

ผลของการใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจ
ในการอ่านสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6

วิทยานิพนธ์

ของ

วิภาพร แดงศรี

เสนอต่อมหาวิทยาลัยราชภัฏบุรีรัมย์ เพื่อเป็นส่วนหนึ่งของการศึกษา
ตามหลักสูตรศิลปศาสตรมหาบัณฑิต สาขาวิชาภาษาอังกฤษ

มิถุนายน 2555

ลิขสิทธิ์เป็นของมหาวิทยาลัยราชภัฏบุรีรัมย์



**THE EFFECTS OF KWL READING STRATEGY UTILIZATION
TO DEVELOP READING COMPREHENSION
FOR GRADE 12 STUDENTS**

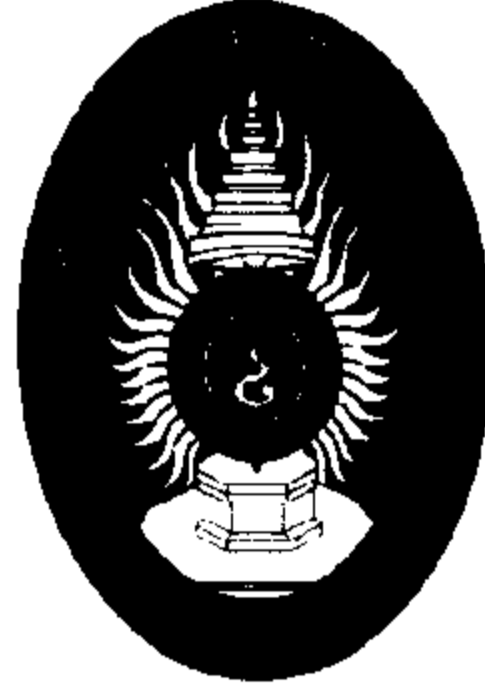
Wiphaporn Dangsi

A Thesis Submitted in Partial Fulfillment of the Requirements

for the Degree of Master of Arts Program in English

June 2012

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The members of the committee have approved the thesis of Mrs. Wiphaporn Dangsri in partial fulfillment of the requirements for the Degree of Master of Arts Program in English, Buriram Rajabhat University.

Thesis examining committee

Prayad

Chairperson

(Assistant Professor Dr. Prayad Poomkhokrak)

Surachai Piyanukool

Major Advisor

(Dr. Surachai Piyanukool)

Ch. Jarat

Co-advisor

(Dr. Chookiat Jarat)

Nawamin P.

Member

(Assistant Professor Dr. Nawamin Prachanant)

The Graduate School, Buriram Rajabhat University has accepted this thesis in partial fulfillment of the requirements for the Degree of Master of Arts Program in English.

Dean, Graduate School

(Assistant Professor Dr. Suthiap La-ongthong)

Approval Date:

ชื่อเรื่อง	ผลของการใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่านสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6		
ผู้วิจัย	วิภาพร แแดงศรี		
ที่ปรึกษาวิทยานิพนธ์	ดร. สุรัชย์ ปิยานุกูล		ที่ปรึกษาหลัก
	ดร. ชูเกียรติ จารัตน์		ที่ปรึกษาร่วม
ปริญญา	ศิลปศาสตรมหาบัณฑิต	สาขาวิชา	ภาษาอังกฤษ
สถานศึกษา	มหาวิทยาลัยราชภัฏบุรีรัมย์	ปีที่พิมพ์	2555

บทคัดย่อ

การวิจัยครั้งนี้มีจุดมุ่งหมายเพื่อ 1) ศึกษาประสิทธิภาพของกลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่าน สำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 ที่มีประสิทธิภาพตามเกณฑ์ 75/75 2) เปรียบเทียบผลสัมฤทธิ์ทางการเรียนของนักเรียน ที่เรียนโดยใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจการอ่านก่อนเรียนและหลังเรียน 3) ศึกษาดัชนีประสิทธิผลของกลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่าน สำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 และ 4) สำรวจความพึงพอใจของนักเรียน ที่มีต่อการเรียนโดยใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่าน กลุ่มตัวอย่างที่ใช้ในการวิจัยครั้งนี้คือ นักเรียนชั้นมัธยมศึกษาปีที่ 6 จำนวน 35 คนที่เรียนในภาคเรียนที่ 2 ปีการศึกษา 2553 โรงเรียนโนนเจริญพิทยาคม อำเภอบ้านกรวด สังกัดสำนักงานเขตพื้นที่การศึกษามัธยมศึกษา เขต 32 ได้มาโดยการสุ่มอย่างง่าย รูปแบบการวิจัยเป็นการวิจัยเชิงทดลองแบบกลุ่มเดียวโดยดำเนินการทดสอบก่อนเรียนและหลังเรียน เครื่องมือที่ใช้ในการวิจัยคือ แผนการจัดการเรียนรู้โดยใช้กลวิธีการสอนแบบ เค ดับเบิลยู แอล จำนวน 10 แผน แบบทดสอบวัดความเข้าใจในการอ่านภาษาอังกฤษมีค่าความยากง่ายระหว่าง 0.20-0.71 ค่าอำนาจจำแนกระหว่าง 0.20-0.66 และค่าความเชื่อมั่นอยู่ที่ 0.94 และแบบสอบถามวัดความพึงพอใจในการเรียน E₁/E₂ และ EI มีค่าความเชื่อมั่น 0.88 วิเคราะห์ข้อมูลโดยใช้ค่าสถิติร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และทดสอบสมมติฐานโดยใช้ Dependent Samples t-test โดยกำหนดค่าความมีนัยสำคัญทางสถิติที่ระดับ .05

ผลการวิจัยพบว่า

1. ประสิทธิภาพของกลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่าน สำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 ที่ผู้วิจัยสร้างขึ้น มีประสิทธิภาพ 81.06/80.14 ซึ่งสูงกว่าเกณฑ์ที่กำหนดคือ 75/75

2. นักเรียน ที่เรียนโดยใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่านสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 ที่ผู้วิจัยสร้างขึ้น มีผลสัมฤทธิ์ทางการเรียนหลังเรียนสูงกว่า ก่อนเรียนอย่างมีนัยสำคัญทางสถิติที่ระดับ .01
3. ดัชนีประสิทธิผลของการเรียนโดยใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจ ในการอ่าน สำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 ที่ผู้วิจัยสร้างขึ้น มีค่าเท่ากับ 0.7208 แสดงว่านักเรียนมีความรู้ในการเรียนเพิ่มขึ้นร้อยละ 72.08
4. นักเรียน มีความพึงพอใจต่อการเรียนโดยใช้กลวิธีการอ่าน แบบ เค ดับเบิลยู แอล เพื่อพัฒนาความเข้าใจในการอ่านสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 โดยรวมอยู่ในระดับมาก

TITLE	The Effects of KWL Reading Strategy Utilization to Develop Reading Comprehension for Matthayomsuksa 6(Grade 12)Students		
AUTHOR	Wiphaporn Dangsi		
THESIS ADVISORS	Dr. Surachai Piyanukool		Major Advisor
	Dr. Chookiat Jarat		Co-advisor
DEGREE	Master of Arts	MAJOR	English
SCHOOL	Buriram Rajabhat University	YEAR	2012

ABSTRACT

The purposes of this research were 1) to explore the efficiency of KWL reading strategy to develop reading comprehension for grade 12 students to meet the criteria set at 75/75; 2) to compare students' learning achievement before and after learning through KWL reading strategy utilization to develop reading comprehension for grade 12 students 3) to examine the effectiveness index of KWL reading strategy utilization to develop reading comprehension for grade 12 students; and 4) to investigate students' satisfaction towards reading comprehension using KWL reading strategy. The samples were 35 grade 12 students who enrolled the English course (E43102) in the second semester of the academic year 2011 at Noncharoenpithayakhom School in Ban Kruat District under Buriram Secondary Educational Service Area Office 32 selected by using simple random sampling technique. A one group pretest-posttest design of the experimental research was employed in this study. The instruments used in this study were 1) 10 sets of the KWL lesson plans; 2) an English reading comprehension achievement test, and 3) the satisfaction questionnaires. The statistics used for analyzing the collected data were percentage, mean, standard deviation, E_1/E_2 and E.I., and the

hypothesis was tested by using dependent samples t-test. The significant difference was set at the level of .05.

The findings were as follows:

1. The KWL reading strategy utilization to develop reading comprehension for grade 12 students had an efficiency of 81.06/80.14 which was higher than the criteria set at 75/75.

2. The learning achievement of students who learned by KWL reading strategy utilization to develop reading comprehension after learning were higher than before learning with the statistical significant difference at the level of 0.1.

3. The effectiveness index of KWL reading strategy utilization to develop reading comprehension for grade 12 students equaled 0.7208 which means students gain more English reading comprehension knowledge up to 72.08 %.

4. The students' satisfactions towards the learning by using the KWL reading strategy utilization to develop reading comprehension for Grade 12 students as a whole was at "high" level ($\bar{X} = 3.56$).

ACKNOWLEDGEMENTS

This has been a long journey, but one that I will never forget. It would be difficult to acknowledge each individual who has in some way or another contributed to the research reported in this thesis. However, I wish to place on record my sincere thanks and appreciation to the following persons who made my thesis possible and enjoyable.

First, I would like to especially thank Dr. Surachai Piyanukool, my major advisor, who dedicated supervision and timely feedback has allowed me to successfully complete this thesis. You have been my guide—my personal Global Positioning System—throughout this journey! You have given me direction, warned me to slow down and proceed with caution, and have often advised me to “recalculate” before moving ahead. I owe you a sincere debt of gratitude; without you, I would have been truly lost.

I would also like to thank my committee members, Dr. Chookiat Jarat, my co-advisor, and Assistant Professor Dr. Nawamin Prachanant, my thesis member, whose insightful as well as incisive feedback and unending encouragement have made it possible for this thesis to come to completion. Thanks to my chairperson, Assistant Professor Dr. Prayad Poomkhokrak, who worked in a timely and consistent manner to assist with the completion of this thesis.

Second, I have greatly appreciated the contributions of my students and those who assisted me in the distribution and collection of the surveys. I would like to specifically thank the thirty-five students who spent their precious time sharing their reading comprehension learning and teaching experiences. This thesis could not have

been completed without their generosity and kindness. Thank you from the bottom of my heart! Moreover, I need to express my great gratitude to my friends and colleagues at Noncharoenpittakhom School who have supported me in countless ways throughout this endeavor. They have made my academic pursuit more enjoyable and rewarding.

Time can be distorted, or even frozen here at Graduate School. It is a pleasure to thank all of my friends who shared our time and memorable moments together in English classroom. I am thankful, for everything they have done for me, which I will mention here, and I am also thankful for everything else, that I would rather mention somewhere else.

Finally, I am pleased to acknowledge the support of husband, John, for his undying love, strength, optimism, and patience through it all. To him this thesis is dedicated. Had it not been for the constancy, support, and warmth of family life, I would not have had the emotional capacity to complete this study. To my sons, Bas, and Ket—you are the most important people in my life! I can only hope that my diligence throughout this process and my value of education have encouraged you to try your best in all your endeavors. I love you, and I am so proud of both of you!

The aforementioned people have helped me in countless ways. Needless to say, nonetheless, any errors or omissions remain my own responsibility.

Wiphaporn Dangscri

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มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

LIST OF ABBREVIATIONS

A.D.	Amno Domini
DELES	Distance Education Learning Environments Survey
DRA	Directed Reading Activity
EFL	English as a Foreign Language
E.I.	Effectiveness Index
ESL	English as a Second Language
ESOL	English for Speakers of Other Languages
GPA	Grade Point Average
IOC	Index of Item Objective Congruence
KWL	Know, Want, and Learned
L1	First Language
L2	Second Language
S.D.	Standard Deviation
SLA	Second Language Acquisition
SPSS	Statistical Package for the Social Sciences
SQ3R	Survey, Question, Read, Recite, and Review

CHAPTER I

INTRODUCTION

1.1 Background of the Research

The fundamentally purpose of reading in the content areas is not to be able to sound out words on the printed page; rather it is an active process in which the reader calls upon experience, language, concepts, and schemata to anticipate and understanding the author's thoughts, concepts, and language. Piyanukool (2001) pointed out that the most common academic goals of reading in the content areas is constructing the meaning of the text that in some way corresponds to the author's intended meaning. In order to do this, students must be able to bring some meaning and interpretation to the text, so that they will be able to see the similarities between what they know or understand and what they read in the text; this process is called reading comprehension. Pookcharoen (2010) defined reading comprehension as a process involving a series of stage during which readers construct meaning as they read and respond to the text they have read.

Before the turn of the 20th century, educators and psychologists noted the importance of comprehension as a part of reading and are concerned with understanding what happens when a reader comprehends. Interest in comprehension has intensified in recent years, but the process of comprehension itself has not changed (Huey. 1968). As Roser (1984:48) pointed out, "whatever children and adults did as they read in ancient Egypt, Greece, or Rome, and whatever they do today in order to derive or apply meaning to print is the same" (p. 48). What has changed is our understanding of how comprehension takes place. It is hoped that improved

understanding of the process of comprehension will enable reading specialists to devise improved teaching strategies.

Furthermore, teachers constantly have sought more efficient ways to teach students to read and to increase their reading comprehension ability. Educators have responded to the need to teach comprehension skills by researching and developing new reading strategies, among them KWL strategies, which focus on relating students' prior knowledge to existing knowledge proposed in the lesson through the use of an advanced organizer (Ogle. 1992).

Clearly, "KWL" stands for what I Know, what I Want to learn, and what I Learned. Cooper (1997) defined the KWL chart as another strategy for activating students' prior knowledge and aiding them in their purpose of reading expository text. The KWL is developed by Ogle (1986) to have students gain a focus for their reading and learning. It is advanced organizer that is used both prior to and after the reading or unit of study occurs. Furthermore, the K and W sections are completed prior to the reading of the text or beginning of a unit of the study: what *I know* (K) and what *I want* to learn (W) about a particular subject. The K section identifies the students' prior knowledge about the content presented, and the W section identifies facts and concepts that the student is interested in learning about in the future lessons. The W section helps to set the purpose or purposes for the reading or studying of a topic. The L section is completed after the reading or unit of study to identify what the student has gained in knowledge during the unit. Cooper (1997) stated that the L section can be used as a tool to see what still needs to be learned or to answer any questions the student may still have about the topic.

Evidently, it is argued that KWL is an instructional reading strategy designed for instructors to help learners learn from nonfiction texts in any content area.

Generally, the KWL strategy motivates active learning and teaching on the parts of both learners and instructors. Developed by Ogle (1986), KWL is an instructional scheme that develops active reading of expository texts by activating learners' background knowledge (Bos & Vaughn. 2002). It provides a structure for recalling what learners know about a topic, noting what they want to know, and finally listing what has been learned and is yet to be learned. Learners begin by brainstorming everything they know about the topic.

Nevertheless, as everyone knows, in Thailand, where English is taught as a compulsory foreign language, previous research has disclosed that the overall reading proficiency in English of Thai students is below the National English Test Criteria (Wongsuwan. 1992) even though most students begin to study English at grade 4. Students performed poorly because they are unable to comprehend the contents of texts, understood the details of the texts, identified the gist, and they lacked the critical skill in interpreting English written texts (Thanbanjerdasuk. 1983; Wirunhayan. 1987; Torut. 1994). Aksaranukraw (1989) reported that the unsatisfactory result of the students' performance in reading English is primarily due to the fact that teachers focus on the product of the language learning, and they usually neglect the emphasis on the learning process. To clarify, teachers usually judge the students' answers as right or wrong, and do not emphasize the thinking processes of the students or how an assigned task must be accomplished. This problem has remained even though there have been numerous attempts to resolve this problem by revolutionizing the curriculum and instruction, promoting research in language learning, etc.

Reading plays an important role in learning activities in EFL classes in Thailand. Students need reading skills in both academic and occupational setting (Torut. 1994; Tiamsuwan. 1996; Piyanukool. 2001). Though reading has been accepted as important skill in teaching English, Thai learners still have difficulty in comprehension English texts, especially those students who are at the beginning level of learning such as in secondary schools (Piyanukool. 2001; La-ongthong, 2002; Chuamklang. 2010; Pookcharoen. 2011). Unfortunately, the bulk of research in EFL in Thailand basically has taken only on dimension in trying to overcome the problem. To clarify, most researchers have paid attention to placing the focus on verifying the effectiveness of using different teaching methods believed to promote critical thinking skill, problem-solving skill, cooperative learning, etc., and then suggest new strategies in teaching reading. Most reading classes are conducted by utilizing the Grammar Translation Method and a product-oriented approach (Torut. 1994; Tiamsuwan. 1996; Piyanukool. 2001; La-ongthong. 2002), in which teachers translate the English reading passages into Thai for the students, ask questions of them, and then judge their answers as right or wrong. However, the unsatisfactory outcomes of English reading comprehension have remained unsolved, and still need clear, directional solutions. When it came to making the researcher's decision on selecting a topic for thesis that would contribute to the EFL context in Thailand, this issue appealed to the researcher's motivation and attention.

As an EFL teacher, the researcher perceived this KWL strategy as a potential learning activity that motivated students to read extensive authentic texts in English, work collaboratively with their peers, and exercise critical thought. These initial positive impressions of KWL strategy use in EFL contexts prompted the researcher to

pursue further research on KWL strategy utilization to develop reading comprehension in EFL classrooms. As a result, the researcher would like to investigate how KWL strategy was used in a high school-level reading course and how the students used reading comprehension during such activity.

1.2 Research Objectives

The fundamental objective of this study was to investigate the effects of KWL strategy utilization to develop reading comprehension for grade 12 students. Specifically, this study will be guided by the following research objectives:

1.2.1 To explore the efficiency of KWL strategy in developing reading comprehension for grade 12 students to meet the criteria set at 75/75.

1.2.2 To compare students' learning achievement before and after learning through KWL strategy utilization to develop reading comprehension for grade 12 students.

1.2.3 To examine the effectiveness index of the KWL strategy utilization to develop reading comprehension for grade 12 students.

1.2.4 To investigate students' satisfaction toward reading comprehension using KWL strategy.

1.3 Research Questions

The study sought to explore the effects of KWL strategy utilization to develop reading comprehension for grade 12 students. Based on the review of literature on KWL strategies the main questions of this study were:

1.3.1 What is the efficiency of KWL strategy utilization to develop reading comprehension for grade 12 students?

1.3.2 Will students who learn reading comprehension through KWL strategy utilization have higher mean scores on post-test than that of pre-test mean scores?

1.3.3 Is the effectiveness index of the KWL strategy utilization to develop reading comprehension for grade 12 students at a high level?

1.3.4 What is the overall satisfaction of grade 12 students toward reading comprehension using KWL strategy?

1.4 Research Hypotheses

Based on the research questions and previous research findings, this study explored the research hypothesis “The grade 12 students’ learning achievement on post-test mean scores on reading comprehension through KWL reading utilization will be higher than on pre-test mean scores.”

1.5 Significance of the Research

Teaching is hard work for everyone, but for high school teachers, the challenge is undeniably greater. Studies of KWL strategy have shown that readers taught to use their recourses for cognitive activities in reading have improved their

comprehension during reading. These strategies enabled students to learn to teach themselves to recognize their own strengths and weaknesses, and to select the strategies needed to obtain their objectives. Also, students shared and learned from each other regarding their respective awareness.

This study was conducted because a review of the literature indicated that no study on KWL strategy to develop reading comprehension had been implemented in Thailand. Thus, this study was undertaken to investigate the potential for KWL reading strategy in Thai high schools as a means of improving comprehension.

This study should be useful for pedagogical implications in teaching reading, and designing EFL reading syllabi for Thai high school students. Insights derived from this study may also be able to help guide the development of EFL strategy so that students can become not only more efficient at comprehension English texts in classroom context, but also more capable of self-directing in reading in the environment outside the classroom.

1.6 Scope and Limitations of the Research

Limitations are inherent in any study. This study is restricted to a country (Thailand) and to an urban area (Buriram Province). The following were potential limitations of the study:

1.6.1 Population

The populations of this study were 100 Mathayomsuksa 6 (grade 12) students who studied English Course (E43102) in the second semester of academic year 2010 at Noncharoenpithayakhom School in Ban Kruat District under Buriram Educational Service Area Office 32.

1.6.2 Samples

The relatively small size of the group of participants was another potential limitation. The total number of participants included in this study is only 35. This classifies the study as small-scale research. Small-scale research by its nature cannot provide an indication of general trends and pattern which can assist in understanding what is taking place at a provincial, or national level in the area of education. All 35 students were selected by simple random sampling with the two main reasons: English course (E43102) was taught by researcher herself, and the students' English proficiency were low, moderate and high equally.

1.6.3 Variables of the Study

1.6.3.1 Independent Variable: KWL reading strategy utilization

1.6.3.2 Dependent Variables: (1) The efficiency of KWL strategy utilization; (2) The achievement of reading comprehension by using the KWL reading strategy; (3) The effectiveness index of KWL strategy utilization; and (4) Students' satisfaction toward KWL reading Strategy.

1.6.4 Reading Contents

English course (E43102) for grade 12 students, is based on the 2001 National Fundamental Curriculum, Foreign Language Subject Area, Ministry of Education. The contents are comprised of 10 lesson plans.

1.6.5 Duration

The time frame of this study was approximately 10 weeks (50 minutes per period and 2 periods per week). The total is 20 periods of instruction conducting during the second semester of academic year 2011. The results are reflective of

training that occurs over a short duration and cannot be generalized to years of use of these approaches.

1.7 Definitions of Key Terms

For the purpose of clarification, the following definitions and explanations were used in this study.

1.7.1 KWL Strategy refers to the strategy designed to help students activate their prior, or background knowledge, to comprehend the text. It also helps them to set goals for reading. The procedure is simple. During the first step (K), the teacher asks the students to assess what they have already **known** about the title. During the second step (W), the teacher asks students to discuss what they want to learn from the story or the article. During the third step (L), the students write down what they **learned** by drawing a map and summarize what they learned (Carr & Ogle. 1987).

1.7.2 Reading refers to “a complex system deriving meaning from print’ that requires an understanding of how speech sounds are related to print, decoding (word identification) skills, fluency, vocabulary and background knowledge, active comprehension strategies, and a motivation to read” (McShane. 2005: 7).

1.7.3 Reading Comprehension refers to the student’s ability to understand the meaning of the text. According to Pearson (2009: 14), reading comprehension comes from “the intersection of the reader, the text and the context.”

1.7.4 Learning Achievement refers to the students’ mean scores deriving from learning achievement test conducted on the content of KWL strategy utilization.

1.7.5 Reading Strategies refer to the planning and management techniques that grade 12 students adopt to achieve reading comprehension from the KWL strategy utilization. Also, to reach those goals, grade 12 students do need to be aware of which strategies to apply and also need to know why, when and, how to use them appropriately and effectively.

1.7.6 Criterion Set 75/75 refers to the achievement test mean scores purposively used to find out the efficiency of the KWL strategy utilization to develop reading comprehension. Overall, the efficiency is divided into two main steps: (1) the efficiency of the process, which is the percentage of learners' total mean scores from the activities scores of KWL reading strategy; and (2) the efficiency of the outcomes, which is the percentage of learners' mean scores from achievement test (posttest).

1.7.7 The Effectiveness Index (E.I.) refers to the methodological statistics to indicate fundamentally learners' progress from reading comprehension through KWL strategy utilization for the grade 12 students.

1.7.8 Satisfaction this refers to positive ideas, thoughts, and feeling of the subjects in the treatment group towards KWL strategy utilization to develop their reading comprehension.

1.7.9 Student Satisfaction refers to the grade 12 students' feeling or attitude indicating favorableness, pleasure, and gladness towards the reading comprehension development through KWL strategy utilization. Additionally, if students feel good about learning results, they will be motivated to learn. Student satisfaction comprises these three attributes: attention, relevance and confidence.

1.7.10 Grade 12 Students refer to Mathayomsuksa 6 students who enrolled the English course (E43102) in the second semester of the academic year 2011 at

Noncharoenpithayakhom School in Ban Kruat District under Buriram Educational Service Area Office 32 in non-English speaking surrounding.

1.8 Summary of the Chapter

The rationale of this chapter was to present a background of the thesis and to briefly describe the research problem. This chapter examines the rationale for this research, along with, the need for the study and the problem statement. This chapter has presented the background of the research, research objectives and research questions. The current research is attempted to identify the scope and limitation of the study of Thai EFL students' KWL strategy utilization to develop their reading comprehension. This research also provided the definitions of key terms used to define the research variables and significance of the research. In the next chapter, Chapter Two is presented the review of the related literature.

CHAPTER 2

LITERATURE REVIEW

This chapter presents a detailed literature review regarding the KWL strategy to enhance reading comprehension. With the aim of better understanding the objectives of this study, it was imperative to carry out a comprehensive review of the related literature. Given that the study entails diverse topics, it was imperative to divide the literature review in the following subsections: 1) EFL discourse in Thailand; 2) second language acquisition; 3) reading comprehension models; 4) importance of teaching reading comprehension; 5) techniques of teaching reading comprehension; 6) efficiency; 7) student satisfaction, 8) the effectiveness index, and 9) previous studies related to the present investigation.

2.1 EFL Discourse in Thailand

2.1.1 Background on English Curriculum as Basic Education

To avoid confusing and to promote better understanding, the researcher will begin by describing the levels of education in Thailand, and an overview of the National English Curriculum as basic education.

According to the organization of the school system in Thailand (Ministry of Education, 2006), formal education included pre-primary, six years of primary education,

three years of lower secondary education, and three years of upper secondary education. Thus, primary education is equivalent to grades 1-6; lower secondary education refers to grades 7-9; and upper education equates grades 10-12. The mandatory education for Thai students is through lower secondary level. At the basic educational level, English (as a foreign language) is one of the eight subject domains included in the core national curriculum. According to the current national curriculum, it is mandatory for every school to teach English at grade 1 (previously at grade 5). At the higher education level each institution has its own English curriculum.

At the national level, the curriculum sets four main cognitive goals in learning English as basic education with different standards as follows:

Goal 1: Language for Communication

To achieve the first goal, students should be able to a) understand listening and reading processes, interpret what they listen to and read from various sources and apply the knowledge they have learned consciously; b) be equipped with communicative skills to exchange information, express feelings and opinions by using appropriate technological resources that enhance a lifelong learning; and c) understand speaking and writing processes to exchange information, concepts and opinions on various topics with creativity, efficiency, and appreciation.

Goal 2: Language and Culture

To attain the second learning goal, students should be able to a) understand the relationship between language and culture of the target language and apply it for using appropriately; and b) understand the similarities and differences of the linguistic systems

and culture components between Thai and English, and apply them into appropriate use.

Goal 3: Language across Content Areas

To fulfill the third goal, students should be able to use the English language as fundamental tool to acquire, develop and broaden their knowledge and vision.

Goal 4: Language and the World Community

To satisfy the final learning goal, students should be able to a) use the target language in different real-life situations such as in schools, community and social world; and b) use the target language as a tool to further study, work, cooperate with others and live in the world in the world community.

According to the National English Curriculum, the instructional principle lies in learner-centeredness. A communicative approach is strongly encouraged in conducting English lessons. To clarify, the learning process should focus on hands on activities with communicative purposes in authentic situations so that students will be able to practice the real use of English appropriately (Ministry of Education. 2006).

2.1.2 The Current Issues

In Thailand, the ability to read English is essential to help advance one's status and lead to academic success, career advancement, etc. because a myriad of current texts have been published in English, and many of them have not yet been translated into the native language. The Thai Ministry of Education (2002) is well aware of this phenomenon, and included reading skill development in the curriculum as a core course at every level with the main objective to develop speed and efficiency in reading. However, reading strategies instruction appeared to be missing (Kanoksilapatham. 2007).

To illustrate, the Grammar-Translation Method, which was practiced in most schools, proved neither effective nor innovative enough to make English classrooms conducive to a successful and stimulating learning environment. To support this point, Wongsothorn, Hiranburana and Chinnawongs (2003) reported that Thai graduate student's performance in English proficiency was unsatisfactory, and below the international standard required for further studies at graduate level abroad. In the report, it was suggested that those who planned to study in higher competence and study skills so that they would be able to adapt themselves to a new learning environment more easily, and would have fewer difficulties in expressing themselves and exchanging information with people from different places around the world through the English language. In addition, it was commented that teachers were one of the main reasons for the unsatisfactory learning outcomes of the students to learn English because they were not well-equipped with a high quality of knowledge about English (Thamraksa. 2003). Further, it has noted that they failed to allow adequate opportunities for students to actively participate in classroom activities. In summary, the participants expressed their opinions on the same issue of the English instruction in Thailand that: (1) teachers were not qualified. There were many teachers who were not academically trained to teach English, especially the primary school teachers who had to teach many subjects. This was because there were not enough English teachers; (2) the class size was too big. There were about 30-40 students in one class; thus, it was very difficult for teachers to allow students to discuss in class. Teachers mostly lectured and acted as the authoritative persons in class. As a result, students got bored and lost motivation and stimulation to study English;

(3) teachers received low salaries. They had no incentives to work hard. Those who were proficient in English were not interested in becoming teachers; and (4) the national curriculum needed to be seriously reformed as a good model for teachers to follow. It seemed that the educational policy from the stake holders lacked continuity, and consistency, and provided very little support in the language learning. There were frequent changes in the administrative positions in the Ministry of Education, and many of them were not qualified and lacked a good vision.

Moreover, the results of the National Test of Thais teaching English as a foreign language of the year 2004 revealed that the quality of teaching English was a disappointment. Test results indicated that 75 percents of those sitting for the test failed, with the average score of 33.98 out of 100, and only 10 percents were considered outstanding (Thamraksa. 2003). The prior research and test results reflected the poor standard, or possibly the failure, of the instructional methods used in most schools in Thailand where teachers played the central role in classroom discussion. To illustrate, the Grammar-Translation Method continued to be widely used in reading classes. Teachers had no incentives to carry out research projects and brush up their knowledge.

2.1.3 Reading Research in Thailand

Over the past decade of research in reading in Thailand, the main focus has been on a similar, one-dimensional issue; that is, most research had sought to compare the different strategies/methods in teaching reading with different group of students. For example, Saysema (1993) examined the learning achievement in Thai reading comprehension of grade 5 students using the hypothesis method. Prapphal (1994)

conducted a study on the relationship between the reading strategies and language background of Thai science students in performing summary tests. Chinarat (2001) explored the comparison of English reading comprehension ability and English vocabulary retention of grade 11 student between groups learning vocabulary through the focus oriented method and the context-oriented method. And Kaewknongmuang (2001) investigated the effects of mind mapping training of English reading comprehension and retention of grade 11 students.

Overall, these studies indicate the similar finding that students who received the treatments or the piloted strategies outperformed the reading tasks or tests than those who did not. Yet, these research studies neither influenced teachers to implement the suggested new teaching approaches, nor yielded much positive improvement in students' language learning achievement in Thailand in general as evidenced in the earlier discussion. This called for an urgent need for Thai government to carefully remedy the educational crisis to upgrade the teaching of English as a foreign language in Thailand.

Thus, in the EFL classrooms in Thailand, there is still much room for researchers to help English teachers to create better English classes to improve the students' performance. Thai students lack the training in using a wide range of powerful study skills and reading strategies. Consequently, the current research might well fit into the present EFL issue to remedy the existing problem. More research studies from different angles and perspectives should be supported to address this chronic problem, and might prove to be an appropriate solution to uphold Thai students to learn English more successfully.

However, in planning my study the researcher realizes that there is no one panacea to accomplish this hard mission. Improving literacy development involves a wide variety of factors ranging from the policy makers, the practitioners, the researchers, the students, the parents, the study resources, the learning environment, the availability of the information resources, the budget, etc.

In summary, all of these variations and factors must be taken into consideration proportionately in order to produce a positive effect. As a potential researcher and practitioner, the researcher does need to perform my role as painstakingly as the researcher could find a suitable solution to this problem. The researcher needs cooperation from stakeholders, teachers, parents, students, etc. to carry out this task. Without the cooperation from the others, failure was a likelihood.

2.2 Second Language Acquisition

Before exploring the concept of metacognition as it relates to adult ESL students, second language acquisition must be discussed. Three key theories in second language acquisition are presented followed by an explanation of variables that influence second language acquisition. By understanding second language acquisition in general, a framework may be given for examination of metacognition in adult ESL learners.

2.2.1 Definitions of Second Language Acquisition

Second language acquisition is a complex phenomenon (Ellis, 1994). Doughty and Long (2003, p. 3) explained second language acquisition as follows:

The scope of second language acquisition (SLA) is broad. It encompasses basic and applied work on the acquisition and loss of second (third, etc.) languages and dialects by children and adults, learning naturalistically and/or with the aid of formal instruction, as individuals or in groups, in foreign, second language, and lingua franca settings.

Ellis (1986) also states that second language acquisition can be a subconscious or conscious process where people learn a language other than a native language in either a natural or classroom setting. Second language acquisition may occur either in natural settings, where the target language is used as a communication tool, or instructional settings, such as the classroom (Ellis, 1986, 1994). Gass and Selinker (2001) explain that second language acquisition is the study of how learners develop systems of new languages. Taken collectively, these researchers present a holistic picture of second language acquisition that includes not only acquisition of second languages, but also the contexts of such acquisition (natural or taught) and purpose (such as communication or other uses). These definitions are useful frameworks in which to explore theories relating to acquisition of a second language.

2.2.2 Theories of Second Language Acquisition

The study of second language acquisition was not formally established until the late 1960s (Pica, 2005). According to Pica (2005) and Nunan (2001), the formal study on second language acquisition was first conducted by Corder (1967). Corder examined learners' errors as a way to understand learning processes (Ellis, 1994). Studies of Selinker (1972) and of Richards (1974) also became the key for the field of second language acquisition because of their focus on interlanguage between first and second

languages. Since that time, scholars and researchers started to focus on how one acquires languages other than the first language.

There are three major theories in second language acquisition: the behaviorist theory, the innatist theory, and the interactionist theory. The first theory, the behaviorist theory, is rooted in behaviorism which focuses on conditioned behavior (VanPatten & Williams. 2007). Based on the views of B. F. Skinner (1974) and Thorndike (1917), behaviorists point out that people learn by repeated practices (Johnson. 2004; de Bot, Lowie & Verspoor. 2005). In other words, learners acquire a second language when they have a lot of repetition through drills and imitations. The stimulus-response relationship also plays a significant role in learning. Learners receive a stimulus, such as a reward or punishment, in order to get a better response in their development. Errors are to be corrected immediately (Peregoy & Boyle. 2001).

Moreover, from the perspectives of behaviorists, learners might sound out a word without much cognitive processing. As a result, learners could identify a word but would tend to fail to understand its meaning. All learning is viewed as the acquisition of new behavior or a process of habit construction with the learning environment as the important element (VanPatten & Williams. 2007). From a behavioral approach, classroom instruction is teacher-centered. Students passively receive the structured instruction and practice skills. The behaviorist theory supports bottom-up strategies, such as decoding, phonics instruction, and grammar pattern drills. Teachers emphasize students' observable and measurable performances. Teachers focus only on students' outcomes, not their processes (Peregoy & Boyle. 2001).

The second theory in second language acquisition is the innatist theory, which dominated in the 1960s and 1970s (Brown, 2000; VanPatten & Williams, 2007). Some researchers and educators reject behavioral approaches (VanPatten & Williams, 2007) and insist that people need to learn naturally and more meaningfully. From the linguistic perspective, Chomsky (1957, 1965) emphasizes a human, innate system and insisted that humans have hard-wired capacities for language acquisition. Chomsky's view includes physiological orientation. From the psycholinguistic perspective, Kenneth Goodman (1965, 1967) viewed reading as a meaning-making process, which is the opposite concept of the behaviorist theory.

Peregoy and Boyle (2001) summarizes studies of Dulay and Burt (1974a, 1974b), stating that learners acquire second languages in a similar way that people acquire a first language. These innatist theorists hold that people learn naturally in a rich literacy environment where they are immersed in opportunities to read various printed materials. Second language students learn naturally from teachers, books, and friends and will naturally acquire their second language without any conscious effort. Learners' motivation is considered an important element. Errors are not to be corrected because second language learners will naturally correct their errors themselves an error is made. In an innatist model, students are encouraged to use top-down reading strategies, including inferring and focusing on text structures. The classroom instructional environment is student-centered with students encouraged to enjoy reading and to appreciate learning. With this holistic approach, teachers are encouraged to use authentic assessments, such as portfolios. Teachers focus on the processes of students' learning

and processes rather than on outcomes. The cognitive theory influences this natural learning perspective (Brown. 2000).

Krashen (1982), one of the major scholars of the innatist theory, is highly associated with the Monitor Theory, which was developed during the 1970s and 1980s (Nunan. 2001; VanPatten & Williams. 2007). Krashen (1982) develops five hypotheses in Monitor Theory. First, Krashen (1982) distinguishes acquisition from learning, which is called the acquisition-learning hypothesis. Acquiring a second language is a subconscious process, whereas learning the second language is a conscious process (Krashen. 1982). According to Krashen, conscious learning cannot become subconscious acquisition (O'Malley & Chamot. 1990; Nunan. 2001).

Second, Krashen (1982) describes that the monitor hypothesis is a conscious process of learning and contributes to second language acquisition to a limited degree. As one learns, the learned system acts like an editor or monitor by polishing the output and making corrections (Gass & Selinker. 2001; Lightbown & Spada. 2006). According to Krashen (1982), the monitor system works when learners meet three conditions: learners need to have enough time to consciously think about the language, learners must focus on how to produce correct language, and learners need to know the rules of the language.

The third hypothesis of Krashen's Monitor Theory is the natural order hypothesis. Krashen (1982) claims that people acquire syntactic rules in certain orders. In the process of second language acquisition, some elements of language or grammatical rules are to be acquired earlier and others are to be acquired later. Krashen (1982) points out

that this order is not necessarily the same as the order of learning a first language.

The fourth hypothesis is the input hypothesis, which is the key component in Krashen's Monitor Theory (Peregoy & Boyle. 2001). People acquire a second language when they understand the language a little beyond the current level of the learners. Krashen designated the learners' current acquired language level as "i," which stands for input, and identifies language that is just above the learners' current language level as "+1" (Lightbown & Spada. 2006; Peregoy & Boyle. 2001).

Krashen's (1982) fifth hypothesis in the Monitor Theory is the affective filter hypothesis. Language acquisition is related to learners' affective factors including motivation, anxiety, feelings, needs, and self-confidence (Lightbown & Spada. 2006). Learners acquire language when the affective filter, which prevents them from learning even when their input is comprehensible, is low.

Some researchers (e.g., McLaughlin. 1978; Gregg. 1984; Odlin. 1986; Gass & Selinker. 2001; Long. 2007) are critical of Krashen's Monitor Theory. According to the researchers, Krashen's conceptual explanation was still ambiguous (e.g., unclear distinction between conscious learning and subconscious acquisition, weakness in focusing on only input, and difficulties of testability in the monitor hypothesis).

However, other scholars state that Krashen's theory led second language researchers to investigate the second language acquisition more cautiously, resulting in increased research in unexplored areas (Brown. 2000; Gass & Selinker. 2001).

The third theory in second language acquisition is the interactionist theory emerged in the 1980s and remains a widely-accepted theory among researchers in second

2.2.3 Factors that Contribute to Second Language Acquisition

Understanding second language acquisition requires an examination of some learner characteristics that affect second language acquisition. These factors include the age and gender of the second language learner, motivation to learn another language, personality characteristics, and aptitude for languages. These factors are presented and explored.

