Action Research Paper

The effect of intentional vocabulary teaching on Thai high school student English writing proficiency

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ABSTRACT

This research reviews the effect of deliberate intentional vocabulary learning strategies. This study also highlights motivation, test-taking techniques and attitudes as significant contributors to learner outcomes. Five classes were tested over a 19-week programme of deliberate vocabulary learning. Four experimental classes received intentional vocabulary strategy activities while a fifth class used incidental language learning methods from their course book without any vocabulary strategy from the researcher. The target vocabulary was taken from a word list based on the language used in Access 1 and Access 3 course books, written by Virginia Evans and Jenny Dooley, as well as word lists from the Cambridge Proficiency in English Test (PET), the Test of English as a Foreign Language (TOEFL), the Student Aptitude Test (SAT), and the Academic Word List (AWL).

This research demonstrates that intentional vocabulary teaching alone does not improve student writing skills, but is a significant factor in both teaching strategies used by teachers and improvements made by students. The research used analytical tools for measuring grammar and vocabulary level of student written content, in particular the Flesch-Kincaid Grade Level Readability Formula which, while it does not take into account the logic and style used by the student, indicates the grade level use of grammar and vocabulary in the written work of students.

After measuring the Flesch-Kincaid writing level of each student's essay section in their exams, a significant trend was observed. It was evident that all students maximize their English skills by the Mid-term of Semester 2. All English Fundamentals students (M1, M3, M6) do not write as consciously at the Final exams of the Final Semester. This suggests that the greatest writing skill improvement is to be expected from the start of the first semester until the middle of the second.

Keywords: vocabulary; education; EFL; Thai; learning; writing; proficiency; Flesch-Kincaid

1. Literature Review

The importance of vocabulary learning is often overlooked in the demand for immediate results through grammar improvement sought by teachers of English in Thai schools. While grammar is important, Laufer and Sim (1985) have argued that knowledge of the vocabulary was the most crucial prerequisite for comprehension, followed by subject matter knowledge and finally grammar (Wallace, 2003).

Identifying the best source of vocabulary acquisition for L2 learners is a very difficult task. Researchers have various assumptions ranging from the 'noticing' assumption, to the 'guessing ability' assumption, from the 'guessing-retention link' assumption, to the 'cumulative gain' assumption.

Carter & McCarthy (1998) also support the notion that adequate time should be focused on vocabulary learning, and further suggested that vocabulary acquisition be devised independently of other course components for second language acquisition. Specific vocabulary learning activities are seldom incorporated into an English language syllabus in Thai government high schools. Most English classes in Thailand expect students to experience incidental learning of vocabulary through the text which is presented in the course book or on handouts. Often there is no systematic method to encourage the student to learn the vocabulary. However, Carter & McCarthy (1998) observed that word-focused tasks, such as completing given sentences, writing original sentences, and incorporating words in a composition, were extremely beneficial and resulted in more words being acquired than through reading alone.

However, Brown (2011) warns that while vocabulary researchers have established that multiple aspects of word knowledge need to be mastered in order for a learner to truly know a word, teachers seem to follow the commonsense view that equates learning words with learning meanings, and to mostly ignore other aspects of word knowledge. Brown suggests teachers develop an approach in which items are revisited regularly as different aspects of vocabulary knowledge are introduced. Clearly, study is required to evaluate various methods in order to ensure effective vocabulary learning is achieved. In this research word searches, word scrabble, cloze exercises, definition matching, and sentence creation exercises were used.

For second language learners vocabulary growth is of major importance, and for many learners commercially published course books will be the source of this vocabulary learning. In this preliminary study, input from the three M1-M3 course books alone would result in students receiving exposure to fewer than the first 1,500 most frequent words in English. O'Loughlin (2012) confirms that the use of course books for vocabulary acquisition necessitates supplementary sources of suitable reading input in order for effective vocabulary learning strategies to be implemented so that learners obtain regular opportunities to meet the most frequent 2,000 words of English.

A long-term study by Hutton (2003) strongly supported the idea that deliberate vocabulary learning methods are extremely beneficial to second and first language speakers. Over a three-year period a school-wide programme incorporating vocabulary-learning tasks of the Academic Word List (AWL) showed significant improvement in student vocabulary levels at a low decile secondary school.

The Academic Word List (AWL) was developed by Averil Coxhead at the School of Linguistics and Applied Language Studies at Victoria University of Wellington, New Zealand This word list contains 570 semantic fields which were selected because they appear with great frequency in a broad range of academic texts. The AWL does not include words that are in the most frequent 2,000 words of English, the General Service List (GSL by Michael West in 1953). Wallace (2003), concluded that students entering university would need to have competence in at least the most common 3,000 English words and the AWL (Academic Word List)

Bruton et al. (2011) distinguish two sense of the incidental in incidental vocabulary learning. One is defined as "vocabulary learnt as a by-product of some other activity, usually reading comprehension," and the second as" when there is no (conscious) intention to learn the vocabulary" (p.760).

Reynolds (2012) points out that Bruton et al. "may have unintentionally led readers to conclude that varying sense of incidental have been used by the researchers" (2012, p.812).

