THE COMPARISON OF USING SQ4R AND APPLIED SQ4R
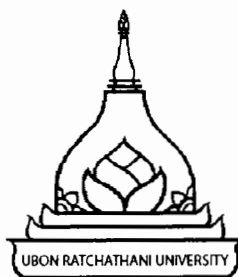# TO PROMOTE ENGLISH READING COMPREHENSION
OF GRADE 9 STUDENTS AT KANTHARAROM SCHOOL

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TITLE THE COMPARISON OF USING SQ4R AND APPLIED SQ4R TO
PROMOTE ENGLISH READING COMPREHENSION OF GRADE 9
STUDENTS AT KANTHARAROM SCHOOL

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ACKNOWLEDGEMENTS

บทคัดย่อ

เรื่อง	: การเปรียบเทียบผลสัมฤทธิ์ทางการอ่านภาษาอังกฤษเพื่อความเข้าใจของ นักเรียนชั้นมัธยมศึกษาปีที่ 3 โรงเรียนกันทรารมณ์ โดยวิธีการสอนแบบ SQ4R และ Applied SQ4R
ผู้วิจัย	: สมหมาย พูนทา
ชื่อปริญญา	: ศิลปศาสตรมหาบัณฑิต
สาขาวิชา	: การสอนภาษาอังกฤษเป็นภาษาต่างประเทศ
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คำสำคัญ	: การอ่านภาษาอังกฤษเพื่อความเข้าใจ, วิธีการสอนแบบ SQ4R, วิธีการสอนแบบ Applied SQ4R

การศึกษาครั้งนี้มีจุดประสงค์เพื่อ 1) เปรียบเทียบผลสัมฤทธิ์ทางการอ่านภาษาอังกฤษเพื่อความเข้าใจ ของนักเรียนชั้นมัธยมศึกษาปีที่ 3 หลังการใช้วิธีการสอนแบบ SQ4R และ Applied SQ4R 2) เปรียบเทียบผลสัมฤทธิ์ทางการอ่านภาษาอังกฤษเพื่อความเข้าใจ ระหว่างวิธีการสอนแบบ SQ4R และ Applied SQ4R และ 3) ศึกษาความพึงพอใจของนักเรียนที่มีต่อวิธีการสอนแบบ SQ4R และ Applied SQ4R

กลุ่มตัวอย่างในการศึกษาครั้งนี้คือนักเรียนชั้นมัธยมศึกษาปีที่ 3 โรงเรียนกันทรารมณ์ อำเภอกันทรารมย์ จังหวัดศรีสะเกษ จำนวน 78 คน เครื่องมือในการทดลองคือแผนการจัดการเรียนรู้โดยวิธีการสอนแบบ SQ4R จำนวน 4 แผน และแผนการจัดการเรียนรู้โดยวิธีการสอนแบบ Applied SQ4R จำนวน 4 แผน เครื่องมือในการเก็บรวบรวมข้อมูลประกอบด้วยแบบทดสอบวัดความเข้าใจในการอ่านภาษาอังกฤษเพื่อความเข้าใจ จำนวน 30 ข้อ แบบสอบถามความพึงพอใจของนักเรียนที่มีต่อวิธีการสอนแบบ SQ4R และ Applied SQ4R และแบบสังเกต

ผลจากการศึกษาปรากฏดังนี้

(1) วิธีการสอนแบบ SQ4R และ Applied SQ4R สามารถพัฒนาความสามารถทางการอ่านภาษาอังกฤษเพื่อความเข้าใจ ของนักเรียนชั้นมัธยมศึกษาปีที่ 3 อย่างมีนัยสำคัญทางสถิติที่ระดับ .01

(2) วิธีการสอนแบบ Applied SQ4R สามารถพัฒนาการอ่านภาษาอังกฤษเพื่อความเข้าใจได้ดีกว่าวิธีการสอนแบบ SQ4R แตกต่างอย่างมีนัยสำคัญทางสถิติที่ระดับ .01

(3) นักเรียนมีความพึงพอใจต่อการจัดการเรียนโดยใช้วิธีการสอนแบบ SQ4R และ Applied SQ4R ในระดับสูง

ABSTRACT

The purposes of this study were to 1) find out whether SQ4R and Applied SQ4R can improve the students' English reading comprehension 2) investigate which reading technique, SQ4R or Applied SQ4R is more effective and 3) examine to what extent the students satisfaction with reading techniques SQ4R and Applied SQ4R. The subjects were 78 Grade 9 students at Kanthatharom School, Kanthararom District, Sisaket Province. The research experimental instruments were 4 lesson plans on SQ4R and 4 lesson plans on Applied SQ4R. The research instruments were a reading comprehension test, a questionnaire on students' satisfaction and the teacher observation sheet.