Age is one factor (Butler & Hakuta, 2004) in second language acquisition, as children, adolescents, and adults do not necessarily acquire a second language in the same manner. Many researchers believe that children learn languages better than adults (Cook, 2001; Gass & Selinker, 2001). However, adults also benefit from more developed cognitive abilities as compared to children (Ellis, 1986). Gender is another factor that affects learners' second language acquisition. Some studies suggest that females are better second language learners than males (Ellis, 1994; Sunderland, 2000; Gu, 2002; Nyikos, 2008). However, there needs to be more research that focuses on gender in relationship to other factors, such as learning strategies, age, and ethnicity (Ellis, 1994). Motivation also influences learners' language acquisition (Gass & Selinker, 2001; Dörnyei, 2006; Lightbown & Spada, 2006; Ushioda, 2008). There are two types of motivation: intrinsic and extrinsic motivation. Intrinsic motivation comes from personal interests and inner needs of the learner. Learners have extrinsic motivation when they are influenced by outside sources, such as getting rewards or jobs. In addition to motivation, Gass and Selinker (2001) demonstrated that certain personality variables can be predictors of better language performance. Extroverted learners are sociable people,

whereas introverted learners are shy people. Some researchers argue that extroverts learn languages better than introverts (Dewaele. 2004), yet others point out that no correlation was found between personality and language performance (Lightbown & Spada. 2006). Other traits which may influence second language acquisition may include self-esteem, empathy, and anxiety (Lightbown & Spada. 2006). Learners with different personal characteristics benefit from various learning styles and tasks (Gass & Selinker. 2001). Aptitude also impacts second language learning (Gass & Selinker. 2001). In fact, aptitude is a very consistent predictor for second language learning (Skehan. 1989; Dornyei & Skehan. 2003). Aptitude in second language acquisition refers to a certain ability that a person possesses for language learning (Ellis. 1986).

In summary, several factors, including age, gender, motivation, personality, and aptitude of learners, are discussed. These learners' characteristics may influence second language acquisition. Having general concepts of second language acquisition, the review of literature continues to present research on second language reading.

2.3 Second Language Reading

Within the broader category of Second Language Acquisition is the finer issue of second language reading. When looking at how individuals learn to read, there are some common features between first and second language reading. However, reading in second language requires several different conditions compared to first language reading (Fitzgerald. 1995b; Garcia. 2000). This section attempts to define the development of reading skills in general as well as reading comprehension in particular. The section also

describes characteristics of reading that English as a Second Language (ESL) students experience when learning to read in a second language.

2.3.1 Definitions of Reading

Research on reading was essential among early psychologists (Rumelhart, 2004). For example, Huey (1908) is one of the greatest scholars in the early twentieth century. Huey (1908) views reading as a meaning-making process with psychological, linguistic, and social dimensions (Reed & Meyer, 2007). Since then, definitions of reading have been changed along with different theoretical views over time (Harris & Hodges, 1995; Cummins, Stewart & Block, 2005).

Like language acquisition, reading was strongly impacted by behaviorism until the 1950s (Thorndike, 1922). Reading was considered conditioned behavior. After the domination of behaviorism, the innatist theory influenced the concept and instruction of reading (Alexander & Fox, 2004). The innatist theory was based on cognitive psychology. According to Goodman (1967: 127), reading is “a psycholinguistic game” which requires interactions with thought and language.

After the period of the holistic view of reading, constructivists emphasized sociocultural and constructive concepts (e.g., Vygotsky, 1978, 1986). The interactive model of reading was emphasized (Eskey, 2005). Scholars stressed reading for constructing meanings from reading materials (Urquhart & Weir, 1998; Carrell & Grabe, 2002; Ruddell & Unrau, 2004; McShane, 2005). For example, Ruddell and Unrau (2004) define reading as “a meaning-construction process that enables us to create carefully reasoned as well as imaginary worlds filled with new concepts, creatures, and characters”

(p. 1462). Carrell and Grabe (2002), scholars in the field of second language reading, used Urquhart and Weir's (1998, p. 22) definition of reading, which is "the process of receiving and interpreting information encoded in language form via the medium of print." McShane (2005: 3) also discussed that reading is "a complex system of deriving meaning from print." These definitions have commonalities including meaning-making processes from information which provide a basis upon which to explore the elements of reading.

Both McShane (2005) and Armbruster, Lehr and Osborn (2003) describe fundamental elements required for reading as phonemic awareness, phonics, fluency, and vocabulary. However, McShane (2005) viewed that reading strategies and affective factors (e.g., motivation) are also needed for reading development. Beyond this technical level, Armbruster, Lehr and Osborn (2003) cite the importance of valued reading comprehension within the development of reading skills. An exploration of reading comprehension is critical, especially within the context of second language reading.

2.3.2 Definitions of Reading Comprehension

reading comprehension is a psychological process which occurs in the mind. The mental process is invisible. This invisibility makes it difficult for the researcher to provide a concrete and clear definition. By understanding the meaning and key elements of reading, the concept of reading comprehension can be explored. Summarizing the report of the RAND Reading Study Group (2002), Snow and Sweet (2003: 1) clarify reading comprehension as follows:

the process of simultaneously extracting and constructing meaning...
.figuring out how print represents words and engaging in the translation of print to sound accurately and efficiently (extracting), at the same time formulating a representation of the information being presented, which inevitably requires building new meanings and integrating new with old information (constructing meaning).

According to Snow and Sweet (2003), three dimensions are involved in comprehension: the reader, the text, and the activity. These three elements work simultaneously, not in isolation. They further state that the process of reading comprehension involved in these three elements both influence and is influenced by the sociocultural context of the developing reader.

3.3.3 Importance of Reading Comprehension

Reading comprehension is essential for learning across subjects, as students are required to construct meaning in texts for better academic performance (Koda & Zehler. 2008). Learners have difficulty achieving academically without comprehending much of what is written in the reading materials. Educators, teachers, and scholars assume that reading comprehension leads students' academic success, which can be measured by such variables as test scores and grade point average (GPA) (Dreher & Singer. 1985; Otero, Campanario, & Hopkins. 1992; Taraban, Rynearsn & Kerr. 2000).

Some studies investigate relationships between students' reading abilities and academic achievement. Arbona, Bullington and Pisecco (2001) conduct a study with 79 Turkish undergraduate and graduate students at universities in the United States ranging in age from 19 to 34. The study revealed a relationship between GPA and speaking-reading proficiency in English, with students with higher levels of English proficiency

having higher GPAs. The finding of Garcia-Vazquez, Vazquez, Lopez and Ward (1997) is similar to in that English reading proficiency of Hispanic English as a Second Language (ESL) students in grades 6 to 12 in the United States was correlated to GPAs and standardized test scores.

Taraban, Rynearson and Kerr (2000) went beyond English proficiency and GPA to examine relationships between reading strategies and academic achievement among freshman university students in the United States. In this study, a questionnaire about reading strategies, scores on the reading section on a standardized test, and the student's GPA were used. The questionnaire comprised of 35 items, including skimming, guessing, summarizing, and identifying key information in a text. The study indicated that students with higher GPAs used more reading strategies than did students with lower GPAs. In addition, a correlation between GPA and the reading test scores was found.

Taken collectively, these studies suggest a need to more fully examine the relationship of English proficiency and English reading strategies in the context of academic achievement of ESL students. An exploration of characteristics of reading in both the learner's first and second languages may provide more depth to such an examination. Likewise, this examination will yield key factors for future research in the fields.

3.3.4 Characteristics of Second Language Reading

Research indicate key differences between first language (L1) and second language (L2) reading (Grabe. 2002b; Grabe & Stoller. 2002). Experiences in learning English as a second language (ESL) for non-native English speakers have also been

studied and reported (Devine. 1993; Koda. 2007). These concepts are presented and explored below.

3.3.4.1 Comparing L1 Reading to L2 Reading

There are some differences between first language (L1) reading and second language (L2) reading. First, while L1 reading involves one language, L2 reading is engaged in two languages for cognitive processing (Carrell & Grabe. 2002; Koda. 2004). Particularly, because these languages are inherently diverse, there are some linguistic differences (e.g., lexical, grammar, and discourse) between the two languages that impact reading in the second language (Grabe & Stoller. 2002). L2 learners use prior literacy knowledge from literacy experience in L1 for information processing (Koda. 2004) which is a phenomenon not necessary for L1 learners who have literacy background knowledge only in their first language upon which new learning may build (Koda. 2004). In addition, L2 readers may transfer words, phrases, or sentences from L1 to L2 or vice versa, but any translation is unnecessary in L1 reading.

There are also some individual and experiential differences between L1 and L2 reading (Grabe & Stoller. 2002). Carrell and Grabe (2002) state that L2 readers tend to have a variety of purposes for learning L2, such as learning L2 for business success, accommodation to the L2 cultures and contexts, entering universities and colleges, and/or leisure (e.g., travel). Third, social and cultural contexts are different between L1 reading and L2 reading (Carrell & Grabe. 2002; Grabe & Stoller. 2002). Even though Koda (2004) saw using background knowledge while reading in L2 as advantages for L2 learners, Carrell and Grabe (2002) point out that different social and cultural background

knowledge can sometimes work negatively for L2 reading. Sociocultural distance may intrude upon L2 learners' reading comprehension.

Although there are some common elements that differentiate L1 reading from L2 reading among Koda (2004), Carrell and Grabe (2002), and Grabe and Stoller (2002), there are some different arguments among the scholars. For example, Koda (2004) points out novice L1 learners have already built fundamental linguistic bases before the formal literacy instruction. However, L2 learners receive L2 reading training before acquiring the adequate linguistic knowledge. Grabe and Stoller (2002) include additional different elements between L1 and L2 reading, such as amount of time for reading in L1 and L2, different levels of L1 reading proficiencies, multiple types of reading materials in L2, and structures of learning organizations.

3.3.4.2 Issues of Second Language Reading

There are several characteristics that influence the second reading development for non-native English speakers. First of all, second language readers have culturally different background knowledge and/or schemata (Jimenez, Garcia & Pearson. 1996; Eskey. 2005). Borrowing descriptions from Rumelhart (1980), Carrell and Eisterhold (1998) define background knowledge as knowledge acquired in the past and schemata as knowledge structures acquired in the past. Koda (2007) states that schemata consist of generalized information acquired from diverse learning situations and show relationships among the component elements.

Singhal (1998) categorizes schemata in the following three variables:
content/background schema, formal/textual schema, and linguistic/language schema.

Content/background schema is knowledge about the content (Carrell. 1987a). Formal/textual schema is knowledge about the formal and rhetorical organizations among different types of reading materials (Carrell. 1987a). Linguistic/language schema involves the decoding process for recognizing words and focuses on how the words fit together in a sentence (Singhal. 1998). Previous research shows that having rich schemata on a subject matter is related to better reading comprehension (Carrell. 1987a; Singhal. 1998; Hudson. 2007).

For content schema or background knowledge, Steffensen and Joag-Dev (1984) investigate the impact of cultural content schemata among American native English speakers and Indian students learning English as a second language (ESL). Both groups read two types of English passages on the topic of weddings, one Indian oriented and one Western oriented. The study showed that both groups recalled and understood the contents that described their own native cultural weddings better than the passages about other cultural weddings. The findings of Carrell (1987a) and of Johnson (1981) also concurred with the study by Steffensen and Joag-Dev (1984).

Textual/formal schema also contributes to second language reading (Carrell. 1992; Koda. 2004). Familiarity of the text structure of the English language (e.g., cause and effect, question and answer, and compare and contrast) facilitates L2 readers in understanding English passages (Carrell. 1984a, 1984b; Eskey. 2005). Carrell (1984a) examines the impact of text structures for different cultural groups. Arabic students recalled from informational texts in the comparison and contrasting organization the best. The next most remembered passage structure for the Arabic students was cause and

effect. By contrast, Asian students recalled text passages well in the organizations of problem solving and of cause and effect.

In the area of linguistic/language schema, Singhal (1998) states that L1 linguistic characteristics may influence L2 readers' interpretation on the English texts. For example, the Finnish language uses less demonstrative formats than English. Finnish texts rarely indicate text structures, while English texts have specific indicators of when a new section begins or what to expect in the following sentence or section. French texts tend to have more theoretical and abstract components than the English texts. Arabic is different from English in that the Arabic language is written from right to left.

Vocabulary is another factor that contributes to successful second language reading (Fitzgerald, 1995b; Koda, 2007). Inadequate English lexical knowledge adversely influences non-native English speaking readers' reading proficiency (Levine & Reves, 1990; August et al. 2005). Carrell and Grabe (2002) argue that ESL readers need to have sufficient size of vocabulary so that the readers can develop vocabulary knowledge by inferring from contexts and by referring to dictionaries, and that the learners benefit from effective instructions on different vocabulary strategies. Qian (2002) conducts a study on the relationship between vocabulary knowledge and reading comprehension with 217 ESL students. Qian (2002) finds that vocabulary depth and size were significantly related to the participants' English reading performance.

Another issue of second language reading is the level of second language proficiency. Alderson (1984) poses a question of whether difficulties of learning foreign language are due to "a reading problem" or "a language problem" (p. 1). Some

researchers explain that reading in second or foreign language depends on learners' first language (L1) proficiency (Cummins, 1979, 1991). The point is that readers' development of the second or foreign language can be determined by the reading ability in the native language rather than the second or foreign language. Once one acquires literacy skills in the first language, some foundations can also be used when learning L2 (Bernhardt & Kamil, 1995). This position is called the linguistic interdependence hypothesis.

Other researchers discuss that in order to read in a second language, one is required to have adequate linguistic knowledge in a second language (Bernhardt & Kamil, 1995). Even proficient L1 readers cannot process L2 reading without knowing the basic linguistic knowledge in L2. This position is well known as the linguistic threshold hypothesis (Koda, 2004), whose foundation is based on Clarke's (1980) short-circuit hypothesis and Yorio's (1971) argument. In the studies conducted by Bernhardt and Kamil (1995) and by Carrell (1991), the results demonstrated that L2 reading proficiency, rather than L1 reading proficiency, predicted the participants' L2 reading ability.

2.4 Reading Comprehension Models

Current reading research has supported the idea that both L1 and L2 readers seem to go through similar cognitive processes (Alderson, 1984, Grabe, 1991, 2004; Eskey, 2005). These reading models have been influential in both L1 and L2 reading research and can be distinguished from one another by its focus regarding how meaning is attained

from print. For instance, the bottom-up model indicates that the reading process is guided by each word in the text and a reader decodes each word to obtain meaning. In contrast to the bottom-up model, the top-down model specifies that the reading process is guided mostly by a reader's past experience and prior knowledge. The interactive model points out that the reading process is guided by an interaction between the text information and the reader's previous knowledge as well as interaction between various reading strategies (Brunning, Shraw & Ronning. 1999). In this study, KWL is a new mode of instruction that focuses on "the interactive nature of reading," rather than a passive way of receiving information from the text through word identification and task analytic learning.

2.4.1 The Bottom-up Model

According to Gough (1972), the emphasis of this model is on print itself. Readers start reading by recognizing the letters, word identification, and they gradually progress toward larger linguistic chunks to sentences, and eventually ending in meaning. The whole reading process is basically word-based and readers construct the meaning of a reading passage by decoding each word. Since this model emphasizes individual words in isolation, rapid word recognition is vital to the bottom-up approach (vanDuzer, 1999). This reading model believes that students who master this process quickly become proficient readers. However, students who are not successful at decoding become struggle readers whose proficiency is interrupted by their inability to decode. Pressley (2000) claimed, skilled decoders are able to recognize frequent letter chunks, prefixes, suffixes, and foreign root words rapidly and such ability can free more memory capacity

in the brain for reading comprehension. In contrast, less skilled readers put more effort into decoding words which leaves less processing capacity in the brain for reading comprehension. This notion has also been confirmed by Pressley (2000) who concludes fast decoding improves reading comprehension.

However, the bottom-up has been criticized that, “bottom-up models suggest that all reading follows a mechanical pattern in which the reader creates a piece-by-piece mental translation of the information in the text, with little interference from the reader’s own background knowledge.” (Grabe & Stoller. 2002: 32). In addition, this word-by-word decoding process causes slow and laborious reading because short-term memory is overloaded, and readers forget easily what they have read when reading comes to an end (Adams. 1990). As a result, readers may only remember isolated facts without integrating them into a cohesive understanding. Without cohesive understanding, readers won’t evoke critical thinking. Without critical thinking, readers will lack the motivation to read on a regular basis. Therefore, the criticism of this model has been that it does not seem to consider the contribution of a reader’s active role and background knowledge to reading comprehension. In other words, the linear nature (letters→ words→ sentences) of this reading model limits the scope of the reading process or envision the reading process as a one-way makes it fail to notice the global or top-down processes (will explain in the next section) that take place during reading. Recognition of the limitations within the bottom-up model in explaining the reading process led to the emergence of the top-down reading model.

The bottom-up model can be applied in L2. A growing body of research in L2 has supported the critical role of lower-level processing in reading comprehension (Bernhardt. 1986; Carrell. 1988; Eskey. 1988, 1997, 2005; Koda. 1992) and the lack of vocabulary “maybe the greatest single impediment to fluent reading by ESL readers” (Grabe. 1988: 63). In a comprehensive review of L2 word-recognition research, Koda (1996) again stresses the very significant role of word recognition in L2 reading comprehension. What’s more, in a study conducted the relationships between the role of higher-level syntactic and semantic processes and word recognition of sixty adult ESL learners in Canada, Nassaji (2003) found that lexical knowledge was strongly correlated with L2 reading comprehension. However, reading in a second language bears some knowledge specific to that culture and society. Therefore, although a number of researchers and studies have emphasized the role of lexical knowledge in reading comprehension, some researchers maintain that vocabulary knowledge is a necessary, but insufficient condition for the outcome of successful reading comprehension (Koda. 1996). In other words, in order for true comprehension of a text to occur, a reader needs to possess other source of knowledge (Devine. 1987; Carrell. 1988; Bernhardt. 1991) and develop appropriate reading strategies (Carrell, Pharis & Liberto. 1989; Anderson. 1991, 2001).

2.4.2 The Top-down Model

Unlike the bottom-up model, the top-down model is a “concept” driven model where the readers’ background knowledge and expectations guide them to construct meaning from a reading text. As Eskey (2005) proposes, the top-down model

emphasizes that the whole reading process is basically “from brain to text” (p. 564). That is to say, a reader starts with certain expectations about the reading text derived from his or her background knowledge and then uses his or her vocabulary knowledge they possess in decoding words to confirm and modify previous expectations (Aebersold & Field, 1997). In other words, a reading text itself has no meaning in the top-down reading model. It is the reader who constructs the meaning of the text by fitting it into his or her prior knowledge. According to Goodman (1967), who develops the top-down model, reading is a “psycholinguistic guessing game” and readers use their background knowledge to guess meaning. Smith (2004), who is also in favor of the top-down model, claims that a reader plays a very active role in the process of translating print into meaning by using knowledge of a relevant language, knowledge of the subject matter, and knowledge of how to read to confirm or reject his or her hypotheses. The process of the top-down model is also called “sampling of the text” (Cohen, 1990). Describing the sampling process, Cohen (1990) maintains that a reader does not read all of the words and sentences in the text, but rather chooses certain words and phrases to comprehend the meaning of the text. Therefore, the top-down model focuses on reading skills like making predictions and inference as well as guessing from context. The top-down model influences both L1 and L2 reading instruction in promoting the importance of prediction, guessing from context, and getting the gist of a text’s meaning.

Nevertheless, the top-down reading model has been criticized for its problem of over-reliance on a reader’s prior linguistic and conceptual knowledge and neglect the importance of the text (Eskey, 1973; Pearson, 1979). Moreover, the top-down model

overlooks the possible difficulties that a reader may have or encounter with guessing or predicting the topic of text if the material is unfamiliar to him or her (Samuels & Kamil, 1988). This is particularly true for second or foreign language learners. Up to this point, both the bottom-up and the top-down theories have been considered inadequate in terms of describing a sound reading process. For the bottom-up theory, it was criticized for its failure to consider the reader's role in the reading process, while the top-down theory relies too much on the reader's prior linguistic and conceptual knowledge and neglects the importance of the text (Eskey, 1973, 1986; Pearson, 1979). Thus, the inadequacy of both the bottom-up and top-down models in explaining the reading process has led to the emergence of the interactive reading model.

The top-down model can be applied in L2. Since reading materials tends to be culture-specific, the top-down model takes into consideration that L2 readers may fail to understand a text if they do not possess or cannot access the appropriate cultural knowledge embedded in it. Reliance on top-down strategies at the expense of word identification skills might not contribute to comprehension. That is to say, limitations on cultural knowledge may cause distortion of the text meaning if the reader relies on guessing from context and prediction (Eskey, 1988). It has long been argued that during the reading process, the reader's language knowledge, personal experiences and knowledge of the textual structure connect interactively to achieve comprehension. Thus, Alderson (2000) specifically stresses that "the whole reading process is not an "either/or" selection between the bottom-up and top-down models, but involves the interaction between both approaches" (p.38).

2.4.3 The Interactive Model

The interactive model combines features of the both bottom-up and top-down models and stresses the interrelationship between a reader and the text. It is now commonly accepted as the most conclusive picture of the reading process for both L1 and L2 readers (Anderson, 1999). Introduced by Rumelhart (1977), the interactive model suggests that there is an interaction between the bottom-up and top-down processes and this model advocates that neither bottom-up nor top-down models can by themselves describe the whole reading process. Rumelhardt (1977) says that “both sensory and non-sensory come together at one place and the reading process is the product of simultaneous joint application of all the knowledge sources” (p.735). Grabe (1991) further describes the interactive theory of reading as one that “takes into account the critical contributions of both lower-level processing skill (word identification) and higher-level comprehension and reasoning skills (text interpretation).” Therefore, reading comprehension is the result of meaning construction between the reader and the text, rather than simple transmission of the graphic information to the readers’ mind (Eskey, 2005). Proponents of this model suggest that a skilled reader simultaneously synthesizes the information available to him or her from several knowledge sources of either bottom-up or top-down during the reading process. In addition, Stanovich (1980) brings the view of “compensation” into the interactive model by proposing that bottom-up and top-down processes compensate for each other in the reading process. In other words, when a reader lacks the appropriate content schemata for a certain text, he or she will rely on the bottom-up processes to compensate for the necessary background knowledge. The

opposite could be true when a reader lacks the bottom-up skills necessary to comprehend a text, he or she will resort to high level processes. This phenomena explain for the process that poor readers tend to resort to high level processes more often than skilled readers given that the use of top-down processes seems to compensate for the poor readers' limited ability of bottom-up processes (Stanovich, 1980).

The interactive model can be applied in L2. Because second or foreign language learners often find it challenging to understand the context due to limitations with knowledge of the language and the culture unfamiliarity, most L2 reading specialists support the interactive reading model (Grabe, 2002, 2004; Eskey, 2005). According to Bernhardt (1990), in L2 reading, both text-driven and knowledge-driven processes operate simultaneously with varying degrees of success. The text-driven factors consist of word-recognition, phonemic decoding, and syntactic feature recognition, while knowledge-driven operations involve intertextual perception, metacognition, and prior knowledge. All of these factors contribute to successful L2 reading. Cook (2001) and Nassaji (2003) point out that even though readers may know all of the vocabulary and grammar, there are times that second language learners still cannot understand the text meaning. The difficulty seems to stem from the lack of social-cultural knowledge as comprehension is based on linguistic data (Bernhardt, 1991). Thus, background knowledge, in addition to the lower-level processing, has been viewed as another critical factor that needs to be developed as part of the reading process. In the reading process, the reader integrates the new information with the existing schemata (Carrell, 1983; Anderson & Pearson, 1984). Schema can be categorized as content schema and formal

schema. For context schema, both Pritchard (1990) and Razi (2004) conduct studies in investigating the influence of cultural schema on reading comprehension. The results all showed that relevant cultural schemata obviously facilitated the reading process. In addition to relevant content or cultural knowledge, familiarity with text structure (formal schema), is another factor affecting comprehension. Formal schema refers to the readers' expectations about how information parts in a text are organized (Carrell, 1987) and this knowledge has been recognized as an important factor in comprehension. For instance, Carrell's (1984) study found that students from different language backgrounds recalled more information when the structure of the reading task was close to the structure of their own language.

In summary, reading comprehension models are complex cognitive processes, and it seems more complex in an L2 context. Clearly, reading in an L2 is an active process involving various sources of knowledge such as relevant language knowledge, appropriate background knowledge and knowledge of text structure. Instead, all of the processes involved are simultaneously active and interactive. With all sources of knowledge, the key to the interactive model is not the dominance of one form of knowledge over others, but the coordination and cooperation of all with each other. In addition to the relevant linguistic, content, and formal schemata, L2 learners also need to be equipped with effective strategies when approaching a reading task to compensate for insufficient knowledge in either language or content knowledge.

2.5 Importance of Teaching Reading Comprehension

As evidenced by verbal protocol studies, good readers use a repertoire of reading comprehension strategies (Pressley & Afflerbach. 1995). A brief list of some of these mature readers' conscious constructive responses to text include looking over a text before reading it, activating and using prior knowledge, searching for important information, summarizing, visualizing, generating questions, and making inferences. Skilled readers use these responses and strategies flexibly, selecting the tool they need to improve their comprehension of a specific text (Pressley & Afflerbach. 1995). Pressley (2000) advocates teaching students how to use a collection of comprehension strategies and to self-regulate their use of those strategies to construct meaning. A large body of research supports the view that students can be trained to use the strategies used by good readers and that the use of those strategies often improves students' reading performances.

Compelling evidence for reading comprehension strategy instruction is found in experimental evaluations. In the 1970s and 1980s, numerous studies validated the teaching of individual reading comprehension strategies, and the contributions of those studies are covered in many reviews (e.g., Pearson & Dole. 1987; Pressley et al. 1989; Pearson & Fielding. 1991). Each of the eight reading comprehension strategies targeted in this research project was evaluated during these decades. In the following representative studies conducted with a wide range of students from second to eleventh grade, the students in the treatment condition were taught to use the strategy while the students in the control group were allowed to process the text without the benefit of

strategy instruction. These studies include monitoring comprehension (Miller. 1985); questioning (Singer & Donlan. 1982; Raphael & McKinney. 1983); making inferences (Hansen. 1981; Hansen & Pearson. 1983); predicting (McGinley & Denner. 1987; Fielding, Anderson & Pearson. 1990); relating prior knowledge (Brown et al. 1977); summarizing (Bean & Steenwyk. 1984; Rinehart, Stahl & Erickson. 1986); understanding text structure (Taylor & Beach. 1984; Idol. 1987); and visualizing (Gambrell & Bales. 1986).

After individual reading comprehension strategies proved their worth, later studies investigated the instruction of multiple strategies (e.g., Adams, Carnine & Gersten. 1982; Taylor & Frye. 1992; Klingner, Vaughn & Schumm. 1998). Consistently, the research on individual and multiple strategies supports the value of reading comprehension strategy instruction. “Because meaning does not exist in text, but rather must be actively constructed, instruction in how to employ strategies is necessary to improve comprehension” (Anderson & Pearson. 1990: 32). A variety of sources concur: reviews and synthesis of research (Alvermann & Moore. 1991; Gersten et al. 2001; Meltzer. 2002; Kamil. 2003; Biancarosa & Snow. 2006; Kamil et al.. 2008); meta-analysis (McGinley & Denner. 1987); research-based guides and guidelines (Langer et al. 2000; Deshler et al. 2007; Torgesen et al. 2007); content area reading and literacy teacher preparation textbooks (e.g., Vacca & Vacca. 2005; Alvermann, Phelps & Ridgeway. 2007); position statements (Pressley & Afflerbach. 1995; Moore et al. 1999); and English language arts standards (Pearson & Dole. 1987; Pearson & Fielding. 1991).

In short, many people think of reading comprehension as a skill that is taught once and for all in the first few years of school. They see reading as a simple process: readers decode, figure out how to pronounce each word in a text then automatically comprehend the meaning of the words as they do with their everyday spoken language. Besides, reading comprehension is the process of identification, interpretation and perception of written or printed material. Comprehension is the understanding of the meaning of written material and involves the conscious strategies that lead to understanding.

2.6 Techniques of Teaching Reading Comprehension

It is important to know how to teach reading to the students. Teachers should adopt the appropriate technique considering previous performance of the students, their linguistic level, ability to perceive new items or vocabulary etc.

2.6.1 Teaching How to Tackle Meaning

It has been already stated that meaning of a text is not “inherent”. It is the reader who brings meaning with him/her. For this reason, the same text can be interpreted in different ways though the writer may have only one idea while writing the text. For this reason, learners should be taught how to reach the proper meaning of the text. If they fail to guess or understand the meaning a text implies, all the efforts and techniques to teach reading to the students will end in smoke.

It is now obvious that the teaching of meaning is the most important task for the teacher. Text-based out look of the students should be changed. Students should be

trained properly so that they may be able to associate the textual meaning to their experience. According to Dechant (1982: 37) “Proficient readers are those who...have an adequate knowledge base that allows them to bring meaning to the printed page.” So, proper association between the textual words and the experience or knowledge is essential for a better understanding. Meaning can be associated with the printed word only by associating the word with the experience, whether real or vicarious, or by associating it with another symbol which fits the context. As meaning starts its operation from the ‘word’, it is suggested to give importance on “word knowledge”, as “word knowledge is the most important factor for reading comprehension or for reading with meaning in the elementary and secondary school years” (Dechant. 1982: 288). Dechant has suggested “a three fold process” for the “teaching of meaning for the words”:

- (1) students should be taught the basic or ‘literal meaning’ of words;
- (2) they should be taught what the other alternatives of a particular word are synonyms, for example; and
- (3) they should know how a particular word for a particular purpose can be used fitting the context.

The overall meaning of a text can be taught through DRA (Directed Reading Activity) suggested by Dechant (1982). According to Dechant (1982: 292) basic steps of the DRA are: (1) building readiness for reading a selection by building concept and vocabulary background, by creating interest and motivation, and by creating a purpose for reading; (2) guided silent reading; (3) checking comprehension; (4) oral rereading of the material; (5) extending word-recognition and comprehension skills: learning and practicing new skills; and (6) enrichment and follow-up activities: supplementary

reading, dramatization, and other creative activities.

The purpose of the teaching of meaning is to enable students to develop their reading skill and prepare a suitable ground for the students to advance their understanding power. Dechant (1982: 293-298) has prescribed “twenty techniques” for this purpose. They are to:

1) provide experience with the concrete object or event, because direct experience is still the best way to develop meaning for words.

2) label objects and made extensive use of signs in the classroom; have pupils cut out and label pictures.

3) teach the pupils to read pictures, illustrations, charts, graphs, and maps.

4) use riddle, rhyme, and puzzle games to illustrate meaning.

5) have pupils construct and use picture dictionaries.

6) use picture words, flash cards and lotto games; read easy stories build sentences with word cards; make scrapbooks; and pursue other similar activities.

7) have pupils place words in the categories to which they belong. For example, the pupils might be required to classify things one might find on a street; things found on a farm; things to eat; things to ride in; things that are animals, plants, fruit, birds, countries, clothing, colors, insects; or things that fly, run, or float.

8) teach the pupils the use of the context as a cue to word meaning. Students can be asked to fill in the gaps using given clues. The question may be like this:

Father bought the apples at the _____. (store, story)

9) have pupils develops the concept of multiple meaning with an exercise. To

develop the concept of multiple meaning, a single word can be used in different sentences with different meanings, and students can be asked to write down their meanings in the blanks provided after each sentence. For example, a single word “run” can be used in different sentences like the following ones with a different meaning in each:

a) The boat runs between Georgia and New York. _____

b) The man runs a hotel in the uptown. _____

c) We saw a run of fish. _____ etc.

And students will be asked to write the meaning of ‘run’ in each blank.

10) teach pupils develop the meaning of heteronyms, words whose pronunciation and meaning change depending upon their use in the sentence.

11) teach pupils to use the cloze procedure to develop meaning. This procedure enables readers to use the context to identify the word that completes a passage.

12) teach pupils to use structural words as cues to meaning.

13) teach pupils the meaning of homonyms.

14) teach pupils to high imagery words and to analyze the sense appeal of words.

15) teach pupils to use the root of a word as well as prefixes suffixes as cues to meaning.

16) teach pupils how to works out the meaning of compound words.

17) teach pupils how to reads words used in a figurative sense.

18) help pupils to use the dictionary.

19) have pupils study technical vocabularies. Knowing technical vocabularies is particularly important in the content areas. The primary types of technical vocabularies

are (1) words that are peculiar to a given subject area; (2) words that are common to all content areas but that have a special meaning in a given content area; and (3) symbols used in a given content area (Dillner & Olson. 1977), and

20) have pupils study the origin of words and how they change, or in other words, the etymology of words.

Students can also be taught space, numerical and time concepts for developing word meaning in greater details.

2.6.2 Approaches to Teach the Skills to Understand Meaning

Understanding a written text means extracting the required information from it as effectively as possible. To understand a text meaningfully, students should be made to practice several exercises. Widdowson (1978: 94) has suggested various types of questions such as open questions, right or wrong, multiple-choice options etc. for understanding meaning. But, Grellet (1996: 13, 21-24) has pointed out that these 'question-types' can be advantageous to the students if they involve the students actively, that is, if the activities need the students "to think and reason in order to give answer or make a choice". For the development of the skills to understand meaning of texts, he has suggested some activities that are divided into two categories. They are Non-linguistic and Linguistic approaches.

2.6.2.1 Non-linguistic Approach

In this approach no comprehension activities require any complex and verbal response on the part of the learners. Instead, some elements (a document, a diagram, a picture etc.) are added to the text and the students are asked to relate the text to a

particular document. Grellet (1996: 13, 22) has mentioned some non-linguistic ways of teaching understanding meaning. They are: (1) comparing texts and pictures; (2) completing or labeling a document; (3) using illustrations; (4) transcoding the information into the form of a diagram; (5) using the information in the passage to find a solution, make a decision or solve a problem; (6) matching; (7) mapping out a document; and (8) jigsaw reading.

2.6.2.2 Linguistic Approach

According to Grellet (1996: 13, 22-24), this approach includes the following strategies:

1. **Reordering:** In these exercises, the students are asked to present the information in a different way. They can be asked to reorder disordered sentences into a cohesive incident, to complete a table, or to draw up a chronological list of the events mentioned in the passage. The aim of this type of exercises is to let the students know that “there are many different ways of presenting the same information.”

2. **Comparing:** Through the comparison between different texts the attention of the students is drawn to what is specific to the passage they are reading. Grellet (op. cit.) states that the passages offered for comparison may differ in their contents (e.g. one can study the development of an item of news over a period of time) or in their points of view (e.g. several articles on the same subject taken from different sources).

3. **Summarizing:** It is an important technique to develop understanding meaning of a text. Since summarizing is “an accurate and objective account of the text, leaving out our reaction to it” and rejecting all minor details, students are forced to read

meaningfully.

4. Note-taking: It means “briefly jotting down one’s reactions and ideas about the passage”, and students can be able to note down and establish the key ideas of a text only when they read the text clearly and effectively. Therefore, this practice is much useful for the students to develop their understanding meaning of the texts they read.

Moreover, the following practices are also useful for this purpose: (a) close reading; (b) cloze test; (c) surveying text organization; (d) using contextual clues to guess meaning of unknown words; (e) transforming information from table, graphs, charts etc. to texts and vice versa; (f) rereading; (g) associating; and (h) word-grouping.

2.6.3 Classroom Procedures for Teaching Reading Comprehension

Classroom activities are very important for the development of teaching reading skills. Teachers should help and encourage the students to read effectively in the class. To perform the job, teachers have to design effective activities for teaching reading comprehension in the class, because, a successful teaching of reading in the class depends largely on the proper planning of reading lessons. Teaching techniques should be designed according to the level of the perception of the students. An experienced and efficient teacher knows well when a particular technique should be followed and how. However, in the teaching of reading, there are some tested teaching techniques by recommended experts, and these techniques can be followed in the classroom. Grellet (1996: 10) states that practicing reading in the classroom is “a silent activity”. He, therefore, suggests that students should not read aloud in the class, because, “it is an extremely difficult exercise, highly specialized (very few people need to read aloud in

their profession) and it would tend to give the impression that all texts are to be read at the same speed.” Moreover, reading aloud tends to prevent the students from developing “efficient reading strategies”.

In order to develop effective reading skills among the students, the teacher should help the class how to approach a text meaningfully. The following procedure, according to Grellet (1996: 10-11), is “very helpful” for the students: (1) considering the text as a whole, its title, accompanying picture(s) or diagram(s), the paragraphs, the typeface used, and making guesses about what the text is about, who wrote it, who it is for, where it appeared, etc.; (2) skimming through the text a first time to see if the learners’ hypotheses were right and then asking a number of questions to themselves about the contents of the text; and (3) Reading the text again, more slowly and carefully this time, trying to understand as much as possible and trying to answer the questions asked by the learners themselves.

Williams (1996) has suggested that for effective teaching of reading in the classroom, the lesson should be divided into three consecutive phases. They are pre- rereading, while-reading and post-reading phases.

2.6.3.1 Pre-reading

Pre-reading stage is important because it can “whet” the students’ appetites to read. Greenwood (1998: 15) states that it can provide a “need to read to complete an activity or confirm an idea; and it can persuade the students that as far as perception or hypothesis is concerned there are no right or wrong answers, only different ones.” In pre-reading stage, teacher should carefully design the activities that prepare the students

mentally to accept what he/she is going to teach in the next stage. Urquhart and Weir (1998: 184) have suggested some pre-reading activities. They are: (1) thinking about the title; (2) checking the edition and date of publications; (3) reading appendices quickly; (4) reading indices quickly; (5) reading the abstract carefully; and (6) reading the preface, the forward and the blurb carefully, respectively.

Aims of this phase, according to Williams (1996), are to introduce and arouse interest in the topic, to motivate learners by giving a reason for reading and to provide some language preparation for the text.

2.6.3.2 While-reading

In the while-reading phase, Greenwood. (1998: 59) stated that “Students must be taught how to read and respond to books.” During this phase students should be involved in activities which enable them to respond cognitively, emotionally and imaginatively to imaginative writing.

The teacher should conduct some useful activities in this phase for the better output from the students in the next stage. The activities in this stage should be designed according to the level and standard of the students. Shahidullah (1995, 1996) has suggested some of the while-reading activities. They are: (1) guessing meaning from context; (2) analyzing sentences; (3) surveying text structure; (4) extracting specific information; (5) getting detailed information; (6) answering pre-set questions; (7) matching texts with picture, diagrams etc.; and (8) guessing meaning of unfamiliar words, respectively.

The while-reading phase is significant. It is the most active stage among the three, because, proper activities in this phase, according to Williams (1996: 38), enable the students to understand the writer's purpose, to understand the text structure and to clarify text content.

2.6.3.3 Post-reading

This stage is designed to evaluate what the teacher has taught in the while-reading stage. In the post reading stage the teacher may ask the students to know their action to the text, for example, the students may answer whether they have liked and enjoyed it, or found it useful or not. If the text is found useful, the meaning and content of it may be extended to the students' known social phenomena, personal interests and knowledge or experience. In short, activities at this stage do not refer directly to the text, but "grows out" of it.

This stage is also important since this stage is supposed to evaluate and examine the output of and feedback from the students. In addition to that, post-reading phase enables the students, according to Williams (1996: 39), to consolidate or reflect upon what has been read and to relate the text to the learners' own knowledge, interest, experience or views.