As is evident in current discussions, incidental occurrences are difficult to empirically study and so improvements to vocabulary usage is probably best evaluated using intentional language learning methods. Indeed, Schmitt is forced to combine approaches, arguing that "vocabulary learning programs need to include both an explicit, intentional learning component and a component based around maximizing exposure and incidental learning." (2008, p.329). Schmitt argues that the overriding principle for maximizing vocabulary learning is to increase the amount of engagement learners have with lexical items.

In this research, the target vocabulary of 120 words for M1 and 150 words for M3 was taken from the context in the course book and developed into various learning activities, including word searches, word scrabble, cloze exercises, definition matching, and sentence creation exercises. The target vocabulary is extremely close to the Cambridge PET word list.

The English course books used for M1 and M3 English Fundamentals during this research in 2012 were Access 1 and Access 3, written by Virginia Evans and Jenny Dooley, and published by Express Publishing in the UK. The vocabulary in the course books closely matched the Proficiency of English Test (PET) Vocabulary List. The PET Vocabulary List was originally developed by Cambridge English for Speakers of Other Languages (ESOL) in consultation with external consultants to guide item writers who produce materials for the PET examination. It includes vocabulary from the Council of Europe's Threshold (1990) specification and other vocabulary which corpus evidence shows is high-frequency. The PET Vocabulary List equips students to socially communicate in English at an intermediate level.

Even when the course books are replaced, Thai government schools continue to aim at PET level English for M1 to M3 students as is evident in the English course books chosen for M1 and M3 English Fundamentals in 2013. These books will be Team Up 1 and Team Up 3, written by Fergal Kavanagh, Claire Moore and Catrin Morris, and published by Eli S.R.L in Italy, and contain a large number of PET words.

1. Methods

1.1. Vocabulary Strategy

The tables below indicate the number of words taken from the course book and words added from PET to each of the M1 to M3 classes.

Also, a suggestion that 2,160 words be introduced for M4 to M6 students from the Academic Word List in order to prepare these students for TOEFL, SAT, and university entrance examinations.

Vocabulary 2012

Class	Words	Sessions	Total	Weeks	Sem 1 a	Sem 1 b	Sem 2 a	Sem 2 b	Year Total
M1	5	3	15	8	120	120	120	120	480
M2	5	3	15	9	135	135	135	135	540
M3	5	3	15	10	150	150	150	150	600
M4	10	2	20	8	160	160	160	160	640
M5	10	2	20	9	180	180	180	180	720
M6	10	2	20	10	200	200	200	200	800

Tot.Words	PET/SAT	Cumulative	
480	317	317	PET words
1,020	540	857	PET words
1,620	316	1,173	PET words
640			AWL words
1,360			AWL words
2,160			AWL words

M1-M3	
Basic Vocabulary	
1,620	words

M4-M6	
Academic Vocabulary	
2,160	words

Total Vocabulary (M1-M6)	3,780 words

PET words from Course book

	Sem 1a	Sem 1b	Sem2a	Sem2b	Total	%
M1	62	58	60	12	192	40.0%
M2	0	0	0	0	0	0.0%
M3	60	59	36	53	208	34.7%

PET words in Total

	Sem 1a	Sem 1b	Sem2a	Sem2b	Total	%
M1	69	80	67	101	317	66.0%
M2	135	135	135	135	540	100.0%
M3	111	76	44	85	316	52.7%

Vocabulary List Academic Year 2012

Through the introduction of vocabulary as indicated above, students in the E-Programme would be expected to become fluent with over 2,000 words by M4, and competent for international university education by M6.

1.2. Vocabulary Creation

Choosing which words and when to introduce them to the students required considerable background study.

For M1-M3 classes, the vocabulary introduced in the course books was examined on a page-by-page and lesson-by-lesson basis as the students would make their way systematically through the Access 1 – Access 3 course books. These words were then compared to various word lists until a word list with the greatest number of these words was identified.

The Cambridge Access course books followed Cambridge PET word list predominantly, so extra words from that list were added to ensure a wider and more comprehensive collection of communicative words were available for students to express themselves more fully throughout their courses.

M4-M6 classes required a slightly different approach as these students faced external examinations that demanded a high level of academic English. M4-M5 students would be introduced to the more abstract terms demanded by the SAT examinations, while M6 with their limited time allocation for studies in their final year would focus on TOEFL and GAT (Thailand's General Aptitude Test) vocabulary.

Once all words were collected, definitions and example sentences were written so that students could attempt to learn and use each word in each lesson. Duplications were identified and a systematic process was created to ensure the vocabulary was not duplicated as the student progressed from M1 to M6.

1.3. Process for taking away Duplicates from Vocabulary List

a) Identify the location of the duplicated word

b) Verify the meaning is identical

c) Replace the word

1.4. Moving Vocabulary from List into Student Lesson Records

a) Copy out of Vocabulary.xlsx

b) Paste into Syllabus.xlsx

c) Words are linked into Record Plan on the appropriate Record tab.xlsx

2. Teaching Methods

Initially, words that were considered difficult for students were taken from the book and introduced as vocabulary during the course.
The target vocabulary of 120 words for M1 and 150 words for M3 was taken from the context in the course book. Since the target vocabulary from Evans and Dooley closely correlated with Cambridge Proficiency of English Test (PET), extra words from PET were added to the vocabulary list.