The results of the study revealed as follows:

(1) The SQ4R and Applied SQ4R reading techniques helped increase the students' English reading comprehension. The posttest scores of SQ4R and Applied SQ4R students were significantly higher than the pretest after being taught at the .01 level.

(2) Applied SQ4R was more effective than SQ4R. The students who learned through Applied SQ4R made significantly higher score than the SQ4R students at the .01 level.

(3) Both groups of the students were satisfied with both reading techniques. The overall mean score of SQ4R and Applied SQ4R students were at 3.98 and 3.99. They both were rated in a high level

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CHAPTER 1

INTRODUCTION

This chapter presents a rationale, research questions, purposes, significance of the study and definitions of key terms of the present study.

1.1 Rationale

In the world of dynamic globalization, the demands of reading a second or foreign language, especially English is of great importance. Reading is the most useful and essential tool for people nowadays in terms of global business, politics, education, science and technology. According to Patel & Jain (2008), reading is not just a skill. Its importance is as a major source of information and pleasure. People use reading to search for information from the newspapers, magazines, job applications and even use it as an instrument for pleasure. It is reasonable to say that reading is one of the major sources where people use it in updating their knowledge. In an educational sector, reading is more than any other language skills. It plays a dominant role as a foundation to learners' success (Burns & Richard, 2012). For language learners, especially those who have learned a foreign language in the more formal environment of a school, reading is almost certain to have played some part in their learning (Langan, 2004). Eskey (2005; as cited in Zhou 2008) has pointed out that many EFL students rarely need to speak the language in their day-to-day lives but may need to read it in order to access the rich of information recorded exclusively in English. In fact, the ability to read the written language at a reasonable rate and with good comprehension has been recognized to be as important as the oral skills (Eskey, 1988).

Although, English has been taught as the only one compulsory foreign language in the environment of schools in Thailand at all educational levels, the level of success is still unsatisfactory. Different institutes and organizations both nationally and internationally reveal that Thailand has been positioned at the very low proficiency level. This can be seen from the results of different testing organized by different institutes.

According to one of Thailand's leading Newspapers, the Nation (2013) reported that Thailand is ranked near bottom in English proficiency based on the survey on the 7th of November, 2013. It states the low proficiency of Thailand's citizens. In their survey, they stated that out of 60 countries and where English is not their mothers' tongue, Thailand managed only the 55th position. Furthermore, it was discovered that while most of the ASEAN countries such as Singapore and Vietnam scored above 50% out of one hundred, Thailand manages to gain only 44.44 %. This shows how incompetent the Thai community is as far as English is concerned.

Similarly, the educational testing institute of Thailand, the National Institute of Education Testing Service (NIETS) (2015) reported that overall Thai secondary school students scored poorly on English in their Ordinary National Educational Test (O-NET) according to the 2014 academic year report. In this test, the scores were detailed into four strands based on the curriculum. Each school's scores were shown and compared to a national level, regional level, affiliated level, provincial level, extra large school level and lastly school level. By doing this, each school can see where they stand and which strands still have problems and need to be developed. The sequential scores from a national level to school level were 29.60, 26.02, 27.09, 26.61, 27.46 and 25.06 respectively. From the statistics, Grade 9 students of Kanthararom School made only 25.06, lower than any other levels in this test. Two strands especially, the first strand, Language for Communication, which requires students to have an understanding of and capacity for interpreting what has been read from various types of media and ability to express opinions with proper reasoning, is the first strand that urgently needs to be improved. The scores from the national level to school level in this test were 27.35, 26.38, 26.94, 25.71, 29.70 and 25.03 respectively. The school's position is still placed under every level in the test.

Based on the above mentioned data, reading appears to be a problematic language skill for Kanthararom School students. This problem may occur from lack of opportunities to use English in their everyday lives and lack of appropriate practices. The work of teachers is to search for proper strategies to assist students in developing their language proficiency.

Different reading strategies have been introduced into reading classrooms to help increase the students' reading abilities. One of the most interesting of those reading

techniques is SQ4R, which is developed from SQ3R invented by Robinson (1961). Later, Applegate et al. (1994; cited in El-Koumy, 2004) proposed to add the fourth R to make it more effective. SQ4R is the reading strategy which provides an active learning environment through the six different activities based on its abbreviation, Survey, Question, Read, Recite, Record and Review (Robinson, 1961). Students find the overall pictures of the reading task through the SURVEY stage. They set the purposes of reading by asking the questions about the texts in the QUESTION stage before reading the text more deeply in the READ stage. They ask questions and answer orally to help them recall the information from the text in the RECITE stage. In the REVIEW stage, the students reread the text to assure the information they have is correct. Finally, they summarize the reading materials through the RECORD stage.