In summary, this section provided previous literature review on characteristics of second language reading. Particularly, comparison between first language (L1) reading and second language (L2) reading and some issues that may influence second language reading are discussed. With understanding unique characteristics of second language learners, the next section further examines KWL strategy.

2.7 KWL Strategy

2.7.1 The Construct of KWL Strategy

Clearly, “KWL” stands for what I Know, what I Want to learn, and what I Learned. Cooper (1997) defines the KWL chart as another strategy for activating students’ prior knowledge and aiding them in their purpose of reading expository text. The KWL is developed by Ogle (1986) to have students gain a focus for their reading and learning. It is an advanced organizer that is used both prior to and after the reading or unit of study occurs. According to Ogle (1986), this strategy is divided into three components. The first component is step K (what I know). This step is a type of brainstorming which has two levels of accessing prior knowledge. The first level involves brainstorming regarding what the students know about the reading topic. In this level the teacher records what the students volunteer about the topic, and corrects any wrong information by initiating a discussion with students or asking students questions to get correct information. The second level of this component involves the students thinking of the more general categories of information that will be encountered when they read. Students are asked to look over a list and to think about which piece of information they might find in the reading.

The second component in Ogle’s (1986) strategy is step W (what do I want to learn?). This step is one of the pre-reading activities. In this step students develop their own reasons for reading to find answers to questions, which will increase their background about the topic. The role of the teacher in this step is to highlight students’ discussion and gaps in information, and help students raise questions that focus their

attention. Most of step W is done as a group activity; before students begin to read they write down individually on a worksheet the specific questions that they are most interested in having answered.

The third component is step L (what I learned). After the students read the passage or the article, they list what they learn from reading. In this step students check their questions and predictions to determine whether the article dealt with their concerns. If not, the teacher recommends another article to fulfill their desire to know. The teacher also assists the students to list additional questions that may have emerged during reading.

2.7.2 Historical Development of KWL Strategy

Hanf (1971) pointed out that a KWL map is a graphic outline used to organize and relate text information for further study. Hanf states that the map, an alternative to traditional outlining, requires students to locate and relate the main ideas and supporting details of a text into an organized whole. Students are to observe associations and relationships in what they read and graphically depict them. Mapping improves comprehension skills that are useful for further learning.

According to Brown and Day (1983), student comprehension is enhanced when summary writing is encouraged. In their study found that students exposed to summarization techniques were better able to plan for their writing experience, paid closer attention to relevant details, and condensed ideas into a limited number of words when compared to a control population. Taylor (1983) stated that many college textbook writers assume that summary strategies are well established prior to college entrance.

Taylor (1983) indicates that many entering college students are unable to write satisfactory summaries and seem to lack a self-monitoring process to summarize a passage or verify it with the original.

Importantly, Ogle (1986) adds mapping and summarization to the KWL. Ogle believes that writing and restructuring the text are powerful tools in helping students to process information. The expanded strategy engages readers to construct meaning from a text and fosters student independence by developing their transfer skills. The KWL strategy; however, focuses on three important concepts: the importance of prior knowledge, group learning, and engaging all students through writing. Ogle strongly believes all of these concepts were important in this strategy (Shelley et al. 1997).

The beliefs of Ausubel (1968), Gagne (1970) and Anderson (1977) on this importance of prior knowledge also grounded the first concept of the KWL strategy. Ausubel (1968) suggests that learning is dependent upon relating students' prior knowledge to existing knowledge proposed in the lesson through the use of an advance organizer. Gagne (1970) proposes that details are linked together to form concepts, which are then linked to form generalizations. Therefore, if students do not activate knowledge base prior to reading, they will be unable to form a critical link with the new materials presented in the text. Anderson (1977) asserts that prior knowledge is extremely important in influencing how we interpret what we read, and what we learn from our reading. To read we must access the knowledge we already have about the topic, or make it available appropriately, so that comprehension can occur.

Furthermore, Ogle (1986) mentions that, during the K step when the students list

on the blackboard or on paper how they would find information, a teacher can assess their prior knowledge about reference sources. The teacher might introduce the students to different reference sources in mini-lessons. Group learning is the second important concept Ogle relies upon when they developed their strategy. Johnson et al (1984) also emphasize the benefits of group learning. They point out that research concerning the nature of group learning has led to using the group process as a way of stimulating students' thinking and purpose setting. Likewise, Vygotsky (1978) believes that learning is result of social interaction. He confirms that the social nature of learning leads to the challenge for teachers to help students move forward in their zone of proximal development. This is a possibility that is realized only by watching and listening to the students can give an explanation of their ideas.

Like Ogle, Murray (1984) mentions that teachers need a structured way to engage students who do not have an opportunity to share orally. Murray suggests that students need to write down their own ideas and questions on a separate worksheet, because writing helps students to focus their thinking and become more reflective. Also, Ogle believes this process helps students develop a personal commitment to guide them through the reading process. This self-questioning process strengthened the students' desire to learn. Dewey (1938) notes that self-questioning influenced the formulation of attitudes of desire and purpose; encouraging students to self-question created a desire to read interesting subject matter critically and purposefully.

Previous to Ogle (1986), Wong and Jones (1982) investigate the effects of a self-questioning technique on comprehension monitoring. The result of the study indicated

that a self-questioning technique increased disabled students' awareness and comprehension of important textual units. The training facilitated their ability to formulate questions and make predictions as well as improved their performance on subsequent comprehension tests.

Later, Ogle (1992) further developed his KWL strategy in combination with 5W questions. The strategy creates an instructional framework where learners list: 1) What is the concept; 2) What I know about; 3) What I want to know; 4) How I find out; 5) What I have learned. In this sense, KWL functions as an effective assessment tool to evaluate the comprehension of the text on learners' part and evaluate the effectiveness of the instructional process on instructors' part.

Most importantly, Carr & Ogle (1987) revise the strategy into the KWL-Plus scheme, short for Know, Want, and Learn plus Mapping and Summarizing. These researchers supplemented the traditional K-W-L strategy with mapping and summarization strategies for use in content area texts. These additions to the K-W-L strategy were helpful for remedial and non-remedial high school students, guiding them in advanced reading (Strangman & Hall, 2009). Ogle (1986) claims KWL helps learners become better readers of expository texts and helps instructors to be more interactive in their teaching. After doing several KWL activities, learners are encouraged to use it as an independent learning strategy to activate their prior knowledge and also extend their KWL scheme to confirm the accuracy of their prior knowledge and of what they learn. This helps them set a definite purpose for reading and record what they learned (Conner, 2006). When mapping, learners refer to the K step to categorize what they learned.

Placing the title at the center of the map, they form categories as major branches, and add explanatory concepts. When summarizing, learners number the concepts on the map and choose to make them a written summary. The summary becomes a useful summative evaluation learners can use to evaluate their comprehension.

In short, the researcher can summarize that the K and W sections are completed prior to the reading of the text or beginning of a unit of the study: what I know (K) and what I want to learn (W) about a particular subject. The K section identifies the students' prior knowledge about the content presented, and the W section identifies facts and concepts that the student is interested in learning about in the future lessons. The W section helps to set the purpose or purposes for the reading or studying of a topic. The L section is completed after the reading or unit of study to identify what the student has gained in knowledge during the unit. Cooper (1997) states that the L section can be used as a tool to see what still needs to be learned or to answer any questions the student may still have about the topic.

2.8 Efficiency

Academically, Phromwong et. al. (1977) defined that efficiency of the instructional packages refers to the quality of the multimedia package that is created in the instruction set. It facilitates and reinforces students' learning the content effectively. Relatively, instructional materials are tried out with the target groups of students. Most of instructional materials are calculated to find out the efficiency by considering from the percentage of exercise, learning process, or sub-test with main two numeric values such as $E1/E2 = 80/80$, $E1/E2 = 85/85$, $E1/E2 = 90/90$, etc. (Kitrakarn. 2001).

Besides, the criteria of calculating for the efficiency such as $E1/E2 = 80/80$ has showed that the criterion set 80/80, first criterion set 80 (efficiency of the process) is percentage of learners' total means score from exercises scores of instructional packages. Second criterion set 80 (efficiency of the outcomes) is percentage of learners' total mean scores from achievement test (Post-test). The statistical formulas are as follows.

$$E_1 = \frac{\sum X}{N} \times 100$$

E_1 = Efficiency of the Process

$\sum X$ = Total Scores of Post-test

N = Number of Samples

A = Total Score of the Exercises in the Lessons

$$E_2 = \frac{\sum F}{N} \times 100$$

E_2 = Efficiency of the Outcomes

$\sum F$ = Total Score of Students who Pass the Post-test

N = Number of Samples

B = Total Score of the Post-test in the Lessons

Presumably, standard criterion to find out the efficiency of instructional material should be 75/75, 80/80, 85/85, or 90/90 depending on the contents and characteristics of the subject. Normally, we define standard criterion 75/75 for subjects related to skill or attitude, and 80/80, 85/85, or 90/90 for the subjects related to cognition. The level of mistake is accepted at 2.5 %.

Definitively, efficiency criterion refers to the levels of efficiency of the instructional packages employed in classroom activity and helps reinforce students' learning and leads the satisfaction to those teachers who construct them. Defining efficiency criterion can be defined by assessment the two kinds of the students' behavior: efficiency of procedure (E1) assessed by noticing the students' learning activities performance continuously and efficiency of result (E2) assessed by post-test or final examination. Efficiency is expected as the criteria that satisfy the teachers with the students' learning behavior. Efficiency is defined as percentage of the students' whole score.

To develop teaching and learning, Srisa-ard (2003: 153-156) indicated two approaches for criterion widely used is 80/80. Firstly, consider from the most of the students (80 %) who are able to achieve learning outcomes at a high level (80 %). In this case the innovation used take less time in teaching only one content. The criterion 80/80 refers to the number of students no less than 80% of students who scores at least 80% of the total score. Finally, consider the result during and at the end of the procedure which is average in high level (80 %). In the case of teaching several times with lots of contents such as three chapters and the measurement during the study (formative) take several times, the criterion 80/80 have the following meanings, namely, the first criterion set 80 is the efficiency of the process (E1), and the second criterion set 80 is the efficiency of the overall effect (E2).

Additionally, Srisa-ard (2003: 156) also mentioned three main concepts of determining the criterion as follows:

First, the efficiency criterion can be set variously depending on the researcher himself. If he wants high efficiency, the criterion may be set at 90/90, but in this case it may have problems that the efficiency can not be achieved the goal. It is not easy to get most of the students scored an average of almost 90 %. Therefore, the criterion set 90/90 is not determined in most research. It is likely to set lower than 80 in both the process and the overall effect as the criterion set 70/70 that means the teaching material developed is effective and can be used to develop most students to achieve their learning at high levels. The criterion set 50/50 or 60/ 60 indicates that the students can be developed average score on one half or slightly more than half (60%), which is unlikely

to be enough, it should be developed to be at a more higher level.

Second, the criterion set 80/80 is not defined as the ratio between the two parts. Generally, it is not interpreted by the comparison. Therefore, the researchers can not only write in the form 80/80 but also 80,80 or even a criterion 80% of the overall process and results. The 80/80 separates the efficiency of the process, the first 80 and the overall effect, the second 80.

The last, the researcher may set the two parts which does not equal as the criterion set 70/80 which means that the efficiency of process is 70% and the overall efficiency is 80%. However, it is not commonly defined in such a manner.

2.9 Student Satisfaction

2.9.1 Student Satisfaction Variables

Student satisfaction has been positively correlated to favorable learning outcomes in a number of studies. Clearly, the literature is abundant with possible solutions to increase student satisfaction.

Research has suggested that positive perceived learning outcomes are correlated directly to student satisfaction levels. Ni and Aust (2008) suggest that the development of a classroom community was critical in enhancing students' satisfaction and perceived learning. Walker (2003) in a large study (N = 917) in Turkey, found results of a regression analysis showed that four of the six scales on the Distance Education Learning Environments Survey (DELES) were significant and positively related to student

satisfaction. The scales were personal relevance, instructor support, active learning, and authentic learning, or task value (Sahin, 2007). In another study of service academy graduates (N= 646), Artino (2006) found that task value, self-efficacy and perceived instructional quality were significantly positively correlated to each other and to students' overall satisfaction with an online course. The researcher continues the discussion by stating: "It appears that students who believed the course was interesting, useful and important were more likely to be satisfied with the training" (p. 266). These findings are echoed by the research of Pintrich and De Groot (1990) who found that intrinsic value (e.g. task value) was strongly related to students' positive attitudes, cognitive engagement, and academic performance. Moreover, Lee (2002) found that task value was a significant positive predictor of student satisfaction levels.

Research conducted by Muilenburg and Berge (2001) identify eight barriers that students face with online learning. These factors were: (a) administrative issues; (b) social interaction; (c) academic skills; (d) technical skills; (e) learner motivation; (f) time and support for studies; (g) cost and access to the Internet; and (h) technical issues. In this large-scale study (N=1,056) the researchers found that student perceptions contribute to negative outcomes such as a higher dropout rate (Carr, 2000), diminished motivation for students to learn (Maltby & Whittle, 2000), and lower student satisfaction levels with the learning experience (Kenny, 2003). While these outcomes exist for a portion of the student population, the majority of students do not encounter these results. Muilenburg and Berge (2001) are able to identify 11 independent variables that represent the students who experienced these lower satisfaction levels.

These variables are: (a) gender; (b) age; (c) self-reported ethnicity; (d) type of learning institution (e.g. community college, undergraduate, graduate, business/corporate/non-profit, and government/military); (e) ability and confidence with online learning technology (from “not currently using these technologies,” to “being comfortable and confident with online learning technologies”); (g) learning enjoyment in the online classroom (from “enjoy online learning significantly less,” to “enjoy online learning significantly more” than the traditional classroom”); (h) the number of online courses completed; (i) the number of online courses dropped; (j) the likelihood of taking a future online course; and (k) whether or not students experienced prejudicial treatment in the traditional classroom due to cultural background, disability, or some other personal characteristic (p. 30).

Muilenburg and Berge (2001) conclude that the lack of social interaction was the most severe barrier they encountered regarding online learning. They found a relationship between social interaction and online learning satisfaction, without speaking to causation. Moreover, Muilenburg and Berge also found that there was a relationship between the number of online classes that a student had taken and a reduced number of perceived barriers for those students, again without a judgment of causation. Similarly, one of the more important constructs in this regard is students' perceived self-efficacy; that is, the students' self-assurance in their ability to achieve designated levels of mastery (Bandura, 1997). Schunk (2005) found that “self-regulated learners are more self-efficacious for learning than are students with poorer self-regulatory skills; the former believe that they can use their self-regulatory skills to help them learn” (p. 87). The

current research has considered all of these factors affecting student satisfaction, with specific emphasis on; (a) administrative issues, (b) social interactions, (c) teacher-student communications, (d) task values, (e) technical ability and confidence with online technology, or self-efficacy, (f) learning enjoyment with online classes, (g) the number of online courses completed, and, (h) the quality of instruction.

Likewise, Artino (2008) found that self-efficacy was also a significant predictor of student satisfaction levels in online classes. His findings were mirrored by previous studies of self-efficacy and its relationship to student satisfaction in traditional classrooms (Pintrich & De Groot, 1990; Zimmerman & Bandura, 1994). Finally, Artino (2008) found that perceived instructional quality was the strongest individual predictor of overall satisfaction. Those students who believed that the course practiced effective instructional design methods were more likely to be satisfied with the experience. These findings were consistent with results reported by Reinhard and Schneider (2001) who report that among a group of adult learners (N = 222) their perceptions of the learning environment in an online course were significantly related to positive student satisfaction levels.

In a large study of undergraduates at Deakin University in Australia (N= 761), researchers Palmer and Holt (2009) measure satisfaction levels as well as levels of importance. Items that had the most significance with respect to satisfaction were:

1. Submitting assignments online.
2. Being able to access online learning resources readily.
3. Organizing and being responsible for their own learning.

4. Being given and/or pointed to the current material.
5. Relating what is learnt to issues in the wider world.

With respect to levels of importance, the items with the most significance were:

1. Having clear expectations of what is required to get good marks.
2. Being able to access online learning resources readily.
3. Receiving feedback on assignments online.
4. Submitting assignments online.
5. Organizing and being responsible for their own learning.

In summary, these results can be summarized to suggest that student satisfaction levels were related to how confidently the students felt about their ability to communicate and learn online, having a clear understanding of what was expected of them to succeed, and feedback concerning their progress in the class.

2.9.2 The Measurement of Student Satisfaction

How to measure academic satisfaction is perhaps the potentially most important contribution of the literature to this research study. The most common student satisfaction instrument is the Student Satisfactory Inventory (Elliott & Shin. 2002; Bryant. 2006; Qaraeen, Al-Omari & Abu-Tineh. 2007). It is a 43-item survey which produces five scales: registration effectiveness, academic advising effectiveness, academic services, instructional effectiveness, and admission and financial aid. Specific instruments are often created for measuring student satisfaction in an international context (Baykal et al. 2004; Moller. 2006).

Elliott and Shin (2002) point out the two general approaches to the measurement of satisfaction. In the traditional approach, “students’ overall satisfaction has been measured with either a simple yes or no question, or with one question assessing the degree of overall satisfaction” (Elliot & Shin. 2002: 199). The alternative approach, which they recommend, measures satisfaction as a multi-attribute score.

Mavondo, Tsarenko and Gabbott (2004: 50) indicate that the timing of student satisfaction measurement matters. For their study, they chose to measure student satisfaction towards the student’s junior or senior year given that “[e]xpectations before enrolling will have been transformed and dramatically changed by the time students are in their second or later years in a university.” The converse should also be true. If one wants to have a true sense of students’ satisfaction with their choice, it is best to get their impression as early in their freshman year as possible before students’ sense of satisfaction is influenced one way or the other by the school environment, institutional support, or their own willingness or unwillingness to engage and study.

In summary, student satisfaction is crucial to learner success. A greater understanding of measurement of student satisfaction with reading comprehension is essential and it is also a vital component of academic success.

2.10 Effectiveness Index (E.I.)

According to Arnold et al (1996), effectiveness is the ability to achieve desired goals. Cost is not a factor with this definition. Effectiveness index refers to the number that represents the progress of the students’ learning by comparing scores increased from

pre-test scores (Ruggiero & Vitaliano, 1999). Barnett et al. (2002) frame the debate in the simplest of terms by articulating the dual policy objective existing under current education policy that requires all schools to effectively produce educational outcomes while simultaneously utilizing endogenous inputs in an efficient manner. So, teaching material needs to be evaluated the effectiveness especially in teaching after it is produced. The assessment of different scores can be seen in two characteristics which are the difference of pre-test and post test scores or an achievement test scores between the experimental and control groups. In pragmatically, most result will be focused on the differences rather than the result of a statistical difference.

As Bowlin (1999) mentions that effectiveness index will affect the post test scores of students which will be higher according each case if the pre-test scores of the two cases are different. Additionally, Kitrakarn (2003) adds that the effectiveness index calculating from the difference of the test after the experiment with the highest score that can be increased. It can be said that the relationship of the study will be done properly, it must be considered the differences of baseline scores (pre-test scores) and the highest score. Especially, the index of effectiveness plays the crucial indicator the scope and efficiency of the media. Also, Farrell (1957) intentionally compares the difference of 3-method scores to support the concepts of effectiveness index that focuses on the average percentage of the scores – it is called “conventional method”. The percentage scores were calculated from the control and experimental percentage scores groups. The percentage scores of each group were then found. The result can reveal into two ways: the percentage increase and/or decrease compared with the scores of the control group.

The details of index of effectiveness formula how it is implemented are briefly described as follows:

$$\text{E.I.} = \frac{P_2 - P_1}{\text{Total} - P_1}$$

Source: Kitrakarn (2003: 44-49)

E.I. = The Effectiveness Index

P_1 = Total Scores of All the Samples' Pretest

P_2 = Total Scores of All the Samples' Posttest

In summary, the effectiveness index is the statistics that indicate learners' progress from learning through materials. It can be concluded that how to find the effectiveness index is a method to determine whether the students gain more knowledge or learning progress. The effectiveness index determines the scope and the effectiveness of the media in teaching and learning activities.

2.11 Previous Studies Related to the Present Investigation

The KWL approach has been recommended by teaching professionals (Carr & Ogle, 1987; Bean, 1995; Fisher et al. 2002). Although the research to support its effectiveness has been limited, the KWL strategy is popular and widely accepted in the document growth among struggling college readers when KWL served as the basis for a college reading course. The KWL strategy also helped struggling readers build evidence

of their learning that they could become strategic readers. Reviewing literature related to this study, a bulk of research on KWL strategy was carefully studied. Related research highlighted the importance of this strategy and assured its effectiveness in improving the students' reading comprehension at different class levels. This was particularly in the reading and social studies domains. They utilized previous studies for instrumentation, in discussing the results and in the comparisons made between this and previous studies.

The studies reviewed were:

According to Carr and Ogle (1987), informal observation and discussion with students indicated that high school students trained in these procedures learned to transfer KWL to new situations. Some students became so adept that they were able to omit the mapping step. They wrote their summary directly from the KWL worksheet. Students were willing to use this technique on their own because they had concrete evidence that they were successful in eliciting information from the text. The authors concluded that the KWL strategy not only improved comprehension and summarizing abilities but it also enhanced students' self-concept.

Piper (1992) investigated the effectiveness of metacognitive skills program in the reading comprehension. The sample included (N=120) grade six pupils taking Social Studies. The researcher used five metacognitive strategies: determining main points, sentence summarization, enquiry, KWL, and eliciting. The results indicated improvement of the reading comprehension when any of those strategies was used especially for students who used the KWL strategy.

Jared and Jared (1997) implemented a study to investigate if the KWL strategy could be integrated into a junior high school or a middle school technology course. The results of the study indicated that students became more motivated to learn and autonomous in their education efforts. The KWL provided a means by which students learned and simultaneously became responsible for their own learning. According to the authors KWL enhanced students' reading comprehension in content areas such as reading, science, social studies, physical education, health, music, and others, because it helped students facilitate their recall prior knowledge, develop self-questioning strategies, read for purposes of answering question, and provide them with opportunities for future research.

Shelley et al (1997) implemented a study with elementary and middle school students in teaching language arts to check if the KWL strategy enhanced reading comprehension of these students. The results indicated that the KWL strategy improved students' reading comprehension and helped students to make textbooks as well as other materials meaningful. Also it encouraged students to make connections between prior knowledge and new information, thus facilitating the construction of meaning.

Weissman (1997) conducted a study of using paragraph frames to complete the KWL strategy with a first grade class. The result of this study proved very effective with the students. There was an immediate improvement in students' nonfiction writing and significant transfer of learning as the frames and language were used in other writing. Also, it provided the teacher with a meaningful way to assess their learning of a subject.

Al-Shaye (2000) investigated effectiveness of what is called metacognitive strategies on the second secondary students' reading comprehension in Kuwaiti schools. This study concentrated on two metacognitive strategies (the K-W-L Plus and the SQ3R strategies) and compares them with the traditional approach of teaching reading in Kuwaiti high schools. The sample included (N=100) students who were distributed into four groups: one group was taught using SQ3R strategy; a second group was taught using KWL strategy; a third group was taught using both SQ3R and KWL strategies; while with the fourth group (the control group) the old traditional method was used. The study findings showed that there was significant improvement in the comprehension level of all groups except the group taught by the traditional method. However, there were no statistically significant differences in the reading comprehension among the three groups (SQ3R, KWL and KWL & SQ3R).

Cantrell, Fusaro and Dougherty (2000) compared the effectiveness of incorporating two different types of reading comprehension strategies- KWL and summarizing- with journal writing to improve learning in social studies at the seventh grade level. The results indicated the group that structured their responses according to the KWL comprehension model learned more than the group that summarized what they had learned. This study is especially significant because one of the few which actually compared two metacognitive strategy using two treatment groups.

Stahl (2003) conducted research to find out the impact of three instructional strategies (the oriented thinking, KWL and moving photos) on the reading comprehension and scientific content acquisition of beginning readers. The sample

constituted (N=31) basic grade two pupils. The study has shown that moving photos strategy and the oriented thinking activities had statistically significant impact on the participants' reading comprehension and acquisition of the scientific content; while there was no statistically significant impact on the reading comprehension and acquisition of the scientific content that can be attributed to using KWL strategy.

Akyüz (2004) investigated the effect of textbook style and reading strategy on 9th grade students' achievement and attitude towards heat and temperature at Ereğli district of Zonguldak. Textbook style was means that whether textbook written in conceptual style or traditional style. The reading strategy was taken as KWL versus reading without KWL. The study uses factorial design to investigate partial and combined effects of these methodologies. In the study, convenience sampling was used. The participants were 123 9th grade students at Zonguldak Ereğli Super High School in four different classes. Then selected classes were randomly assigned into four groups. The groups were conceptual physics text with KWL reading strategy, conceptual physics text with reading without KWL, traditional physics text with KWL reading strategy and traditional physics text with reading without KWL. Achievement and attitude tests were administered before and after the treatment. The data was analyzed by Multiple Analysis of Covariance (MANCOVA) to find out individual and combined effects of conceptual physics texts and KWL reading strategy. The results has shown that conceptual physics texts were effective in increasing students' attitude, KWL was effective in increasing achievement, and their combination was effective in increasing both achievement and attitude of the students.

Ammre & Nator (2006) explored the impact of activating previous knowledge by using KWL and the closure strategies on the reading comprehension of a sample of grade four underachieving pupils. They enquired whether there were differences that could be attributed to the pupil gender. The total sample was (N= 60); half were boys and the others were girl pupils. All were grade 4, who suffered from difficulty in learning and were subscribed in the Learning Sources Centers in fourteen state and private schools. Participants were selected randomly. They were divided into two groups: an experimental group (N=30), taught reading texts using KWL and closure strategies to activate their previous knowledge; and a control group (N=30), taught in the traditional method. Results of this study have proved effectiveness of KWL and closure strategies in activating previous knowledge, and thus, improving reading comprehension of underachieving pupils. However, there were no reading comprehension differences that can be attributed to difference in gender.

Al-Khateeb and Idrees (2010) conducted the quasi experimental study aiming to assess the impact that can be attributed to using KWL (Know-Want-Learned) strategy on the reading comprehension of religious concepts for grade ten female students in Ma'an city; as compared with the traditional method of teaching. Data for this study were collected through the pre / posttests as an instrument administered to a sample of 80 homogeneous students constituting two whole groups of participants studying at a secondary school for girls in Ma'an. One class represented the experimental group, with whom the KWL strategy was used; and the other represented the control group where the traditional method of teaching reading was used. Participants were given scores in the

light of a rating scale designed for that purpose. Comparison between the two methods of reading instruction was made. Averages and standard deviations of the students' scores in both groups were calculated. Then, the ANCOVA was used to determine the impact of each teaching strategy: the KWL and the traditional strategies, on the comprehension of the religious concepts. Analysis showed statistically significant differences between average scores of participants in the two groups in favor of the experimental group. Extraneous variables were controlled; and evidence ascertained that this difference can only be attributed to the intervention: using KWL strategy.

Fengjuan (2010) investigated the integration of the Know-Want-Learn (KWL) strategy into English language teaching for non-English majors. At the end of the experiment, the participants in the experimental group were asked to complete a questionnaire about their evaluation of the KWL scheme. The questionnaire consisted of 4 questions and was designed on a 5-point Likert scale of agreement. The participants were asked to circle one of the numbers. And in t-test with equal variances assumed, results $t=2.161$ and $p=.034$ (<0.05) show a significant difference in the means between two groups. This means that the KWL strategy had brought improvement in comprehension and reading performance on the part of the experimental group. The questionnaire survey showed that about 75% of the participants circled "4" and "5", indicating that they were in favor or strongly favor of the KWL strategy. Only 7.5% gave a low rating of the strategy. The mean (4.05) indicated that the majority of the participants had a positive attitude toward the integration of KWL into ELT for non-majors. The findings illustrate a manageable way of integrating the KWL reading and

writing strategies in ELT for non-majors. Active learning, as shown in this study, can be well implemented in KWL instructional scheme, and most important of all, learners prefer such active learning through the KWL scheme.

Priyono (2010) examined whether KWL strategy is able to improve students' reading comprehension and to find out what happens to the class situation if KWL strategy is used to improve students' reading comprehension. The method applied in this research is action research with two cycles in which each cycle starts from planning, acting, observing, and reflecting. The materials are analytical exposition and hortatory exposition texts. The data collected are the qualitative data and the quantitative data. The qualitative data are collected from observation, interview, and questionnaire. The quantitative data are collected from the pre-test in pre-research and the post-test in Cycle 1 and Cycle 2. The qualitative data are analyzed by constant comparative method and the quantitative data are analyzed by descriptive statistics. The result of this research showed that students' reading comprehension was improved. The improvement was proved by the increase of the students' mean scores from 73.82 in the pre-test to 76.97 in the post-test of Cycle 1, and 81.58 in the Post-test of Cycle 2. Besides that, having known how to use KWL strategy well students were more motivated and felt more comfortable in joining the reading class. They did not come late in the reading class, and did not ask permission to the researcher to go out during the reading class. They were more active because they interacted with their friends in the group work. Based on the result above, the researcher could interpret that students had been able to comprehend the passage, and they were more motivated and felt more comfortable in joining the reading class.

In conclusion, KWL strategy is an introductory strategy that provides a structure for recalling what students know about a topic, noting what students want to know, and finally listing what has been learned and is yet to be learned. It also allows students to take inventory of what they already know and what they want to know. Students can categorize information about the topic that they expect to use. Clearly, most research on KWL strategy indicated its significance in improving the reading comprehension of students. However, KWL also affects and impacts in improving the students' reading comprehension.

2.12 Summary of the Chapter

This chapter, the review of literature, provided a comprehensive review of key research relevant to the study. The goal of reading comprehension instruction is to provide students with the skills, strategies, and knowledge to read fluently and to understand and construct meaning from text for purposes of enjoyment and learning, whether reading a book, magazine, sign, pamphlet, email message, or information on the Internet. Reading comprehension is considered by many scholars to be the most important area of education, and proficiency in reading is becoming even more critical in our technological society. Skill in reading is a prerequisite for many of the learning activities in content-area classes such as social studies, science, and vocational education and for successful employment and daily living. Numerous researcher studies have been conducted on the importance of the KWL strategy in developing students' learning process. Also, many researchers and educators have studied the importance of KWL

strategy in enhancing students' reading comprehension. Teaching and training in KWL provide instructional implications for students to focus on cognitive strategies and can be used to promote academic learning.

This chapter has reviewed the literature which underlies and supports this research study. In the next chapter, Chapter Three, the methods for this study will be described.

มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this chapter is to present the methodology that was employed to address the research questions of this study. Several topics will be discussed. First, the research population and samples that were examined are described. Then, the research instruments will be presented. The specific research procedures that were followed, including data collection and data analysis, are then described. Summarizations related to the inclusion of the chapter in the study are presented.

3.1 Population and Samples

3.1.1 Population

The target population of the study were from a pool of approximately 100 Matthayomsuksa 6 (grade 12) students at Noncharoenpithayakhom School in Ban Kruat District who are studying English course (E43102) in the second semester of the academic year 2010 under Buriram Educational Service Area Office 32. Selection of the school was decided by convenience sampling, and the accessible population and the sample are determined as all the classes of Noncharoenpithayakhom School.

3.1.2 Samples

The samples in this study were 35 grade 12 students in a public high school located in Ban Kruat District, Buriram Province, which is in The Northeast of Thailand, selected by using simple random sampling technique. Among these students, twenty-four were female and eleven were male aged 15-17. This high school was selected for this study based on the following criteria. First, this school is

neither in the top 30%, nor in the bottom 30%. For this reason, the student population is more reflective of the general population. Second, this high school follows the general curriculum standards mandated by the Ministry of Education (MOE) in Thailand and the school is officially recognized by the MOE. Third, the students admitted into this high school are required to take the national standardized test, and have to meet the admission standards. In that sense, the students of this high school generally had at least low-to-intermediate English language proficiency level. Furthermore, entering this high school depends on students' test scores despite of their socio-economic backgrounds. The subjects' native language is Thai and all the subjects have received approximately 8 years of formal English instruction since grade 3. All the students study English as a mandatory subject of five class hours (50 minutes) per week.

Statistically, the sample size of the study was determined by many factors, which included the effect size, the level of significance, the statistical procedures, and the desired statistical power. This study had one independent variable, which was KWL strategy. There were three dependent variables, which were reading comprehension achievement, efficiency, effectiveness index, and students' satisfaction. The researcher used each dependent variable separately, because there was no relationship expected between them. As the independent variable of this study was KWL strategy, which consisted of 10 lesson plans. The researcher used all KWL strategy lesson plans for teaching reading comprehension in the subject of English language.

3.2 Research Instruments

In this section, instructional components are described: 10 KWL lesson plans, English reading comprehension achievement test, and a 5-point rating scale questionnaire. The details of each instrument and how they were implemented briefly described as follows:

3.2.1 10 KWL Lesson Plans

The lesson plans were focused on KWL reading strategy for grade 12 students at Noncharoenpittayakhom School which were constructed by the researcher. There were 10 lesson plans with 10 topics instructed by KWL strategy (See Appendix C).

The construction of the lesson plans were explained as follows:

Again, lesson plans were constructed by the researcher, and based on reading comprehension using KWL strategy to comprehend the texts for grade 12 students with the following steps:

- 1) The researcher studied the Basic Education Core Curriculum B.E. 2544 (A.D. 2001) about vision, principles, goals, learners' key competencies, desirable characteristics, learning standards of foreign languages, indicators, learning areas, and strands and learning standards of foreign languages.

- 2) The researcher studied methodologies, principles, theories, and how to teach reading with KWL strategy and teaching step with KWL strategy.

- 3) The researcher analyzed the strand and curriculum for informative used.

The researcher found out correlation between the topics and learning strands and indicators, and the topics used in this experiment are interesting for students as follows:

Lesson Plan 1: Sparrow

Lesson Plan 2: No Water no Problem

Lesson Plan 3: Story of Valentine's Day

Lesson Plan 4: Electric Fish

Lesson Plan 5: A Popular Intention

Lesson Plan 6: More Than Just a Tail

Lesson Plan 7: Wonder Grass

Lesson Plan 8: Barak Obama

Lesson Plan 9: Tsunami

Lesson Plan 10: Soccer

After teaching the lesson plan with the students and then gave them to do the achievement test or posttest and answered the questions.

4) The researcher chose the activities for students as the following steps:

Step 1: Activities before Reading

As for pre-reading, the teacher motivated students to check their background knowledge by talking about the topic and writing the things they had already known in column K (know). Students brainstorm in the whole class "What I know".

Step 2: Activities while Reading

Students made the questions about the things that they wanted to know in column W (want to know). Students brainstormed for "What I want to learn." Then, students emphasized the gaps in their knowledge before they read to provide real purposes for their reading. Also, teacher let them wrote down the questions he most desires to have answered. The teacher encouraged students to find out the answer from the story.

Step 3: Activities after Reading

Students wrote down the knowledge in to the column L (learned). Each student wrote down what they had learned.

5) The researcher drafted 10 lesson plans employed in learning and instruction.

6) The researcher checked the lesson plans to find out the content validity quality by the advisors and then examined by 3 experts about the content validity by using 5-point Likert scale to see the correlation with the Basic Education Core Curriculum B.E. 2544 (A.D. 2001) in terms of key concepts, indicators, learning strands, activities, learning media, and learning assessment .

7) The researcher analyzed the scores from the experts to find out the mean scores and compare with the criteria. Appropriate mean scores at 3.51 and upper were considered that lesson plan can be utilized. Therefore, it was confident that the instruments used in this research presented high. The mean score obtained was 4.11 (S.D.=0.56). The names of three experts were as follows (See Appendix B):

1. Dr. Sawarot Ruangpaisan, an English lecturer at Faculty of Humanities and Social Sciences, Buriram Rajabhat University.

2. Miss Sumitra Pankulbadee, an English lecturer at Faculty of Humanities and Social Sciences, Buriram Rajabhat University.

3. Mr. Bamrung Kanram, an English lecturer at Faculty of Humanities and Social Sciences, Buriram Rajabhat University.

8) The researcher, then, analyzed the scores from the experts to find out the mean scores and compared with these criteria (Srisa-ard. 2000: 99-103).

The five-point Likert scales used in this study were presented as follows:

Meaning		Opinion Level
4.51 - 5.00	means	The Most Appropriate
3.51 - 4.50	means	More Appropriate
2.51 - 3.50	means	Average Appropriate
1.51 - 2.50	means	Less Appropriate
1.00 - 1.50	means	The Least Appropriate

Appropriate mean scores at 3.51 and upper were considered that the lesson plans can be utilized.

9) The researcher improved the lesson plans based on the experts' comments and suggestions until the lesson plans were completed for trying out with the real research samples.

10) The KWL strategy procedures were tried out with grade 12 students who were not samples studying at Muangtalungpithayasan School in the academic year 2010 in Prakhonchai District, Buriram Province in order to find out the weak point and then improved the reading comprehension before real using with the experimental samples.

There were three steps to perform the KWL strategy utilization to develop reading comprehension.

1. The Individual Trial

The KWL strategy utilization to develop reading comprehension was employed with 3 different proficiency level students: high, moderate, and low proficient student who were not the samples in the study. The three proficient students were carried out a pre-test, and they learnt reading comprehension by using

KWL instructional packages for 12 fifty-five minute periods. While the students were studying via the KWL strategy utilization packages in reading comprehension, they were requested to do the exercises. After that, they were requested to do a post-test and give some opinions about KWL strategy utilization packages for a period. The scores which the students gained from the exercises and the post-test were computed to find out the efficiency of process (E1) and the efficiency of the outcomes (E2). The E1 was 74.28, and E2 was 72.87. Then the researcher improved the KWL strategy utilization packages based on the students' comments.

2. The Small Group Trial

The nine students who participate in this step were 3 high proficient, 3 moderate proficient, and 3 low proficient students. Before learning reading comprehension via KWL strategy utilization packages for 12 fifty minute periods, they took a pre-test for a period. While the students were learning via instructional packages, they did the exercises. Then they took a post-test and provided some opinions for a period. In this step, the efficiency of the process (E1= 73.77) and the process of the outcomes (E2= 73.43) were analyzed from the students' exercises and a post-test, respectively.

3. The Field Trial

In this step, there were 35 students with three different proficiency levels of English achievement participated. They took pre-test for a period and learnt through KWL strategy utilization packages for 12 fifty minute periods. After learning, they took post-test. The scores of the activities in the KWL achievement to develop reading comprehension, and the post-test scores from the field trial were decided to find out the efficiency of the KWL strategy to develop reading comprehension based on

75/75 standard level. The result of the field trial revealed that the efficiency index of KWL strategy utilization to develop reading comprehension was 75.66/75.29 which met the criteria set.

11) lesson plans were used with grade 12 students who studied at Noncharoenpittayakhom School in academic year 2011 to find out the weak points and then improved the lesson plans based on the experts' comments and suggestions before using with the samples.

3.2.2 English Reading Comprehension Achievement Tests

The main purpose of this test was to check the development of students in learning reading comprehension with the use of KWL strategy technique. After each lesson, the teacher distributed students a test which was designed in form of multiple choices is on KWL principle (See Appendix D). Each lesson comprised of 8-10 questions and each question bases on the Wh- question words: Who, What, Where, When, and Why.

Additionally, the pretest and posttest were the multiple choices consisting of 60 items that requires students to choose the correct answer. The samples did the same test in the posttest. The 60 items pre-post test was constructed by the researcher.

The construction of reading comprehension achievement test was presented as follows:

- 1) The researcher studied a syllabus for upper-secondary level of English subject and the content reading comprehension for grade 12 students.
- 2) The researcher constructed the test on reading comprehension with consisted of 60 items of multiple choice questions with four alternatives.