Five words introduced each lesson, and all 15 words for each week were then recalled through various learning activities, including word searches, word scrabble, cloze exercises, definition matching, and sentence creation exercises.

Student record forms prepared for new vocabulary in that it provided a list of words to be covered each lesson.

The words, along with the entire data for the lesson was merged from data in and Excel file, that contained dates, objectives, as well as target vocabulary.

The Syllabus file was linked to a Vocabulary Excel file, which matched frequently used Thai words with words found in PET. The vocabulary file was first filled with words from the course book. These were then correlated with PET words, and additional PET words, matching common Thai words, were added. By matching vocabulary closest to Thai daily usage identified vocabulary more immediately relevant to the student.

	Week	Part	Thai	Word	Definition		Coursebook	PET in Course	PET only	Pet Word
1										
52		2	ดิบ	raw	not cooked		1	1		raw
53		2	ทำไม	why	for what reason				1	why
54		2	เปื่อยเนย	blunt	not having a sharp edge or point		1			
55		2	ผัก	vegetable	a plant that is used as food		1	1		vegetable

All words, both Thai and English, were linked to the Syllabus Excel file.
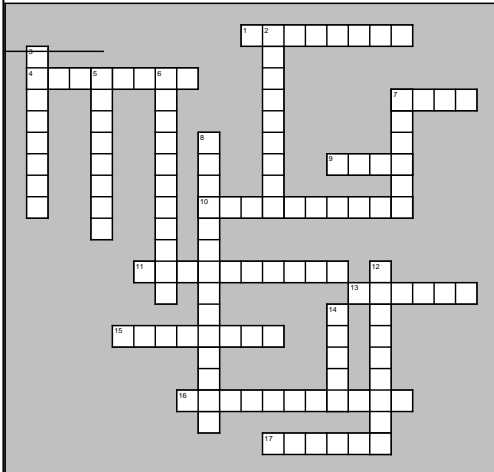
		Week	Part	
Total Words	120	1	1	ที่ผ่านมา, ตรงมา a quarter past, a quarter to, half past, o'clock, excuse me
SB Words in PET	62	1	2	สุภาพ, กรุณา, i polite, please, welcome, timetable, school subjects
SB % in PET	51.7%	1	3	ตำราเรียน, ในรั textbook, weekday, consonant, vowel, article
		2	1	แปลก, เอกพจน strange, singular, plural, tofu, the Internet
M1 Sem 1a		2	2	ใจดี, ยิ้ม, หุ้นส be kind, smile, partner, share, alone
		2	3	ในคู่, ในกลุ่ม, a in pairs, in groups, plump, fair, moustache
Added PET words	7	3	1	กัด, ปืน, ชั่วร้าย bite, climb, evil, watch, brilliant
		3	2	ชม, ต่างทุ, pin watch, earring, pin, scarf, handbag
PET Words Total	69	3	3	สร้อยข้อมือ, แ bracelet, dress, necklace, children, women
Pet Words %	57.5%	4	1	หนู, ฟัน, ของที่ mice, teeth, souvenir, holiday, recycle

These words could then be used to create the Student Learning Record, Syllabus, Lesson Plans, and Course Outlines.

Students completed their Learning Record form after each lesson. This provided feedback and an indication of what students considered they had learned most during the course.

3. Evaluation Methods

Based on written responses to essay questions under examination conditions. Each question is allocated approximately 20 minutes to complete.

3.1. The Flesch-Kincaid Grade

The Flesch-Kincaid Grade Level Readability Formula is a new calculation to improve the original Flesch Reading Ease Formula which cites scores equivalent to the school grade necessary for the reader to understand the document. For instance, a score of 9.3 means that a ninth grader would be able to read the document. The US Government Department of Defense uses Flesch-Kincaid Grade Level formula as a standard test.

The specific mathematical formula is:
FKRA = (0.39 x ASL) + (11.8 x ASW) - 15.59 where;
FKRA = Flesch-Kincaid Reading Age
ASL = Average Sentence Length (i.e., the number of words divided by the number of sentences)
ASW = Average number of Syllable per Word (i.e., the number of syllables divided by the number of words)

3.2. The Flesch Reading Ease Formula

The Flesch Reading Ease Formula is considered as one of the oldest and most accurate readability formulas. The best text should contain shorter sentences and words. The score between 60 and 70 is largely considered acceptable.

The output, RE, is a number ranging from 0 to 100. The higher the number, the easier the text is to read. Scores between 90.0 and 100.0 are considered easily understandable by an average 5th grader, scores between 60.0 and 70.0 by 8th and 9th graders, scores between 0.0 and 30.0 are considered easily understood by college graduates.

The specific mathematical formula is:
RE = 206.835 – (1.015 x ASL) – (84.6 x ASW)
RE = Readability Ease
ASL = Average Sentence Length (i.e., the number of words divided by the number of sentences)
ASW = Average number of syllables per word (i.e., the number of syllables divided by the number of words)

The ease of readability in a document is indicated in the following ranges:

90-100	Very Easy	60-69	Standard	0-29	Very Confusing
80-89	Easy	50-59	Fairly Difficult		
70-79	Fairly Easy	30-49	Difficult		

3.3. M1 Examination Questions

M 1 Midterm Semester 1

Part D (5 Marks)
Home
Write a 50-60 word paragraph to describe items you can see in the room below.
Use 'in', 'on', 'next to', 'beside', 'under', 'between' 'behind', 'above'.