Several studies have been conducted with different groups and different levels of students by employing SQ4R technique. The results of the studies proved that SQ4R helped develop reading abilities. In this study, therefore, the researcher would like to discover whether SQ4R can help lead to a better improvement in English reading comprehension for Grade 9 students at Kanthararom School.

1.2 Research questions

1.2.1 Can SQ4R and Applied SQ4R help improve the students' English reading comprehension?

1.2.2 Which reading technique, SQ4R or Applied SQ4R, is more effective?

1.2.3 Are the students satisfied with both reading techniques SQ4R and Applied SQ4R?

1.3 Purposes of the study

1.3.1 To compare Grade 9 students' reading achievement after using the treatments of SQ4R and Applied SQ4R.

1.3.2 To compare the effectiveness of using SQ4R and Applied SQ4R in developing English reading comprehension of Grade 9 students.

1.3.3 To investigate the students' satisfaction towards SQ4R and Applied SQ4R.

1.4 Significance of the study

This study intends to investigate which technique, SQ4R or Applied SQ4R, is more effective in teaching English reading comprehension for Grade 9 students at Kanthararom School. The findings of the study will be useful for teachers to bring the application of the more effective technique to promote reading comprehension for Grade 9 students, or even other levels in school. In case of similar results, the teacher then can bring both techniques in their teaching. For the students, these two techniques can help them read strategically and meaningfully. The students can apply these techniques in other English reading lessons and other subjects with different content areas.

1.5 Definitions of key terms

The following definitions are frequently used in the present study.

SQ4R is a systematic reading model. The process in teaching and learning is designed depend on its acronyms as below:

S stands for Survey. The students survey the text to find the main point of the text

Q is referred to Question. The students make a prediction about the text by generating the questions using the knowledge in the survey stage.

R1 is referred to Read. The students start reading attentively to find the information that answers the questions they already have.

R2 stands for Recite. The students ask the questions and answers out loud to themselves, peers or group in order to make sure the questions and answers still stay with them.

R3 stands for Review. The students re-read the text to confirm all knowledge they

R4 represents for Record. The students record the knowledge they gain and summarize by retelling the story in a short paragraph in English.

Applied SQ4R is a reading model which vocabulary and language structures instruction are contained in this technique to help comprehension more possible for the students. The process in learning is:

Vocabulary and grammatical structures are presented in the beginning to make reading more comprehensible for the students.

S stands for Survey. The students survey the text to find the main point of the text being read.

Q is Question. The students make a prediction about the text by generating the questions using the knowledge in the survey stage.

R1 is Read. The students start reading attentively to find the information that answers the questions they already have.

R2 stands for Recite. The students say the questions and answers out loud to themselves, peers or groups in order to make sure the questions and answers still stay with them.

R3 stands for Review. The students re-read the text to confirm all knowledge they gain from their reading.

R4 represents for Record. The students record the knowledge they gain and summarize by retelling the story in a short paragraph in English.

Reading comprehension is an intellectual of process of a reader making meaning of text through a printed material. The students are required to understand the meaning of words and sentences, identify the main ideas, identify the details, and summarize the texts.

Students refer to Grade 9 students at Kanthararom School in the academic year 2015.

CHAPTER 2
LITERATURE REVIEW

This chapter presents the analysis of published literature relevant to these following topics: reading comprehension, theories in second language (L2) reading, factors influencing the reader's comprehension, SQ4R strategy and previous studies in SQ4R strategy.

2.1 Reading comprehension

Reading comprehension is a complex process of a reader understanding the meaning of written language in the form of text. The process of reading comprehension has been seen in different aspects by theorists, researchers and educators. In the viewpoint of Pardo (2004; cited in Sahin, 2013), reading comprehension is the process of meaning construction as a result of blending content and message of the text with the readers existing knowledge and skills during reader text interaction. Sweet & Snow (2003) describe reading comprehension as the process of extracting and constructing the meaning simultaneously. Likewise, we can use both concepts; extracting which means analyzing how print represents words and thus, translating it to sounds accurately; constructing, which means making a representation of the information being presented. It usually requires building new meanings and associates it with old information. So, these two important factors determine the success or failure of reading comprehension. Woolley (2011) stated that reading comprehension is the process of making meaning from text. The main objective in reading is to gain an overall understanding rather than to obtain meaning from isolated words or sentences. In understanding the text information, readers develop mental model of the text during the reading process.

In short, reading comprehension is an interaction between the readers through the written materials. The ultimate goal in the reader's mind is to understand the messages from the printed materials being read.

Reading comprehension consists of different levels of comprehension. To measure the success in reading, it depends on the levels of comprehension of the readers that are able to make meaning with the reading texts. Reading comprehension can be classified into different levels which require different reading and thinking abilities.