3) The items of the test were edited and revised by the advisors before proposing to the experts to examine the validity by using Index of Item Objective Congruence (IOC) formula as follows (Phattiyathanee. 2001: 221).

+1 = When it is sure that items of the test are coincide with objectives.

0 = When it is not sure that items of the test are coincide with objectives.

-1 = When it is sure that items of the test do not coincide with objectives.

4) The researcher calculated IOC, and chose the questions which had the IOC index at level 0.67-1.00 to include in the test. (See Appendix I).

5) The researcher did the test by trying-out with 35 grade 12 students at Noncharoenpittayakhom School in the second semester of academic year 2010.

6) An item analysis was carried out from the data obtained from the study. Each question was analyzed for the discrimination power (B) by Brennan's method and using the software program to calculate. The criteria used to select the test items were level of the discrimination power (B) at 0.2-1.0 (Srisa-ard. 2002: 82-84). It indicated that the level of difficulty (p) was at 0.20-0.71, and the discrimination power (B) was at 0.20-0.66 (See Appendix J).

7) The reliability of the test was determined by using the Lovett's method (Rcc). The software program was used to calculate the data, the reliability of the test was accepted at ≥ 0.7 (Srisa-ard. 2002: 96).

8) The researcher selected the approved 60 test items as a pretest and a posttest (achievement test) (See Appendix D).

3.2.3 A 5-point Rating Scale Questionnaire

Methodologically, the satisfaction questionnaire consisted of 10 questions (See Appendix E). All questions were designed to investigate the students' satisfaction and students' opinions towards KWL strategy utilization to develop reading comprehension.

The structures and construction of the satisfaction questionnaires were explained as follows:

Structurally, the satisfaction questionnaires were divided into three main parts:

(1) Personal Information: The subjects were required to answer the questions about gender, and educational level. The questions were in the form of checklist for subjects to tick; (2) Students' Satisfaction and Opinions: This section was about the satisfaction and students' satisfaction towards the KWL strategy utilization to develop their reading comprehension. Importantly, the questions were in the form of checklist with 5 criteria. The five-point Likert scales used for rating their satisfaction are as follows (Srisard, 2002: 102):

	Meaning	Opinion Level
5	means	The Most Satisfactory
4	means	Very Satisfactory
3	means	Average Satisfactory
2	means	Less Satisfactory
1	means	The Least Satisfactory

Furthermore, the last part mainly emphasized on open-ended form. This part obtained one question that the researcher also collected the data by participants'

answers. The question was in the open-ended form in which the subjects can write their answer down.

The questionnaire was constructed and developed gradually as follows:

1. The researcher reviewed the literature on satisfaction.
2. The researcher studied literature review critically on how to construct the satisfaction questionnaire as explicated by Likert's method or five-point rating scales.
3. The researcher gathered and arranged the issues concerning using KWL reading strategy effected on reading comprehension into a list.
4. The researcher proposed the statements to the advisors before creating 10 questions based on using KWL strategy to develop reading comprehension.
5. The statements were examined by 3 experts to check for the correctness and appropriation. The five-rating scales were presented as follows (Srisa-ard, 2002: 102):

5 scores	mean	Strongly Agree
4 scores	mean	Agree
3 scores	mean	Uncertain
2 scores	mean	Disagree
1 score	mean	Strongly disagree

Interestingly, the researcher calculated to find out the mean scores.

Appropriate scores at 3.51 and upper were considered as the questionnaire items statement. The researcher improved and revised the questionnaire if they had weak points. After that the questionnaire was proposed to the experts again.

6) The researcher organized the statements and tried out with grade 12 students at Noncharoenpittayakhom School in academic year 2011.

7) Each item of five-point rating scales was calculated by utilizing Pearson's Correlation Coefficient formula (R_{XY}) to find out the discrimination which must be at 0.20-1.00 level (Srisa-ard, 2002: 110). The discrimination was at 0.59-0.78 (See Appendix K).

8) The method of Coefficient Alpha of Cronbach (α -Coefficient) (Srisa-ard, 2002: 99) was used to find out the reliability coefficient which the value must be more than 0.80. The data were orderly calculated by computer software program.

9) The researcher selected ten main questions which had the most significant reliability at level 0.88 to be a part of the questionnaire (See Appendix K).

3.3 Data Collection Procedures

Again, three main research instruments were employed in this study. These included: lesson plans, reading comprehension achievement test, and satisfaction questionnaire, respectively.

With regard to the selection of research methods, some important dimensions need to be taken into consideration. A one group pretest-posttest design of the experimental research was employed in this study. Table 3.1 below demonstrates the research design used in this study.

Table 3.1**Research Design** (Sai-yot. 1995: 248-249)

Group	Pre-test	Treatment	Post-test
Experiment	T ₁	X	T ₂

As revealed in the table above, the symbols were presented as follows:

T₁ = Pretest

X = Treatment

T₂ = Posttest

The data collection procedures for this study were as follows:

3.3.1 The students did the pretest in the first period. They were made clear that this test was not affected their grades, but they intentionally asked to do the test seriously, and honestly.

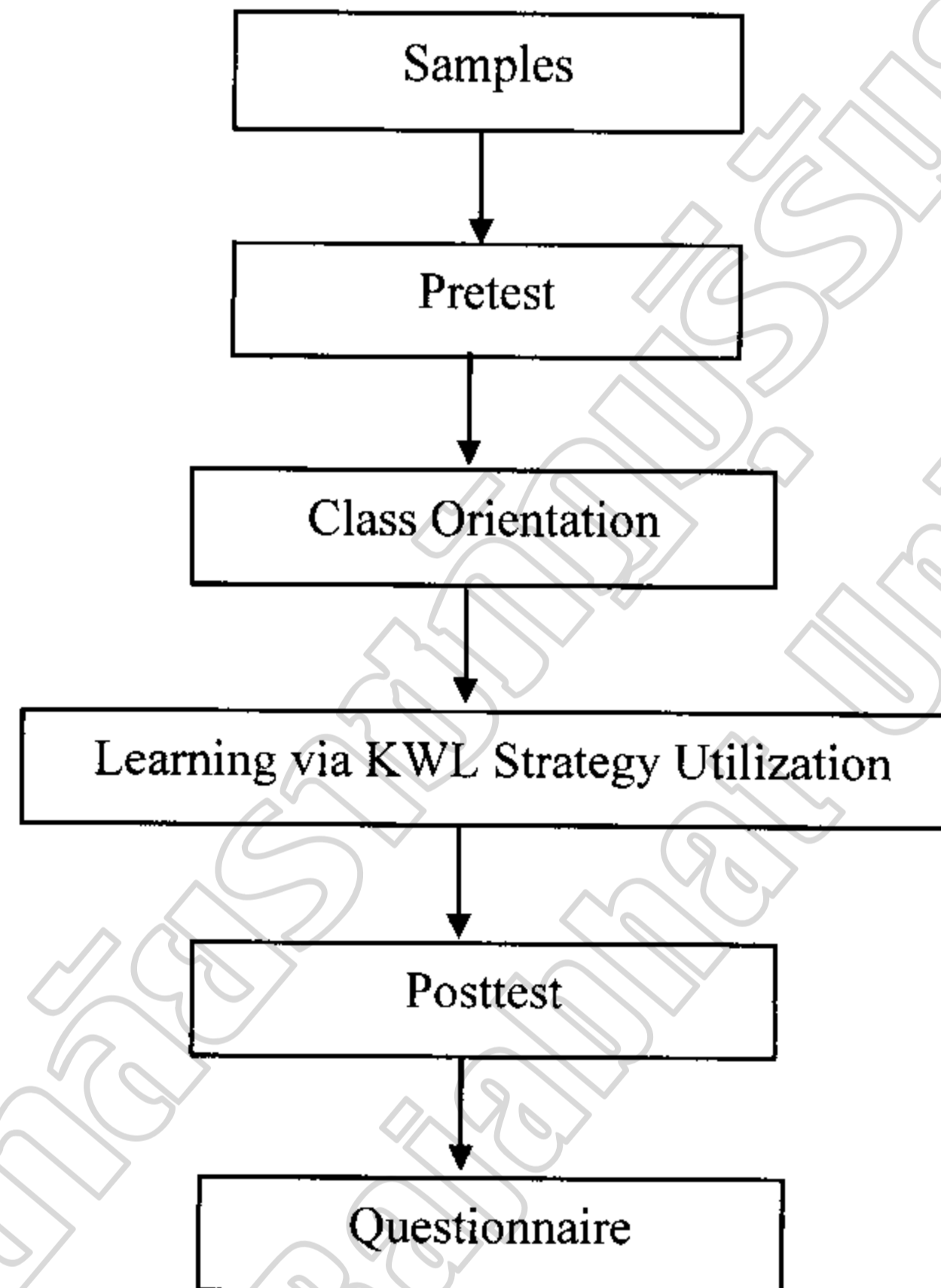
3.3.2 The teacher provided the class orientation before teaching.

3.3.3 As for teaching procedures, there were ten lesson plans focus on KWL reading strategy utilization.

3.3.4 Posttest was taken at the last period after the teaching to see long-term effectiveness of the KWL strategy utilization in reading comprehension and did a satisfaction questionnaire.

Figure 3.1: Stages of Data Collection

Clearly, the stages of data collection can be illustrated as following figure:



3.4 Data Analyses Procedures

Methodologically, data collection and data analysis occurred concurrently were conducted. During collection of additional data, an analysis of previously collected data was already taking place. In the previous section, the researcher looked at participants, research instruments used, and data collection procedures. For data analysis, this section will be emphasized how the data obtained are analyzed, interpreted, and reported. To achieve the research purposes, the following aspects are presented as following:

3.4.1 The Pre-test and Post-test Scores

3.4.1.1 In order to evaluate the students' English reading comprehension before and after being taught through KWL strategy utilization, the pre-test and post-test were computed by mean (\bar{X}) and standard deviation (S.D.)

3.4.1.2 The scores obtained from a posttest and pretest were then calculated to find out the efficiency of process, and the efficiency of the outcomes, respectively.

3.4.1.3 Dependent samples t-test was used to compare the difference between pretest and posttest of students' achievement scores.

3.4.1.4 The effectiveness index (E.I) was used to find out learners' progress from learning through KWL strategy utilization in reading comprehension for grade 12 students after learning.

3.4.2 Students' Satisfaction Questionnaire Towards KWL Strategy

Utilization

In order to evaluate the students' satisfaction towards the KWL strategy utilization to develop reading comprehension, the data from five-rating scales was computed for asking the mean (\bar{X}). The following criteria employed for interpretation (Srisard, 2002: 103) were as follows:

Meaning		Interpretation
1.00-1.50	means	The Least Satisfaction
1.51- 2.50	means	Less Satisfaction
2.51-3.50	means	Average Satisfaction
3.51-4.50	means	More Satisfaction
4.51-5.00	means	The Most Satisfaction

3.4.3 Additional Opinions Data

The data obtained by learners' opinion and suggestion in the last part of the questionnaire was analyzed by content analysis technique to find out their satisfaction and reaction towards KWL strategy utilization to develop students' reading comprehension.

3.5 Statistics Used to Analyze Data

3.5.1 Statistics Used to Find out the Quality of Instruments

3.5.1.1 Validity of achievement test and questionnaire by using Index of Item Objective Congruence (IOC) formula (Phattiyathanee. 1094: 166-167).

$$IOC = \frac{\sum R}{N}$$

IOC = Index of Item Objective Congruence between Question and Objective

$\sum R$ = Total Scores of Experts' Opinion

N = Number of Experts

3.5.1.2 The discrimination index of the achievement test questions (r) by using Brennan's method (Srisa-ard. 2002: 90).

$$B = \frac{U}{n_1} - \frac{L}{n_2}$$

B = Discrimination Index

U = Number of the Students who Pass the Examination which Correctly Answered

L = Number of the Students who Fail the Examination which
Correctly Answered

f = Number of Students in High Group and Low Group which
are Equal

n_1 = Number of the Students who Pass the Examination

n_1 = Number of the Students who Fail the Examination

3.5.1.3. The reliability of the achievement test by using Lovett's method
(Srisa-ard. 2002: 96).

$$R_{cc} = 1 - \frac{k \sum X_i - \sum X_i^2}{(k-1) \sum (X_i - C)^2}$$

R_{cc} = The Reliability of the Test

k = Numbers of Question

X_i = Each of Student's Scores

C = Criterion Scores of the Tests

3.5.1.4 Discrimination of each item for five-point rating scale
questionnaire by using Pearson's Correlation Coefficient (Srisa-ard. 2002: 110).

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

r_{xy} = Correlation Coefficient between Variable X and Y

X = Total Scores of Variable X Index

$\sum Y$ = Total Scores of Variable Y Index

$\sum XY$ = Total of Multiplied Result between Variable X and Y

$\sum X^2$ = Total Scores of Variable X Index's Square

$\sum Y^2$ = Total Scores of Variable Y Index's Square

N = Number of a Pair of Variables Index or Number of Samples

3.5.1.5 Reliability coefficient of the satisfaction questionnaire by using Cronbach's Alpha-coefficient (α -Coefficient) (Srisa-ard. 2002: 99)

$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum S_i^2}{S_t^2} \right]$$

α = Reliability coefficient

k = Number of statements

$\sum S_i^2$ = Total of each statement's variance

S_t^2 = Variance of total scores

3.5.1.6 The efficiency of KWL strategy (E_1/ E_2) (Kitrakarn. 2002: 44-49)

$$E_1 = \frac{\sum X}{A} \times 100$$

E_1 = Efficiency of the Process

$\sum X$ = Total Scores of Posttest

N = Number of Samples

A = Total Score of the Exercises in the Lessons

$$E_2 = \frac{\sum F}{N} \times 100$$

E_2 = Efficiency of the Outcomes

$\sum F$ = Total Score of Students who Pass the Posttest

N = Number of Samples

B = Total Score of the Posttest in the Lessons

3.5.1.7 The effectiveness index (E.I.) of the KWL Strategy

(Kitrakarn. 2003: 44-49).

$$\frac{P_2 - P_1}{\text{Total} - P_1}$$

E.I. = The Effectiveness Index

P_1 = Total Scores of all the Samples' Pretest

P_2 = Total Scores of all the Samples' Posttest

Total = Multiplied Result of Samples' Number and Real Scores of the Test

3.5.2 Basic Statistics Used to Analyze the Data

3.5.2.1 Percentage (Srisa-ard. 2002: 104)

$$P = \frac{f}{N} \times 100$$

P = Percentage

f = Frequency of the Data

N = Numbers of total Frequency

3.5.2.2 Mean (\bar{X}) (Srisa-ard. 2002: 105)

$$\bar{x} = \frac{\sum x}{N}$$

$$\bar{x} = \text{Mean}$$

$$\sum x = \text{Total Scores in Group}$$

$$N = \text{Number of Scores in Group}$$

3.5.2.3 Standard Deviation (S.D.) (Srisa-ard. 2002: 106)

$$\text{S.D.} = \sqrt{\frac{\sum (X - \bar{X})^2}{N - 1}}$$

$$\text{S.D.} = \text{Standard Deviation}$$

$$X = \text{Score of Each Item}$$

$$\bar{X} = \text{Mean}$$

$$N = \text{Number of Scores in Group}$$

$$\sum = \text{Total Sores}$$

3.5.3 Dependent Samples t-test

The differences between pre-test and post-test mean scores were calculated by dependent samples t-test formula (Srisa-ard. 2002: 112).

$$t = \frac{\sum D}{\sqrt{\frac{n \sum D^2 - (\sum D)^2}{(n-1)}}}$$

t = Statistics Index Used to Compare with Critical Index to

Find out Significant Difference

D = Different Result of Minus between a Pair of Scores

n = Number of Samples or a Pair of Scores

3.6 Summary of the Chapter

In summary, this chapter provided a detailed description of the methodology employed and the data collection in the present study adopted from quantitative methods in order to explore the effects of KWL strategy utilization to develop reading comprehension for grade 12 students. The rationale of choosing singled-method design was given. The quantitative methods used were one reading comprehension test and one questionnaire. Samples were the intact-teacher' students. The results and findings will be reported in Chapter Four.

CHAPTER 4

RESULTS

This chapter commences with a brief discussion of the overarching question that informed the study and the articulation of the four research questions. This discussion is followed by a report of the findings related to each research question, including examples of prevalent themes. The chapter concludes with a presentation of additional findings and musings not directly related to any specific research question that occurred in response to the study and provided additional information on KWL strategy relationships and the challenges these that relationships provide. The findings are also framed by the four questions that informed this study: 1) research question one regarding the determination the efficiency of KWL strategy to enhance reading comprehension for grade 12 students to meet the criteria set at 75/75; 2) research question two regarding the comparison between students' learning achievement before and after learning through KWL strategy utilization to develop reading comprehension for grade 12 students; 3) research question three regarding the exploration the effectiveness index of the KWL strategy utilization to develop reading comprehension for grade 12 students; and 4) research question four regarding the investigation the satisfaction of grade 12 students towards the KWL strategy utilization to develop reading comprehension. The findings presented are drawn from quantitative data from the exercises, achievement tests, and questionnaire; and the qualitative data from the open-ended questions. The open-ended questions are presented generally descriptively.

Importantly, before fully analyzing the results it will firstly be necessary to address some relevant statistics in this analysis. The briefly description inferential statistics, i.e. parametric and non-parametric tests are presented. Then, the selection of statistics used in the study is summarized. Finally the results of the analysis are presented based on the research questions.

Most importantly, having discussed the relevant statistics employed in the study, it now turns to the results of the main analysis of the comprehension pre- and post-tests and those of the reading comprehension tests first. Finally, the results of the questionnaires are presented. Additionally, the research questions of this study afforded a means of addressing the purpose of the study. The results related to each research questions are identified below. Each research question and corresponding hypothesis are highlighted, variables utilized are presented, assumptions related to employed statistical procedures are discussed, results pertaining to the question are described, and tables display results.

4.1 Research Question One: What is the efficiency of KWL strategy utilization to develop reading comprehension for grade 12 students?

This research question focused on describing the KWL reading strategy reported to be used by grade 12 students who participated in this study, which was discussed in Chapter Three. To answer this section, the researcher primary used the quantitative data from the KWL strategy exercises and the achievement test, which determined the efficiency of the KWL strategy utilization to develop reading comprehension for grade 12 students based on the criterion set at 75/75. Interestingly,

the pretest and posttest were administered to students to see the advancement in their reading comprehension through KWL strategy utilization. However, the pre-test and the post-test scores were analyzed to determine the progress after learning in order to see how much they understand and develop their ability on reading comprehension, and to see whether KWL reading strategy could help to develop their reading comprehension ability. The data analysis is displayed in Table 4.1 below.

Table 4.1

The Mean and Standard Deviations, and Percentage for Each KWL Strategy Item (N = 35)

No.	Activities Scores of Learning with KWL Strategy (Efficiency of the Process)										Post-test (60)	
	1 (7)	2 (22)	3 (13)	4 (28)	5 (21)	6 (21)	7 (26)	8 (11)	9 (25)	10 (12)		Total (186)
1	7	16	12	20	19	18	22	10	20	11	155	51
2	2	18	11	15	21	18	22	8	21	12	148	49
3	6	14	12	18	21	18	18	10	20	10	147	39
4	4	11	12	17	21	19	20	6	18	11	139	42
5	7	18	12	18	21	20	22	7	19	11	155	48
6	7	17	11	18	21	21	19	7	17	12	150	57
7	6	18	12	19	21	20	20	10	21	12	159	48
8	4	17	13	22	20	20	15	8	15	10	144	47
9	7	18	12	20	21	22	22	11	23	9	164	53
10	6	18	12	18	21	21	19	9	17	11	152	49
11	6	17	12	18	21	19	21	10	24	9	157	48
12	6	13	11	24	21	20	20	10	22	10	157	46
13	7	16	12	16	20	18	19	10	23	12	153	51
14	6	14	12	21	21	18	21	10	23	12	158	47

Table 4.1 (Continued)

No.	Activities Scores of Learning with KWL Strategy (Efficiency of the Process)										Post-test (60)	
	1 (7)	2 (22)	3 (13)	4 (28)	5 (21)	6 (21)	7 (26)	8 (11)	9 (25)	10 (12)		Total (186)
15	6	13	11	23	20	16	19	10	24	10	152	52
16	6	13	12	19	20	19	18	8	19	10	144	48
17	5	13	11	22	21	18	20	10	20	11	151	45
18	6	17	11	18	20	14	21	10	22	12	151	51
19	6	15	11	17	20	19	20	10	23	11	152	52
20	7	16	11	16	21	20	20	11	24	11	157	48
21	3	18	12	19	21	20	22	7	22	12	156	35
22	6	18	12	19	21	18	21	8	23	10	156	46
23	6	14	12	18	21	19	20	10	24	11	155	48
24	6	17	12	18	21	20	19	8	19	10	150	50
25	6	17	12	19	21	18	19	8	18	11	149	43
26	5	13	12	17	20	17	19	10	17	10	140	51
27	5	14	12	17	20	14	17	11	23	11	144	49
28	6	15	12	17	20	14	20	11	20	9	144	46

Table 4.1 (Continued)

No.	Activities Scores of Learning with KWL Strategy (Efficiency of the Process)										Post-test (60)	
	1 (7)	2 (22)	3 (13)	4 (28)	5 (21)	6 (21)	7 (26)	8 (11)	9 (25)	10 (12)		Total (186)
29	6	13	12	19	21	17	17	11	22	11	149	48
30	6	17	12	19	20	19	18	8	23	12	154	52
31	6	16	11	18	21	16	17	9	22	11	147	44
32	6	15	13	18	21	21	17	10	20	10	151	47
33	6	15	11	24	20	18	15	10	18	10	147	54
34	6	18	12	16	21	19	17	7	19	11	146	48
35	6	17	12	18	20	18	14	8	20	11	144	51
Total	202	549	412	655	721	683	632	321	725	377	5,277	1,683
\bar{X}	5.771	15.686	11.771	18.714	20.600	19.514	18.057	9.17	20.71	10.77	150.77	48.08
S.D.	1.08	1.99	0.54	2.17	0.55	1.72	2.04	1.40	2.42	0.91	5.69	4.17
%	82.44	71.29	90.54	66.83	98.09	75.05	85.98	83.37	82.85	89.76	81.06	80.14

From Table 4.1, the efficiency of KWL strategy utilization to develop reading comprehension for grade 12 students, which were conducted by the researcher, is 81.06/80.14 which was higher than the criteria set at 75/75. Clearly, it indicates that students, who learned reading comprehension through the KWL strategy utilization, received total mean scores from the activities scores of the KWL strategy utilization at 81.06 % and total mean scores from the achievement test after learning through instructional packages at 80.14 %, remarkably.

Furthermore, the information as to the perceived efficiency of the KWL strategy in developing reading comprehension for grade 12 students proudly indicated that the students intentionally assumed a wide range of the KWL strategy when obtaining reading comprehension instruction, which was higher than the established requirement. In order to reflect more profoundly upon the students' mean scores on posttest than that of pretest of reading comprehension development through KWL strategy, a detailed quantitative analysis of the very aspect based on multiple sources of data is provided in the Research Question Two below.

2.2 Research Question Two: Will students who learn reading comprehension through KWL strategy utilization have higher mean scores on post-test than that of pre-test mean scores?

The second research question focused on gaining an understanding of the similarities and differences between pre-test and post-test mean scores employed by grade 12 students when they were instructed by KWL strategy utilization to develop reading comprehension. Methodologically, both pre-test, and post-test scores were

consisted of 60 items. Also, they were compared to find out the statistically significant difference. The significant difference at the level of .05 was set for this study.

Table 4.2

Comparison of Pre-test and Post-test Mean Scores

No.	Pre-test Scores (60)	Post-test Scores (60)	Difference (D)	Double Difference (D ²)
1	23	51	28	784
2	14	49	35	1225
3	21	39	18	324
4	18	42	24	576
5	11	48	37	1369
6	18	57	39	1521
7	10	48	38	1444
8	15	47	32	1024
9	13	53	40	1600
10	18	49	31	961
11	16	48	32	1024
12	20	46	26	676
13	17	51	34	1156
14	15	47	32	1024
15	19	52	33	1089
16	20	48	28	784
17	15	45	30	900
18	22	51	29	841
19	18	52	34	1156
20	15	48	33	1089
21	13	35	22	484
22	17	46	29	841

Table 4.2 (Continued)

No.	Pre-test Scores (60)	Post-test Scores (60)	Difference (D)	Double Difference (D²)
23	19	48	29	841
24	15	50	35	1225
25	21	43	22	484
26	25	51	26	676
27	17	49	32	1024
28	14	46	32	1024
29	15	48	33	1089
30	19	52	33	1089
30	17	44	27	729
32	16	47	31	961
33	23	54	31	961
34	18	48	30	900
35	19	51	32	1024
Total	606	1683	1077	33919
\bar{X}	17.31	48.08	30.77	969.11
S.D.	3.38	4.17		

As Table 4.2 shows, the thirty-five grade 12 students who enrolled the English (E43102) course in the second semester of the academic year 2011 at Noncharoenpithayakhom School in Ban Kruat District under Buriram Educational Service Area Office 32, obtained the pre-test mean scores at 17.31 and post-test mean scores at 48.08, which reported that the students who learned by KWL strategy utilization to develop reading comprehension after learning had higher achievement than before learning, remarkably.

Additionally, the information presented in the Table 4.2 above only represents the comparison the difference between pre-test and post-test mean scores of the thirty-

five grade 12 students, regardless of testing the hypothesis with dependent t-test.

Then, a t-test was performed to identify differences of learning achievement between students' pre-test and post-test mean scores (See Table 4.3).

Table 4.3

Statistical Difference between Pre-test and Post-test Mean Scores

Achievement	N	Total Scores	\bar{X}	S.D.	t
Pre-test	35	60	17.31	3.38	38.05**
Post-test	35	60	48.08	4.17	

** significant difference at .01

In this study, thirty-five students were represented. As indicated in the table above, the dependent samples t-test was conducted in order to find whether there was a significant difference in the using the KWL strategy utilization of the pre-test and the post-test mean scores. The results revealed the statistically significant difference between the pre-test and the post-test mean scores in using KWL strategy utilization to develop reading comprehension at a .01 level.

4.3 Research Question Three: Is the effectiveness index of the KWL strategy utilization to develop reading comprehension for grade 12 students at a high level?

The third research question investigated the effectiveness index of KWL strategy utilization to develop reading comprehension for the grade 12 students. Pertaining to the rubrics used in this study, the data gathered to address this question derived from the quantitative data by using the achievement tests. Somewhat unexpectedly, the pre-test scores consisted of 60 items, and post-test scores formed 60 items of students' effectiveness index were calculated. Table 4.4 below displays the effectiveness index reported on the achievement tests by all respondents in the study.

Table 4.4

The Students' Effectiveness Index of KWL Strategy Utilization (N=35)

Numbers of Students (n)	Total Scores	Total Scores of All Samples' Pre-test	Total Scores of All Samples' Post-test	The Effectiveness Index (E.I.)
35	60	606	1,683	0.7208

As Table 4.4 shows, the findings revealed that the of KWL strategy utilization to develop reading comprehension equaled 0.7208 which means 72.08% students gain more English reading comprehension knowledge.

According to the Tables above, the researcher intentionally investigated in three main tasks: (1) students' efficiency of KWL strategy utilization to develop their reading comprehension to meet the criteria set at 75/75; (2) comparison of students'

learning achievement before and after learning through KWL strategy utilization to develop reading comprehension; and (3) the effectiveness index of the KWL strategy utilization to develop students' reading comprehension, respectively.

The following research question discusses in greater detail each item of students' satisfaction towards the KWL strategy utilization to develop their reading comprehension.

4.4 Research Question Four: What is the overall satisfaction of grade 12 students toward reading comprehension using KWL strategy?

To gain more insights into the students' satisfaction towards the KWL strategy to develop their reading comprehension tasks, the fourth research question was formulated. To address this question, the research used a 10-item of 5-rating scale satisfaction questionnaire, ranging from the most satisfactory (5) to the least satisfactory (1). Additionally, student satisfaction has been positively correlated to favorable learning outcomes. While this study has all approached this topic from slightly different perspectives, student satisfaction with the learning experience is acknowledged as an axial constructed in positive learning outcomes. Table 4.5 begins discussing this aspect by discussing differences in KWL strategy satisfaction used by grade 12 students in the study.

Table 4.5**The Mean and Standard Deviation for Each Satisfaction Questionnaire Item****(N = 35)**

No.	Statement	\bar{X}	S.D.	Meaning	Rank
1.	Reading strategy enhances students' reading comprehension.	3.68	1.13	More Satisfactory	6
2.	KWL strategy is easy to practice.	3.57	1.08	More Satisfactory	8
3.	KWL strategy is fun.	3.94	0.98	More Satisfactory	2
4.	KWL strategy is useful.	3.86	1.05	More Satisfactory	3
5.	KWL strategy can promote critical thinking.	3.80	0.35	More Satisfactory	4
6.	KWL strategy can help me analyze the text.	4.54	1.11	More Satisfactory	1
7.	KWL strategy can help integrate prior knowledge with new information.	3.53	1.14	Most Satisfactory	9
8.	I use my prior knowledge to facilitate the reading comprehension.	3.51	1.17	More Satisfactory	10
9.	KWL strategy is child-centered learning.	3.66	0.47	More Satisfactory	7
10.	KWL strategy can help increase vocabulary retention	3.72	1.18	More Satisfactory	5
Grade Total		3.56	0.62	More Satisfactory	

As shown in the table above, the 35 grade 12 students reported using each KWL reading strategy item with varying degrees of frequency. The means of

individual strategy items ranged from a high of 4.54 to a low of 3.53. The grade 12 students were satisfied toward the KWL strategy utilization to develop reading comprehension as a whole at “more satisfactory” levels ($\bar{X}=4.54$, S.D.=1.11). It should be noted that the most frequently satisfied strategy was no. 6 “KWL strategy can help me analyze the text” ($\bar{X}=4.54$, S.D.=1.11). Importantly, they satisfied this strategy at “most satisfactory” level. When considering at each item, it was found that the three highest mean scores were no. 6 “KWL strategy can help me analyze the text” ($\bar{X}=4.54$, S.D.=1.11), followed by no. 3 “KWL strategy is fun” ($\bar{X} = 3.94$, S.D. = 0.98), and no. 4 “KWL strategy is useful” ($\bar{X} = 3.86$, S.D. = 1.05), respectively. In contrast, the three lowest mean scores were was no. 8 “I use my prior knowledge to facilitate the reading comprehension” ($\bar{X}=3.51$, S.D.=1.17), followed by no. 7 “KWL strategy can help integrate prior knowledge with new information” ($\bar{X} = 3.53$, S.D. =1.14), and no. 2 “KWL strategy is easy to practice” ($\bar{X} = 3.57$, S.D. =1.08), respectively.

4.5 Summary of the Chapter

In this chapter, quantitative findings method research was offered. The quantitative results were presented in four sections. In the first section, the efficiency of the KWL strategy utilization to develop reading comprehension was provided. In the next section, the students’ learning achievement towards KWL strategy, was offered. For the third section, the effectiveness index of the KWL strategy utilization, was presented. In the last section, the students’ satisfaction toward the KWL strategy was provided, respectively. Based upon the results presented in this chapter, the next

chapter, Chapter Five, discusses interpretations of the results, their implications for students, teachers, and professionals, and recommendations for further studies.

มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

CHAPTER 5

CONCLUSION AND DISCUSSION

This chapter provides an overview of study findings that the researcher considers of most importance with an integrated discussion of the researchers' interpretations of these findings. In addition, the chapter summarizes the overall purpose of this study, which was to determine the effects of KWL strategy utilization to develop reading comprehension for grade 12 students. A discussion of the findings and conclusion are presented in accordance to the researcher's findings and then compared with findings from literature review. Finally, this chapter ends with commendations and suggestions for future research in implementing KWL strategy utilization in high school.

5.1 Summary of the Major Findings of the Study

This study began with a personal concern for the beginning teacher. Currently, the education profession is in a state of crisis. What is effective teaching? Numerous theorists have posed this question and have found conflicting answers. For a beginning teacher to become an effective teacher, preparation and mentoring is paramount. Schools face a difficult challenge in educating today's youth. Equally important to recognizing the diversity and complexity of teaching individual students and meeting their unique needs is the challenging task of recruiting, mentoring, and retaining effective teachers. The most important task thrust upon education is determining classroom effectiveness. This study is of particular importance in the

area of preparing educators to be successful in the classroom. This study, as outlined thus far, has four main purposes of concern. First, it was explored the efficiency of KWL strategy to develop reading comprehension for grade 12 students to meet the criteria set at 75/75. Second, compare students' learning achievement before and after learning through KWL strategy utilization to develop reading comprehension was investigated. Third, it examined the index of effectiveness of the KWL strategy utilization to develop reading comprehension for grade 12 students. Finally, it also purposively investigated students' satisfaction toward reading comprehension using KWL strategy. The samples were 35 grade 12 students who enrolled the English (E43102) course in the second semester of the academic year 2011 at Noncharoenpittayakhom School in Ban Kruat District under Buriram Educational Service Area Office 32, selected by using purposive sampling technique. A one group pretest-posttest design of the experimental research was employed in this study. The instruments used in this study were 1) the 10 KWL lesson plans, 2) an English reading comprehension achievement test, and 3) the satisfaction questionnaires. The combination of these data sources elicited the information needed to explore the four research questions that framed the study. The statistics used for analyzing the collected data were percentage, mean, standard deviation, and dependent samples t-test. The significant difference was set at the level of .05. The main findings of this study were as follows:

1. The KWL strategy utilization to develop reading comprehension for grade 12 students had an efficiency of 81.06/80.14 which was higher than the standard criteria set at 75/75.

2. The grade 12 students who learned by KWL strategy utilization to develop reading comprehension after learning had higher achievement than before learning at the .01 level of statistical significance.

3. The index of efficiency of KWL strategy utilization to develop reading comprehension equaled 0.7508 which means 75.08% students gain more English reading comprehension knowledge.

4. The grade 12 students' satisfaction toward the learning of English reading comprehension using the KWL strategy as a whole were at "more satisfactory" levels ($\bar{X} = 3.56$).

At the conclusion of the study, the intent of the strategies designed for the study was to establish the expectation that all students would be successful in reading. In the next section, the researcher will connect the findings from the research to the literature that was reviewed in Chapter Two of this study. Some of the findings here concur with what prior research has shown; however, some of the findings suggest that there have indeed been major improvements in teacher education, particularly in the area of assessment.

5.2 Discussion of the Major Findings of the Study

Discussions of the findings are reported in this section. In order to better understand the major findings of the study in relation to the four research questions as mentioned above, the researcher will discuss in the light of the results reported in Chapter Four. On the other hand, the following challenges to KWL strategy utilization to develop reading comprehension were also reported to the account and interpretation of the findings are discussed in relation to previous research and in the

context of: 1) the efficiency of KWL strategy utilization to develop reading comprehension; 2) differences between students' learning achievements; 3) the effectiveness index of the KWL strategy utilization to develop reading comprehension; and 4) students' satisfactions towards the KWL strategy utilization to develop reading comprehension, respectively. The ensuing discussion of the findings will be guided by the original four research questions that emerged from the analysis.

However, the complexity of these challenges came to the forefront of the discussions and reflections as time went on, and these needs became intense challenges that required more group problem solving to resolve. Like any long-term relationship that intensifies and grows, the number of unresolved issues may decrease in number, but may increase in intensity. Afterwards, implications for instruction and research will be addressed. Below is shown the discussions of the following aspects based on the research findings.

5.2.1 The Efficiency of KWL Strategy Utilization to Develop Reading

Comprehension

The first research question asked about the reading comprehension efficiency of grade 12 students who taught by using KWL strategy. The results of the reading comprehension efficiency suggest a positive answer to this question. After a ten-week experimental instruction, the results of the statistical analysis revealed that the KWL strategy utilization to develop reading comprehension for grade 12 students had an efficiency of 81.06/78.09 which was higher than the standard criteria set at 75/75. This finding showed that students improved their reading comprehension efficiency through the KWL strategy.

The research in this study found that the KWL strategy enhanced students' comprehension, which confirms Carr and Ogle's (1987) purpose in designing this strategy to help students comprehend the text. Likewise, this study corroborates the study of Piper (1992), who found instruction in KWL enhanced the reading comprehension of grade 6 students in the area of social studies. Similar positive results using KWL with middle school students were published by Shelley et al. (1997) and Cantrell, Fusaro and Dougherty (2000). From the current study and the previously published research it appears that KWL can be an effective learning strategy for improving reading comprehension in both English and Thai.

Through this research, previous studies conducted individually on the KWL (Piper, 1992; Fengjuan, 2010; Priyono, 2010) showed improvement of students' reading comprehension. In this study, students instructed in the KWL strategy received the benefits of using both in their classroom. It appears that use of KWL strategy is more effective than the traditional reading approach in enhancing reading comprehension of high school students in Thailand. Based on the literature review the research was unable to locate any studies which compared the KWL strategy for effectiveness in improving reading comprehension. Also, no previous studies were found which used KWL strategy in one class. The use of the KWL individually is mentioned as effective learning strategies in improving students' reading comprehension. Ammre & Nator (2006) indicated that the KWL strategy is a meaning-making strategy that engages students in active text learning, and improving the students' comprehension. According to Al-Khateeb and Idrees (2010), KWL is an effective strategy skill because it causes readers to establish purposes for study, and it determines whether they have been successful in satisfying their purpose. The

researcher asserts that KWL had a high positive effect on students' reading comprehension in this study, because both of them emphasize different skills and strategies that enhance student comprehension. However, there was no significant difference between these strategies in improving reading comprehension of the students in the sample.

5.2.2 Differences Between Students' Learning Achievements

The second research question explores the comparison between students' learning achievement before and after learning through KWL strategy utilization to develop reading comprehension for grade 12 students. In total, 35 grade 12 students included in this study completed both the pre- and post-reading comprehension test.

Taken collectively, this allowed the researcher to examine changes in their teaching orientations over time. The results are encouraging. It is noticeable that the mean score of the KWL strategy utilization pre-test ($\bar{X}=17.31$) was dramatically lower than the KWL strategy utilization post-test mean scores ($\bar{X}=48.08$). The results revealed that the grade 12 students who learned by KWL strategy utilization to develop reading comprehension after learning had higher achievement than before learning at the .01 level of statistical significance. This implies that the group of students who were being taught by KWL strategy possessed a higher level of KWL strategy development than the students who never learnt at the beginning of the semester. That is even though KWL strategy instruction is effective, learning is slow and not efficient for all of the cases, especially for ESL and EFL learners.

The finding of this research agrees with the findings of numerous studies related to the effects of KWL strategy utilization in helping students to learn more comprehension strategies. Strangman and Hall (2009) mentioned that using KWL

strategies could help learners be aware of, and control, their efforts to use particular skill and strategies. Also, a study by Cooper (1997) and Conner (2006) asserted that students who were trained to use KWL strategies were better than students at evaluation types of comprehension questions and giving adequate answers.

Emphasizing the role of teachers in assisting students to utilize effective KWL strategy, Carr and Ogle (1987) urged teachers to teach students to use KWL as a tool for monitoring and improving classroom learning and educational performance.