M 1 Final Semester 1

Part E (10 Marks)
Home
Write a 70-80 word paragraph to describe Tom's life yesterday and today.
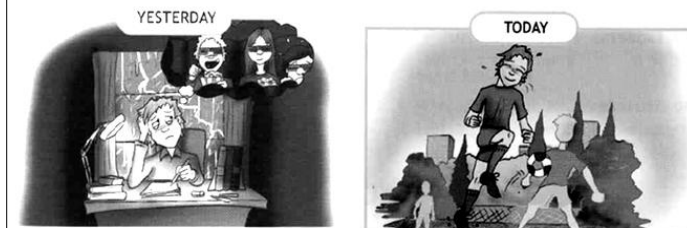
M 1 Midterm Semester 2

Part D (5 Marks)
Home
Write a 50-60 word paragraph to describe the things Mr. Parker, Mrs. Parker, Cindy, and George did LAST WEEK.

Sunday	George — tidy his room
Monday	Mrs Parker — water the plants
Tuesday	Cindy — visit her best friend
Wednesday	Mr Parker — repair the car
Thursday	George — play football
Friday	Mr and Mrs Parker — go shopping
Saturday	Cindy and George — watch a DVD

M 1 Final Semester 2

Part E (10 Marks)
Home
Write a 70-80 word paragraph to describe your plans with 'going to' and intentions with 'will' for your next holiday in the **FUTURE**.
Compare your future holiday with your recent holiday in the **PAST**.
Include some of the ideas below:

- go surfing
- go sightseeing
- buy souvenirs
- go on a boat trip
- make new friends
- go shopping
- see treasures
- visit family

3.4. M3 Examination Questions

M 3 Midterm Semester 1

Part D (5 Marks)
Writing
Using the pictures A-D, write a short story of about 80-100 words in the past simple tense.
Include the following ideas in your story:

- volcano/start/erupt/6am
- people/hear/noise/see/smoke/sky
- they/panic/leave/houses
- night/sleep/forest
- day/return/village
- see/ash/dust/sad/lose/everything
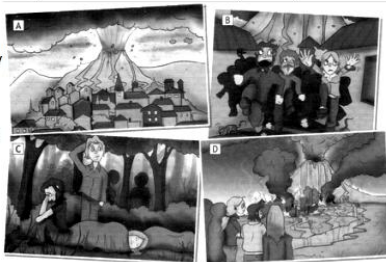
Title: _____

M 3 Final Semester 1

Part E (10 Marks)
Writing
Using the pictures A-D, write a short story of about 80-100 words **in the past**. Your story must include some verb forms in PAST SIMPLE, PAST CONTINUOUS, and PAST PERFECT.

Include the following ideas:
- people   - place   - weather
- what happened   - people's feelings

Include the following verbs:
- surf   - attack   - lay down
- see   - swim fast   - come to save

Title: _____

_____

_____

_____
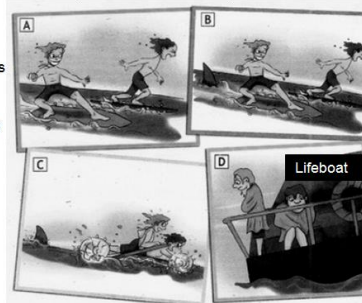
M 3 Midterm Semester 2

Part D (5 Marks)
Writing
Write a paragraph of 90-100 words comparing two famous people.

Title: _____

M 3 Final Semester 2

Part E (10 Marks)
Writing
Jon and Margaret Smith have recently bought a house and are going to fix it up. Using the pictures below, write a short story of about 80-100 words describing what is going to happen to this house. Your story must include some verb forms in PRESENT PERFECT, PAST SIMPLE, and FUTURE (using 'going to' and 'will').

Include the following ideas:

- pond / make
- windows / replace
- house / paint
- a swimming pool / install
- roof / fix
- fence / repair

The examination questions listed on this page indicate the progressive level of expression expected for M1 and M3 students, and the prompts provided for initiating student responses.

3.5. M6 Examination Questions

Below are the M6 student examination questions.

M 6 Midterm Semester 1	**Part B (6 marks)** **Independent Writing** Write a 100-150 word paragraph to answer the following question: "When people succeed, it is because of hard work. Luck has nothing to do with success." Do you agree or disagree with the quotation above? Use specific reasons and examples to explain your position.
M 6 Final Semester 1	**Part E (10 marks)** **Independent Writing** Write a 150-170 word paragraph to answer the following question: "With the help of technology, students nowadays can learn more information and learn it more quickly." Do you agree or disagree with the quotation above? Use specific reasons and examples to explain your position.
M 6 Midterm Semester 2	**Independent Writing** Write a 150-170 word paragraph to answer the following question: Some people believe that the Earth is being harmed (damaged) by human activity. Others feel that human activity makes the Earth a better place to live. What is your opinion? Use specific reasons and examples to support your answer.
M 6 Final Semester 2	**Part E (10 marks)** **Independent Writing** Write a 150-170 word paragraph to answer the following question: A friend of yours has received some money and plans to use all of it either to go on vacation or buy a car. Your friend has asked you for advice. Compare your friend's two choices and explain which one you think your friend should choose. Use specific reasons and details to support your choice.