Special Education Support Service (2009) ranked comprehension based on Bloom's Taxonomy into six levels:

(1) Remembering

This level is the lowest rank of cognitive processing. Readers are able to recognize or recall information which is explicitly stated in the texts by answering the questions like "what, where, when or who". Understanding the text in this level help readers

(2) Understanding

Understanding requires students not only to recall the information but also bridge a new knowledge to their previous learning and experiences. The abilities in this level include classifying, inferring, comparing and explaining. Students can be pushed further to examine scenarios from other perspectives, reorder information, and consider

(3) Applying

Applying knowledge entails using it in new contexts, transferring what has been learned in one topic, situation or problem to a new one. The use of principles or rules from one area employed on a new task or the demonstration of the correct usage of a procedure constitutes the application level of the taxonomy.

(4) Analyzing

At this level, readers are able to break down a whole idea into small parts, and see the relationships and patterns between each part. Readers are encouraged to put all the information on a topic together like jigsaw pieces and see the big picture.

(5) Evaluating

Readers understand the text from its context. The information is then analyzed and evaluated. The evaluation involves making a judgment after exploring a hypothesis and examining the evidence.

(6) Creating

At the creating level, the readers are expected to draw and combine the different ideas or knowledge from different resources to form a new product. The information can come from previous lessons, chapters and from other subjects. The ability to integrate the unrelated information from various resources to create a new knowledge is the desired outcome in this level.

According to Hashim (2014), reading comprehension is classified into three levels:

First, literal or message extraction level- The readers are able to memorize about facts where the information is stated explicitly in the text.

Second, inferential or message interpretation level.-The readers will have the ability to interpret meaning where they need to use overt information along with intuition, reasoning, and experience to attain the higher level of thinking.

Third, critical, creative or message evaluation level – In this level, the readers have the ability to do an overall critical evaluation of certain information or an idea that has been read in terms of the precision and/or suitability of the given information of a new idea encountered. This critical evaluation may require some different thinking and depend to some degree upon the knowledge and personal experience of the student, but it focuses mostly on convergent critical thinking being done by the student.

Block & Pressley (2001) and Moats (1998) stated that critical reading comprehension skills and strategies include the ability to:

(1) summarize;

(2) predict;

(3) develop questions;

(4) clarify;

(5) relate the content of the text to personal experience and knowledge (activate prior knowledge);

(6) construct mental representations of the text;

(7) monitor understanding of the text and

(8) determine and connect important ideas to construct meaning

Townsend (2007; as cited in Lismayanti 2014) classified reading comprehension from the highest to the lowest level into three different levels: independent level,

instructional level, and frustration level. These levels are classified based on Gickling & Havertape's (1981) ratios of known to unknown words in the texts.

Independent level is the level at which the readers are able to read independently on their own. The numbers of known words in the text are more than 97%. Only few words are too difficult for them when they read. Instructional level is the level where the students can read and understand the text with the numbers of 93-97% known words, but will be challenged by some words on each page.

Frustration level is the level where students have to stop often as they try to decode words. The students encounter with the less than 93% known words in the texts. If the students continue their reading, the unknown words make students become frustrated.

To conclude, reading comprehension is classified into different levels depending upon the degrees of reader's reading ability. Understanding the students' comprehension levels is useful for teachers in designing the suitable reading lessons for the students. In this study, the level of reading comprehension abilities is set as the goal in reading. The students are expected to have the abilities to understand the meaning of words and sentences, identify the main ideas, identify the details, and summarize the texts.

2.2 Theories in second language (L2) reading

As stated earlier, reading, especially reading in the second language is a complex procedure which involves different processes when we read. Here are some theories to explain how reading operates.

2.2.1 Schema theory

Schema plays a crucial role on teaching reading comprehension. It is viewed as the influences of the readers' background knowledge on reading comprehension. It explains how readers apply their background knowledge and previous experiences to increase their ability in comprehending written texts. Schema contains all knowledge which is stored in one's minds and packaged into units called "schemata" (Rumelhart, 1980). These schemata are classified into three types: linguistic schemata, formal schemata, and content schemata.

(1) Linguistic schemata refer to the readers' existing language proficiency in vocabulary, grammar and idioms. It can be said that the more linguistic schemata or the

language knowledge a reader has in his/her mind, the faster the reader acquires information and the better understanding the reader may get.

(2) Formal schemata are the organizational forms and rhetorical structures of written texts. These include different types of knowledge from different text genres. Formal schemata are described as abstract, encoded, internalized, coherent patterns of meta-linguistics, discourse and textual organization that guide the expectation in his/her attempt to understand the meaningful piece of language.