Advanced KWL strategy is associated with increased learning as well as higher academic achievement (Bean, 1995; Fisher et al. 2002). Students who are aware of what they know and what they do not know adjust their learning (i.e., study strategies) behavior accordingly. This finding agreed with the finding of Jared and Jared (1997), who used the KWL strategy with elementary and middle school students in a language arts class. The finding of their study showed that student learned to make connections between prior knowledge and new information, thus facilitating the construction of meaning. Also, the research of this study found that the KWL strategy helped students to become strategies readers, when they use the components of this strategy during their reading. This finding was also asserted by Shelley et al (1997), who mentioned that the KWL strategy helps children to become strategies readers by getting them to use more reading strategies than other readers do. Based on this study and the previous studies it appears that KWL strategy can be an effective strategy for helping Thai high school students to learn more comprehension strategies than the traditional reading approach.

Pertaining to the rubrics used in this study, KWL strategy development also appears to be particularly responsive to classroom assignments that require students to reflect on their reading and problem solving. Hanson and Williams (2008) used a writing assignment to enhance KWL strategy behavior in undergraduate engineering majors. They found an improvement in students' KWL strategy awareness. Students became aware of what they knew and what they did not know when solving problems. In addition, students' communication of their solutions to others improved. Previous research has suggested that students with limited KWL skills gain the most from KWL training in the classroom (Weissman, 1997; Al-Shaye, 2000; Cantrell, Fusaro & Dougherty, 2000).

Most importantly, this finding coincided with the studies conducted by Piper (1992); Al Shaye (2000); and Ammre & Al Nator (2006); conclusions of which indicated the significant role of KWL strategy in improving the students' reading comprehension. However, findings of this study contradict Stahl's (2003), whose results indicated non-effectiveness of the KWL strategy in activating the students' previous knowledge.

Somewhat unexpectedly, result of this study can be interpreted in the light of all the step of the KWL strategy, i.e. the students' demonstration of his/her knowledge about the topic to be learnt. That is to say that KWL strategy does contribute in improving the student's comprehension level and in achieving meaningful learning through activating previous knowledge related to the reading text. It gives the reader an opportunity to find real conceptual relations and not random ones with those concepts previously made while building up a cognitive structure. Students are continuously active arranging and organizing what they have learned, in order to

make hypothesis and predictions in relation to the text and its objectives. For this purpose, they use different intellectual processes such as: comprehension, interpretation, analysis, evidencing and eliciting in order to take appropriate decisions and accomplish their learning goals.

5.2.3 The Effectiveness Index of the KWL Strategy Utilization to Develop Reading Comprehension

The third research question investigates the effectiveness index of the KWL strategy utilization to develop reading comprehension for grade 12 students. This element was examined by the quantitative analysis of the questionnaire data. The findings indicated that the index of efficiency of KWL strategy utilization to develop reading comprehension equaled 0.7508 which means 75.08% students gain more English reading comprehension knowledge. According to the findings of this study and the literature review findings the researcher asserts that both KWL had a high positive effect on students help students to use comprehension strategies in there study.

This result was in agreement with the previous studies of Akyüz (2004) that comprehension strategy instruction had a positive effect on EFL college learners' answers to main idea questions and Ammre & Nator (2006) study that reading strategy instruction improved students' ability to identify the main idea and supporting details of reading passages. Results of this study verified KWL reading strategy instruction can be a valuable addition to the core reading program of any school seeking to improve the literacy skills of their students. Major advantages of guided reading instruction include administration in small groups, at the student's instructional level, and instruction in the key components. This allows the student to

engage in authentic reading, thus increasing the likelihood of comprehension. Current research on “grouping for instruction” reported positive changes in student outcomes. Findings revealed that students receiving instruction in small groups learn significantly more than students who are not instructed in small groups (McGinley & Denner. 1987; Fielding, Anderson & Pearson. 1990; Pressley & Afflerbach. 1995; Moore et al. 1999; Biancarosa & Snow. 2006; Kamil et al.. 2008).

As previously stated and discussed in the literature review chapter, previous research found inconsistent results in terms of the effectiveness of KWL strategy. For example, Hanf (1971), Ogle (1986), and Shelley et al. (1997) found that KWL had a positive impact on English reading comprehension. In contrast, Gagne (1970) and Murray (1984) found no difference between the traditional whole-class teaching method and KWL in their effects on secondary learners’ reading ability.

Somewhat unexpectedly, this unfavorable result supported the claim of Pritchard (1990) and Razi (2004) that, when examining the effectiveness of reading comprehension instruction, studies adopting researcher-made measures are more sensitive to change and more likely to yield statistically significant results than the ones with standardized tests. According to Pritchard (1990) and Razi (2004), this phenomenon is perhaps due to the fact that standardized tests are less reader-friendly. They are normally shorter in length and involve more complicated vocabulary as well as sentence structures, which may require test takers to demonstrate various types of linguistic knowledge to comprehend the texts. Similarly, Deshler et al. (2007) and Torgesen et al. (2007) suggest the type of instruction determines how adaptive the teacher must be. He suggests that teachers do not need to think on their feet when they use prescriptive instruction, but adapting on the fly is necessary when using

constructivist instruction. Pressley (2000) asserts that reading programs encourage passivity in teachers. On the other hand, authentic literacy situations and social interactions, components of open tasks, compel teachers to tailor instruction to the circumstances in which they find themselves. Therefore, they must make spontaneous instructional decisions based upon students' needs. Likewise, Klingner, Vaughn and Schumm's (1998) research indicates that when teachers move toward using open tasks, teachers' responsiveness is critical. This study supports these assertions that teachers must be more thoughtfully adaptive as a result of the openness of the task.

5.2.4 Students' Satisfaction towards the KWL Strategy Utilization to Develop Reading Comprehension

Current research is useful in developing strategies to improve student scores on reading comprehension assessments. The grade 12 students' satisfaction toward the learning of English reading comprehension using the KWL strategy as a whole were at "more satisfactory" levels. It is a free verbal exchange of ideas between teacher and students. It seems to indicate that teacher spends sufficient time in preparing the process and steps of discussion. Sufficient time should be allotted to discuss all the issues. At the same time students should know the time limit to reach a conclusion (Pearson & Dole. 1987; Pearson & Fielding. 1991). Additionally, the teacher in the beginning should introduce the topic, the purpose of discussion, and the students participating in discussion. Encourage students listen other's point of view and then evaluate their own.

Publicly declaration, the grade 12 students were agreed with all the statement of the questionnaires. It tends to inform that the KWL strategy showed a high

positive effect in helping them to learn how to use more comprehension strategies such as making connections between their background knowledge and new knowledge. Moreover, most of students rated English language subject as the crucial subject and pay attention in class though they still work hard to keep in English (Pearson & Dole. 1987; Pressley et al. 1989; Pearson & Fielding. 1991). However, previous studies conducted individually on the KWL strategy (Weissman. 1997; Al-Khateeb & Idrees. 2010) showed an effect in helping students to learn comprehension strategies. Also, the students who were treated by KWL received the benefits using this strategy in their classroom.

Additionally, Jared and Jared (1997) indicated that the KWL strategy helps students to become more motivated to learn and be autonomous in their education efforts. They asserted that this strategy helps students to use their prior knowledge during reading, develop self-questioning strategies, read for purposes of answering questions, and provide them with opportunities for future research. Wander (1996) also mentioned that the KWL is an effective reading comprehension strategy, helps students to learn more different strategies such as; recall and self-questioning.

Specific to EFL contexts, most of the students receiving experimental treatment showed their interest and attention during instruction. For example, students in the KWL treatment showed their interest in the use of this strategy by their participation and their eagerness to answer the questions. Also, as Jared and Jared (1997) found, students showed satisfaction and delight with this strategy when they were able to use their prior knowledge or experiences. But the most important part was the self-question, because students in this strategy ask themselves what they know, what they want to know, and what they learned, which enhanced their attitudes

toward learning and developing a purpose for reading. According to Ogle (1986), the KWL strategy is a self-questioning process which helps students develop a personal commitment to guide them through reading process. Also, Dewey (1938) noted that self-questioning influences the formulation of attitudes of desire and purpose, encourages students to self-question, and creates a desire to read critically and purposefully.

Besides, if the reasons of students selecting the KWL strategy were more positive responses, the student satisfaction toward development reading comprehension in their major area of study would be positively increased as well (Bryant. 2006; Qaraeen, Al-Omari & Abu-Tineh. 2007). As Baykal et al (2004) and Moller (2006) indicate; student satisfaction is positively associated with program completion rates and grade achievement. Clearly, the student satisfaction is related to their attitudes and perceptions toward the use of KWL strategy to develop reading comprehension. Evidently, as a result, the majority of the students enjoyed using KWL strategy in their learning classes. In fact, the student satisfaction survey indicated that most of students believed they learned more of the information with the KWL strategy.

In order to encourage the students to use English as much as possible, the teacher can explicitly require students to use English during a certain part of the activity (Grellet. 1996; Williams. 1996). While the students showed their interest in the KWL strategy, the researcher observed that most of these students did not like to use others techniques. They mentioned to the teacher that the KWL strategy was sufficient for them to comprehend the passage; also they did not like the writing process of the summarization.

To briefly summarize these findings, the results of the study have shown that not only is there improvement in reading comprehension and fluency of students, but that there are positive attitudes toward KWL as well. These findings were generally not predicted. The four fundamentally major findings discussed exposed suggestions for future research and for practitioners aiming to utilize this thesis's findings. The suggestions for future research and for practice provided by this thesis are revisited in order to allow other researchers to add to the body of research concerning students with KWL and to allow practitioners to better serve their students.

5.3 Pedagogical Implications for KWL Strategy

This research confirms previous theories that suggest that teachers must be adaptive to navigate the complex environment of the classroom. There are several implications from the study that will contribute to the field of reading comprehension and inclusion. Most importantly, this study will add to the few studies that have placed thirty-five student teachers in one inclusive classroom during the same placement. In addition, the literature clearly pointed to a lack of opportunities for teachers to receive additional training in co-teaching models and strategies. By being a part of this study, the participants gained insight into KWL strategy utilization. The gained insights were based on a shared, authentic experience that has given them the extra preparation and learning experiences to bring to their own future classrooms.

Based on the findings of this study and the previous studies, the research asserts that KWL strategy utilization can be taught successfully to facilitate comprehension and comprehension strategies of high school readers in Thailand. Therefore, to be effective in the unpredictable context of the classroom, teachers must

be thoughtful about their instruction, making adjustments as needed. The following are recommendations for the future use of KWL strategy utilization to enhance students' reading comprehension, and assist students to learn more KWL strategy.

5.3.1 One of the findings of this study is that KWL strategy is effectively used when specific instructional reading strategy is applied. Effective use has two meanings: students do know how to read a text and simply do care about the book. KWL is one of essential of reading strategies for students to comprehend the text effectively, because students in this study showed their satisfactions to use the KWL, which takes much more time and effort.

5.3.2 To the best of the researcher' knowledge, it was prototype model for another teachers to exploit in to the classroom. Using KWL strategy for enhancing reading comprehension of high schools' students. Therefore there is a need to translate into Thai materials on KWL strategy in order to provide teachers with the appropriate methods to teach in their class.

5.3.3 The new modification in the KWL strategy makes it more appropriate for the teachers who do not want to spend most of the class hours to reading. In this technique, teachers only spend about twenty minutes of their lessons for KWL strategy. The Ministry of Education should cooperate with researchers and assist them with the implementation of their studies. Presently numerous complications must be overcome prior to researchers being able to administer their studies. The current policy forces researchers to first receive permission from the Ministry of Education, the local educational district, and from the school where the study will be implemented.

5.3.4 As there are a few studies and resources in Thai related to KWL strategy, the Ministry of Education should encourage Thai researchers and teachers to conduct educational studies and research related to KWL strategy utilization. Also, they should be given opportunities to attend educational conferences such as those sponsored by the international reading association, so they can gain new experiences and learn from the experts.

5.4 Suggestions for Future Research

Carrel and Wise (1998) suggest that reading ability seems to be an important factor and needs to be taken into consideration in future ESL/EFL research. This section provides recommendations based on the results of the study. The following are recommended for future research in the field of KWL strategy utilization. These suggestions relate directly to the influence of KWL strategy on students' comprehension strategies and reading comprehension. These suggestions follow:

First, since this study was implemented with grade 12 Thai EFL students, the first recommendation is that a similar study of KWL strategy utilization should be implemented with grade 12 male and female students in Thailand to determine whether gender has an effect.

The second recommendation is the study could be conducted to compare the effects of KWL strategy utilization on students' reading comprehension between male students and female students in grades other than the twelfth grade carrying out with students on the college level, and different school levels to ascertain the scope of the findings of this study by determining the success of implementing different KWL strategy utilization in Thai high schools to determine their effectiveness.

The third recommendation is to investigate the attitudes of high school students and the teachers toward using the reading strategies involving applying KWL techniques in their programs and teaching instruction. Also, since the instrument designed by the research obtained fairly high ratings regarding the reliability and the validity of the reading comprehension and comprehension strategies, the instrument is recommended to be utilized in future studies of grade 12 students in Thai reading classes.

5.5 Conclusion Remarks

This chapter presented a summary of the key findings and themes related to questions in the study. Consequently, the KWL strategy motivates active learning and instructing on the parts of both learners and instructors. This study made contributions as follows: 1) it illustrated a detailed process for integrating the KWL scheme into Thai EFL students; and 2) it shows that such integration involves efforts on the part of both learners and instructors. As with all research, after completing this study, the researcher has more questions than answers. The researcher would like to repeat this study with the modifications in the intervention discussed in the previous chapter. As a proponent of full inclusion in today's classrooms, the researcher supports KWL strategy teaching as a research-based strategy to support including all diverse learners in the general education classroom. Nevertheless, at different points throughout the study, the researcher questioned whether the researcher was creating a positive experience for the student teachers.

However, the researcher continues to believe that, for KWL strategy teaching to become a reality in today's schools, it deserves more opportunities for practice and

experimentation. The literature suggests that, across the board, teachers do not feel prepared for KWL strategy teaching and would participate in additional training if given the opportunity. Therefore, KWL strategy teaching at the student teaching level, accompanied by group support and an open forum, will, most likely, not exist in the field and could provide this requested additional support at the pre-service level. The researcher has not been given the opportunity to begin a new action research cycle with KWL strategy teaching teachers utilizing the revised model. Even so, the researcher plans to complete another modified cycle and compare the findings with these findings.

Completing this study has empowered the researcher to further her research agenda for finding strategies that include all learners in the classroom. The researcher also invites other teacher educators to partake in a similar study of KWL strategy teaching to continue the discussion and keep this collaborative experience in the current research conversation as it provides valuable information to the field of inclusion. Also, the educational system is far from guaranteeing full participation for all students in the general education classroom. Exploring the use of KWL strategy teaching in the inclusive classroom is just the beginning of the researcher's quests for equality for all students.

In addition, the literature clearly pointed to a lack of opportunities for teachers to receive additional training in KWL strategy teaching model. By being a part of this study, the participants gained insight into KWL strategy teaching. The gained insights are based on a shared, authentic experience that has given them the extra preparation and KWL strategy teaching experiences to bring to their own future classrooms. Consequently, this increase in KWL strategy teaching experience for

high school teachers is a valid addition to all teacher education programs that prepare dual certification teachers.

For the researcher, the completion of the study has enabled a greater understanding of the research purpose, the reviewed literature, and the methodological procedures. Moreover, it also has empowered the researcher to explore her personal teaching experiences and to examine current curriculum reading materials and their application to the EFL English reading curriculum with a new awareness and purpose.

มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

มหาวิทยาลัยสุโขทัย,
Buriram Rajabhat University

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มหาวิทยาลัยสุโขทัยศึกษา
Buriram Rajabhat University

APPENDICES

APPENDIX A

Formal Letter

The Letter Asking Permission to Try Out the Research Instruments



No. 0545.11/ว 516

Buriram Rajabhat University
Jira Road, Amphoer Mueng,
Buriram 31000, THAILAND

August 16, 2011

Dear Mr. Director of Muangtalungpittayasan School:

Subject: Asking Permission to Try Out the Research Instruments

Buriram Rajabhat University (BRU) presents this letter to the Director of Muangtalungpittayasan School to ask permission to try out the research instruments. I wish to inform you that Mrs. Wiphaporn Dangsri, a student studying in Master of Arts Program in English at BRU, is conducting the research, entitled "**The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade 12 Students**," under the supervision of Dr. Surachai Piyanukool, Chairperson of the Thesis.

In this regard, BRU would like to ask permission from Mr. School Director to allow her to collect the research data from the grade 12 students at Muangtalungpittayasan School by responding to her research methodologies in August 2011.

Please accept, Mr. School Director, my sincere appreciation and the assurances of my highest consideration.

Yours sincerely,



(Assistant Professor Dr. Suthiap La-onghong)
Dean of Graduate School
Buriram Rajabhat University

Office of Graduate School
Tel: 04461 1221, 04460 1616 ext. 3806
Fax: 04461 2858

The Letter Asking Permission to Collect the Research Data



No. 0545.11/๓ 521

Buriram Rajabhat University
Jira Road, Amphoer Mueng,
Buriram 31000, THAILAND

August 26, 2011

Dear Mr. Director of Noncharoenpittayakhom School:

Subject: Asking Permission to Collect the Research Data

Buriram Rajabhat University (BRU) presents this letter to the Director of Noncharoenpittayakhom School to ask permission to collect the research data. I wish to inform you that Mrs. Wiphaporn Dangsri, a student studying in Master of Arts Program in English at BRU, is conducting the research, entitled "**The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade 12 Students,**" under the supervision of Dr. Surachai Piyanukool, Chairperson of the Thesis.

In this regard, BRU would like to ask permission from Mr. School Director to allow her to collect the research data from the grade 12 students at Noncharoenpittayakhom School by responding to her research methodologies in August-September 2011.

Please accept, Mr. School Director, my sincere appreciation and the assurances of my highest consideration.

Yours sincerely,

(Assistant Professor Dr. Suthiap La-ongthong)
Dean of Graduate School
Buriram Rajabhat University

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APPENDIX B

Letter for Experts

The Letter Requesting to be the Expert for the Research Instruments



No. 0545.11/ ๓155

Buriram Rajabhat University
Jira Road, Amphoer Mueng,
Buriram 31000, THAILAND

March 25, 2011

Dear Dr. Sawarot Ruangpaisan,

Subject: Requesting to be the Expert for the Research Instruments

Buriram Rajabhat University (BRU) presents its complement to Dr. Sawarot Ruangpaisan, the English lecturer at Associate Dean of Faculty of Humanities and Social Sciences at Buriram Rajabhat University to be the expert for the research instruments. I would like to inform you that Mrs. Wiphaporn Dangsi, a student studying in Master of Arts Program in English at BRU, is conducting the research, entitled "**The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade 12 Students,**" under the supervision of Dr. Surachai Piyankool, Chairperson of the Thesis.

In this regard, BRU strongly believes in your kindness to be the expert for giving suggestions in her research instruments.

Thank you very much for your cooperation.

Yours sincerely,

(Assistant Professor Dr. Suthiap La-onghong)
Dean of Graduate School
Buriram Rajabhat University

Office of Graduate School

Tel. 0 4461 1221, 0 446 1616 ext. 3806

Fax 0 4461 2858

The Letter Requesting to be the Expert for the Research Instruments



No. 0545.11/ ๓155

Buriram Rajabhat University
Jira Road, Amphoer Mueng,
Buriram 31000, THAILAND

March 25, 2011

Dear Miss Sumitra Pankulbadee,

Subject: Requesting to be the Expert for the Research Instruments

Buriram Rajabhat University (BRU) presents its complement to Miss Sumitra Pankulbadee, the English lecturer at Associate Dean of Faculty of Humanities and Social Sciences at Buriram Rajabhat University to be the expert for the research instruments. I would like to inform you that Mrs. Wiphaporn Dangsri, a student studying in Master of Arts Program in English at BRU, is conducting the research, entitled "**The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade 12 Students**," under the supervision of Dr. Surachai Piyanukool, Chairperson of the Thesis.

In this regard, BRU strongly believes in your kindness to be the expert for giving suggestions in her research instruments.

Thank you very much for your cooperation.

Yours sincerely,

(Assistant Professor Dr. Suthiap La-onghong)
Dean of Graduate School
Buriram Rajabhat University

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The Letter Requesting to be the Expert for the Research Instruments



No. 0545.11/ ๑155

Buriram Rajabhat University
Jira Road, Amphoer Mueng,
Buriram 31000, THAILAND

March 25, 2011

Dear Mr. Bamrung Kanram,

Subject: Requesting to be the Expert for the Research Instruments

Buriram Rajabhat University (BRU) presents its complement to Mr. Bamrung Kanram, the English lecturer at Associate Dean of Faculty of Humanities and Social Sciences at Buriram Rajabhat University to be the expert for the research instruments. I would like to inform you that Mrs. Wiphaporn Dangsi, a student studying in Master of Arts Program in English at BRU, is conducting the research, entitled "**The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade 12 Students,**" under the supervision of Dr. Surachai Piyanukool, Chairperson of the Thesis.

In this regard, BRU strongly believes in your kindness to be the expert for giving suggestions in her research instruments.

Thank you very much for your cooperation.

Yours sincerely,

(Assistant Professor Dr. Suthiap La-ongthong)
Dean of Graduate School
Buriram Rajabhat University

Office of Graduate School

Tel. 0 4461 1221, 0 446 1616 ext. 3806

Fax 0 4461 2858

APPENDIX C

Lesson Plans

Course: Fundamental English (E43101)	Unit 1 Lesson Plan 1	Level: Intermediate
Theme: KWL Reading Strategy		Time: 2 Periods
Topic: KWL		Date:May 2011

Concept: KWL reading strategy can improve students' reading comprehension. Moreover, it is essential for students to be able to link their background knowledge to new knowledge. Therefore, students should have a chance to practice this strategy to improve their reading comprehension. By doing the activities students can apply the knowledge to comprehend the text effectively.

Terminal Objective: Students are able to use KWL strategy while reading.

Enabling Objectives: Students are able to....

1. thoroughly understand the aims of the study
2. have better understanding of KWL strategy
3. actively participate in the research study
4. maintain a good relationship with the researcher
5. understand the text better after using KWL reading strategy
6. answer the questions of the passage correctly

Content

1. Pre-test (achievement test)
2. KWL strategy
3. The importance of English reading comprehension.
4. Question words

Teaching procedure:

Note: Students should know the steps of KWL strategy.

1. Warm up

1.1 Teacher asks students about the importance of reading.

Teacher: D you know why reading is very important?

1.2 Teacher asks students questions:

Teacher: Why we have to know how to read effectively?

Students: We use reading in a daily life.

Reading leads us gain more knowledge.

Teacher: The reading strategies will help you better understand what you read. You will connect your reading to what you already know. Also, you will better remember what you read later.

.....vary.....

1.3 Teacher tells students about the objectives of using KWL strategy in reading comprehension.

1.4 Teacher introduces the students what KWL strategy is, and how important it is.

1.5 Teacher: Today we will learn about the KWL strategy.

2. Presentation

(Pre-reading)

2.1 Teacher tells students about the importance of reading comprehension in globalization. Therefore, the students should know the strategy to comprehend the texts or many materials.

2.2 Teacher points out the objectives and how to use KWL strategy in reading comprehension.

2.3 Teacher demonstrates how to use KWL strategy with the text "Sparrow".

2.3.1 Teacher gives the text to students and motivates them to think about the topic.

2.3.2 Students brainstorm about the topic.

2.3.3 Teacher draws KWL chart on the blackboard and writes down the things that students have already known in column K.

3. Practice

(While-reading)

3.1 Teacher teaches students question words and let students make the questions about the things they want to know about the topic.

3.2 Students make the questions about what they want to know and the teacher writes down in column W.

3.3 Teacher teaches the new vocabulary to students.

3.4 Students start reading the text.

3.4.1 Students start reading by skimming it.

3.4.2 Students read the passage again by scanning it.

3.4.3 Students do the exercise.

4. Production

(Post-reading)

4.1 Students try to answer the questions about they want to know in column W, and the teacher records their answers in column L.

4.2 Students write essay about the birds.

4.3 Teacher lets the students ask and answer the questions and make an appointment with students to conduct the research.

5. Wrap Up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

6.1 KWL strategy

6.2 Worksheets

6.3 Pictures

7. Evaluation

The assessment tools provided with this lesson are:

- 7.1 interest observation form.
- 7.2 participate observation form.
- 7.3 KWL Chart.
- 7.4 worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....
.....

8.2 Process/Enduring-understanding:

.....
.....

8.3 Product/Achievement:

.....
.....

8.4 Attitude/Quality:

.....
.....

9. Problems

.....
.....

10. Suggestions

.....
.....

(signature).....

Mrs. Wiphaporn Dangsi

Teacher

3 Steps of KWL Strategy

Step K- What I know

Step 1 Step 1:What I know(K). This is composed of two sub-steps. In the first part, there is a straightforward brainstorming of what the group knows about the topic. Teacher activates the background knowledge of the students by brainstorming of what they know about the topic and writes all involvements on the board. Then teacher provides with a K W L chart. KWL chart is a three column chart that is used in K-W-L sessions. The chart includes the terms what I know, what I want to know, what I learned (Marinak. 1998). In this part teacher select key concept for the brainstorming as specific and pertinent as it is possible. This is necessary to keep responses inside the topic (Ogle. 1986). In the second part, students are asked to categorize their association and write them to the “Know” column(Marinak.1998).

Step W-What I want to know

Step 2 Step2:What I want to Know(W). Using the information that is stated as known students generate questions they want to be answered about the topic. Some students may be in conflict with other students about some information. This will generate their own reasons to read and they can ask about this challenging information. The questions are written to second column (Ogle. 1986). Want to know part is group discussion, but before reading students should write their own questions on their worksheets, by doing this, they develop a personal commitment with guides reading(Ogle. 1986).

Step L - What I have learned

Step3 Steps3:What I learned(L). Teacher asks students to find whether the text deals with the students’ questions. During reading, students write the answers to their questions on their charts. After reading, students discuss what they learned through reading. If students cannot find the information they want to know, teacher suggests for further reading. Each student should have an opportunity to find their questions to be answered or addressed (Ogle.1986). KWL Strategy (Ogle. 1986) is one of those teaching and learning strategies used mainly for information texts.

KWL

K - What I know

W- What I want to know

L - What I’ve learned

KWL

- **Begin with students’ knowledge and Ideas**
- **Provides reasons for learning**
- **Adds news information to knowledge base**
- **Involves students in learning**
- **Empowers students to create their own knowledge**

KWL CHART

Step K, Step W, Step L

- Direction:**
1. Write what you know about "THE SPARROW" in Column K
 2. Write what you want to know about "THE SPARROW" in Column W.
 3. Write what you have learned about "THE SPARROW" from the passage in Column L

Step K What I know	Step W What I want to know	Step L What I have learned

NAME _____

DATE _____

THE SPARROW



This very small bird is found throughout the world. There are many different species of sparrow. There are about fifty different species of sparrows living in North and South America. Sparrows are only about four to six inches in length. Many people appreciate their beautiful song.

Sparrows prefer to build their nests in low places. Their nests are usually built on the ground, 5 clumps of grass, low trees, and low bushes. In cities, they build their nests in building nooks and other holes. They rarely build their nests in high places. Sparrows build their nests out of twigs, grasses, and plant fibers. Their nests are usually small and well-built structures.

Female sparrows lay four to six eggs at a time. The eggs are white with reddish brown spots. The 10 eggs hatch within eleven to fourteen days. Both the male and female parents care for the young. Insects are fed to their young after hatching. Young sparrows are ready to leave the nest eight to ten days after hatching. The large feet of the sparrow are used for scratching seeds. Adult sparrows mainly eat seeds.

Sparrows can be found almost anywhere there are humans. Some species of sparrows prefer to live in deserts, prairies, swamps, marshes, forests, and other bushy areas. Some sparrows in northern 15 North America will migrate south in winter, although most stay in one area year-round. The older adult males of the migrating sparrows usually spend their winters near their breeding area. Many people throughout the world enjoy these delightful birds.

Answer the Questions

- The chief food for adult sparrows is _____.
 - seeds
 - nuts
 - insects
 - eggs of other birds
- Where do sparrows live?
 - Throughout the world
 - Wherever there are humans
 - In cities and in the country
 - All of the above
- The word *species* means _____.
 - adult
 - kinds
 - nests
 - foods
- Which of the following is TRUE?
 - All sparrows migrate in winter.
 - Young sparrows are able to leave the nest about twenty days after hatching.
 - Sparrows rarely build their nests in high places.
 - Sparrows are some of the largest birds found in North and South America.

5. The care of the young sparrows _____.
- a. is mainly done by the father
 - b. is mainly done by the mother
 - c. is shared by both parents
 - d. none of these
6. The second paragraph of this passage mainly discusses _____.
- a. where sparrows are found
 - b. the diet of the sparrow
 - c. the nests of the sparrow
 - d. migration of sparrows
7. The nests of sparrows are _____.
- a. usually built in low places
 - b. built out of twigs, plant fibers, and grasses
 - c. small, well-built structures
 - d. all of these

Answers Key

- 1. a
- 2. d
- 3. b
- 4. c
- 5. c
- 6. c
- 7. d

Lesson Plan 2

Subject : English	Unit 1 Lesson Plan 2	Level: Intermediate
Theme : Environment		Time: 2 periods
Topic : No Water No Problem		Date:May 2011

Concept: Analyzing /discussing the similarities and differences of living creatures in the world is important. Students should know the creatures around themselves. They can get various knowledge from reading. Moreover they can use KWL strategies to enhance their reading comprehension effectively.

Terminal Objective: Students are able to describe the similarities and the differences of creatures.

Enabling Objectives: Students are able to...

1. pronounce and give the meaning of the words correctly.
2. answer the questions from passage correctly.
3. comprehend and interpret the text effectively.
4. summarize the main idea of the text they read.
5. describe the differences or similarities between the camels and others animals.

Teaching Aids: KWL chart, reading passage, pictures

Content

1. The passage: No Water No Problem
2. Vocabulary: actually, claim, manage to, moisture...etc.
3. Structure: present simple tense

Teaching procedure:

Note: Students should already know about the characteristic of camel that can stay without drinking for many days.

1. Warm up

- 1.1 Teacher tells the objectives of study.
- 1.2 Teacher has students look at the picture of camel and try to answer the question.
- 1.3 Teacher asks students:
 - Teacher: Do you know what is in this picture?
 - Student: It's camel.
 - Teacher: Where do camels live?
 - Student: They live in the desert.
 - Teacher: What do you know about them?
 - Students:.....vary.....
- 1.4 Teacher activates the student's prior knowledge and asks them about the camel.

2. Presentation

Pre-reading

- 2.1 Students receive the reading passage “No Water No Problem”.
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students give the opinions about they need to know more about camel.

Step K

- 2.4 Teacher gives the KWL chart to students and lets them write down about the things they have known in column K
(What I know)
 - 2.4.1 Students brainstorm about the topic.
 - 2.4.2 Students share everything they know and record all of their ideas in column K.

3. Practice

While-reading

Step W

- 3.1 Students write the things that they want to know about the camel in column W.
 - 3.1.1 Students make the questions that describe what they want to know from the passage.
 - 3.1.2 Students record the questions in column W (What I want to know).
- 3.2 Students start reading by skimming it.
- 3.3 Students read the passage again by scanning it.
- 3.4 The teacher lets the student answer the questions and correct it.

4. Production

Post-reading

- 4.1 Students are divided into a group of five. Each group discusses the passage.
- 4.2 Each group elects the representative to give the opinion and talk about what they have known from reading the passage.

Step L

- 4.3 Each student writes down the things they have learned from reading the passage in column L.
 - 4.3.1 Students record the information after reading the passage about what they have learned in column L (What I learned).

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

- 6.1 Reading passage focusing on reading comprehension
- 6.2 KWL Chart
- 6.3 Worksheets

7. Evaluation

The assessment tools provided with this lesson are:

- 7.1 interest observation form.
- 7.2 participate observation form.

 7.3 KWL Chart.

7.4 worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....
.....
.....

8.2 Process/Enduring-understanding:

.....
.....
.....

8.3 Product/Achievement:

.....
.....
.....

8.4 Attitude/Quality:

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.....

9. Problems

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.....

10. Suggestions

.....
.....
.....

(signature).....

Mrs. Wiphaporn Dangsi

Teacher

Work Sheet 1

Step K, Step W, Step L

- Direction:**
1. Write what you know about “camel” in Column K
 2. Write what you want to know about “camel” in Column W.
 3. Write what you have learn about camel from the passage “No Water No Problem” in Column L

Step K	Step W	Step L
What I know	What I want to know	What I have learned

NO WATER NO PROBLEM



There are actually animals which do not need water in the world. We already know that camels can live without water for a long time, but some scientists claim that giraffes also can. Giraffes can live without water even longer than camels, which can lack water for only seven days. So, where do they get the moisture in order to live? The truth is, these desert animals can manage to get the

5 moisture they need from the food they eat, they do not store water in **their** humps like most people seem to think.

Now, let's talk about two interesting small animals. They are jerboas and Gerbils. These two lives live toughly. They live in desert areas of Asia and Africa. These two animals eat seeds and roots, then they would **extract** any moisture that can be found in these plants. As a result, they

10 hardly to drink water. Jerboas live in burrows. On a hot day, they would usually plug up the burrow's entrance so that it would cool up a little bit. As for Gerbils, they can thrive and breed very easily when captured. They are also famous for being a kind of popular pets.

A. Comprehension

I. Choose **A** for the true statements and **B** for the wrong ones.

-1. Not all animals need water.
-2. Some animals never drink water.
-3. Gerbils and Jerboas are small mouse-like creatures that live in trees in desert.
-4. Camels store water in their humps.
-5. Gerbils thrive in capacity.
-6. The life of a Gerbil is fairly easy.
-7. Giraffes have become popular pets.
-8. Jerboas extract moisture by plugging up their burrows with seeds.
-9. Gerbils and jerboas live in Asia and Africa.
-10. They love to go out in midday sun looking for seeds and roots.

II. Choose the best answer

1. From the passage, it is concluded that.....
 - a. there are some animals which do not need water
 - b. giraffes can live without water longer than camels
 - c. desert animals get moisture from food they eat
 - d. Jerboas and Gerbils can also live without water
2. "their" in line 5 refers to.....
 - a. humps
 - b. desert animals
 - c. camels
 - d. people

B. Vocabulary

Choose the appropriate meaning for each word.

1. **Actually** means.....
 - a. by swallowing
 - b. really
 - c. desert condition
 - d. during the day
2. **Manage to** means.....
 - a. survive
 - b. survive easily
 - c. breed
 - d. succeed
3. **Moisture** means.....
 - a. wetness
 - b. food
 - c. nourishment
 - d. comfort
4. **Claim** means.....
 - a. say
 - b. write
 - c. accuse
 - d. explain
5. **To store** means.....
 - a. swallow
 - b. irrigate
 - c. keep safely
 - d. breed abundantly
6. **Humps** are.....
 - a. multiple stomachs
 - b. saddles
 - c. bladders of lard
 - d. bumps on the back of animal.
7. **Deserts** are.....
 - a. pudding
 - b. sweets
 - c. hot, dry, barren regions
 - d. African safari park
8. **Extract** means.....
 - a. draw out
 - b. drill holes
 - c. plug up
 - d. survive
9. **Burrows** are.....
 - a. holes in the ground
 - b. desert wheel-barrows
 - c. hiding places
 - d. sand-stone caves
10. **Thrive and breed** means.....
 - a. struggle for existence
 - b. live dangerously
 - c. stay healthy and have babies
 - d. enjoy life in spite of everything

Answer Key

“No Water, No Problem”

I.

- | | | |
|------|------|-------|
| 1. B | 5. A | 9. A |
| 2. A | 6. B | 10. B |
| 3. B | 7. B | |
| 4. B | 8. B | |

II. 1. c 2. b

B. Vocabulary

- | | | |
|------|------|-------|
| 1. b | 5. c | 9. a |
| 2. d | 6. d | 10. c |
| 3. a | 7. c | |
| 4. a | 8. a | |

Buriram Rajabhat University

Lesson Plan 3

Subject : English	Unit 1 Lesson Plan 3	Level : Intermediate
Theme : Culture		Time : 2 periods
Topic : The Story of St. Valentine's Day		Date :June 2011

Concept: Understanding the differences between Thai culture and western culture is useful for studying English language.

Terminal Objective: Students are able to understand the history of Valentine's Day and gives the opinion about it.

Enabling Objectives: Students are able to...

1. Pronounce and give the meaning of the words correctly.
2. Answer the questions about the important day from passage correctly.
3. Summarize the main idea of the text they read.
4. Do the exercise correctly.

Content

1. The passage Valentine's Day
2. Vocabulary: Emperor, awful, solution, ignore, illegally, wedding, etc.
3. Structure: past simple tense.

Teaching Procedure:

Note: Students should already be familiar with Valentine's Day.

1. Warm Up

- 1.1 Teacher tells the objectives of study.
- 1.2 Teacher lets students look at the picture and try to answer the question.
Teacher asks students:
Teacher: When is Valentine's Day?
Students: It's on 14th February in each year.
Teacher: What do people do on that day?
- 1.3 Students send cards and give the roses or chocolate to each other.
- 1.4 Teacher activates the student's prior knowledge and asks them about Valentine's day.

2. Presentation

(Pre- reading)

- 2.1 Students receive the reading passage "the story of Valentine's Day".
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students give the opinions on what they need to know more the about story of Valentine's Day.

Step K

- 2.4 Teacher gives the KWL chart to students and lets them write down about the things they have known in column K.
 - 2.4.1 Teacher and students brainstorm about the topic.
 - 2.4.2 Students share everything they know and record all of their ideas in column K.
- 2.5 Teacher introduces vocabulary and grammar structure in the text.

3. Practice

(While- reading)

Step W

- 3.1 Students write the things they want to know about the Valentine's Day in column W.
- 3.2 Students make the questions that describe what they want to know from the passage.
- 3.3 Students record the questions in column W.
- 3.4 Students start reading by skimming it.
- 3.5 Students read the passage again by scanning it.
- 3.6 Teacher lets the student answer the questions and correct it.

4. Production

(Post -reading)

- 4.1 Students write the essay about Valentine's Day.
- 4.2 Students make Valentine's Card.

Step L

- 4.3 Each student writes down the things he/she has learnt from reading the passage in column L.
- 4.4 Students record the information after reading the passage about what they have learned in column L.

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Material

- 6.1 Reading passage focusing on reading comprehension
- 6.2 KWL chart
- 6.3 Pictures

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....
.....
.....

8.2 Process/Enduring-understanding:

.....
.....

8.3 Product/Achievement:

.....
.....

8.4 Attitude/Quality:

.....
.....

9. Problems

.....
.....
.....