4. Analysis

It was evident that after five years of exposure to native English teachers, M6 students were capable of conversing reasonably fluently, albeit using limited vocabulary. The mid-term speaking assessments signified an M3 native speaker conversation level.

However, analysis of the writing skills indicated that writing achievement for M6 was considerably lower than speaking ability. This was similar for all classes.

The analysis of writing tasks indicated that significant improvement was required for all students, particularly the new students in M1 who had just completed their Prathom schooling.

M6 Student TOEFL Speaking Test (Mid-term Semester 1)

#	TOEFL (4)		Arguments	Word stress	Sent. Stress	Slow	Reading	Grammar	Repetition	Circular arg.	Vague arg.	Weaknesses	Strengths
Student 1	4	100%	3	1					1			personnels	circumstances
Student 2	3	75%	2	1									
Student 3	2	50%	2		1	1	1	1					
Student 4	3	75%	3					1	1			I'm not scared anything	
Student 5	3	75%	3			1			1			try,try,try	accumulate
Student 6	2	50%	2					1		1			
Student 7	2	50%	2		1			1					
Student 8	2	50%	2									Answer the question	
Student 9													
Student 10	2	50%	2		1			1		1		Too short	
Student 11	1	25%	1		1			1				Too short	
Student 12	4	100%	3										travel-related
Student 13	2	50%	1					1			1	easy job (simple vocab)	
Student 14	0	0%											
Student 15	3	75%	3					1					investment
Student 16	1	25%	1		1		1						
Student 17	2	50%	2					1		1			
Student 18	3	75%	2			1		1				In my thinking	
Student 19	2	50%	2			1					1		
Student 20	2	50%	2	1							1		
Student 21	2	50%	2								1		
Student 22	2	50%	3	1	1	1	1						
Student 23	3	75%	3	1									
Student 24	2	50%	2							1	1		more experience

Surprisingly, the majority of new students who entered the English Programme did so with only a Grade 1 or Grade 2 (Prathom 2) level in English. This would suggest that Junior schools in the Phitsanulok province of Thailand had not been able to provide adequate English language training for students to be prepared for Secondary (Matthayom) English education.

Thus M1 students were subject to intense grammar and vocabulary training during their initial months in the programme. The results of this effort can be seen in the M1 report example (next page).

M1 English Fundamentals Update Feb 2013

Dear Parent,
This is a brief description the progress of Kasitinat in English Fundamentals. Below is a writing analysis* of ████████'s essays.

บิดา,มารดา
นี่คือคำอธิบายสั้น ๆ ความคืบหน้าของบุตรหลานของคุณในภาษาอังกฤษ พื้นฐาน ด้านล่างเขียนวิเคราะห์จากบทความของบุตรของท่านเป็น

Summary report:

████ has progressed from a **P2* level** (June 2012) **to** a **P5* Writing level** (February 2013)

*Flesch-Kincaid measures structure, punctuation, and vocabulary. These figures do not assess the writer's logic or style.

Semester 1 Midterm (Sem 1a) Level*: P2 (Very Easy) *This is a bookcase near a chair. there is a vase on the wardrobe. There is a sofa between the lamps. There are two windows behind the sofa. There are two books beside the bookcase. There is a book under the bookcase. There is a pillow in the sofa. There is a chair next to bookcase.*	Characters: 219 Words: 56 Sentences: 8 Char./Word: 3.91 Readability (60-70 best): 93.98 Syllables/Word: 1.25 Words/Sentence: 7.0 Alt. Levels: Coleman P3 : SMOG P3
Semester 1 Final (Sem 1b) Level*: P3 (Fairly Easy) *Yesterday Tom didn't play football. He didn't play Computer games. He is thought about 3D movie. He did his homework. He slept late. He didn't play with his friend. He had a lot of homeworks. He is busier in yesterder. Today, Tom is happy. He playing football with friends. He get up late. He is smiling.*	Characters: 242 Words: 56 Sentences: 12 Char./Word: 4.32 Readability (60-70 best): 79.73 Syllables/Word: 1.45 Words/Sentence: 4.67 Alt. Levels: Coleman P3 : SMOG M1
Semester 2 Midterm (Sem 2a) Level*: P6 (Fairly Easy) *On Monday last week, Mrs Parker is Mother's George and Cindy She water the plants on Friday Mrs Parker went to shopping with Mr. Parker. Mr Parker is father's George and Cindy. he repaired the car on Wednesday last week. George is Cindy's brother he tidied his room. On Saturday, George and Cindy watched a DVD. Cindy is George's sister. she visited her best friend on Tuesday last week.*	Characters: 317 Words: 69 Sentences: 8 Char./Word: 4.59 Readability (60-70 best): 71.79 Syllables/Word: 1.49 Words/Sentence: 8.62 Alt. Levels: Coleman M2 : SMOG M2
Semester 2 Final (Sem 2b) Level*: P5 (Fairly Easy) *I'm going to go to Kra-bi, where has a lot of islands. with my family. It's so long from Phitsanulok to Kra-bi. but, my family is going to go krabi by air plane. When we are going to kra-bi already. We will check in a hotel. First, we are going to visit my grand mother, who is cheerful, and buy souvenirs to give to my friends in Phitsanulok. I'm going to go sightseeing, and see a lot of mountains. We will take my grandmother back to Phitsanulok. We are going to play banana boat. It's excited. Then, we going to take photos of beautiful things in kra-bi. After that, We will come back to Phitsanulok. My holiday last year was bad because, my aunt was drug and destroyed hotel's chairs, tables and a expensive Television.*	Characters: 572 Words: 139 Sentences: 14 Char./Word: 4.12 Readability (60-70 best): 78.07 Syllables/Word: 1.4 Words/Sentence: 9.93 Alt. Levels: Coleman P5 : SMOG M3