(3) Content schemata refer to the background knowledge of content area of the text. These include topic familiarity, cultural and previous knowledge within a field. Schemata should have the knowledge relative to the content domain of the text, which is the key to the understanding of the texts. Sometimes, content schemata can help learners with limited knowledge of language schemata to understand texts by predicting, choosing information and removing uncertainties.

In short, schema is one of the most influential sources of knowledge that affects the readers' ability in reading. The more schemata knowledge the readers possess, the better readers they become. Thus, teachers should be aware of the students' schema before designing reading lessons to the students.

2.2.2 Models of Reading Process

Reading, especially reading comprehension, is a complex ongoing cognitive and mental process. It is a place where the readers are expected to combine their prior knowledge with the new acquired information in the text that has been read. As the readers' schemata are operated, they combine with the three reading models: bottom-up model, top-down model and interactive model. These three reading models are used to describe the various ways the readers have an interaction with the text. Aebersold & Field (1997) and Rumptz (2003) point out the process of these models as follows:

Bottom-up model

Bottom-up theories believe that learning to read develops children's reading abilities due to the different parts of language like letters, sounds, morphemes, parts of speech, and sentence structures to understand the meaning of the whole text. It is a sequential or serial mental process which involves all linguistics skills. Ultimately, which signals to use in order to arrive at the meaning depends on the reader (Goodman, 1970; as cited in Kader, 2008). Bottom-up process is comparable to solving a jigsaw

problem which begins by examining each piece of the puzzle and putting them together to make a picture.

Top-down model

In contrast to the bottom-up model, Top-down processing or conceptual model is like taking a bird's eye view of a landscape below (Goodman, 1970 as cited in Kader, 2008). Prior knowledge is usually associated with the top-down strategy for the reader employs general knowledge. So, we could see that reading involves taking risks like a guessing game for it is a must in the puzzle solving process, to infer meanings, and decide what to retain and what not to retain then continue. This kind of reading process is best avoided as the knowledge should come from the reader itself (Goodman, 1967).

Interactive model

Interactive model is a combination of bottom-up and top-down models explaining that prior knowledge and prediction facilitated in a more comprehensible text. The interaction takes place at three levels: 1) the interaction between lower-level and higher-level skills; 2) between bottom-up processing and top-down processing; 3) between the background knowledge of the text and the background of the reader. In interactive reading processing, both bottom-up and top-down processing should be happening at the same time. (Rumelhart, 1980). Readers may employ bottom-up process as a base for comprehending a text and then turn to top-down process to arrive a high-level interpretation of the content of the text. Prediction of the content will be confirmed, changed or ignored through further data analysis.

Based on the above explanation, reading models are divided into three types: bottom-up, top-down and interactive model. In bottom-up, readers attempt to use their grammatical knowledge to understand the given text whereas top-down model the readers use their background or general information to predict the meaning of the text they read. In interactive model readers use the operation of both bottom-up and top down to help them understand the text meaning.

2.3 Factors influencing second language (L2) reader's comprehension

Reading has general component skills and knowledge areas. Because of its complexity, language learners might encounter difficulties when they read in a second or foreign language. These difficulties may be influenced by several different factors. Graham & Bellert (2004; as cited in NSW Department of Education and Training, 2010) stated that learners who struggle with comprehension possess inefficient strategies and use them inflexibly. They are usually unaware of what good comprehenders do and need to be shown how and when to apply a small repertoire of comprehension strategies. Explicit instruction in comprehension strategies can help support them to overcome difficulties in understanding texts. Woolley (2011) stated that reading comprehension difficulties, by its nature, are complex. It comes from the combination of factors inside and outside the readers. The inside factors the readers can be biological, cognitive and behavioral issues while the outside factors are a lack of reader proficiency, problems within the text and heavy task demands. Aebersold & Field (1997) pointed out six major factors that influence the readers' reading comprehension:

(1) Cognitive development and style orientation

Cognitive development and style orientation explains that the earlier a child or student is exposed to the second language the better his/her ability to grasp concepts, willingness to use a variety of strategies, and basic ways of approaching texts.

(2) Reading performance and competence in L1

The readers with higher levels of proficiency in L2 are more able to transfer reading skills from their L1 to L2, thus enhancing their L2 reading proficiency.

(3) Metacognitive knowledge

Learners who are able to describe and discuss the features and rules of their own language appear to be more proficient at improving their L2 reading processes.

(4) Second or foreign language proficiency

This is one of the greatest factors in L2 reading. Without threshold levels of L2 proficiency, reading does not improve. In addition, a careful assessment of the

(5) Degree of difference between L1 and L2/FL

There is a greater difference between the native language and the target language or L2 in terms of writing system, rhetorical conventions, and purposes for

reading. Therefore, the students should master their first language before mastering the L2 or target language. In other words, it is difficult to acquire the target language without mastering his or her first language.

