clever | climb |
| climbed | coffee | combined | compared |
| competition | complaining | composer | convenient |
| conversation | conversations | courage | creature |
| criminal | cure | customers | dance |
| danced | decay | defence | defending |
| delighted | deserve | disappointing | disapproval |
| discuss | discussed | discussing | diseased |
| diseases | disturbing | during | earned |
| empty | engineering | exactly | examination |
| examined | excellent | fat | faults |
| feathers | film | films | firm |
| fond | frighten | frightened | frightening |
| government | grand | grandfather | graves |
| guard | hair | handle | harm |
| hat | healthy | hesitate | hunter |
| hurried | imitated | improvement | improving |
| insect | invent | invented | invention |
| invited | jaws | journeyed | kicked |
| kilometer | leather | legs | limb |
| listed | lists | lot | loud |
| luckily | lunch | mail | managers |
| meat | message | messages | motionless |
| multiplying | necks | neglected | nested |
| obedience | opposed | origin | overcame |
| package | pale | parks | patient |
| paused | peculiarities | perform | performances |
| photographers | picked | pity | plane |
| planes | policeman | poured | prefer |
| probability | programmes | proud | pupil |
| qualification | qualifications | qualified | rapid |
| rapidly | refer | restaurant | risks |
| rope | sample | search | searched |
| searching | self | shade | sharply |
| shop | shoppers | shut | skin |
| slope | slower | slowly | spitting |
| spoiled | steadily | stiff | strap |
| strip | strips | suddenly | sugar |
| suitable | supper | suspects | tail |
| tastes | tea | thanks | theatre |
| ticket | tied | tip | title |
| tobacco | toes | tomorrow | tools |
| tracking | uncle | universal | unlucky |
| wandered | weapons | weight | widow |
| worshipped | wrapped | | |

3. Word types found in List Three

| | | | |
|--------------|---------------|---------------|----------------|
| adapt | adapted | aid | appreciation |
| assists | assumed | assured | authorities |
| automatic | available | awareness | briefed |
| capacities | categories | challenge | civil |
| commencing | compatible | compensate | compound |
| computer | computers | concentrating | conducted |
| conference | consists | constant | contact |
| contemporary | contrasting | convincing | correspondence |
| couple | creation | cultural | culture |
| decade | decades | definite | derived |
| design | designed | designing | despite |
| devoted | displayed | emerged | emphasized |
| energetic | energy | environment | environmental |
| equipment | evidence | exceeding | exhibition |
| external | facilitate | fees | finally |
| founded | funding | generation | grade |
| guidelines | grade | guidelines | ignores |
| impact | income | initial | injuries |
| innovative | inspectors | instance | instruction |
| intelligence | intelligent | investigating | investigation |
| investment | invisible | job | linking |
| logic | medical | medically | mental |
| methods | migrated | minimal | mutual |
| mutually | obtain | obviously | options |
| paralleled | participation | percent | period |
| philosophers | pose | potential | predicts |
| primary | prior | professional | professionals |
| promoted | promotion | pursuing | quoted |
| relaxed | released | require | required |
| requires | research | researchers | residential |
| restrained | role | schedules | scheme |
| selected | source | strategists | stress |
| stresses | style | submit | substitute |
| tape | technology | topic | traced |
| undertake | unique | varied | |

4. Word families in List One

| | | | |
|--------|---------|-----------|-----------|
| a | able | above | accept |
| accord | actor | actual | add |
| admit | adopt | advantage | after |
| agent | agree | all | allow |
| almost | alone | already | always |
| among | amount | ancient | and |
| apply | arm | army | around |
| art | article | as | associate |
| at | attempt | away | abase |

| | | | |
|-------------|-----------|------------|------------|
| be | because | become | bed |
| belong | beside | between | blood |
| blow | board | both | branch |
| bread | break | bright | bring |
| brother | build | buy | by |
| c | car | carry | case |
| catch | cause | centre | change |
| character | child | choose | claim |
| class | clear | close | cloud |
| colour | come | company | complete |
| contain | continue | cost | could |
| council | count | cover | cross |
| crowd | danger | daughter | day |
| dead | deal | dear | decide |
| declare | demand | department | depend |
| describe | detail | die | difference |
| direct | discover | district | divide |
| do | dog | dollar | down |
| draw | drink | drop | due |
| duty | e | each | ear |
| earth | east | easy | efficient |
| eight | either | else | employ |
| end | enemy | enjoy | enough |
| enter | equal | event | ever |
| example | exercise | expense | experiment |
| extend | fact | fail | familiar |
| family | famous | fast | father |
| feel | field | fight | fill |
| first | fix | flow | flower |
| fly | follow | force | forget |
| fortune | four | g | gentle |
| girl | glad | glass | god |
| good | great | ground | hang |
| happen | happy | hard | have |
| he | head | hear | heart |
| heavy | here | hold | home |
| honour | hope | hot | hour |
| house | how | human | husband |
| ill | important | in | include |
| independent | influence | instead | introduce |
| joint | jointed | joy | judge |
| june | just | keep | kill |
| kind | lady | last | late |
| law | lead | leave | left |
| length | level | lie | lift |
| like | likely | limit | line |
| lip | listen | literature | little |
| live | local | long | lose |
| loss | m | many | market |
| marry | mass | material | mean |