Due to the unusual intensive teaching employed for M1 students to adapt to Secondary Education (Matthayom) level English requirements, it may be unfair to suggest that vocabulary alone made significant improvements possible. Indeed, learning new vocabulary was only one of many elements in the student's intensive improvement process.

5. Findings

5.1. M1 Student Writing Level Before and After Intentional Vocabulary Training

Prior to the introduction of intentional vocabulary training in Semester 2, the progress of student writing ability was analyzed. By the mid-term examination of the first semester, the Flesch-Kincaid average grade level of both M1/11 and M1/12 was P2. By the final exam at the end of the semester, the class average for M1/11 had improved to P5, a 3-grade improvement, while M1/12 improved to P5, a 4-grade improvement.

After the intentional vocabulary training was introduced, both M1/11 and M1/12 improved to P6, a 1-grade improvement. Initially, this suggested that improvement progess was detrimentally affected by vocabulary training. However, after closer examination, students had simply developed basic grammar during the first semester, a necessity as students needed to reach the normal level of writing skill for students of their age group.

As a result, it is probably impossible to fully ascertain what part vocabulary played in the improvement of students, as major effort was made during intensive lessons to ensure students were able to reach adequate levels in grammar, punctuation, as well as vocabulary.

However, when looking at the M3 group, in which no such emergency adjustment was required, major changes were noticed. The most notable Change when Vocabulary is used compared with when it is not intentionally introduced. Comparisons between M3 and M6 did produce clear empirical evidence to the effect of an intentional vocabulary focus in lessons.

5.2. M3 Student Writing Level Before and After Intentional Vocabulary Training
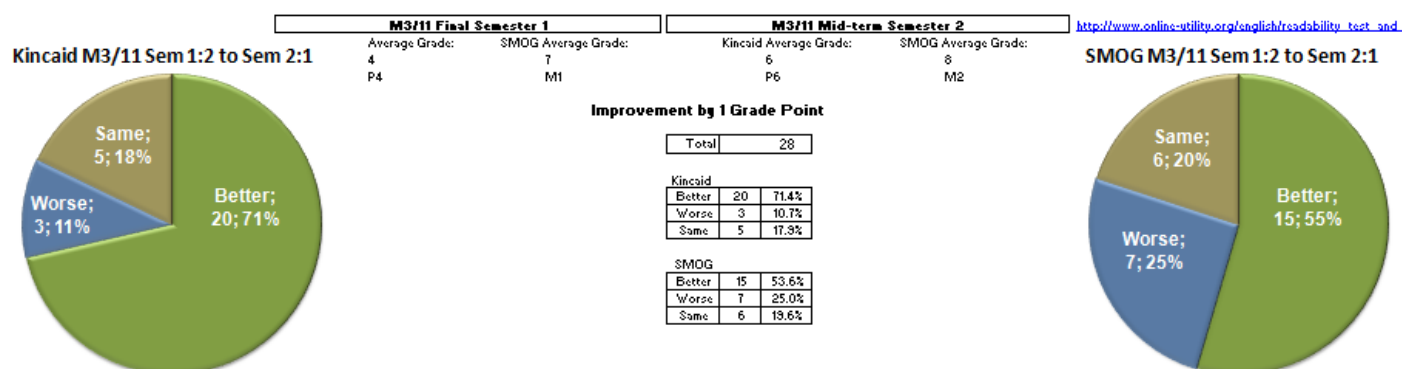
This was particularly different to the M6 control group which received no intentional vocabulary focus. The results of improvements for the M6 class were surprisingly unimpressive.