(6) Cultural orientation

The most far-reaching and influential factors in L2/FL reading are those of cultural orientation. The students' attitudes toward texts and purpose for reading, the types of reading skills and strategies they use in L1 and their acquired background knowledge in L2 are all major influences in L2/FL reading.

Hashibuan (2011) identified the students' reading comprehension failures caused by five major reasons; 1) they lack of vocabulary knowledge; 2) they fail to understand a sentence; 3) they fail to have an understanding of how sentences relate to each others; 4) they do not know how to combine the information together in a meaningful way; and 5), the students lack of interest or concentration.

In short, reader's comprehension may be influenced by the reader's schema as well as the reading performance and competence in L1 and metacognitive knowledge whereby if a student master his/her first language so well he/she can use some reading skills to apply in his/her second language. In this study, these factors are useful for teachers in selecting appropriate reading passages in terms of the students' language knowledge, topic familiarity and the students' interests.

2.4 SQ4R Strategy

As mentioned earlier, reading difficulties may occur from different factors. Selecting appropriate reading strategies are some of the factors that can help improve the reading skill for the students. SQ4R is a reading strategy which originally developed from SQ3R by Robinson (1964; cited in Nuttall 1985). The process of making meaning is designed depends on its acronym.

S is represented for 'survey'. In this stage, students survey the text by looking at its topic, heading, subheading, pictures, chart, graphs or the words in italics or bolds before reading the text deeply.

Q stands for 'question'. In the question stage, students use the information they obtain from surveying stage to construct the questions they are expected to find in the given text.

R1 stands for 'Read'. Students start to read attentively to find the information that answers the questions they have.

R2 is referred to 'Recite'. Students recall the questions and answers by saying aloud from their memory.

R3 stands for 'Review'. Students reread the text to confirm the information they have.

To make SQ3R more effective, Applegate et al. (1994; cited in El-Koumy, 2004) suggests adding the fourth R after the last step in SQ3R. The SQ4R's process is described as follow:

S represents the word 'survey'. In this step, the students survey the reading texts by reading its title, subtitle, opening and concluding paragraphs. Surveying the text before it is read, the reader will have a greater understanding of the main ideas. This enables the reader to organize as he/she is reading.

Q is the abbreviation of question. The students will generate the questions by using his/her knowledge they obtain from surveying the texts in the first step. These questions are used as a basis to ask the readers themselves and those answers may be found from the reading materials.

R1 stands for read. The students actively and attentively read the texts in order to answer the questions they already have in the 'Question' step. They underline or highlight the material that answers their questions.

R2 stands for recite. In this step, the students check whether they can recall the questions and their answers from memory.

R3 represents to review. In this step, the students are allowed to go over the texts again in order to check their understanding and reinforce it in their memory

R4 stands for Record or (w)rite. The students briefly write the answers to their questions in their own words.

Richardson & Morgan (1997; as cited in Hashibuan, 2011) stated that SQ4R is an effective reading strategy. It provides a systematic way of comprehending and studying text. Its process consisted of Survey, Question, Read, Recite, (W)rite and Review. Students start their learning activities by previewing and making a prediction about the reading text. They, then, set a purpose of reading by producing the questions about the topic. They start to read actively to search for answers to the questions they generated.
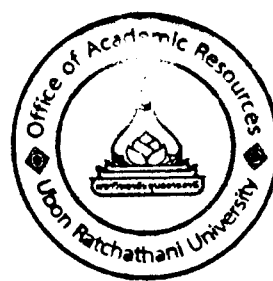
Students monitor their comprehension by summarizing the information of the text. Finally, they evaluate their comprehension through reviewing stage (Billmeyer & Barton, 1998).

Sinthapanon (2002; as cited in Songthin, 2013) explained SQ4R activities into three stages in teaching reading.

Lead in stage - In this stage, the students will be prepared in a comfortable atmosphere to be ready before they start to read.

Teaching stages - In teaching stage, it comprises of six stages based on the SQ4R procedures.

Survey stage - The students quickly read the materials to find the main point of the reading text.

Question stage - Students construct the questions to arouse their curiosity about their reading event. Questioning helps students recall their previous knowledge and at the same time help them read purposely.

Reading stage - Students read attentively to seek the information that answers the questions they already have. Any questions that come to their minds while they read will be noted down. Readers continue to read until they find the answers.

Record - Students record the knowledge they gain from the reading stage by using their own words.

Recite - Students summarize the texts using their own words. If they are not sure of their gained information, they are able to read again.

Reflect – Students analyze and express opinions about the written texts.