| | | | |
|------------|-----------|-----------|-----------|
| meet | member | memory | might |
| minister | miss | mister | money |
| more | morning | most | mother |
| mountain | mrs | music | name |
| native | necessary | necessity | need |
| neighbour | neither | new | news |
| newspaper | nine | no | nor |
| north | not | now | o |
| object | occasion | of | off |
| offer | office | oh | old |
| once | one | only | open |
| operate | or | organize | other |
| out | over | paint | part |
| particular | pass | past | pay |
| peace | per | perhaps | picture |
| plain | plant | play | point |
| political | poor | popular | position |
| possess | possible | post | post |
| power | prepare | present | president |
| press | press | pretty | price |
| private | profit | progress | promise |
| proper | protect | provide | pull |
| purpose | put | quality | quite |
| raise | rank | reach | ready |
| real | realize | really | receive |
| recent | reduce | refuse | regard |
| relation | relative | remain | remember |
| reply | report | represent | reserve |
| respect | ride | rise | river |
| roll | room | round | rule |
| run | safe | sail | science |
| seat | secretary | seem | sell |
| September | serve | service | settle |
| seven | shake | shine | ship |
| side | sight | sign | silence |
| silver | simple | since | sir |
| sister | sit | situation | sleep |
| smile | snow | so | social |
| society | soldier | south | speak |
| speed | spend | spite | stage |
| start | station | step | still |
| stop | story | strength | strong |
| student | substance | succeed | suffer |
| suggest | sun | Sunday | support |
| suppose | sure | surprise | system |
| table | take | talk | teach |
| ten | then | there | therefore |
| they | thing | think | thirty |
| thousand | three | through | throw |
| Thursday | thus | till | time |

| | | | |
|--------|----------|------------|---------|
| today | together | too | top |
| toward | town | tree | true |
| try | turn | twelve | two |
| u | under | understand | unite |
| unless | until | up | upon |
| usual | value | variety | various |
| view | visit | vote | wage |
| want | watch | we | wealth |
| wear | welcome | well | western |
| what | when | where | whether |
| who | wild | win | wind |
| window | with | within | wonder |
| wood | work | would | wound |
| you | young | youth | |

5. Word families in List Two

| | | | |
|------------|------------|-------------|--------------|
| advertise | advice | afford | afraid |
| aim | amuse | anger | annoy |
| approve | arrest | ashamed | attend |
| attract | audience | avoid | baby |
| balance | basket | bell | bit |
| bitter | block | bottle | brown |
| burst | bush | busy | camera |
| card | cat | check | cheque |
| chicken | clean | clever | climb |
| coffee | collect | comb | combine |
| commerce | compare | competition | complain |
| compose | confidence | convenience | conversation |
| courage | creature | criminal | cure |
| curtain | customer | dance | decay |
| decrease | defend | delight | deserve |
| disappoint | discuss | disturb | during |
| educate | electric | empty | engine |
| especial | exact | examining | excellent |
| faint | fan | fat | fault |
| feather | film | finger | firm |
| flash | float | old | fond |
| fright | gay | govern | grand |
| grave | guard | guest | hair |
| handle | harm | hat | hesitate |
| honest | hunt | hurry | imagine |
| imitate | immediate | improve | inform |
| insect | insure | intend | invent |
| invite | jaw | journey | kick |
| kilometer | knee | leather | leg |
| limb | list | lock | lone |
| lot | loud | luck | lunch |
| mail | manage | meat | message |

| | | | |
|---------|------------|------------|----------|
| mix | moderate | motion | multiply |
| neglect | nest | nurse | obey |
| oppose | origin | pack | pain |
| pale | patient | pause | peculiar |
| perform | persuade | photograph | pity |
| plane | poison | pour | practice |
| prefer | probable | proud | pupil |
| quick | rapid | rare | refer |
| request | restaurant | rope | rush |
| sad | sample | search | self |
| shade | shop | shut | skin |
| slope | spell | spit | spoil |
| steady | stiff | strap | strip |
| sudden | sugar | supper | tail |
| taste | tea | tender | theatre |
| ticket | tie | tip | title |
| tobacco | toe | tomorrow | tool |
| trick | uncle | universe | wake |
| weak | weapon | weigh | widow |
| witness | worry | worship | wrap |
| wrist | | | |

6. Word families in List Three

| | | | |
|-------------|-------------|--------------|--------------|
| achieve | adapt | affect | aid |
| analyse | annual | appreciate | assist |
| assume | assure | authority | automate |
| available | brief | capacity | category |
| challenge | civil | commence | commit |
| compatible | compensate | compound | compute |
| concentrate | conclude | conduct | confer |
| consist | constant | contact | contemporary |
| contribute | convince | cooperate | correspond |
| couple | create | culture | decade |
| definite | derive | design | despite |
| detect | device | devote | economy |
| emerge | energy | environment | equip |
| eventual | evident | exceed | exclude |
| exhibit | external | facilitate | factor |
| fee | final | founded | function |
| fund | generation | grade | guideline |
| ignorant | impact | impose | income |
| initial | injure | innovate | inspect |
| instance | instruct | intelligence | intense |
| invest | investigate | involve | job |
| link | locate | logic | medical |
| mental | migrate | minimal | monitor |
| mutual | obtain | obvious | occur |
| option | orient | parallel | percent |

period
predict
professional
quote
require
role
select
stress
tape
trace
vary

philosophy
previous
prospect
react
research
schedule
similar
style
technique
transport
visible

pose
primary
psychology
relax
reside
scheme
source
submit
technology
undertake

potential
prior
pursue
release
restrain
secure
strategy
substitute
topic
unique

VITAE

VITAE

| | |
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