5.3. M6 Student Writing Level Before and After Incidental Vocabulary Training
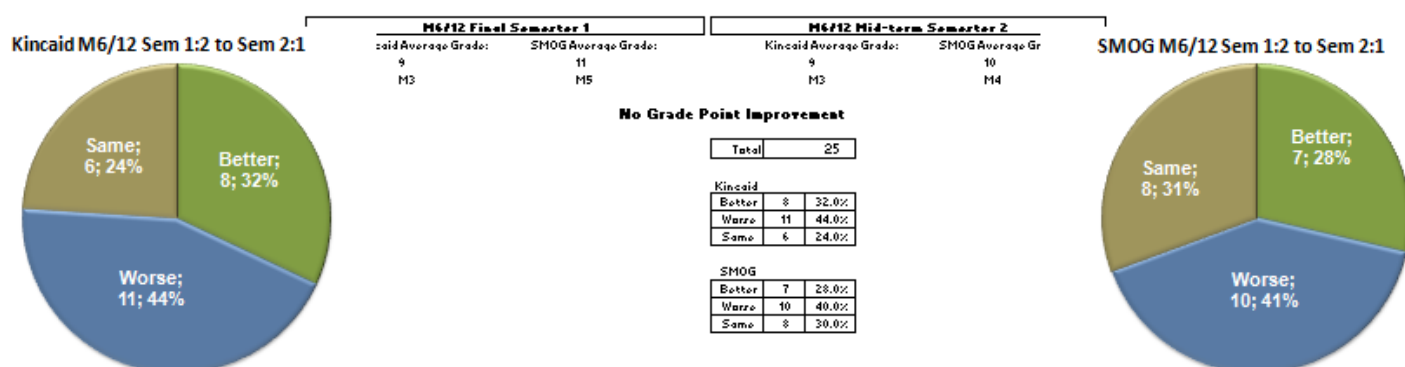
While more M3 students showed improvement from Final Exam Semester 1 to Midterm Semester 2, the level at which improvement was made indicated that greater progress was achieved by M6 rather than M3. Indeed, all M3 students on average improved less significantly than any of the other classes, including the control group that had no intentional vocabulary activity, M6/11. Even though M6/11 students experienced incidental vocabulary learning only, the writing level of this class on average improved far better than M3/11 and M3/12. This would suggest that intentional vocabulary activities do not in themselves make any significant improvement in student writing skill at the Pre-intermediate English level. Other factors are clearly evident, as is seen in the improvement experienced by the control group, M6.
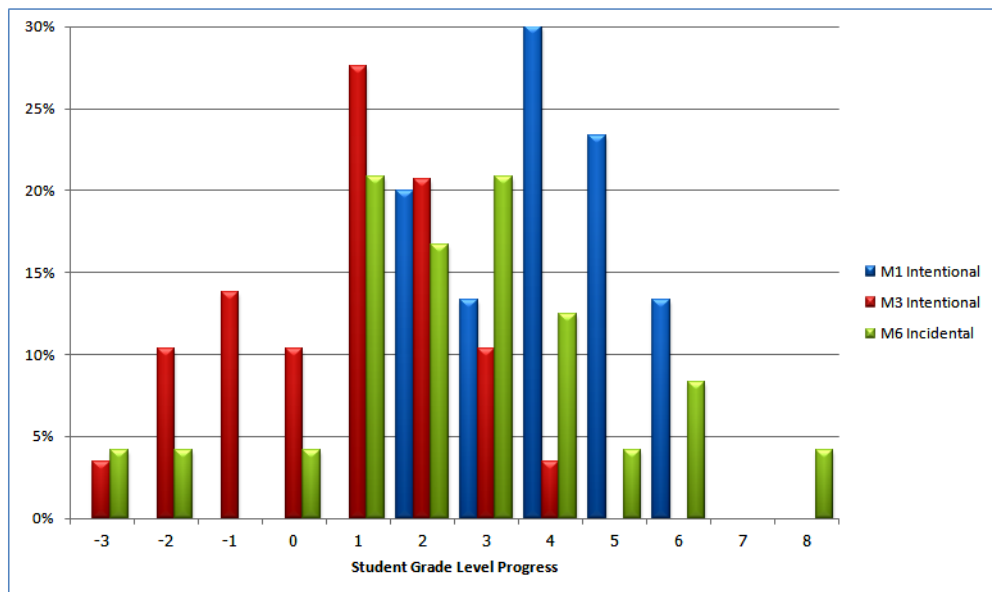
Student Progress During Experimental Research Period (Sem 1a - Sem 2a)

5.4. The summer vacation syndrome

Results from student writing analysis also revealed a significant trend. It was noticeable that almost all students in M1, M3, and M6 maximize their English skills by the Mid-term of Semester 2, while the majority write at a significantly lower level of English in the Final Exam at the end of the Second semester, and thus the academic year, in February.

This may be because they feel less pressure as they already expect or have received notice of entrance to other courses. It's an interesting observation. It may be due to the fact that they are looking forward to their summer break, or perhaps the fact that students may be feeling too tired to make any real effort by the end of a long year.

Whatever the reason for the low final exam results, it is clear that significant improvements were recorded across all classes. In general, M1 students entered at P2 level and improved to P5, some at P6 and a few at M1. This is a remarkable achievement by the students in such a short time, especially L2 students who are measured by the Flesch-Kincaid writing level, which is designed to measure native English student ability and rates text on a U.S. school grade level.

For example, a Flesch-Kincaid writing score of 8.0 means that the text is aimed at an eighth grade student level. Challenging Thai students to achieve an M1 native English level requires considerable effort but it would seem that by M2 these students may catch up to their expected level.

6. Conclusion

While no definitive correlation can yet be made between intentional vocabulary activities and improved writing skill, qualitative improvements to teaching English were experienced by teacher and student alike. These included improved teaching strategy, enhanced student monitoring, diverse vocabulary learning methods, the introduction of book reading assignments, and the creation of a 6-year vocabulary roadmap.

6.1. Improved Teaching Strategy

The implementation of new vocabulary teaching required a more thorough teaching plan in order to assess which words and in what order they should be introduced. This led to a detailed syllabus creation model that enables a teacher to plan a 60 lesson course over a 20-week period in three to four hours. This resulted in an improved overview of lesson objectives in line with the course curriculum and examination requirements.