However, SQ4R has been further developed by educators and researchers to maximize its usefulness. For instance, Bhlool (2013) developed another model, which is similar to SQ4R called SQ3R2 (SQ3R, SQ4R and PSQ5R). The aim is to understand the material in some depth. The method involves five simple steps; Survey, Question, Read, Recall and Review.

Survey - Students skim through the text to gain an overview which is not key points.

Question - Students devise questions that you hope the text will answer.

Read - Students read slowly and carefully.

Recall - Students write down the main points from the chapter from memory.

In short, SQ4R is a systematic reading model which provides active learning through its six teaching and learning activities depend upon its abbreviations. In this study, SQ4R was adopted from Applegate et al. (1994) model. The teaching and learning procedures were done through surveying, questioning, reading, reciting, reviewing and recording.

2.4.1 The advantages of SQ4R and its limitations

SQ4R is accepted to be one of the most effective reading strategies. Its advantages were pointed out as follow:

(1) Surveying the reading topics in SQ4R helps students memorize the overall pictures of a reading text (Robinson, 1961)

(2) Questioning makes students read purposely (Songthin, 2013), concentrate on their reading and search for information from the text (Songthin 2013 and Yakupoglu 2012).

(3) Questioning before reading helps students understand and improvecritical thinking, analyzing, synthesizing, hypothesizing and evaluating skills (Robinson, 1961).

(4) Self questioning during reading in SQ4R is helpful and it facilitates the students' learning. Students thus can improve their comprehension better (Songthin 2013 and Yakupoglu 2012).

(5) SQ4R helps students understand the main point of the reading material and be able to combine it with the other points in the passages. This increases the students understanding and retention (Robinson, 1961)

(6) Reciting the answers in the recite stage provides opportunities for students to retell the story after reading. This stage prevents students from forgetting the information from the reading passages and at the same time it helps students improve their long term retention (Robinson, 1961).

(7) Reviewing is useful for students to summarize and relate the obtained information to the students' interests (Robinson, 1961).

(8) SQ4R helps students promote reading efficiency and increase their interests. They are also able to relate the new knowledge with the previous information they have. By doing this, it makes reading more comprehensible for students (Hashibuan, 2011, Songthin 2013 and Yakupoglu, 2012).

(9) SQ4R teaching and learning process helps students build their confidence when they recite and take tests (Hashibuan, 2011).

(10) SQ4R strategy helps students organize an efficient studying (Hashibuan, 2011).

(11) The information in the textbook can be learnt systemically through SQ4R, so the textbook can be exploited maximally by the students who read it to improve the learning process of the reading (Hashibuan, 2011).

(12) SQ4R supports students to have good reading habits (Hashibuan, 2011).

In short, SQ4R is a systematic reading strategy. It provides interactive and participative learning environment through each stage of its learning process. Employing SQ4R into real practice can enhance students to be an effective reader.

Although, SQ4R brings several advantages, but it still has some limitations when it is used, especially in a foreign language classroom. To make SQ4R more effective, some suggestions were given as follow:

(1) Teacher should have good command in using language in order thatthey are able to guide and give suggestions when this technique is employed (Kaewliam, 2011, Sinthapanon and others; 2003 as cited in Songthin, 2013).

(2) Teachers should provide reading passages that are suitable for students in terms of their ages, modernizes, and its' interesting. It is also helpful if the students have background knowledge to the selected reading passages.(Banjongmanee 2005; Potaya 2003; Sinthapanon and others, 2003 and Songthin, 2013).

(3) Students should have good reading skills and be able to question and find the answers by themselves (Moonkum, 2003).

(4) Students should be taught relevant grammatical knowledge in the reading passage because lacking of grammatical knowledge makes students encounter with difficulties, especially writing a summary (Kaewliam, 2016).

(5) SQ4R does not have vocabulary and grammatical structure instruction stage, therefore, teachers should contain vocabulary and grammatical knowledge instruction into teaching and learning procedures in order to reduce the students' reading problems (Kaewliam, 2016 and Potaya, 2003).

Based on the information derived from several previous studies, SQ4R was recommended to develop by adding vocabulary and grammatical structure

instruction stage to make it more effective for the learners. This changing creates a new reading model called Applied SQ4R. The frameworks of SQ4R and Applied SQ4R are demonstrated in Figure 2.1