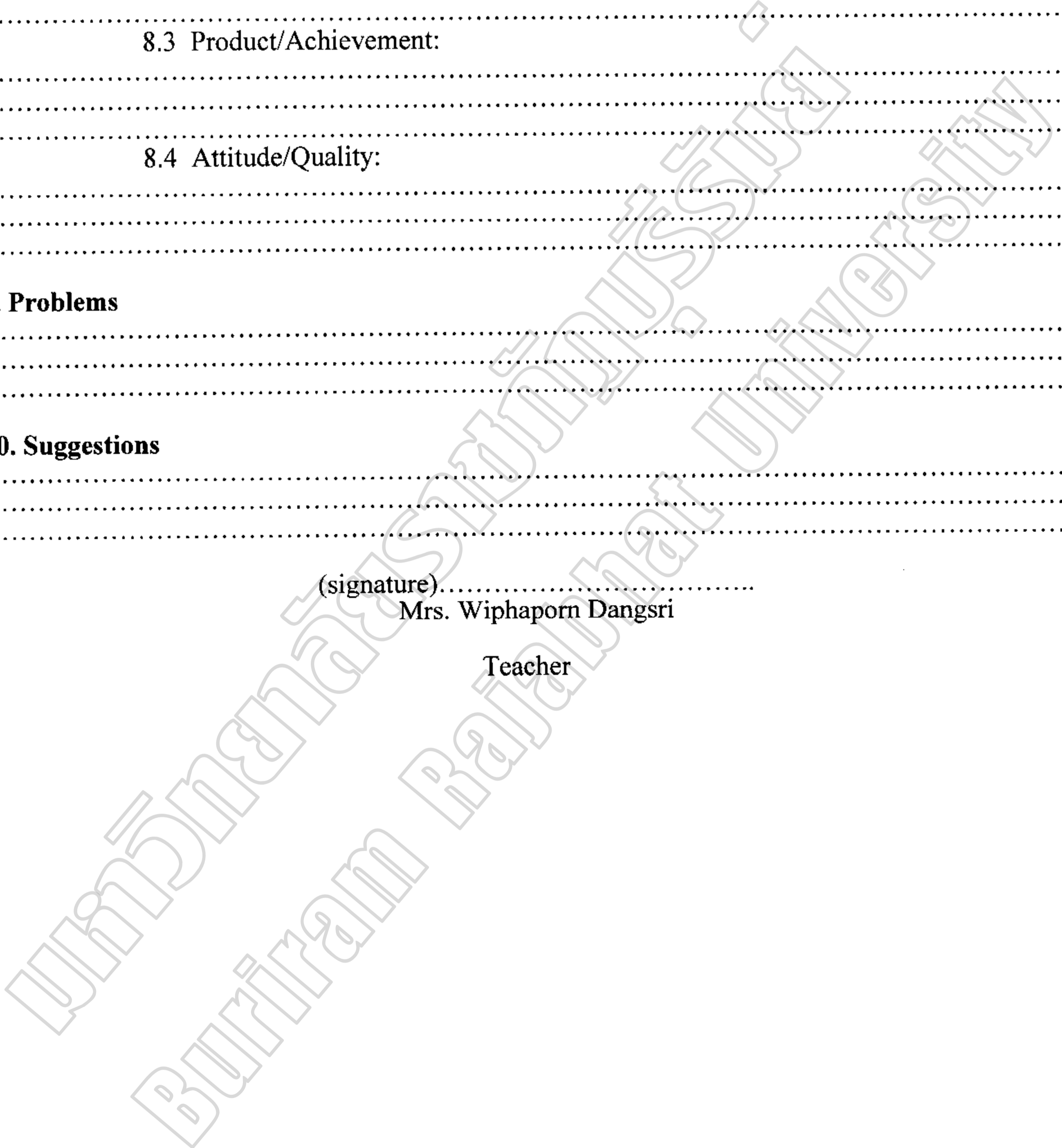
10. Suggestions

.....
.....
.....

(signature).....

Mrs. Wiphaporn Dangsi

Teacher



Worksheet

Step K, Step W, Step L

- Direction:** 1. Write what you know about “Valentine’s Day” in Column K
 2. Write what you want to know about “Valentine’s Day” in Column W.
 3. Write what you have learn about Valentine’s Day from the passage “The Story of St. Valentine” in Column L

Step K	Step W	Step L
What I know	What I want to know	What I have learned

Name _____ Date _____

The Story of St. Valentine



The Roman Emperor Claudius II was fighting many wars. He wanted a strong army, but many men did not want to be soldiers. Claudius thought the men wanted to stay home to be with their wives and children instead of leaving to fight wars.

5 Claudius thought of an awful solution to his problem. He decided to cancel all marriages! No one in all of Rome could get married. Claudius thought that if the men couldn't get married, the men would ignore the women and want to be soldiers.

10 Valentine, who was a priest, believed that people needed to get married. He thought that if they were not married, they would be tempted to sin by living together without being married. So he secretly and illegally married couples anyway! He performed the weddings in secret places, so the Roman soldiers would not find out.

15 But they did find out. Valentine was arrested and brought before the Emperor. The Emperor thought Valentine was a well spoken and wise young man, and encouraged him to stop being a Christian and become a loyal Roman. Valentine would not deny his beliefs, and he refused. He was sent to prison until he could be executed. While he was in prison, he sent out letters to his friends and asked to be prayed for by writing *Remember your Valentine*.

Valentine was killed on the 14th or the 24th of February in the year 269 or 270. We celebrate Valentine's Day on February 14th in honor of St. Valentine.

Answer the following:

1. Name the Emperor who ruled during Valentine's lifetime.

a. Claudius I	b. Claudius II
c. Nero	d. Augustus

2. The Emperor wanted men to:
 - a. live at home and work for the empire.
 - b. raise children and be loyal Roman citizens.
 - c. go to other countries and raise families.
 - d. go fight wars in other lands.

3. Valentine disobeyed the Emperor's orders twice. What TWO things did he refuse to do?

a. stop performing marriages	b. kneel to the Emperor
c. stop being a Christian	d. read the Bible

Answer Key**The Story of St. Valentine****I. Answer the following:**

1. b
2. d
3. a and c

II. Match the words to the correct meaning.

1. g
2. i
3. h
4. b
5. f
6. a
7. d
8. j
9. c
10. e

มหาวิทยาลัยราชภัฏสุราษฎร์ธานี
Buriram Rajabhat University

Lesson Plan 4

Subject : English	Unit 1 Lesson Plan 4	Level :Intermediate
Theme : Environment		Time : 2 periods
Topic : Electric fish		Date :June 2011

Concept: Reading is a crucial skill that leads to new knowledge. Students should know how to read effectively and apply the knowledge to their daily life.

Terminal Objective: Students are able to describe the characteristics of electric fish.

Enabling Objectives: Students are able to...

1. Pronounce and give the meaning of the words correctly.
2. Answer the questions about the Electric Fish from passage correctly.
3. Summarize the main idea of the text they read.
4. Do the exercise correctly.

Content

1. The passage "Electric fish".
2. Vocabulary: Tropical, powerful, fresh water, scary, electric etc.
3. Structure: Present Simple tense.

Teaching Procedure:

Note: Students should already be familiar with Electric fish.

1. Warm Up

- 1.1 Teacher tells the objectives of study.
- 1.2 Teacher lets student look at the picture and try to answer the question.
- 1.3 Teacher asks students:
 - Teacher: What is this?
 - Student: It's a fish.
 - Teacher: Where do fish live?
 - Student: They live in canal, pond, sea etc.....
 - Teacher: Do you know some fish are dangerous?
 - Student: Yes, may be piranha.
 - Teacher: Yes, that right. Today we would like to read about the fish that is as dangerous as piranha. It's an Electric fish.
- 1.4 Teacher activates student's prior knowledge and asks them about electric fish.

2. Presentation

(Pre-reading)

- 2.1 Students receive the reading passage "Electric Fish".
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students express the opinions that they need to know more about electric fish.

Step K

- 2.4 Teacher gives the KWL chart for students and lets them write down about the things they have known in column K.
- 2.5 Students brainstorm and record the things they know about electric fish in the K column until they cannot think of more.
- 2.6 Students discuss about what they wrote in the K column.
- 2.7 Teacher records the students' prior knowledge of electric fish on the K section of KWL chart in the blackboard.
- 2.8 Teacher introduces new vocabulary and grammar structure.

3. Practice**(While-reading)****Step W**

- 3.1 Students write the things that they want to know about the electric in column W.
 - 3.1.1 Teacher encourages students to share something else they would like to know about electric fish.
 - 3.1.2 Students make the questions that describe what they want to know from the passage. Then, they record the questions in column W.
- 3.2 Students start reading by skimming it.
- 3.3 Students read the passage again by scanning it.
- 3.4 The teacher lets the student answer the questions and correct it.

4. Production**(Post-reading)**

- 4.1 Students write mind mapping about the dangerous of Electric fish.
- 4.2 Some students present their mind mapping.

Step L

- 4.3 Each student write down the things he/she has learned from reading the passage in column L.
 - 4.3.1 Students record the information after reading the passage about what they have learned in column L.
 - 4.3.2 Students check what new information that they have learned to answer the questions in the W column.
4. Students share what they have learned about the electric fish in large group. Teacher records these results on the large class KWL chart.

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

- 6.1 Reading passage focuses on reading comprehension
- 6.2 KWL chart
- 6.3 Word cards
- 6.4 Pictures

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....
.....

8.2 Process/Enduring-understanding:

.....
.....

8.3 Product/Achievement:

.....

8.4 Attitude/Quality:

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9. Problems

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10. Suggestions

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.....

(signature).....

Mrs. Wiphaporn Dangsi

Teacher

Work Sheet 1

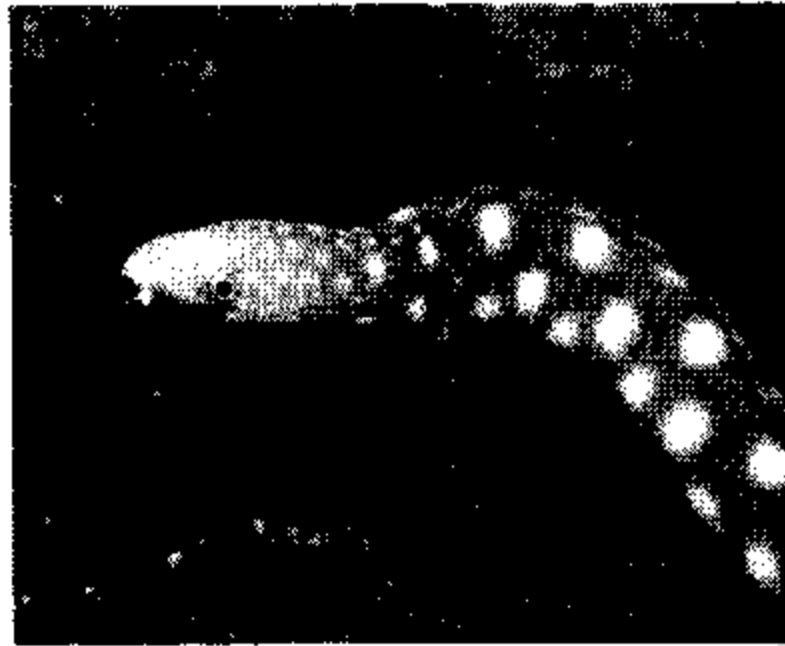
Step K, Step W, Step L

- Direction:** 1. Write what you know about “Electric fish” in Column K
 2. Write what you want to know about “Electric fish” in Column W.
 3. Write what you have learned about Electric fish from the passage in Column L

Step K What I know	Step W What I want to know	Step L What I have learned

Name _____ Date _____

Watch Out For Electric Fish!



You may have heard about electric fish, but do you know what they are really like? Electric fish can be found in many areas of the world, both tropical, in seas and oceans, and also in freshwater river and lakes. Electric fish are powerful and dangerous. Some kinds of them can even send their electric shock into northern oceans. However, some fish are not as scary as they seem.

- 5 For example, if a healthy person were struck by the electric shock of a large electric eel, which can release 600 volts or more, he would not die, because the amperage from the electric eel is quite low, although its shock can be nasty.

The electric shock of these fish, including the Electric Catfish from tropical Africa, comes from their electric organs. They let out electric waves from electric cells in their bodies in order to
 10 keep predators away. Besides keeping away predators, their shock can be used as a kind of echo location as well. More examples of fish with electric organs are the Elephant Fish of Africa and the Knife Fish of South America, both of which are aquarium fish.

There are public aquariums that put fish in the tank in order that people can watch the inhabitants release their electric waves. However, not all electric fish can be seen in aquariums.
 15 About 250 species of electric fish are too dangerous so they have to be studied in museums or on field expeditions. The structure of the fish's electric organs can be quite hard to understand. They are under the skin surface. Their electric cells are in a structure that looks like a honeycomb. It is full of a jelly covering and supporting nerve endings, which are joined with a special lobe in the fish's brain. People are still studying this subject and it surely will gain immense interest from
 20 scientists in years to come.

I. Choose **A** for the true statements and **B** for the wrong ones.

-1. Only freshwater fish have electric organs.
-2. Some fish do have electric organs.
-3. Such fish are found only in salt water.
-4. Some give out electric rays so strong that they extend even into northern oceans.
-5. Large electric eels kill many men.
-6. They can give shocks also have high amperage.
-7. These shocks also have high amperage.
-8. The electric organs are located on all areas of the fish's body.
-9. Many electric fish are not suitable for aquariums.
-10. Electric fishes use their shocking ability to defend themselves.

II. Answer the following questions.

1. Name 3 electric fish.

- a.....
- b.....
- c.....

2. Why are electric fish shocks unlikely to kill any normal, healthy person?

.....

3. What is the main idea of the passage?

- a. Electric fish are powerful and dangerous.
- b. Electric shock comes from the electric organs of the fish.
- c. There are many kinds of electric fish.
- d. Some electric fish are raised in aquariums.

4. The electric organs.....

- a. are used on field expeditions
- b. are found just beneath the surface of the skin
- c. are protected from rust by jelly
- d. are confined to museums

5. Is it possible to show when the fishes are discharging electricity?

- a. Yes
- b. No.
- c. Only in museums.
- d. May be.

6. What is the purpose of the jelly in the honeycomb-like structure?

.....

7. The fish may also use their electrical impulses.....

- a. to support nerve ending
- b. as sexual stimulant
- c. as a form of echo location
- d. to change their batteries

8. Electric fish

- a. are commonly found in Arctic
- b. are commonly found in warm waters
- c. are all suitable for aquariums
- d. are filled with jelly

B. Vocabulary

Choose the appropriate meaning for each word.

1. **Nasty** means.....

- a. painful
- b. quick
- c. bad
- d. fatal

2. **Tropical** means.....

- a. the third
- b. equatorial
- c. aquatic
- d. dark-skined

3. **Inhabitants** are.....

- a. electric fish
- b. those living in water
- c. those living in sin
- d. those living inside

Answer Key

“Watch Out For Electric Fish”

- I.
- | | |
|------|-------|
| 1. B | 6. A |
| 2. A | 7. B |
| 3. B | 8. B |
| 4. B | 9. A |
| 5. B | 10. A |

- II. 1. a. Electric Catfish
 b. Elephant Fish of Africa
 c. Knife Fish of South America
2. The amperage from the electric eel is quite low.
 3. c
 4. b
 5. a
 6. To support nerve endings
 7. c
 8. b

B. vocabulary

- | | | |
|------|------|------|
| 1. c | 4. c | 7. b |
| 2. b | 5. b | 8. b |
| 3. d | 6. d | |

Lesson Plan 5

Subject : English	Unit 1 Lesson Plan 5	Level :Intermediate
Theme : Food		Time : 2 periods
Topic : A POPULAR INVENTION		Date :June 2011

Concept: Identify the main ideas, analyzing, discussing and summarizing the text is important for learners to comprehend the texts. Moreover, knowing beliefs and culture of the native speaker can help Thai learners understand the texts and learners can use KWL strategy to improve their reading comprehension effectively.

Terminal Objective: Students are able to read the feature article.

Enabling Objectives: Students are able to...

1. Pronounce and giving the meaning of the words correctly.
2. Answer the questions about the passage correctly.
3. Summarize the main idea of the text they read.
4. Do the exercise correctly.

Content

The passage: A POPULAR INVENTION.

Vocabulary : Invention, substance, sapodilla, substitute, etc.

Structure : Past simple tense.

Teaching procedure:

Note: Students should already be familiar with A POPULAR INVENTION.

1. Warm up

- 1.1 Teacher tells students the objectives of study.
- 1.2 Teacher shows the picture and lets the students look at the picture and try to answer the questions.
- 1.3 Teacher asks students:
 - Teacher: What is this?
 - Students: It's a chewing gum.
 - Teacher: Can you eat it?
 - Students: Yes.
- 1.4 Teacher activates students' prior knowledge by asking them about a chewing gum.

2. Presentation

(Pre-reading)

- 2.1 Students receive the reading passage "A POPULAR INVENTION".
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students give the opinions that they need to know more about A POPULAR INVENTION.

Step K

2.4 Teacher gives the KWL chart for students and lets them write down about the things they have known in column K.

2.4.1 Students brainstorm about the topic.

2.4.2 Students share everything they know and record all of their ideas in column K.

2.5 Teacher introduces new vocabulary and grammar structure.

3. Practice**(While-reading)****Step W**

3.1 Students write the things that they want to know about the chewing gum in column W.

3.1.1 Students make the questions that describe what they want to know from the passage.

3.1.2 Students record the questions in column W.

3.2 Students start reading by skimming it.

3.3 Students read the passage again by scanning it.

3.4 The teacher lets the student answer the questions and correct it.

4. Production**(Post-reading)**

4.1 Students are divided a group of five. Each group discusses the passage.

4.2 Each group selects the representative to give the opinions and what they have learned from reading the passage.

Step L

4.3 Each student write down the things she/he has learned from reading the passage in column L.

4.4 Students record the information after reading the passage about what they have learned in column L.

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

6.1 Reading passage focuses on reading comprehension

6.2 KWL chart

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Work Sheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....

.....

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8.2 Process/Enduring-understanding:

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8.3 Product/Achievement:

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8.4 Attitude/Quality:

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9. Problems

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10. Suggestions

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(signature).....

Mrs. Wiphaporn Dangsi

Teacher

KWL CHART

Step K, Step W, Step L

- Direction:**
1. Write what you know about “A POPULAR INVENTION ” in Column K
 2. Write what you want to know about “A POPULAR INVENTION” in Column W.
 3. Write what you have learned about chewing gum from the passage “A POPULAR INVENTION ” in Column L

Step K What I know	Step W What I want to know	Step L What I have learned

A POP!-ULAR INVENTION



Did you know that the invention of chewing gum was an accident? People have been chewing gum-like substances since the early times. Some were made from thickened resin, a substance that comes from plants. Others were made from grains and waxes. But chewing gum, as we know it today, was invented by mistake in 1870 when Thomas Adams, a photographer, became friends with a Mexican military general, Antonio Lopez de Santa Anna.

After Santa Anna defeated the Texans at the Alamo, he was exiled from Mexico. Santa Anna stayed with Thomas Adams in New York and introduced him to a gummy substance people in Mexico liked to chew called chicle. Chicle was the milky sap from sapodilla trees that grew in the tropical rain forests in Central America. Adams wanted to use the chicle to invent a cheaper substitute for rubber. He tried to make all sorts of items out of chicle, including toys and rubber boots, but each of his experiments failed. One day, while he was contemplating his failures, he remembered that people in Mexico chewed chicle. Curious, he popped a piece of the chicle into his mouth and began to chew on it. Adams added licorice flavor to the chicle and opened the world's first chewing gum factory.

30 Much like Adams's discovery of chewing gum, the invention of bubble gum was also an accident. In 1928, Walter Diemer, an accountant for the Flier Gum Company in Philadelphia, stumbled upon the invention while
35 experimenting with new recipes for chewing gum. Diemer created a gum that was less sticky and more stretchy than regular chewing gum. Diemer learned he could blow bubbles with this new gum.

40 Accidents or not, chewing gum and bubble gum are two inventions that people across the globe pop over!



A POP!-ULAR INVENTION

by Kelly Hashway

1. What is chichle made from?

- | | |
|-------------|--------------------|
| a. rubber | b. licorice |
| c. tree sap | d. tropical fruits |

2. When Santa Anna defeated the Texans, he was exiled from Mexico. What does the word exiled mean?

- | | |
|------------------|--------------------|
| a. hidden from | b. forced to leave |
| c. called a hero | d. retired |

3. Put these events in sequential order.

Write 1st, 2nd, 3rd, 4th, 5th, or 6th on each line.

- | | |
|-------|---|
| _____ | Adams becomes curious to find out what chichle tastes like, so he tries it. |
| _____ | Antonio Lopez de Santa Anna comes to New York and stays with Thomas Adams. |
| _____ | Adams tries to make toys and boots out of chichle. |
| _____ | Santa Anna introduces Thomas Adams to chichle. |
| _____ | Adams opened the first chewing gum factory in the world. |
| _____ | Walter Diemer invents bubble gum. |

4. Explain why the invention of chewing gum is considered an accident.

A POP!-ULAR INVENTION

Vocabulary Activity

Part 1: Reread “A Popular Invention” by Kelly Hashway. As you read highlight the following vocabulary words in the story.

resin	exiled	tropical	contemplate
licorice	accountant	defeated	

Part 2: Match each vocabulary word on the left with its definition on the right.

- | | |
|----------------------|---|
| _____ 1. resin | a. to concentrate or engage in deep thought |
| _____ 2. exile | b. flavor from a plant used in food |
| _____ 3. tropical | c. to win a victory over |
| _____ 4. contemplate | d. warm climate with lots of rainfall |
| _____ 5. licorice | e. to force someone to leave |
| _____ 6. accountant | f. someone whose job it is to keep track of money for a business |
| _____ 7. defeat | g. clear, yellowish, or brownish substance that oozes from certain trees; sap |

Part 3: Use a vocabulary word from the list to complete each sentence.

- 8. Henry didn't like shoveling snow, so he moved to a place with a _____ climate.
- 9. If you would like a job as an _____, you should have excellent math skills.
- 10. The Buffalo Sabres hockey team will _____ the Boston Bruins.
- 11. The chess player sits quietly and tries to _____ his next move.
- 12. Black _____-flavored gumdrops are my favorite.

ANSWER KEY
A POP!-ULAR INVENTION
by Kelly Hashway

- 1. What is chichle made from? **c**
 - a. rubber
 - b. licorice
 - c. tree sap
 - d. tropical fruits
- 2. When Santa Anna defeated the Texans, he was exiled from Mexico. What does the word exiled mean? **b**
 - a. hidden from
 - b. forced to leave
 - c. called a hero
 - d. retired
- 3. Put these events in sequential order.
 Write 1st, 2nd, 3rd, 4th, 5th, or 6th on each line.
4th Adams becomes curious to find out what chichle tastes like, so he tries it.
1st Antonio Lopez de Santa Anna comes to New York and stays with Thomas Adams.
3rd Adams tries to make toys and boots out of chichle.
2nd Santa Anna introduces Thomas Adams to chichle.
5th Adams opened the first chewing gum factory in the world.
6th Walter Diemer invents bubble gum.
- 4. Explain why the invention of chewing gum is considered an accident.
Adams was trying to invent an artificial rubber substance when he tried chicle and realized it would make great gum.

ANSWER KEY
A POP!-ULAR INVENTION
Vocabulary Activity

Part 1: Reread “A Pop!-ular Invention” by Kelly Hashway. As you read highlight the following vocabulary words in the story.

resin	exiled	tropical	contemplate
licorice	accountant	defeated	

- Part 2:** Match each vocabulary word on the left with its definition on the right.
- g 1. resin
 - e 2. exile
 - d 3. tropical
 - a 4. contemplate
 - b 5. licorice
 - a. to concentrate or engage in deep thought
 - b. flavor from a plant used in food
 - c. to win a victory over
 - d. warm climate with lots of rainfall
 - e. to force someone to leave

f 6. accountant

f. someone whose job it is to keep track of money for business

c 7. defeat

g. clear, yellowish, or brownish substance that oozes from certain trees; sap

Part 3: Use a vocabulary word from the list to complete each sentence.

8. Henry didn't like shoveling snow, so he moved to a place with a tropical climate.

9. If you would like a job as an accountant, you should have excellent math skills.

10. The Buffalo Sabres hockey team will defeat the Boston Bruins.

11. The chess player sits quietly and tries to contemplate his next move.

12. Black, licorice-flavored gumdrops are my favorite.

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Buriram Rajabhat University

Lesson Plan 6

Subject : English	Unit 1 Lesson Plan 6	Level :Intermediate
Theme : Nature		Time : 2 periods
Topic : More Than Just a Tail		Date :June 2011

Concept: Understanding about the nature is necessary for students. They should have ability in interpreting what has been heard and read from various types of media, and ability to express opinions with reasons.

Terminal Objective: Students are able to interpret and comprehend the text with using KWL strategy in reading comprehension.

Enabling Objectives: Students are able to...

1. Pronounce and give the meaning of the words correctly.
2. Interpret the text correctly.
3. Answer the questions from passage "More Than Just a Tail" correctly.
4. Summarize the main idea of the text.
5. Express their opinion about the passage.

Content

The passage: More Than Just a Tail

Vocabulary: Wonder, actually, curl up, parachute, enemy, mud etc.

Structure: Present simple tense

Teaching procedure:

Note: Students should already be familiar with the animals that have tail.

1. Warm up

- 1.1 Teacher tells students the objectives of study.
- 1.2 Teacher shows the picture and lets the students look at the picture and try to answer the question.
- 1.3 Teacher asks students:
 - Teacher: What kinds of animals have got a tail?
 - Student: There are monkeys, elephants, squirrel, crocodiles, a dog and a cat.
 - Teacher: Is tail useful for animal?
 - Student: Yes/No
 - Teacher: OK, today we will read about More Than Just a Tail that you will know if a tail is useful for animals or not.
- 1.4 The teacher shows the pictures of animals that have got tails.
- 1.5 Teacher activates student's prior knowledge by asking them about what kinds of animals that have got tail.

2. Presentation **(Pre-reading)**

- 2.1 Students receive the reading passage “More than just a tail”.
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students give the opinions that they need to know more about the tail.

Step K

- 2.4 Teacher gives the KWL chart to student and lets them write down about the things they have known in column K.
 - 2.4.1 Students brainstorm and record the things they know about “More than Just a Tail” in the K column until they cannot think of more.
 - 2.4.2 Students discuss what they wrote in the K column.
- 2.5 Teacher records the students’ prior knowledge of “More than Just a Tail” on the K section of KWL chart on the blackboard.

3. Practice **(While-reading)**

Step W

- 3.1 Students write the things that they want to know about the tail and write it on column W .
 - 3.1.1 Teacher encourages students to share something else they would like to know about “More than Just a tail”.
 - 3.1.2 Students make the questions that describe what they want to know from the passage. Then, they record the questions in column W.
- 3.2 Students start reading by skimming it.
- 3.3 Students read the passage again by scanning it.
- 3.4 Students do the exercises and teacher corrects it.

4. Production **(Post-reading)**

Step L

- 4.1 Students discuss about the passage.
- 4.2 Each student writes down the thing he/she has learned from reading the passage in column L.
- 4.3 Students record the information after reading the passage about what they have learned in column L.
- 4.4 Students check what new information that they have learned to answer the question in the W column.
- 4.5 Students share what they have learned about “More than Just a tail” in large group. Teacher records these results on the large class KWL chart.

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Material

- 6.1 Reading passage focuses on reading comprehension
- 6.2 KWL chart
- 6.3 Pictures

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Work Sheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....

.....

8.2 Process/Enduring-understanding:

.....

.....

8.3 Product/Achievement:

.....

.....

8.4 Attitude/Quality:

.....

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9. Problems

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.....

10. Suggestions

.....

.....

.....

(signature).....

Mrs. Wiphaporn Dangsi
Teacher

KWL CHART

Step K, Step W, Step L

- Direction:** 1. Write what you know about “tail” in Column K.
 2. Write what you want to know about “tail” in Column W.
 3. Write what you have learned about tail from the passage “More than Just a Tail” in Column L.

Step K What I know	Step W What I want to know	Step L What I have learned

More That Just at Tail



1 Have you ever wondered why animals have tails? Actually, The tail is one of the most useful tools they have. Different kind of animals needs different of tails for its own purpose. Many animals use tails to balance themselves as when the bird hop or fly or when the rabbit and the kangaroos jump. Some animals living on the tree can pick fruit by hanging their tails from

5 branches. A fox curls up under its tail to feel warm. Tail could even save some animals' lives. When the squirrel falls from a tree, it has tail as a parachute bringing it down to the ground safely. In a similar way, an alligator fight against the enemies with the powerful tail. However, for some animals, their tails are very important, while, for others, their tails are only little use. A

10 beaver has a tail to help it swim, to help it build home with mud, to hold itself steady while using its teeth to cut the tree down. Finally, a beaver also makes a warning sound from its tail. While the beaver's tail is very useful tool, a cow uses its tail only to brush the annoying flies away.

A. Comprehension

Answer the following questions.

1. Complete the sentence.
 - a. A fox uses its tail to.....
 - b. A cow uses it tail to.....
 - c. An alligator uses its tail to.....
 - d. A bird uses its tail to.....

2. The beaver uses its tail.....

a. to keep pesky flies away	b. to help pack home with mud
c. to help it land safely	d. to fight off enemies.

3. What other things does the beaver use its tail for?
 - a.
 - b.
 - c.

4. We know from the story that.....
 - a. a cow uses its tail to make a warming sound
 - b. a beaver's tail is essential to its existence
 - c. a kangaroo lean on its tail when it hops
 - d. a fox uses its tail as a parachute

5. According to the text, animals' tails.....

a. must be powerful	b. should be well-taken care of
c. serve different purposes	d. are generally of little use

Answer Key

1. a. feel warm
b. brush the annoying flies away
c. fight against the enemies
d. balance itself as when it hops or flies

2. b

3. a. helping it swim
b. helping it build home with mud
c. holding itself steady while using its teeth to cut the tree down

4. b

5. c

6. d

7. a

8. b

B. Test your word power

1. b 2. a 3. b 4. b 5. c 6. d 7. c 8. c 9. b

มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

Lesson Plan 7

Subject : English	Unit 1 Lesson Plan 7	Level :Intermediate
Theme : Environment		Time : 2 periods
Topic : Wonder Grass		Date :June 2011

Concept: Learning about the environment is important for human lives. Therefore, students should get knowledge and express the opinion from reading feature articles.

Terminal Objective: Students are able to understand about the environment around themselves and can identify the main idea, analyze the essence of the text.

Enabling Objectives: Students are able to...

1. answer the questions about the text .
2. summarize the text they read.
3. do the exercise correctly.
4. write mind mapping about the wonder grass.

Content

The passage Wonder Grass

Vocabulary : bug, poet, bloom, seed, slim, shoot, remarkable etc.

Structure : Present simple tense.

Teaching Procedure:

Note: Students should already be familiar with the bamboo.

1. Warm up

- 1.1 Teacher tells students the objectives of study.
- 1.2 Teacher shows the picture and lets the students look at the picture and try to answer the question.
- 1.3 Teacher asks students:
 - Teacher: What is this?
 - Student: It's a bamboo.
 - Teacher: Is bamboo a tree?
 - Student: Yes/No
 - Teacher: Where can you see the bamboo?
- 1.4 Teacher tells the students about the bamboo.
- 1.5 Teacher activates student's prior knowledge and by asking them about the bamboos.

2. Presentation

(Pre-reading)

- 2.1 Students receive the reading passage "Wonder Grass".
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students share the ideas about what they need to know more about bamboos.

Step K

2.4 Teacher gives the KWL chart to student and lets them write down about the thing they have known in column K.

2.4.1 Students brainstorm and record the things they know about wonder grass in the K column until they cannot think of more.

2.4.2 Students discuss what they wrote in the K column.

2.4.3 Teacher records the students' prior knowledge of wonder grass on the K section of KWL chart in the blackboard.

3. Practice

(While-reading)

Step W

3.1 Students write the things that they want to know about the bamboos in column W.

3.1.1 Teacher encourages students to share something else they would like to know about wonder grass.

3.1.2 Students make the questions that describe what they want to know from the passage. Then, they record the questions in column W.

3.2 Students start reading by skimming it.

3.3 Students read the passage again by scanning it.

3.4 Students do the exercise.

4. Production

(Post-reading)

4.1 Students are divided a group of five. Each group discusses the passage.

4.2 Each group selects the representative to give the opinion about what they have known from reading the passage.

Step L

4.3 Each student writes down the things he/she has learned from reading the passage in column L.

4.3.1 Students record the information after reading the passage about what they have learned in column L.

4.3.2 Students check the new information that they have learned to answer the question in the W column.

4.4 Each student writes mind mapping about the benefit of bamboo.

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

6.1 Reading passage focuses on reading comprehension.

6.2 KWL chart.

6.3 Pictures.

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

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8.2 Process/Enduring-understanding:

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8.3 Product/Achievement:

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8.4 Attitude/Quality:

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9. Problems

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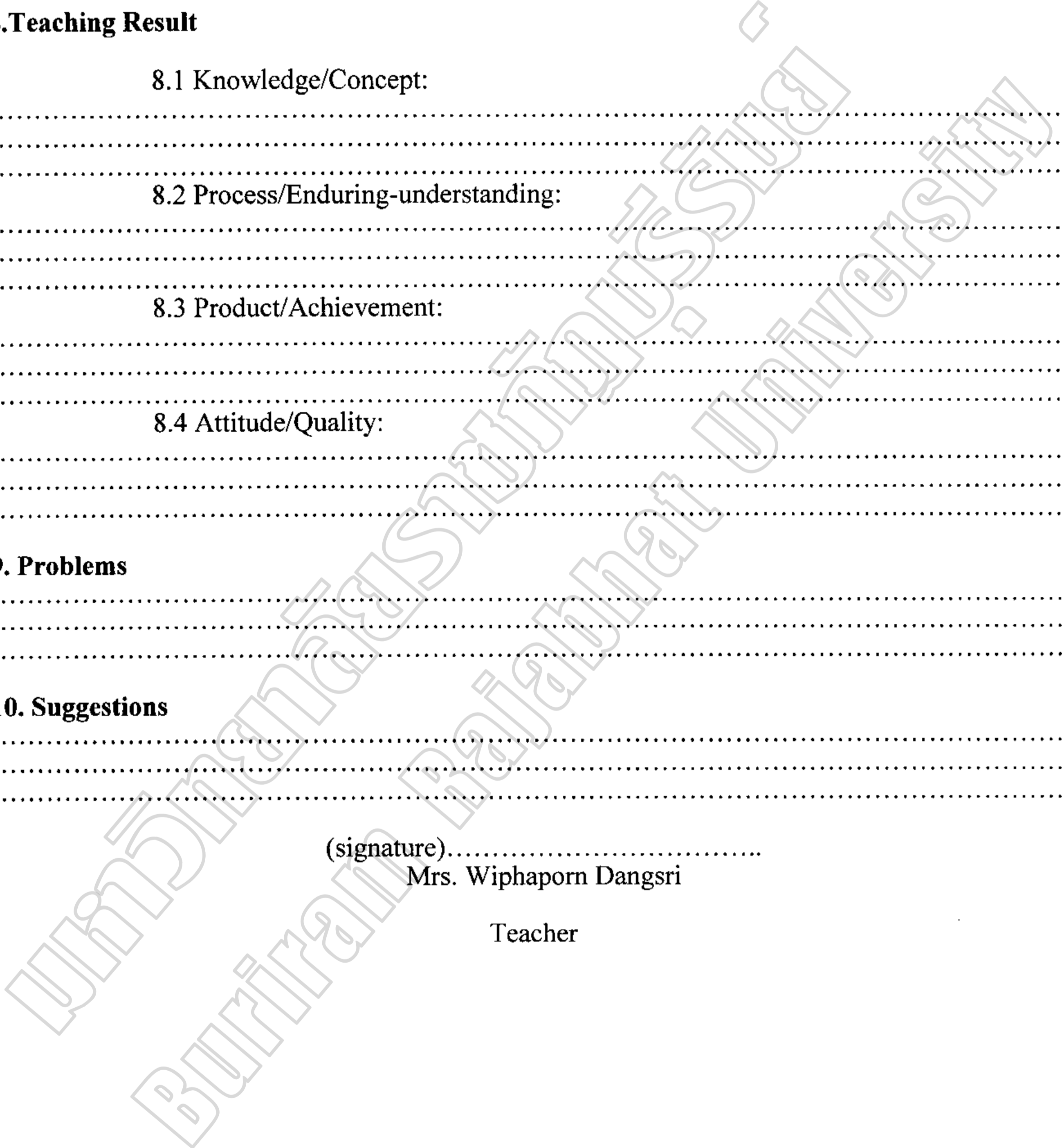
10. Suggestions

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(signature).....

Mrs. Wiphaporn Dangsi

Teacher

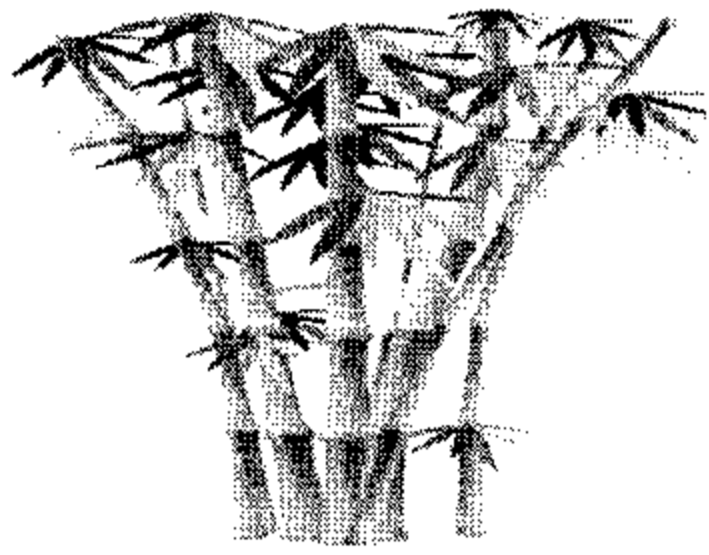


KWL CHART

Step K, Step W, Step L

- Direction:** 1. Write what you know about “wonder grass” in Column K
 2. Write what you want to know about “wonder grass” in Column W.
 3. Write what you have learned about wonder grass from the passage in Column L

Step K What I know	Step W What I want to know	Step L What I have learned



The Wonder Grass

Bamboo may be the most useful plant in the world. We can make use of almost every part of it, from shoots to items. People, especially in China and Japan, eat the tender shoots of bamboo, which are soft and tasty. This kind of food is even canned and shipped to many countries around the world. The leave of some type of bamboo are also favorite food to cows.

5 Not only eatable, bamboo has a lot more uses. Inside the bamboo's hard stem there is the soft pulp. The pulp can be taken out and turned into paper just about the same that we made paper from wood pulp. But bamboo can do a bigger job than that. Although bamboo has along and slim stem, we can build a house from it. The fence, the walls, the roof, the floor, all can be made of bamboo, including furniture, curtains, birdcages, cooking pots or drinking cups. The bamboo stems are so strong that
10 we can build high bridges across the river from them.

Among this remarkable strength lies the surprising truth. Bamboo is not a tree. It is a kind of grass, probably the tallest grass of the world. It can be as tall as a tree that we would feel like a bug while going through the bamboo forest. But not all bamboo grows tall. In more than 500 kinds
15 of bamboo, some are tall but some are no higher than our ankles. Bamboo has straight and thin stems with branches and long, delicate leaves. When the wind blow, this leave would sway slightly. It is the beautiful picture that inspires many paintings. Many Japanese poets write poem and songs about that.

Bamboo grows best in warm and rainy places. Some types bloom and have seeds every year
20 while some may bloom only once in 40 years or never bloom at all. When it dies, new shoots come up from around the roots of the old bamboo. In one week, some kinds of bamboo can grow as well as us and give the shade to our house.

It is hard to believe that grass could be this tall but its stem shows that it is certainly
25 different from trees. The stem of bamboo is hollow. So, it is light when compared to tree wood, maybe so light that we can lift a big piece of it with only one hand. And, because it is hollow, we can stick it together and use it as water pipes. It can be very useful to many farmers when it carries water from a river or lake to their field. We can say that they use the bamboo pipes to "irrigate"
30 their field.

A. Comprehension

Answer the following questions.