6.2. Improved Student Monitoring

While considerable improvement in M1 student writing ability was observed, as can be seen when comparing M1/11 writing skill level at Midterm semester 1, compared with Midterm semester 2, not all classes experienced this level of improvement.

6.3. Improved Vocabulary Learning Methods

Many involved in English Programmes in Thailand believe that the use of Thai should not be encouraged when teaching. However, Hulstijn, Merel and Greidanus. (1996) studied improvements in vocabulary acquisition through three the use of marginal glosses (provision of L1 translations of unknown words), dictionary (opportunity to use a bilingual dictionary), and controlled activities.

The Dutch team concluded that "frequency of occurrence will foster incidental vocabulary learning more when advanced second language (L2) readers are

given the meanings of unknown words through marginal glosses or when they look up meanings in a dictionary than when no external information concerning unknown words' meanings is available." (Hulstijn, Merel and Greidanus, 1996, p.327). This was confirmed by the feedback from Thai students when Thai translations for words were included in the vocabulary lists. As opposed to English words with English definitions only, students experienced a greater ease of understanding the concepts behind the words being learned and could infer their meanings correctly when Thai translations were added as a guide.

6.4. Introduction of Book Reading Assignments

While close exercises, word searches, word scrabble, definition matching, and sentence creation exercises are useful, students failed to include much of the new vocabulary from the course books into their final examination essays. Eckerth and Tavakoli (2012), who studied the effects of word exposure frequency and elaboration of word processing on incidental L2 vocabulary acquisition through reading suggested that additional time should be spend on comprehension questions and student self-analysis of reading material as "processing words again after reading (input–output cycles) is superior to reading-only tasks". (Eckerth and Tavakoli, 2012, p. 227).

This has led to the introduction of Book reading assignments to students, such as the M1 reading assignment of The Death of Karen Silkwood in the Oxford Bookworms ELT Library Stage 2 (700 Headwords) Collection Paperback version, published in 2007 (ISBN-10: 0194790576).
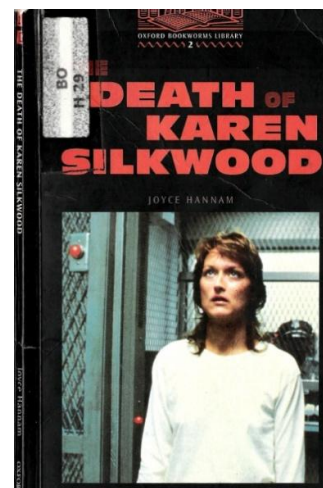
The results of the effects of these reading assignments on writing levels will be analyzed in further research.

6.5. Creation of a 6-Year High School Vocabulary Roadmap

Perhaps most significant of all is the creation of a comprehensive 6-year vocabulary roadmap for the English Programme that teaches 4,560 words to M1-M6 students, namely: 1,594 PET communicative English words for M1-M3 students and 1,045 SAT academic English words for M4-M6 students.

Vocabulary 2013

Class	Words	Sessions	Total	Weeks	Sem 1 a	Sem 1 b	Sem 2 a	Sem 2 b	Year Total
M1	6	3	18	10	180	180	180	180	720
M2	6	3	18	10	180	180	180	180	720
M3	6	3	18	10	180	180	180	180	720
M4	10	2	20	10	200	200	200	200	800
M5	10	2	20	10	200	200	200	200	800
M6	10	2	20	10	200	200	200	200	800

Tot.Words	PET/SAT	Cumulative	
720	568	568	PET words
1,440	582	1,150	PET words
2,160	444	1,594	PET words
800	478	478	SAT words
1,600	538	1,016	SAT words
2,400	29	1,045	SAT words

M1-M3	Basic Vocabulary	2,160 words
M4-M6	Academic Vocabulary	2,400 words
Total Vocabulary (M1-M6)		4,560 words

PET words from Course book	Sem 1a	Sem 1b	Sem2a	Sem2b	Total	%
M1	148	135	140	94	517	71.8%
M2	66	81	90	65	302	41.9%
M3	56	31	49	51	187	26.0%

PET words in Total M1-3	Sem 1a	Sem 1b	Sem2a	Sem2b	Total	%
M1	152	143	144	129	568	78.9%
M2	154	147	147	134	582	80.8%
M3	119	137	92	96	444	61.7%

	M1	M2	M3	Total	M4	M5	M6	Total
Nouns	425	392	440	1257	355	325	301	981
Verbs	128	131	140	399	200	193	283	676
Adjectives	116	125	113	354	238	280	199	717
Adverbs	27	34	13	74	6	2	12	20
Pronouns	5	12	5	22	0	0	0	0
Prepositions	10	16	4	30	1	0	3	4
Conjunctions	3	6	2	11	0	0	2	2
Expressions	6	4	3	13	0	0	0	0
	720	720	720	2,160	800	800	800	2,400

M 4-6		
SAT	1,045	43.5%
TOEFL	1,018	42.4%
AWL	521	21.7%

6.6. Further Research Required

It is the opinion of this researcher that more research is required into finding effective methods for students to express themselves using diverse vocabulary.

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