1. The word "wonder" implies things EXCEPT.....
 - a. Bamboo is useful in many ways.
 - b. Bamboo is grass, not a plant.
 - c. Bamboo is very strong.
 - d. Bamboo inspires poets to write poems on its item.
2. Bamboo is.....
 - a. a member of the tropical tree family
 - b. a member of the paper family
 - c. a member of the grass family
 - d. a very beautiful tree
3. Bamboo likes.....

a. warm dry places	b. Japanese poets
c. wet warm places	d. your ankles

4. Name 6 things people make from bamboo

- | | |
|--------|--------|
| 1..... | 2..... |
| 3..... | 4..... |
| 5..... | 6..... |

5. Bamboo is

- | | |
|---------------------|-------------------|
| a. strong and heavy | b. light and dark |
| c. light and strong | d. wet and warm |

6. Bamboo can be used.....

- | | |
|------------------------|--------------------------------------|
| a. to irritate farmers | b. to stop bugs crawling in the park |
| c. to irritate fields | d. as paint thinner |

II. Tick / for the true statements and x for the wrong ones.

-a. Bamboo has given inspiration to Japanese poets.
-b. All bamboo is tall.
-c. Fishing poles can be made from bamboo.
-d. Bamboo shoots cows.
-e. People eat bamboo shoots.
-f. Fine paper is made from bamboo shoots.
-g. All bamboo blooms every year.
-h. bamboo grows so quickly that people have to trim it from time to time
-i. Bamboo does not break easily.

B. Vocabulary

Choose the appropriate meaning for each word.

1. A Bug is.....

a. one of 500 kinds of grass	b. a small bird
c. an insect	d. a tiny seed
2. A Poet is.....

a. made from bamboo	b. a kind of poet
c. a person who write about bamboo	d. a person who writes poem
3. Bloom means.....

a. flower	b. germinate
c. explode	d. pollenate
4. Seeds are.....

a. bamboo buds	b. tiny things that can grow into new plant.
c. new shoots	d. little blooming particles
5. Slim is.....

a. green	b. uppermost
c. broad	d. slender
6. Shoots are.....

a. flowers	b. buds
c. pistols	d. stamens
7. Remarkable means.....

a. unusual	b. grassy
c. slim	d. fast-growing
8. Probably means.....

a. unlikely	b. likely
c. like me	d. spongy
9. Hollow means.....

a. empty	b. light
c. grassy	d. spongy

10. **Tender** means.....

- | | |
|----------|--------------|
| a. soft | b. tasty |
| c. salty | d. beautiful |

Answers Key
The Wonder Grass

1. d
2. c
3. c
4. 1. chairs 2. tables 3. curtains 4. bridges 5. cooking pots
6. flower vases
5. c
6. c

II.

- a. /
- b. X
- c. /
- d. X
- e. /
- f. X
- g. X
- h. X
- i. X

B. Vocabulary

1. c
2. d
3. a
4. b
5. d
6. b
7. a
8. b
9. a
10. a

Lesson Plan 8

Subject : English	Unit 1 Lesson Plan 8	Level : Intermediate
Theme : Person		Time : 2 periods
Topic : BARACK OBAMA		Date :June 2011

Concept: Knowing and giving information about the famous person in the world is important. Students should express their feeling after reading the text then using KWL strategy to comprehend and interpret effectively.

Terminal Objective: Students are able to describe the characteristic of famous people and give information about it.

Enabling Objectives: Students are able to...

1. pronounce and give the meaning of the words correctly.
2. answer the questions about the famous person in the passage correctly.
3. summarize the text with their own words.
4. do the exercise **Reading Comprehension** correctly.
5. discuss about the famous people

Content

The passage : **BARACK OBAMA**

Vocabulary: mature, transfer, successful, elect, reform, promote etc.

Structure : Present simple tense/past simple Tense

Teaching procedure:

Note: Students should know about **BARACK OBAMA** before.

1. Warm up

- 1.1 Teacher tells the objectives of study.
- 1.2 Teacher shows the picture and lets the students look at the picture and try to answer the question.
- 1.3 Teacher asks students:
 - Teacher: Who is he?
 - Student: **BARACK OBAMA**
 - Teacher: Is he Thai?
 - Student: No. He is American.
 - Teacher: Where does he live?
 - Students: He lives in America.
- 1.4 Teacher tells the students about **BARACK OBAMA**.
- 1.5 Teacher activates student's prior knowledge and ask them about the **BARACK OBAMA**.

2. Presentation

(Pre-reading)

- 2.1 Students receive the reading passage “**BARACK OBAMA**”.
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students give the opinions about what they need to know more about **BARACK OBAMA**.

Step K

- 2.4 Teacher gives the KWL chart to student and lets them write down about the thing they have known in column K.
 - 2.4.1 Students discuss the topic and write down everything they know about Barack Obama in column K
 - 2.4.2 Teacher summarize the things that students know on the backboard.
 - 2.4.3 Teacher teaches students the vocabulary in the passage.

3. Practice

(While-reading)

Step W

- 3.1 Students write the things that they want to know about **BARACK OBAMA** in column W.
 - 3.1.1 Teacher encourages students to share something else they would like to know about **BARACK OBAMA**.
 - 3.1.2 Students make the question that they want to know from the passage; for example,
 - Who is he?
 - What does he do
 - Where does he live now?
 - How many people are there in his family?
 -vary.....
- 3.2 Students make the questions that describe what they want to know from the passage. Then, they record the questions in column W.
- 3.3 Students start reading by skimming it.
- 3.4 Students read the passage again by scanning to answer the questions.
- 3.5 Students do exercise.

4. Production

(Post-reading)

- 4.1 Students are divided into a group of five. Each group discusses the passage.
- 4.2 Each group selects the representative to give opinions and what They have known from reading the passage.

Step L

- 4.3 Each student writes down the things he/she has learned from reading the passage in column L. They answer the question from column W.
 4.4. Students summarize the passage with their own words.

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

- 6.1 Reading passage focuses on reading comprehension.
 6.2 KWL chart.
 6.3 Picture.

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
 7.2 Participate observation form.
 7.3 KWL Chart.
 7.4 Worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....

8.2 Process/Enduring-understanding:

.....

8.3 Product/Achievement:

.....

8.4 Attitude/Quality:

.....

9. Problems

.....

10. Suggestions

.....

(signature).....

Mrs. Wiphaporn Dangsi

Teacher

Reading Comprehension/ Biography

BARACK OBAMA



Barack Hussein Obama is America's 44th President. He was born on August 4th, 1961, in Honolulu, Hawaii, to Ann Dunham, a white American from Kansas, and Barack Obama, Sr., who was from Kenya. Barack was the only child born to his parents, who married on February 2, 1961, and divorced in 1964, but he has seven half-siblings from his father's family, and one half-sister with whom he was raised, the daughter of his mother and her second husband.

As a child, Barack moved from Hawaii to Indonesia, when his mother's Indonesian second husband had to return in 1967. Barack attended school there, but returned to Hawaii when he was ten years old, where his grandparents raised him. He graduated from high school, where he was said to be mature for his age, in 1979. He first attended Occidental College in Los Angeles, before transferring to Columbia University in New York City. He graduated with a Bachelor's degree in political science in 1983.

He worked for four years in New York. He then moved to Chicago, where he worked as a community organizer, doing things such as helping people find jobs or prepare for college, before entering Harvard Law School in 1988. In his second year at Harvard, he was elected President of the *Harvard Law Review*. He graduated from Harvard in 1991 with a Juris Doctor degree, and returned to Chicago. Obama organized a successful voter registration drive in Illinois in 1992. He published his first book of memoirs, *Dreams from My Father*, in 1995. He taught constitutional law at the University of Chicago Law School for 12 years. He also worked at a law firm and as a community organizer.

Obama was elected to the Illinois state Senate in 1996. He served there until 2004, working to reform ethics and health-care laws; achieve tax credits for low-income workers; negotiate welfare reform; and promote increased subsidies for childcare. He worked to change unfair lending practices, and was praised by police organizations for police reforms he initiated. He was elected to the US Senate in 2004, making him the fifth African-American senator in history.

Barack Obama ran for President in the 2008 campaign. His running mate was Senator Joe Biden from Delaware. His main opponent was Senator John McCain from Arizona. Obama, an eloquent and inspiring orator, communicated a message of change and hope during his campaign. On November 4, 2008, Barack Obama won the election. He was inaugurated on January 20th, 2009, on the steps of the Capitol in Washington, D.C and became America's first African-American President.

Choose the best answer for each question about BARACK OBAMA

1. Which of the following would be a good title for this text?
 - a. Barack Obama, Our 44th President
 - b. Barack Obama, Bi-Cultural Child
 - c. Barack Obama, Community Organizer
 - d. Barack Obama, African-American Politician

2. Obama spent a few years of his childhood in which foreign country?
 - a. Kenya
 - b. Indonesia
 - c. Hawaii
 - d. all of these
3. Obama was elected President of the *Harvard Law Review* at which university?
 - a. Columbia University
 - b. University of Chicago
 - c. Harvard University
 - d. Occidental College
4. Obama taught constitutional law at which university?
 - a. Columbia University
 - b. University of Chicago
 - c. Harvard University
 - d. Occidental College
5. What was Obama's first political office?
 - a. Chicago political organizer
 - b. Illinois State Senator
 - c. United States Senator from Illinois
 - d. President of the United States
6. What is Obama's speaking style?
 - a. dry and wooden
 - b. meandering and fanciful
 - c. articulate and inspirational
 - d. cold and ironic

Reading Comprehension/Biography

Name _____ Date _____

Answer these questions about BARACK OBAMA in complete sentences.

1. Why did Obama move to Indonesia when he was a child?

2. What are the nationalities of Obama's half-siblings?

3. Why do you think Obama worked as a community organizer?

4. Was Obama the first African-American elected to the Senate?

5. What were the main messages of Obama's 2008 presidential campaign?

Answer Key**MULTIPLE CHOICES**

1. a
2. b
3. c
4. b
5. b
6. c

SHORT ANSWER

(Answers will vary; accept reasonable responses that include the following ideas)

1. His Indonesian step-father had to return.
2. Kenyan and Indonesian
3. He wanted to improve life for the needy.
4. No, he was the fifth.
5. Change and hope

ESSAY

Answers will vary.

มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

Lesson Plan 9

Subject : English	Unit 1 Lesson Plan 9	Level :Intermediate
Theme : Environment		Time : 2 periods
Topic : TSUNAMI		Date :July 2011

Concept: Reading information about important phenomena in the world is very crucial for human life. Therefore, learners should have a good chance to describe, explain, compare and express opinions about matters, issues, news, and situations heard and read.

Terminal Objective: Students are able to understand and explain about the Tsunami.

Enabling Objectives: Students are able to...

1. Answer the questions about Tsunami correctly.
2. Summarize the text .
3. Do the exercise correctly.

Content

The passage : "Tsunami"

Vocabulary: eruption, capable, risk, negligible, emergency, disaster etc.

Structure: Present simple tense

Teaching procedure:

Note: Students should already know something about the Tsunami.

1. Warm up

1.1 Teacher tells students the objectives of study.

1.2 Teacher asks students:

Teacher: What is happening in Japan now?

Student:vary.....

Teacher: Have you ever heard about the Tsunami before?

Student: Yes/no

Teacher: What is the cause of Tsunami?

Students:.....vary.....

1.3 The teacher: Today, we will learn about Tsunami .

2. Presentation

(Pre-reading)

2.1 Students receive the reading passage "Tsunami".

2.2 Students look at the topic of the reading and guess what they will get from reading it.

2.3 Students give the opinions about what they need to know more about Tsunami .

Step K

2.4 Teacher gives the KWL chart to students and lets them write down about the things they have known in column K.

2.4.1 Students brainstorm and record the things they know about Tsunami in the K column until they cannot think of more.

2.4.2 Students discuss what they wrote in the K column.

2.4.3 Teacher records the students' prior knowledge about Tsunami on the K section of KWL chart in the blackboard.

3. Practice**(While-reading)****Step W**

3.1 Students write the things that they want to know about the Tsunami in column W.

3.1.1 Teacher encourages students to share what they would like to know about the Tsunami.

3.1.2 Students make the questions that describe what they want to know from the passage. Then, they record the questions in column W.

3.2 Students start reading by skimming it.

3.3 Students read the passage again by scanning it.

3.4 The teacher lets the student answer the questions and correct it.

4. Production**(Post-reading)**

4.1 Students are divided into a group of five. Each group discusses the passage.

4.2 Each group selects the representative to give the opinion about what they have known from reading the passage.

Step L

4.3 Each student writes down the thing he/she learned from reading the passage in column L.

4.3.1 Students record the information after reading the passage about what they have learned in column L.

4.3.2 Students check the new information that they have learned to answer the questions in the W column.

4.4 Students summarize the information from the text.

5. Wrap Up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

6.1 Reading passage focuses on reading comprehension.

6.2 KWL Chart.

6.3 Newspaper.

6.4 Picture.

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

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8.2 Process/Enduring-understanding:

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8.3 Product/Achievement:

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8.4 Attitude/Quality:

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9. Problems

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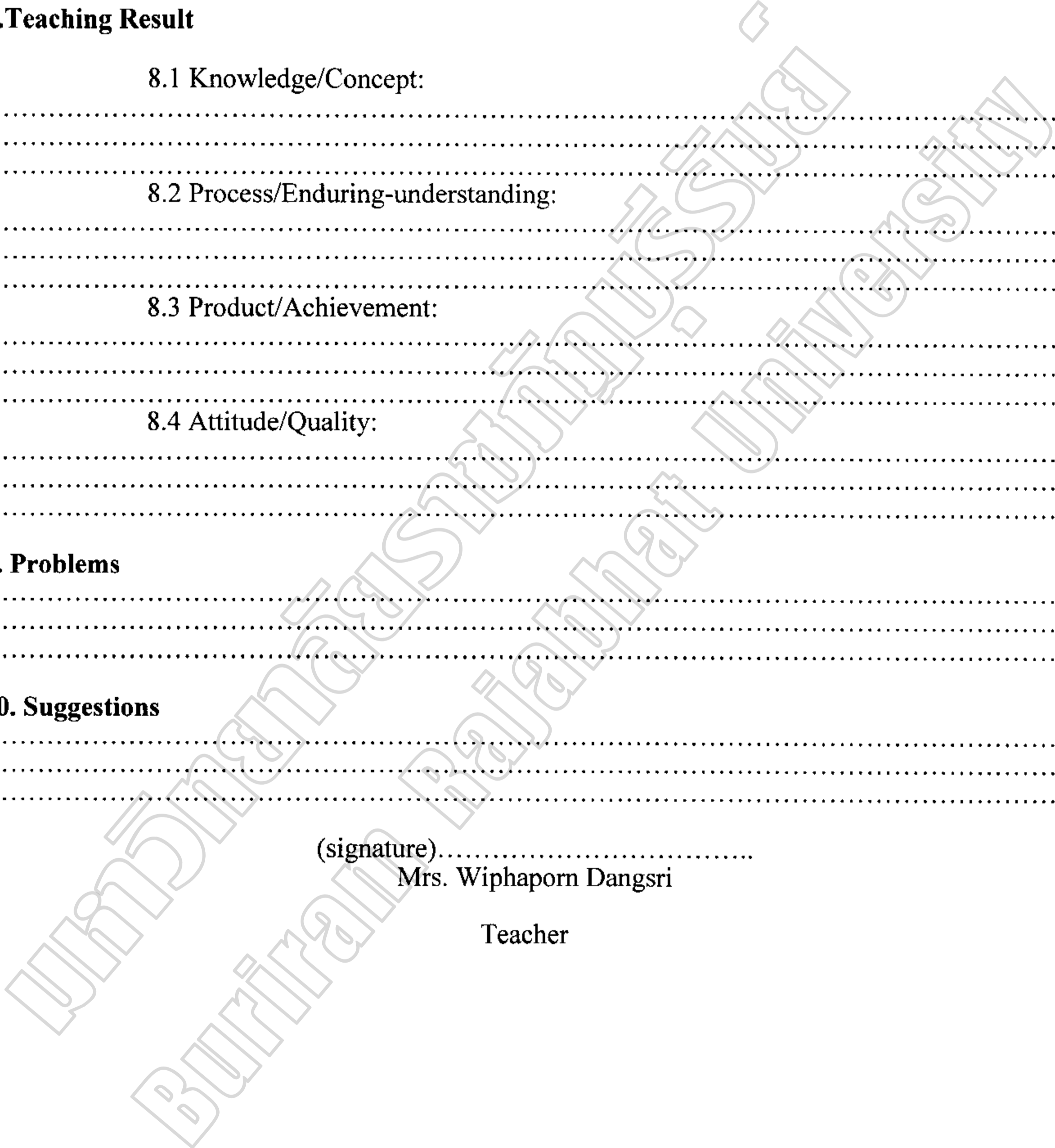
10. Suggestions

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(signature).....

Mrs. Wiphaporn Dangsi

Teacher



KWL CHART

Step K, Step W, Step L

- Direction:** 1. Write what you know about “Tsunami” in Column K
 2. Write what you want to know about “Tsunami ” in Column W.
 3. Write what you have learned about Tsunami from the passage in Column L

Step K What I know	Step W What I want to know	Step L What I have learned

Following Instructions

Read the instructions very carefully before you start writing anything.

Team Collaboration and Task

Your name/s:

Your class:

Date:

Assessment

Your will be graded out of 100 points for the following:

1. 60 - points for answering all the questions in full sentence form.
2. 10 - points for working together quietly and for getting along.
3. 10 - points for raising your hand and waiting quietly when you need help.
4. 10 - points for handing in everyone's work (every member must hand in the answers) on time by the end of the lesson.
5. 10 - points for handing this paper back clean with no writing on it.

Find the answers to the following questions and write them down.

1. What is the title of the passage?
.....
2. Who is the author?
.....
3. How many paragraphs are there?
.....
4. Is there a sub-title? If so what is it?
.....
5. What is the name of the volcano that will trigger a "mega-tsunami"?
.....
6. Where is this volcano located? Give all the details.
.....
.....
.....
.....
.....
7. How fast will this tsunami travel?
.....
8. Where did the information come from?
.....
9. What did Simon Day say?
.....
10. How often does the volcano erupt?
.....
11. What will collapse exactly? Explain.
.....
.....
12. Where will the effects reach?
.....
13. How strong will the energy of the collapse be?
.....
14. What will happen after the landslide?
.....
15. What is the connection of the rubble deep under the water?
.....
16. How far will the tsunami go in 10 minutes?
.....
17. What would happen in the Sahara Desert?
.....
18. What would happen across the Atlantic Ocean in Florida and the Caribbean? How high would the tsunami be there?
.....
19. How long would it be before the tsunami reached the United States and the Caribbean?
.....
20. What countries would be affected in Europe?
.....

Canary Islands Earthquake Could Trigger Monster Tsunami

by Susan Schlachter



The eruption of a volcano in the Canary Islands could trigger a "mega-tsunami" that would devastate Atlantic coastlines with waves as high as 330 feet, scientists said on Wednesday. They said an eruption of the Cumbre Vieja volcano on La Palma, part of the Spanish island chain off West Africa, was likely to cause a massive chunk of rock to break off, crashing into the sea and kicking up huge walls of water higher than any other in recorded history.

The tsunami would be capable of traveling huge distances at up to 500 miles an hour, the scientists said in a research paper to be published in September's *Geophysical Research Letters*.

Simon Day, of the Benfield Greig Hazard Research Centre at the University College of London, said that as the volcano was not erupting at present, the short-term and medium-term risks were "negligible."

But Cumbre Vieja should be monitored closely for any signs of activity so that emergency services could plan an effective response, he said.

"Eruptions of Cumbre Vieja occur at intervals of decades to a century or so and there may be a number of eruptions before its collapse," said Day, who collaborated on the research with Steven Ward of the University of California.

"Although the year-to-year probability of a collapse is therefore low, the resulting tsunami would be a major disaster with indirect effects around the world."

WEST SAHARA TO BEAR BRUNT

The effects would spread north, west and south of the Canaries, with the west Sahara bearing the worst of the wave's energy.

The energy released by the collapse would be equal to the electricity consumption of the entire United States in half a year.

Immediately after the landslide, a dome of water 93,000 feet high and tens of miles wide would form, only to collapse and rebound.

As the landslide rubble moved deeper under water, a tsunami would develop. Within 10 minutes, the tsunami would have moved a distance of almost 155 miles.

On the west Saharan shore, waves would probably reach heights of 330 feet.

Florida and the Caribbean, the final north Atlantic destinations to be affected by the tsunami, would have to brace themselves for 165 foot waves some eight to nine hours after the landslide.

Wave heights toward Europe would be smaller, but substantial waves would hit the coasts of Britain, Spain, Portugal and France.

The research paper estimated water would penetrate several miles inland and that the devastation would cause trillions of dollars in damage.

Canary Islands Earthquake Could Trigger Monster Tsunami

Choose the correct answer:

1. The "mega-tsunami" is ...
 - a. an island
 - b. a volcano
 - c. a high wave
 - d. canary
2. What would be the result of a big rock falling into the sea?
 - a. Waves would be very high.
 - b. The volcano would stop.
 - c. Walls would kick up a storm.
 - d. It would fall into the sea.
3. How often does the volcano go off?
 - a. Every year.
 - b. Every 5 years to 9 years.
 - c. Every 10 to 100 years.
 - d. Every day.
4. The worst part of the disaster would be...
 - a. in the Atlantic Ocean
 - b. in the United States
 - c. in the Caribbean
 - d. in the Sahara Dessert
5. How high would the water be?
 - a. 155 miles.
 - b. 93,000 feet.
 - c. 330 feet.
 - d. 165 feet.

Summarize the information from the answers above.

Lesson Plan 10

Subject : English	Unit 1 Lesson Plan 10	Level :Intermediate
Theme : Sports		Time : 2 periods
Topic : Soccer		Date :.....July 2011

Concept: Sport is a favourite activity for people around the world. Soccer is one of the popular sports in the world. Thus, students should know about the origin of soccer by using KWL strategy to comprehend the text.

Terminal Objective: Students are able to get knowledge about soccer through reading.

Enabling Objectives: Students are able to...

1. answer the questions about the origin of soccer correctly.
2. summarize the main idea of the text they read.
3. doo the exercise correctly.
4. write about favorite football team.

Content

The passage :“Soccer”

Vocabulary : Variety, originate, banning, penance, frivolous, etc.

Structure : Past simple tense

Teaching procedure:

Note: Students should already be familiar with the soccer.

1. Warm up

- 1.1 Teacher tells students the objectives of study.
- 1.2 Teacher shows the picture and let the students look at the picture and try to answer the question.
- 1.3 Teacher asks students:
 - Teacher: What is popular sport in our province now?
 - Student: It's football.
 - Teacher: What football team do you like most?
 - Student: Buriram PEA
 - Teacher: Do you ever seen Buriram PEA ?
 - Students: Yes/No.
 - Teacher: O.K today we will learn about the popular sport. That is soccer or football.
- 1.4 The teacher tells the students about the soccer.
- 1.5 Teacher activates student's prior knowledge and ask them about the soccer.

2. Presentation (Pre-reading)

- 2.1 Students receive the reading passage “soccer”.
- 2.2 Students look at the topic of the reading and guess what they will get from reading it.
- 2.3 Students give the opinions about what they need to know more about soccer.

Step K

- 2.4 Teacher gives the KWL chart to students and lets them write down about the things they have known in column K.
 - 2.4.1 Students brainstorm and record the things they know about soccer in the K column until they cannot think of more.
 - 2.4.2 Students discuss what they wrote in the K column.
 - 2.4.3 Teacher records the students’ prior knowledge about soccer on the K section of KWL chart in the blackboard.

3. Practice (While-reading)

Step W

- 3.1 Students write the things that they want to know about the soccer in column W.
 - 3.1.1 Teacher encourages students to share what else they would like to know about soccer.
 - 3.1.2. Students make the questions that describe what they want to know from the passage. Then, they record the questions in column W.
- 3.2 Students start reading by skimming it.
- 3.3 Students read the passage again by scanning it.
- 3.4 Students do the exercises.

4. Production (Post-reading)

- 4.1 Students are divided into a group of five. Each group discusses the passage.
- 4.2 Each group selects the representative to give the opinions about what they have known from reading the passage.

Step L

- 4.3 Each student writes down the things he/she has learnt from reading the passage in column L.
 - 4.3.1 Students record the information after reading the passage about what they have learned in column L.
 - 4.3.2 Students check the new information that they have learned to answer the question in the W column.
- 4.4 Each student writes the essay about “My Favourite Football Team”

5. Wrap up

Teacher and students conclude the lesson and discuss any common problems or mistakes in reading.

6. Materials

- 6.1 Reading passage focuses on reading comprehension
- 6.2 KWL Chart
- 6.3 Picture

7. Evaluation

The assessment tools provided with this lesson are

- 7.1 Interest observation form.
- 7.2 Participate observation form.
- 7.3 KWL Chart.
- 7.4 Worksheets.

8. Teaching Result

8.1 Knowledge/Concept:

.....

.....

.....

8.2 Process/Enduring-understanding:

.....

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8.3 Product/Achievement:

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8.4 Attitude/Quality:

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9. Problems

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10. Suggestions

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(signature).....

Mrs. Wiphaporn Dangsi

Teacher

KWL CHART

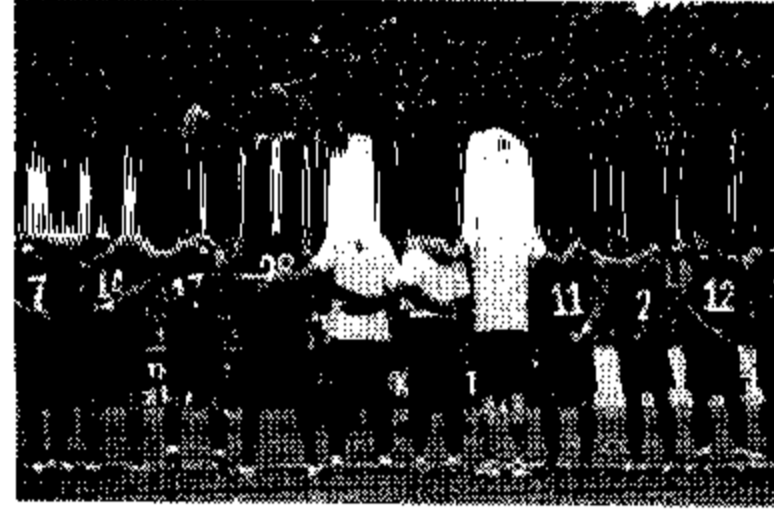
Step K, Step W, Step L

- Direction:** 1. Write what you know about “soccer” in Column K
 2. Write what you want to know about “soccer” in Column W.
 3. Write what you have learned about soccer from the passage in Column L.

Step K	Step W	Step L
What I know	What I want to know	What I have learned

Soccer

Reading Comprehension – Informational Passages



Directions: Read the passage. Then answer questions about the passage below.

“The rules of soccer are very simple, basically it is this: if it moves, kick it. If it doesn't move, kick it until it does.” ~Phil Woosnam, 1974 .

5 Woosnam is a former soccer player and manager in Wales. He moved to the United States, where he was the coach of the American national team. He is now in the United States' National Soccer Hall of Fame. His quotation describes large *variety* of games that have been played for at least 3,000 years, finally resulting in the game of soccer.

10 Soccer seems to have *originated* in Asia. The Japanese played a game similar to soccer in about 1000 B.C.E., and it is documented that the Japanese played the first real soccer game in the year 611 A.D. The Chinese played against Japan with a feather or hair-filled soccer ball as early as 50 B.C.E. The Greeks played a game called *episkyros*. It was similar to soccer. The Romans played a ball game called *Harpastum*. Somehow soccer made its way to England by the 1300s. King Edward of England did not like the game; in fact, he passed laws *banning* it. King Henry IV and King Henry VII passed laws against soccer as well. Queen Elizabeth of England had people put in
15 jail for a week for playing soccer, followed by religious *penance*, or payment for sin. The game was thought to take time away from military drills and archery. At that time, it was very important for young men to practice archery, and soccer competed with archery.

20 However, laws, penance, and official censure did not stop the game of soccer. The game was very popular in the British Isles. It was played many different ways — sometimes it was played by kicking the ball, but often it was played by kicking members of the opposing team. Sometimes an entire village played against another village. The game was played through streets, fields, and streams. Over time, players agreed on general rules for the game. They also agreed on the size and
25 weight of the soccer ball.

Then another problem developed. During the 1600s, the Puritans in England took a particular dislike to soccer. This religious group thought that soccer was a “*frivolous*,” or time-wasting, entertainment. They also said that soccer disturbed the peace on Sunday, the Lord's Day. So, there was a new ban on Sunday soccer.

30 Despite the ban, soccer eventually became an accepted sport. It even became part of the school curriculum. In 1863, a meeting of eleven English soccer clubs and schools decided on the official rules of the game. This meeting was the beginning of “The Football Association”. Soon other countries formed football associations. By 1912, there were 21 countries affiliated with the *Federation Internationale de Football Association* (FIFA). Today FIFA has 208 member
35 associations.

Before the 1970s, soccer was considered to be mostly a men's game. However, FIFA established the Women's World Cup in 1991. The first Women's World Cup tournament was played in the People's Republic of China in 1991. Twelve teams played for the championship. US
40 women's college teams have also begun to receive varsity status, mostly because of the influence of Title IX, a new law which provides more money for schools that include women's sports.

FIFA *estimates* that about forty million (40,000,000) women are currently playing football throughout the world. The FIFA “Big Count,” a 2006 soccer *census*, estimates two hundred sixty five million (265,000,000) male and female soccer players worldwide and five million referees, for a total of two hundred seventy million (270,000,000) people – four percent of the world's population – actively engaged in soccer.

Questions:

- 1) With what did the ancient Chinese fill their soccer balls?
 - a. hair
 - b. grass
 - c. paper
 - d. Both A and C are correct.
 - e. All of the above
- 2) Why was soccer outlawed in England?
 - a. The players made noise on Sunday.
 - b. The game replaced archery.
 - c. Both B and C are correct.
 - d. All of the above
- 3) What marked the beginning of The Football Association?
 - a. The Title IX law
 - b. A village soccer game
 - c. A meeting of soccer clubs
 - d. The 2006 census of players
 - e. None of the above
- 4) How many soccer associations belong to FIFA?
 - a. 192
 - b. 203
 - c. 205
 - d. 208
 - e. 211
- 5) How many people are involved with soccer worldwide?
 - a. 270,000,000
 - b. 295,000,000
 - c. 370,000,000
 - d. 4% of the world's population
 - e. Both A and D are correct.

Vocabulary

- 1) A *variety* is a group of...
 - a. one thing.
 - b. similar things.
 - c. different things.
 - d. fancy things.
 - e. plain things.
- 2) The best synonym for *originated* is...
 - a. began.
 - b. started.
 - c. ended.
 - d. Both A and B are correct.
 - e. Both B and C are correct.
- 3) *Banning* means...
 - a. including.
 - b. perfecting.
 - c. prohibiting.
 - d. explaining.
 - e. encouraging.
- 4) *Penance* is ...
 - a. archery.
 - b. religion.
 - c. payment.
 - d. comparison.
 - e. entertainment.
- 5) If something is *frivolous*, it is...
 - a. a religious ceremony.
 - b. worth doing.
 - c. a waste of time.
 - d. creative.
 - e. a law or rule.
- 6) If you make an *estimate*, you make a...
 - a. decision.
 - b. guess.
 - c. requirement.
 - d. demand.
 - e. Both C and D are correct.
- 7) What is a *census*?
 - a. A law
 - b. A team
 - c. A game
 - d. A count
 - e. An association

APPENDIX D

English Reading Comprehension Achievement Test

Directions:

1. The test consists of 5 passages and 60 items.
2. Time allocated is 100 Minutes
3. Students choose the most appropriate answer

Read the following passage and choose the best answer.

Passage 1

The Yellow fruit



What kind of fruit is delicious and yellow?

That's right it is banana.

Banana grows on banana plants. Banana plants are not trees. Bunches of bananas come out of the stalks of the plants. Each bunch contains about 15 bananas. The size of banana is not definite. Some are as big as your arms, and some can be as tiny as your fingers. But every one of them surely is yummy!

Bananas are planted in banana plantations. Farmers plant bananas on these large areas. First, the farmers would plant the banana roots in the ground. Then, after banana leaves grow out and petals of bananas blossoms drop off, there appears a cluster of bananas. Bananas grow very fast at the beginning. Sometimes they can grow as high as a house!

We buy banana from market or from grocery store. Then we get to taste the sweet and tender taste of bananas. Sometimes we cook them as desserts, such as banana pudding, but banana can be cooked as a vegetable as well. Bananas which are cooked as vegetable **those** that never get sweet.

These yellow fruits are picked after they have been planted for a year. But we do not pick them when they are ripe, we can pick them when they are still green. The reason for this is that it takes a long time before these bananas reach a market or a grocery store. If we pick them when they are already ripe, they can spoil during their way from the banana plantations to the market. Therefore, they are picked when they are green so that they can get ripe on boats or trains carrying them to us.

I. Mark *A* for the true statements and *B* for the false ones (Items 1-7)

-1. Bananas grow out of banana trunks.
-2. A Banana plant is a kind of tree.
-3. Banana can only be cooked as desserts.
-4. We put roots in the ground to plant bananas.
-5. Bananas have only one size.
-6. There are flowers on banana plants.
-7. We pick bananas after we have planted them for 1 year.

II. Choose the Correct Answer (Items 8-12)

8. What is this story about?

- a. How bananas look like
- b. Where to buy bananas.
- c. A yellow fruit called banana
- c. How bananas are planted.

9. According to the passage, where do we buy bananas?

- a. We buy them from the farmers.
- b. We buy them from the markets.
- c. We buy them from grocery store.
- d. Both b and c

10. How are bananas sent to us?

- a. By airplane
- b. By mail
- c. By boat
- d. By taxi

11. Why do bananas have to be picked when they are still green?

- a. Because they would spoil if we do not pick them.
- b. Because they can get ripe during shipping.
- c. Because they are already ripe.
- d. All of the above

12. “those” in line 13 refer to.....

- a. bananas
- b. vegetables
- c. desserts
- d. sweets

Passage 2**The Great Wall**

Among the Seven Wonders of the world, the Great Wall of China is the biggest one built by man. Not only big, this structure also served as a protector of Chinese people from being killed and stolen by the Huns, the barbarians from the north who came on horseback. Every 200 and 300 yards of the wall are tall watchtowers. When the Huns approached the wall, the smoke signals would be passed from one to another Watchtower. If the enemy came at night, the signal fire would be lighted instead and an alarm would warn the army to rush to defend the wall.

Yes, the Great Wall of China is very big...But how big is it?

With about 1,500 miles in length, the Great Wall of China lies across the mountains and valleys of northern China. It is 15 feet thick and as tall as a house. The Wall is made of earth and stones. Although each part of the wall was not built at the same time, the entire length was built about many hundreds of years ago, when there was no machine to help with the construction. So, the greatness of the Great Wall of China shows us how patiently Chinese people worked to build this protector of their country only with their hands.

Choose the Correct Answer (Items 13-22)

13. The purpose of this article is to tell.....

- a. how patient the Chinese were
- b. when, where, how and why the Great Wall was built and how it was guarded
- c. when and why the Huns rode their horses into China
- d. how the Chinese invented machines and fire

14. If the Great Wall was attacked at night,

- a. the Huns would ride their horses into China
- b. a signal fire would be lighted
- c. smoke signals would be passed
- d. the people of China felt safer

15. The people of China felt safer.....
- a. before there were machines
 - b. when an alarm sounded
 - c. when the Wall was built
 - d. when an enemy approached the wall
16. The great wall was built
- a. every 200 or 300 yards
 - b. many hundreds of years ago
 - c. as a tourist attraction
 - c. to keep out the communists
17. The great wall was built.....
- a. of a tall watchtowers
 - b. by hand
 - c. to stretch mountains and valleys
 - d. for riding horses into China
18. Killing Chinese people.....
- a. was the reason for the Great Wall
 - b. was done every 200 yard
 - c. was done by the Huns
 - d. sounded on alarm
19. Across northern China.....
- a. the Chinese Emperors were stealing things
 - b. the Huns lighted signal fires
 - c. stretches the Great Wall
 - d. machines were used to help build the Great wall
20. Horses.....
- a. stretched for 1500 miles
 - b. were used to build the wall
 - c. carried barbarians
 - d. worked patiently with their hands
21. Of the structures that man has built.....
- a. all are made of earth and stone
 - b. different parts were built at different times
 - c. the biggest is the Great Wall
 - d. most have watchtower
22. The Chinese people.....
- a. is the biggest one built by man
 - b. passed smoke signals from towers
 - c. were thick and tall
 - d. worked to build the Great Wall

Passage 3

The Great Musician



Johann Sebastian Bach is considered one of the greatest musicians in the world. He was born in Germany. He started his career as a musician and became famous by playing church music. He did not care whether other people would scold him, he played music the way he wanted to.

5 It was not surprising for Bach to become a musician, because many of his family members were musicians. Many times they were hired to play music for dukes, princes and other noblemen. Bach's music talent showed since he was just seven years old. At that age, he already knew how to read music. He loved music so much that once he had to depend on the moonlight to copy organ music. Though someone might have found out that he was
10 copying organ music from a special music book, he did not care. It's not hard to see now how important music was to Bach.

Bach played the violin and viola, but he loved the organ as well. During his school days, he spent his vacations by traveling to many places to hear organists play. Soon after that he became a talented composer and he was hired to work for a duke. However, he did
15 something that caused him to end up in the guardhouse. He left the duke and went to play music for a prince instead. But Bach did not let time pass by doing nothing, he spent time writing organ music in jail.

Bach was a very well-known musician during his time. However, he is still highly adored today by many music lovers around the world.

Choose the Correct Answer (Items 23-32)

23. The purpose of this article is to tell a little about the great musician and composer, J.S. Bach. He showed how important music was to him by.....

- | | |
|--------------------------------|-------------------------------------|
| a. working for a duke | b. getting together with his family |
| c. copying music by moon light | d. going to school |

24. Of the four or five greatest composer,

- | | |
|-------------------------------|------------------------------|
| a. three were born in Germany | b. most died 200 years ago |
| c. Bach is considered one | d. four were as same as Bach |

25. Bach learned to read music.....

- a. when he went away to school
- b. because he had nothing else to do
- c. when he was about 7 years old
- d. because his father taught to do it

26. Bach played.....

- a. better than any other pianist
- b. the violin and viola
- c. their instruments at the same time
- d. music the way people were used to

27. Bach played.....

- a. when everyone else was sleeping
- b. church music
- c. the special book of music
- d. during school vacations

28. Bach played music.....

- a. in the guardhouse
- b. in unusual ways
- c. on the saxophone
- d. organically

29. When he shocked church people, Bach.....

- a. apologized
- b. refused to play again
- c. refused to apologize
- d. went to jail

30. Music often filled the Bach house because.....

- a. it was very small
- b. everyone had a radio
- c. many of the family were musicians
- d. musicians are noisy

31. Bach was arrested because.....

- a. he shocked church people
- b. he went to work for a prince
- c. he went away to school
- c. laws were very strict

32. Bach went to the guardhouse.....

- a. to visit one of his friends
- b. to find quiet time to compose song
- c. because he did something that offended his employer
- d. because he would like to play for a prince instead

Passage 4**One School One Tambon**

As I know, school is one of the most important places for human beings. There are many schools in Thailand. Most parents like to take their children to study in the most popular schools. The most popular schools are usually in town while the schools in rural areas are usually poor and lack good facilities.

5 Noncharoenpittayakhom is one of the schools in a rural area. It is located in Ban Noncharoen Ban Kruat District, Buriram Province. It is 64 Kilometers from Buriram and you can go there by car or by motorcycle. It was founded on 23rd March 1982. Teachers started teaching there on 17th May 1982. There were 75 Matthayomsuksa 1 students. There was learning at Trikongkaram temple at that time. The vision of the school is to be the best school
10 in the community which produces qualified persons and raises education management to a high standard. There are 818 students who are very lovely and friendly. Moreover, there are 31 devoted teachers who work hard in this risky place because Noncharoenpittayakhom School is located near the border of Cambodia. That means the school will face the conflict or fighting between two countries more frequently.

15 One of the most important people is Mr. Somkiet Suangram. He is the director of my school. He is very clever and diligent. He likes to take care of the teachers and students. He always spends all his time at school. In the present time, he tries to practice English because he wants to promote his students to study English as a second language.

In the past, Noncharoenpittayakhom school was very small and had no technology.
20 But nowadays, it is “One School One Tambon or in Thai โรงเรียนดีประจำตำบล”. Because of the Education Ministry spent almost 2 billion baht upgrading schools in remote areas, 182 schools across the country, as well as my school, have been chosen to upgrade. My school has got a budget of about 12 million Baht from this project to develop the school in many aspects such as students, teachers, administrators and community.

25 The plan calls for schools joining the scheme to be given money to improve the landscape of schools, repair or build school buildings, develop libraries and buy educational equipment, including computers and wireless high-speed internet. Therefore, most students like to surf the internet under the trees near the canteen.

In addition, teachers skilled in core subjects are recruited and sent to the schools.
30 Thus, the number of teachers will be increased enough to teach the students. It will help the students’ achievements at a higher level.

One of the best things is the environment in my school. The air is fresh and everywhere is green because there are many trees around the school such as sugar apples, papayas, chilies and mangoes. There are beautiful sun flowers in front of the school and
35 many banana trees at the back of the canteen.

Moreover, this project supports sports and art. The students in the school have got the new gym and swimming pool. They are very wonderful and many students like to swim in the evenings. It is very useful for students and the people in the community.

- The unique of this school that it is a 3 D school which is different from other schools.
- 40 The first D stands for Democracy. The second D stands for Decency and the last D stands for Drugs free.

Although, my school is not popular but I enjoy studying here and I will get a better life with education. I try and try to study hard and look for the best way to improve my life. Therefore, I am also proud of studying in "One School One Tambon".

Answer the Questions (Items 33-43)

33. What does One School One Tambon mean in Thai?
- a. โรงเรียนในฝัน
b. หนึ่งโรงเรียนหนึ่งตำบล
c. โรงเรียนศิลปะประจำตำบล
d. โรงเรียนในชุมชน
34. How many "One School One Tambon" are there in Thailand?
- a. 158
b. 182
c. 183
d. 186
35. Where is Noncharoenpittayakhom school located?
- a. in Bankruat
b. in Prakhonchai
c. in Bangkok
d. in Nangrong
36. Who is the Director of Noncharoenpittayakhom School?
- a. Mr.Somnuk
b. Mr.Somkiet
c. Mr.Sarawoot
d. Mr.Prasit
37. How many students and teachers are there in the school?
- a. 818
b. 849
c. 919
d. 1,110
38. This project supports every aspect below except.....
- a. a new school
b. a new gym
c. a swimming pool
d. a canteen
39. How many plants are there in Noncharoenpittayakhom School?
- a. papayas
b. bananas
c. sugar apples
d. a, b and c are correct
40. How can you visit Noncharoenpittayakhom School?
- a. By train
b. By bus
c. By motorcycle
d. b and c. are correct
41. How far is it from Noncharoen sub-district to Buriram Province?
- a. 44 kilometers
b. 54 kilometers
c. 64 kilometers
d. 74 kilometers
42. What does 3D stand for?
- a. Democracy Decadence Drugs free
b. Democracy Deception Druggy
c. Democracy Decency Drugs free
d. Democratism Decency Drugs free
43. How does the author feel about her school?
- a. She feels upset.
b. She is proud of her school.
c. She sometimes feels lonely and happy.
d. She feels angry with it.

Passage 5**The Thunder Castle**

What is the most fever football club in Thailand in nowadays. The answer is Buriram PEA. Buriram PEA or well known in another name “ The Thunder Castle”. Mr.Newin Chidchob is the Chairman and there is a head coach Attaphol Buspakom that he was the former football player in Thailand.

5 **Buriram PEA Football Club**, is a professional Thai football club based in Buriram province. The club was previously based in Ayutthaya before moving east to Buriram for the 2010 season. The history of Buriram PEA. The club was founded as PEA (Provincial Electricity Authority) since 1970, hence their 40 years old history, their first top league crowned need to wait until 1998 and again in 2008. The original club's colour was
10 purple/white and the team named 'Sparking Guys' or 'The Sparkers'. Their original base was Ngamwongwan area in Bangkok where they head office of PEA department situated. But due to the expanding of Thai Premier League and the limitation of fan club in Bangkok, PEA decided to relocate themselves to Ayutthaya Province where they formed bonding with local fan club and unofficially called Faifa Ayutthaya (Electricity of Ayutthaya in English) In
15 2010, team was took over by Newin Chidchob the famous Buriram politician and the team moved again to Buriram province.

Buriram PEA uses the multi-purpose sports stadium i-mobile Stadium, that holds 12,000 spectators. They will build Thunder Castle Stadium which will be their new home stadium. This stadium is the breath of Buriram which holds 24,000 spectators. It's spent
20 500,000,000 to decorate this ground. This stadium is very popular and civilization in Thailand because they bring modern and high technology use for comfortable to the visitors. This is the sport complex stadium in Thailand.

Cheering team of Buriram is very perfect. Most of them are interested and crazy with football game. Especially, when their favorite team play with others, they wear Buriram PEA
25 T-shirts all over Buriram Province. This is the wonderful thing that different from others. Buriram people are powerful and love in their team. Moreover, one of the best thing is cheer leader She is Karuna Chidchob who work very hard to cheer her team. She sings and dances together with cheering team.

The best footballer in this team is the most important. There are many football players
 30 who come from everywhere in Thailand and other foreigners. For example, Rungsan Rungsan
 Viwatchaichok (*vice captain*), Theeratorn Boonmatan, Suchao Nuchnum, Sivaruck
 Tedsungnoen, Frank Ohandza Frank Acheampong and the player who was born in Buriram
 are Adisak Kraisor and Jakkraphan Kaewprom.

In conclusion, football is very popular in Thailand in nowadays as well as Buriram
 35 PEA. Moreover, Buriram people like to take their children to cheer together. Therefore, it
 makes good relationship to their families. They usually spend their times on weekend to
 cheer their favourite teams as Thunder Castle and Buriram FC.

Read this Passage and Answer the Questions (Items 44-50)

44. Who is the chairman of Buriram PEA?
 a. Karuna Chidchob
 b. Newin Chidchob
 c. Attaphol Buspakhom
 d. Sasom Popprasert
45. Who is the coach of Buriram PEA?
 a. Sasom Popprasert
 b. Attaphol Buspakhom
 c. Chaiyong Kampiam
 d. Kietisak Senameung
46. What is the former team before change to Buriram PEA?
 a. 'the Sparkers'
 b. Faifa Ayuthaya
 c. Thunder Castle
 d. Breath of Buriram
47. What does PEA stand for?
 a. Provincial Electricity Authority
 b. Provincial of Buriram Authority
 c. Powerful Electricity Academy
 d. Power of Electricity Authority
48. How many the capacity of the new stadium?
 a. 8,000
 b. 12,000
 c. 24,000
 d. 25,000
49. Which football player in Buriram PEA team is Buriram people?
 a. Suchao Nuchnum
 b. Teeratorn Boonmatan
 c. Jakrapan Kaewprom
 d. Sivaruck Tedsungnoen
50. Who is the foreign player of Buriram PEA team?
 a. Frank Ohanza
 b. Frank Acheampong
 c. Robby Santos
 d. a and b are correct
51. What do Buriram people like to do while Buriram PEA has the match?
 a. They wear Buriram PEA T-shirt.
 b. Parents take their children to cheer their team.
 c. They cheer and dance together.
 d. All above are correct.
52. How many professional football teams are there in Buriram ?
 a. 1
 b. 2
 c. 3
 d. 4

Passage 6

What is Bamboo?



BAMBOO is one of the most amazing examples of plant life. It grows at a rate of 41 centimeters a day and can grow as high as 36 meters.

Bamboo is a grass. It is the largest member of the family of grasses, though most people think of it as bush or a tree. It spreads so rapidly that if there is a road running through
5 a growth of bamboo, the road may disappear completely in a month if it is not kept open!

There are about five hundred kinds of bamboos tree. They all have smooth, hollow, jointed stems with strong, watertight partition at each joint. While most bamboos flower every year, there are some that bloom only three or four times in a century. The flowers are like **those** of grasses. The fruit is usually like grain, and in some kinds, like nuts.

10 The bamboos are tropical and subtropical plants. They grow in Asia, in South American, and a few species grow in Africa. About thirty kinds of tall bamboos from other parts of the world have been successfully introduced in California and Florida.

The use of bamboos are so numerous, it is almost hard to believe. People build houses with it, using large sections for posts and the split stems for rafters, roofing, and
15 floors. They strip off the hard outer layers for mats and screens to separate the rooms. The Joints of the largest kinds are used for buckets and those of smaller ones for bottles.

There are even certain kinds of bamboos so hard that they can be made into knives, and beautiful baskets are woven of strips from the outer coverings in Japan, gardeners use hollowed bamboo stems for water pipe. In China, the inner pulp is made into the finer grades
20 of paper. The Javanese make bamboos in the flutes. We eat the tender shoots of bamboo as a vegetable. So you see how valuable the bamboo is.

53. Which of the following statements is true?

- a. A bamboo is a bush or a tree.
- b. Bamboo is the largest plant.
- c. Bamboo flowers every year.
- d. Bamboo is a grass

54. What can we infer about California and Florida?

- a. To grow bamboos it is difficult.
- b. Bamboo can grow there.
- c. Only tall bamboos can grow there.
- d. No bamboos grew there in the old days.

55. What are mats and screens made from?
- a. The shoots of bamboos
 - b. Hard outer layers of bamboo stems
 - c. The hollowed bamboo stems
 - d. The split bamboo stems
56. Which part of bamboos can be used as bottles?
- a. The flowers of bamboos
 - b. The joints of small bamboo stems
 - c. The inner pulp of bamboo stems
 - d. The joints of large bamboo stems
57. Which can be made into knives?
- a. Hard bamboos
 - b. Tall bamboos
 - c. Large bamboos
 - d. Strips from the outer coverings of bamboos
58. "The use of bamboo are so numerous, it is almost hard to believe." What does the underlined part mean?
- a. The uses of bamboos are valuable.
 - b. There are large numbers of use of bamboo.
 - c. There are many kinds of bamboos to use.
 - d. Bamboos are very useful.
59. ".....that road may disappear completely in a month if it is not kept open!"
What does the underlined word refer to?
- a. The road
 - b. The bush
 - c. The bamboo
 - d. The grass
60. "The flowers are like those of grasses". What does the underlined word refer to?
- a. The bamboos
 - b. The stems
 - c. The fruits
 - d. The flowers

Achievement Test Answer

Items	Answer	Items	Answer	Items	Answer
1.	b	21.	c	41.	c
2.	b	22.	d	42.	c
3.	b	23.	c	43.	b
4.	a	24.	c	44.	b
5.	b	25.	c	45.	b
6.	a	26.	b	46.	b
7.	a	27.	b	47.	a
8.	c	28.	b	48.	c
9.	d	29.	c	49.	c
10.	c	30.	c	50.	d
11.	b	31.	b	51.	d
12.	a	32.	c	52.	b
13.	b	33.	c	53.	d
14.	b	34.	b	54.	c
15.	c	35.	a	55.	d
16.	b	36.	b	56.	d
17.	b	37.	b	57.	a
18.	c	38.	a	58.	d
19.	c	39.	d	59.	c
20.	c	40.	d	60.	a

APPENDIX E

Students' Satisfaction Questionnaire towards KWL Strategy in Reading Comprehension

(English Version)

Directions:

1. The purpose of this questionnaire is to investigate the students' satisfaction towards KWL strategy in reading comprehension.
2. The survey has 3 parts: Personal Information, Students' opinions, and other suggestions or comments.
3. Your answers will be only used in academic purpose, especially to solve the problems of reading comprehension of Thai EFL students. This will not at all affect your fame, studying, career, or ways of life.
4. Please answer truly and accordingly to your opinions and data.

Part 1: Personal Data

Directions: Answer the following questions about your personal data and attitude towards English learning and reading by putting the / sign in the bracket in front of the information.

Gender: () Male () Female

- | | | |
|--|---------|--------|
| 1. English is an important language and I like studying English. | () Yes | () No |
| 2. English is useful to me. | () Yes | () No |
| 3. English helps me get the good grade. | () Yes | () No |
| 4. I love reading and I like to read the book when I have free time. | () Yes | () No |

Part 2: Students' Satisfaction

Directions: Please tick / in that corresponds to your opinions about the effects of KWL strategy utilization on development of reading comprehension

Satisfaction Level	Meaning
5 means	Most Satisfactory
4 means	Very Satisfactory
3 means	Average Satisfactory
2 means	Less Satisfactory
1 means	The Least Satisfactory

No.	Text	Satisfaction level				
		(5)	(4)	(3)	(2)	(1)
1.	Reading strategy enhances students' reading comprehension					
2.	KWL strategy is easy to practice.					
3.	KWL strategy is fun.					
4.	KWL strategy is useful.					
5.	KWL strategy can promote critical thinking.					
6.	KWL strategy can help me analyze the text.					
7.	KWL strategy can help integrate prior knowledge with new information.					
8.	I use my prior knowledge to facilitate the reading comprehension.					
9.	KWL strategy is child-centered learning.					
10.	KWL strategy can help increase vocabulary retention					

Part 3: Suggestions

Thank you very much!

แบบสอบถาม ความพึงพอใจของนักเรียนของกลวิธีการอ่านแบบ เค ดับเบิลยู แอล
ต่อความเข้าใจในการอ่านภาษาอังกฤษ

(Thai Version)

คำชี้แจง

1. วัตถุประสงค์ของแบบสอบถามนี้ เพื่อสำรวจความพึงพอใจของนักเรียนในการใช้กลวิธีการอ่านแบบ เค ดับเบิลยู แอล ต่อความเข้าใจในการอ่านภาษาอังกฤษ
2. แบบสอบถามมี 3 ส่วนคือ ด้านข้อมูลทั่วไป ด้านความคิดเห็นและด้านข้อเสนอแนะต่าง ๆ
3. คำตอบของท่านจะใช้ในจุดประสงค์ทางการศึกษาเท่านั้น เพื่อแก้ปัญหาการอ่านเพื่อความเข้าใจของนักเรียนไทยที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ แบบสอบถามนี้จะไม่มีผลต่อท่านทั้งด้านชื่อเสียง การเรียน หรือการดำรงชีวิตของท่าน
4. โปรดตอบคำถามด้วยความเป็นจริงและตรงกับความคิดเห็นของท่านมากที่สุด.

ตอนที่ 1 ข้อมูลส่วนบุคคล

คำชี้แจง โปรดตอบคำถามเกี่ยวกับข้อมูลส่วนตัวของท่านและเจตคติที่ท่านมีต่อภาษาอังกฤษและการอ่าน

โดยเขียนเครื่องหมาย / ลงในวงเล็บด้านหน้าข้อความที่ตรงกับความเป็นจริง

เพศ () ชาย () หญิง

- | | |
|--|--------------------|
| 1. ภาษาอังกฤษเป็นภาษาที่สำคัญ ฉันจึงชอบเรียนภาษาอังกฤษ | () ใช่ () ไม่ใช่ |
| 2. ภาษาอังกฤษมีประโยชน์ต่อชีวิตของฉัน | () ใช่ () ไม่ใช่ |
| 3. ภาษาอังกฤษช่วยให้ฉันมีผลการเรียนที่ดี | () ใช่ () ไม่ใช่ |
| 4. ฉันรักการอ่าน ฉันชอบอ่านหนังสือเมื่อฉันมีเวลาว่าง | () ใช่ () ไม่ใช่ |

ตอนที่ 2 ความพึงพอใจของนักเรียน

คำชี้แจง

โปรดเขียนเครื่องหมาย / ใน ที่ตรงกับความเห็นของท่านเกี่ยวกับผลการใช้กลวิธีแบบ เค ดับเบิลยู แอล กับการอ่านภาษาอังกฤษเพื่อความเข้าใจ

	ความหมาย	ระดับความพึงพอใจ
5	หมายความว่า	มีความพึงพอใจมากที่สุด
4	หมายความว่า	มีความพึงพอใจมาก
3	หมายความว่า	มีความพึงพอใจปานกลาง
2	หมายความว่า	มีความพึงพอใจน้อย
1	หมายความว่า	มีความพึงพอใจน้อยที่สุด

ข้อที่	ข้อความ	ระดับความพึงพอใจ				
		(5)	(4)	(3)	(2)	(1)
1	กลวิธีการอ่านเพิ่มพูนความเข้าใจในการอ่านสำหรับนักเรียน					
2	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล ง่ายต่อการฝึกฝน(การนำมาใช้ในการอ่าน)					
3	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เป็นกลวิธีการเรียนที่สนุก					
4	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล มีประโยชน์ในการอ่าน					
5	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล สามารถส่งเสริมการคิดวิเคราะห์					
6	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล สามารถช่วยข้าพเจ้าในการวิเคราะห์เนื้อเรื่องที่อ่าน					
7	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล สามารถนำพินความรู้เดิมมาเชื่อมโยงกับความรู้ใหม่					
8	ข้าพเจ้าใช้พินความรู้เดิมเพื่อช่วยในการอ่านเพื่อความเข้าใจ					
9	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล เป็นการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญ					
10	กลวิธีการอ่านแบบ เค ดับเบิลยู แอล สามารถเพิ่มความคงทนในการเรียนรู้คำศัพท์					

ตอนที่ 3

ข้อเสนอแนะ

ขอขอบคุณในความร่วมมือ

APPENDIX F

KWL Lesson Plans' Evaluation

(English Version)

Directions: 1. Lesson plans' evaluation form is for the expert to evaluate the lesson plan.

2. Put a tick/sign in the blank that expresses your opinion.

Opinion Level	Meaning
5	means the most appropriate
4	means more appropriate
3	means average appropriate
2	means less appropriate
1	means the least appropriate

Text	Opinion Level				
	5	4	3	2	1
1. Concept 1.1 describes concept, content or theme. 1.2 corresponds with the expected learning outcomes.					
2. Expected Learning Outcomes 2.1 can be evaluated. 2.2 are appropriate to students' level. 2.3 After teaching students can achieve the expected learning outcomes.					
3. Objectives 3.1 correspond with the contents and the concept. 3.2 thoroughly identify students' behaviors. 3.3 identify the behaviors measureable and assessable.					
4. Content 4.1 is clear cut and correct. 4.2 is appropriate to students level and time allocated.					

Text	Opinion Level				
	5	4	3	2	1
5. Teaching Procedure 5.1 corresponds with the theme. 5.2 corresponds with the expected learning outcome. 5.3 emphasizes reading process with KWL Strategy in reading comprehension. 5.4 facilitates child-centered learning. 5.5 is appropriate to students' abilities. 5.6 increases students' knowledge and skills. 5.7 is creative thinking-oriented.					
6. Materials 6.1 correspond with the expected learning outcomes. 6.2 are suitable for students' level. 6.3 are interesting and appropriate for content. 6.4 promote autonomous learning.					
7. Evaluation 7.1 corresponds with the expected learning outcomes. 7.2 The evaluation instruments correspond with teaching procedure. 7.3 The students play important roles in the evaluation.					

Suggestions

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(signature).....Expert

(.....)

Position.....

แบบประเมินแผนการจัดการเรียนรู้
โดยการใช้กลวิธีการอ่านแบบ เค ดับเบิล ยู แอล ในการอ่านเพื่อความเข้าใจ
(Thai Version)

- คำชี้แจง : 1. แบบประเมินแผนการจัดการเรียนรู้สำหรับผู้เชี่ยวชาญประเมิน
 2. โปรดกาเครื่องหมาย /ในช่องที่ตรงกับความเห็นของท่านมากที่สุด

ระดับความคิดเห็น	ความหมาย
5 หมายถึง	เหมาะสมมากที่สุด
4 หมายถึง	เหมาะสมมาก
3 หมายถึง	เหมาะสมปานกลาง
2 หมายถึง	เหมาะสมน้อย
1 หมายถึง	เหมาะสมน้อยที่สุด

ข้อความ	ระดับความคิดเห็น				
	5	4	3	2	1
1. สาระสำคัญ 1.1 แสดงความคิดรวบยอด เนื้อหา หรือแก่นของเรื่อง 1.2 สอดคล้องสัมพันธ์กับผลการเรียนรู้ที่คาดหวัง					
2. ผลการเรียนรู้ที่คาดหวัง 2.1 ประเมินผลได้ 2.2 เหมาะสมกับระดับชั้นของผู้เรียน 2.3 สอนให้บรรลุผลการเรียนรู้ที่คาดหวังไว้					
3. จุดประสงค์การเรียนรู้ 3.1 สอดคล้องกับเนื้อหาและสาระสำคัญ 3.2 ระบุพฤติกรรมที่ครบถ้วนชัดเจน แสดงให้เห็นว่านักเรียนสามารถบรรลุพฤติกรรมการเรียนรู้ได้ 3.3 ระบุพฤติกรรมที่สามารถวัดได้และประเมินได้					

(ต่อ)

<p>4. เนื้อหา</p> <p>4.1 ถูกต้องตามหลักวิชาการและชัดเจน</p> <p>4.2 เนื้อหาเหมาะสมกับเวลาและระดับชั้น</p>					
<p>5. การจัดกิจกรรมการเรียนรู้</p> <p>5.1 สอดคล้องกับสาระการเรียนรู้</p> <p>5.2 สอดคล้องสัมพันธ์กับผลการเรียนรู้ที่คาดหวัง</p> <p>5.3 เน้นการอ่านโดยใช้กลวิธี เค ดับเบิลยู แอล เพื่อความเข้าใจ</p> <p>5.4 เน้นผู้เรียนเป็นสำคัญ</p> <p>5.5 เหมาะสมกับความสามารถผู้เรียน</p> <p>5.6 เสริมสร้างให้นักเรียนเกิดทักษะและเกิดความรู้</p> <p>5.7 แสดงความริเริ่มสร้างสรรค์</p>					
<p>6. สื่อการเรียนรู้</p> <p>6.1 สอดคล้องผลการเรียนรู้ที่คาดหวัง</p> <p>6.2 เหมาะสมกับระดับชั้นผู้เรียน</p> <p>6.3 เหมาะสมกับเนื้อหาและน่าสนใจ</p> <p>6.4 ส่งเสริมให้ผู้เรียนได้เรียนรู้ด้วยตนเอง</p>					
<p>7. การวัดการประเมินผล</p> <p>7.1 สอดคล้องกับผลการเรียนรู้ที่คาดหวัง</p> <p>7.2 เครื่องมือวัดสอดคล้องกับขั้นตอนและกระบวนการเรียนรู้</p> <p>7.3 นักเรียนมีส่วนร่วมในการวัดผล</p>					

ข้อเสนอแนะเพิ่มเติม

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ลงชื่อ.....ผู้เชี่ยวชาญ

(.....)

ตำแหน่ง.....

APPENDIX I

KWL Lesson Plans' Evaluation

(English Version)

Directions: 1. Lesson plans' evaluation form is for the expert to evaluate the lesson plan.

2. Put a tick/sign in the blank that expresses your opinion.

Opinion Level	Meaning
5	means the most appropriate
4	means more appropriate
3	means average appropriate
2	means less appropriate
1	means the least appropriate

Text	Experts' Opinion Level (Appropriation)			\bar{X}	S.D.	Meaning of Opinion Level (Appropriation)
	1	2	3			
1. Concept						
1.1 describes concept, content or theme.	3	4	4	3.67	0.58	More Appropriate
1.2 corresponds with the expected learning outcomes.	3	4	4	3.67	0.58	More Appropriate
Total				3.67	0.58	More Appropriate
2. Expected Learning Outcomes						
2.1 can be evaluated.	4	4	5	4.33	0.58	More Appropriate
2.2 are appropriate to students' level.	4	5	5	4.67	0.58	The Most Appropriate
2.3 After teaching students can achieve the expected learning outcomes.	4	4	5	4.33	0.58	More Appropriate
Total				4.44	0.58	More Appropriate
3. Objectives						
3.1 correspond with the contents and the concept.	4	4	5	4.33	0.58	More Appropriate
3.2 thoroughly identify students' behaviors.	3	4	4	3.67	0.58	More Appropriate
3.3 identify the behaviors measureable and assessable.	3	4	4	3.67	0.58	More Appropriate
Total				3.89	0.58	More Appropriate

Text	Experts' Opinion Level (Appropriation)			\bar{X}	S.D.	Meaning of Opinion Level (Appropriation)
	1	2	3			
4. Content						
4.1 is clear cut and correct.	4	5	5	4.67	0.58	The Most Appropriate
4.2 is appropriate to students level and time allocated.	4	5	5	4.67	0.58	The Most Appropriate
Total				4.67	0.58	The Most Appropriate
5. Teaching Procedure						
5.1 corresponds with the theme.	4	5	5	4.67	0.58	The Most Appropriate
5.2 corresponds with the expected learning outcome.	4	4	5	4.33	0.58	More Appropriate
5.3 emphasizes reading process with KWL Strategy in reading comprehension.	4	4	4	4.00	0.00	More Appropriate
5.4 facilitates child-centered learning.	4	4	5	4.33	0.58	More Appropriate
5.5 is appropriate to students' abilities.	4	4	5	4.33	0.58	More Appropriate
5.6 increases students' knowledge and skills.	4	4	5	4.33	0.58	More Appropriate
5.7 is creative thinking-oriented.	4	4	4	4.00	0.00	More Appropriate
Total				4.29	0.41	More Appropriate
6. Materials						
6.1 correspond with the expected learning outcomes.	4	4	5	4.33	0.58	More Appropriate
6.2 are suitable for students' level.	4	4	5	4.33	0.58	More Appropriate
6.3 are interesting and appropriate for content.	4	5	5	4.67	0.58	The Most Appropriate
6.4 promote autonomous learning.	4	4	5	4.33	0.58	More Appropriate
Total				4.41	0.58	More Appropriate
7. Evaluation						
7.1 corresponds with the expected learning outcomes.	4	4	5	4.67	0.58	The Most Appropriate
7.2 The evaluation instruments correspond with teaching procedure.	4	4	5	4.33	0.58	More Appropriate
7.3 The students play important roles in the evaluation.	4	4	5	4.33	0.58	More Appropriate
Total				4.44	0.58	More Appropriate
Total				4.28	0.53	More Appropriate

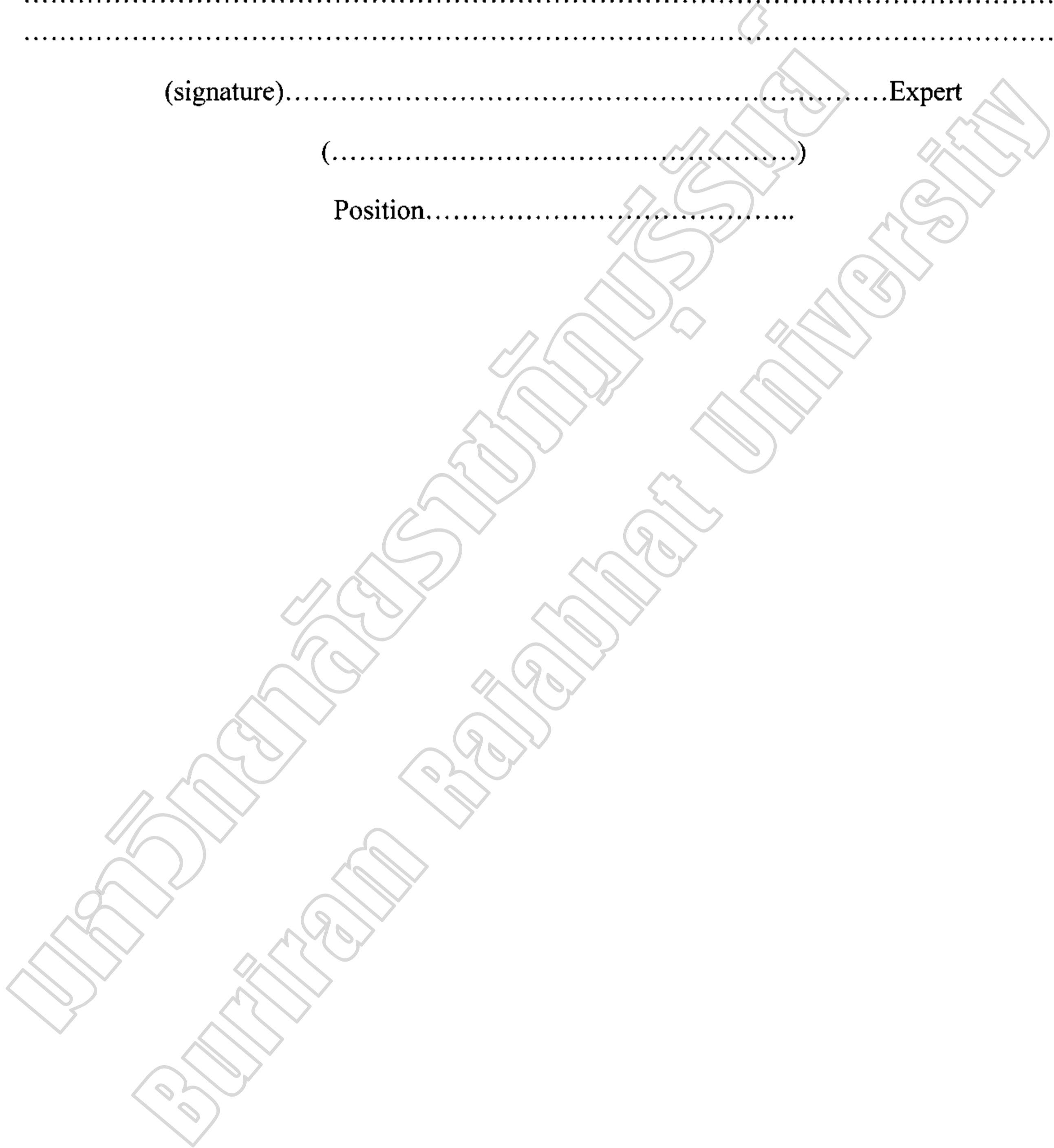
Suggestions

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(signature).....Expert

(.....)

Position.....



APPENDIX H

The Evaluation of Correctness and Appropriation of the Statements in the Students' Satisfaction Questionnaire towards KWL Strategy in Reading Comprehension for grade 12 Students by the Experts

Opinion Level	Meaning
5 means	most appropriate
4 means	more appropriate
3 means	average appropriate
2 means	less appropriate
1 means	the least appropriate

Item	text	Experts' Opinion (Appropriate)			\bar{X}	S.D.	Level of Appropriation
		1	2	3			
1	Reading strategy enhances students' reading comprehension	4	5	5	4.67	0.58	The Most Appropriate
2	KWL strategy is easy to practice.	5	4	4	4.33	0.58	More Appropriate
3	KWL strategy is fun.	5	4	5	4.67	0.58	The Most Appropriate
4	KWL strategy is useful.	4	4	5	4.33	0.58	More Appropriate
5	KWL strategy can promote critical thinking.	4	5	5	4.67	0.58	The Most Appropriate
6	KWL strategy can help me analyze the text.	4	4	5	4.33	0.58	More Appropriate
7	KWL strategy can help integrate prior knowledge with new information.	5	5	5	5.00	0.00	The Most Appropriate
8	I use my prior knowledge to facilitate the reading comprehension.	5	4	5	4.67	0.58	The Most Appropriate
9	KWL strategy is child-centered learning.	4	4	5	4.33	0.58	More Appropriate
10	KWL strategy can help increase vocabulary retention	4	4	5	4.33	0.58	More Appropriate
Total					4.53	0.52	The Most Appropriate

APPENDIX I

The Items-Total Correlation for each Item of Five-Point Rating Scale Questionnaire

Item No	RXY	Sig.	Remark
1	0.73	0.77	
2	0.66	0.60	
3	0.77	0.53	
4	0.63	0.72	
5	0.73	0.55	
6	0.78	0.70	
7	0.68	0.60	
8	0.77	0.65	
9	0.59	0.58	
10	0.70	0.67	

Critical values for Pearson $r \geq 0.2834$ ($df = N-2 = 35-2 = 33$)

The reliability coefficient(Coefficient Alpha of Cronbach)

Number of Students = 35

Number of Items =10

α - Coefficient = 0.88

APPENDIX J

**The Item Analysis Results Showing the Level of Difficulty (p), the Discrimination Index (B),
and the Reliability (Rcc) of the Pre-test and Post –test on KWL**

Items	P	B	Items	P	B
1	0.23	0.41	23	0.20	0.42
2	0.40	0.66	24	0.54	0.50
3	0.51	0.61	25	0.46	0.62
4	0.57	0.65	26	0.63	0.24
5	0.29	0.33	27	0.20	0.28
6	0.54	0.57	28	0.43	0.66
7	0.23	0.29	29	0.51	0.40
8	0.37	0.32	30	0.51	0.40
9	0.57	0.65	31	0.20	0.55
10	0.71	0.31	32	0.51	0.63
11	0.49	0.66	33	0.63	0.48
12	0.57	0.53	34	0.23	0.35
13	0.63	0.31	35	0.29	0.44
14	0.49	0.66	36	0.29	0.44
15	0.31	0.28	37	0.60	0.52
16	0.66	0.48	38	0.26	0.31
17	0.26	0.48	39	0.40	0.45
18	0.46	0.62	40	0.23	0.51
19	0.46	0.48	41	0.20	0.23
20	0.26	0.34	42	0.20	0.39
21	0.26	0.34	43	0.20	0.39
22	0.26	0.20	44	0.29	0.60

Items	P	B	Items	P	B
45	0.63	0.48	53	0.49	0.37
46	0.26	0.40	54	0.26	0.40
47	0.63	0.43	55	0.29	0.37
48	0.29	0.60	56	0.29	0.37
49	0.37	0.50	57	0.31	0.33
50	0.29	0.60	58	0.51	0.33
51	0.29	0.37	59	0.31	0.33
52	0.29	0.60	60	0.31	0.33

The reliability of the test (Rcc) is 0.94

N = 35 Mean = 23.31 S.D. = 11.74

APPENDIX K

The Table of IOC Index Analysis of Achievement Test

**Topic: The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade
12 Students**

Items	The Opinion Scores of Experts			$\frac{\sum R}{N}$	IOC Index
	1	2	3		
1	+1	+1	+1	1.00	Coincide
2	+1	+1	+1	1.00	Coincide
3	0	+1	+1	0.67	Coincide
4	+1	+1	+1	1.00	Coincide
5	0	+1	+1	0.67	Coincide
6	0	+1	+1	0.67	Coincide
7	+1	+1	+1	1.00	Coincide
8	+1	+1	+1	1.00	Coincide
9	+1	+1	0	0.67	Coincide
10	+1	+1	+1	1.00	Coincide
11	+1	+1	+1	1.00	Coincide
12	+1	+1	+1	1.00	Coincide
13	+1	+1	+1	1.00	Coincide
14	0	+1	+1	0.67	Coincide
15	0	+1	+1	0.67	Coincide
16	+1	+1	+1	1.00	Coincide
17	+1	+1	+1	1.00	Coincide
18	0	+1	+1	0.67	Coincide
19	+1	+1	+1	1.00	Coincide

The Table of IOC Index Analysis of Achievement Test

Topic: The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade

12 Students (Continue)

Items	The Opinion Scores of Experts			$\frac{\sum R}{N}$	IOC Index
	1	2	3		
20	0	+1	+1	0.67	Coincide
21	0	+1	+1	0.67	Coincide
22	0	+1	+1	0.67	Coincide
23	+1	+1	+1	1.00	Coincide
24	0	+1	+1	0.67	Coincide
25	+1	0	+1	0.67	Coincide
26	+1	0	+1	0.67	Coincide
27	0	+1	+1	0.67	Coincide
28	+1	+1	0	0.67	Coincide
29	+1	+1	+1	1.00	Coincide
30	0	+1	+1	0.67	Coincide
31	0	+1	+1	0.67	Coincide
32	+1	+1	+1	1.00	Coincide
33	+1	+1	+1	1.00	Coincide
34	+1	+1	+1	1.00	Coincide
35	+1	0	+1	0.67	Coincide
36	+1	+1	+1	1.00	Coincide
37	+1	+1	+1	1.00	Coincide
38	+1	+1	+1	1.00	Coincide
39	+1	+1	0	0.67	Coincide

The Table of IOC Index Analysis of Achievement Test

Topic: The Effects of KWL Strategy Utilization to Develop Reading Comprehension for Grade

12 Students (Continue)

Items	The Opinion Scores of Experts			$\frac{\sum R}{N}$	IOC Index
	1	2	3		
40	+1	0	+1	0.67	Coincide
41	+1	+1	0	0.67	Coincide
42	+1	+1	+1	1.00	Coincide
43	+1	+1	+1	1.00	Coincide
44	+1	+1	+1	1.00	Coincide
45	+1	+1	+1	1.00	Coincide
46	+1	+1	+1	1.00	Coincide
47	0	+1	+1	0.67	Coincide
48	+1	+1	+1	1.00	Coincide
49	+1	+1	+1	1.00	Coincide
50	+1	0	+1	0.67	Coincide
51	0	+1	+1	0.67	Coincide
52	+1	+1	+1	1.00	Coincide
53	0	+1	+1	0.67	Coincide
54	0	+1	+1	0.67	Coincide
55	+1	+1	+1	1.00	Coincide
56	+1	+1	+1	1.00	Coincide
57	+1	+1	+1	1.00	Coincide
58	0	+1	+1	0.67	Coincide
59	+1	+1	+1	1.00	Coincide

60	+1	+1	+1	1.00	Coincide
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From the table, it shows that the Index Item of Congruence (IOC) is 0.67-1.00

Remarks:

+1 = When it is sure that items of the test are coincident with objectives.

0 = When it is not sure that items of the test are coincident with objectives.

-1 = When it is sure that items of the test are not coincident with objectives.

มหาวิทยาลัยสุโขทัย
Buriram Rajabhat University

CURRICULUM VITAE

Name: Wiphaporn Dangsri

Date of Birth: May 10, 1973

Place of Birth: 53/1 Ban Ponduan, Pongo Subdistrict, Sanom District,
Surin Province, Thailand

Address: 146 Moo 8 Prakhonchai Subdistrict, Prakhonchai District,
Buriram Province, Thailand

Education: 1980-1985 Primary School from Ban Ponduan School, Sanom District,
Surin Province, Thailand

1986-1988 Secondary School from Sanomwitthayakarn School, Sanom
District, Surin Province, Thailand

1993-1996 Bachelor of Arts in English, Rajabhat Institute Buriram,
Buriram Province, Thailand

2009-2011 Master of Arts Program in English, Buriram Rajabhat University,
Buriram Province, Thailand

Working Place: Noncharoenpittayakhom School, 75 Moo 1, Noncharoen
Subdistrict, Ban Kruat District, Buriram Province, Thailand