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┌──────────────────────────────────────────────┐
│      SQ4R and Applied SQ4R's frameworks        │
└──────────────────────────────────────────────┘
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SQ4R	Applied SQ4R
Survey the reading text (S)	Vocabulary grammatical knowledge instruction
Formulate question (Q)	Survey the reading text (S)
Read (R1)	Formulate question (Q)
Recite (R2)	Read (R1)
Review (R3)	Recite (R2)
Record (R4)	Review (R3)
	Record (R4)
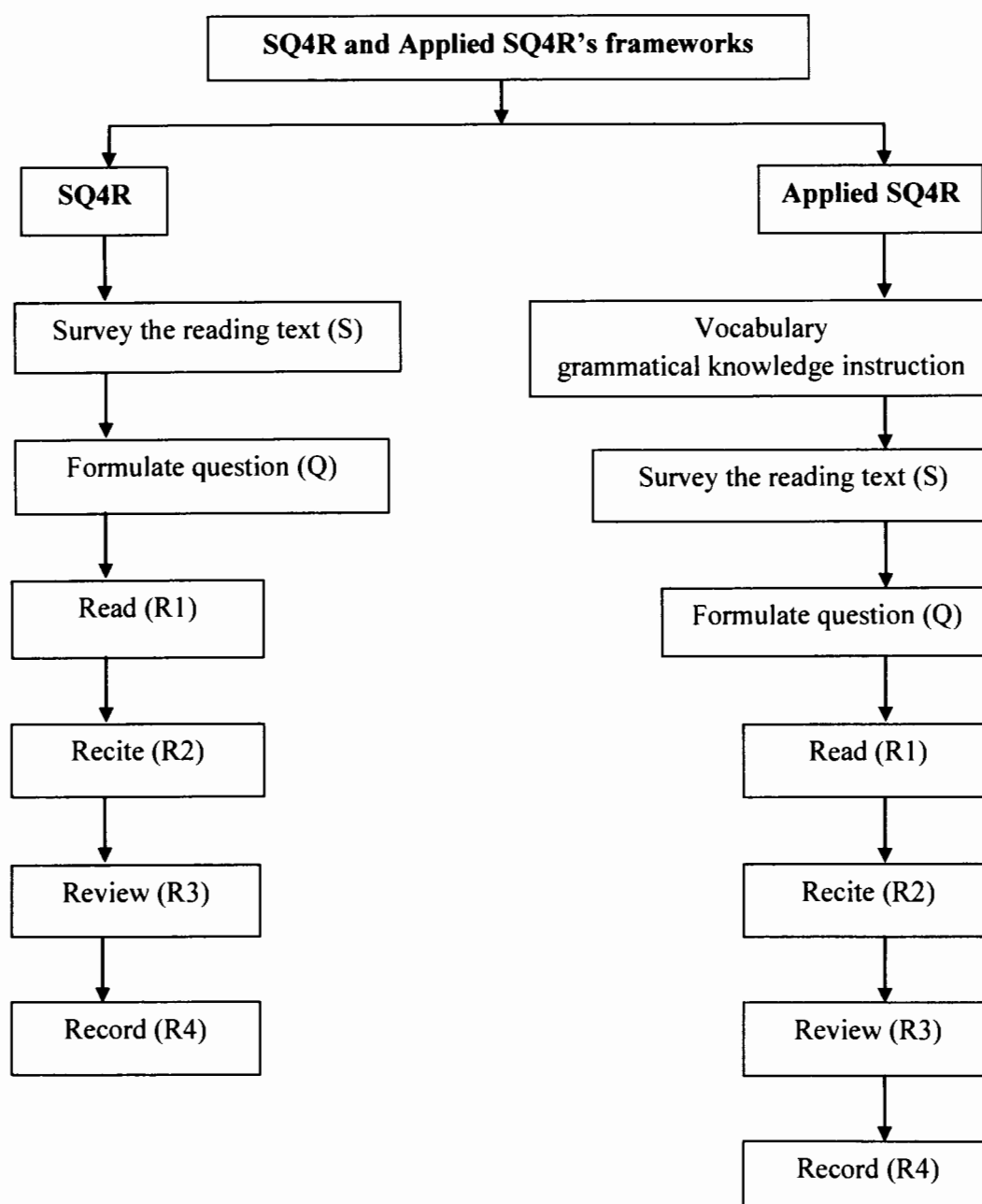
Figure 2.1 SQ4R and Applied SQ4R's Frameworks

To conclude, Applied SQ4R is a seven stage reading technique. It contained a vocabulary and grammatical structure instruction stage as a pre-reading activity to lead students to a better understanding in the reading text.

2.4.2 Previous studies on SQ4R in Thailand

2.4.2.1 Previous studies in English subjects

Potaya (2003) investigated the effect of SQ4R on English reading comprehension and summary writing ability. The subjects were 36 second year students in vocational education at Lampang Polytechnique College, Lampang Province. The research experimental instruments were eight lesson plans using SQ4R. The research instruments were reading comprehension test and summary writing test. The findings discovered that the students' English reading and writing ability were higher. Potaya suggested that the selected texts should be suitable in terms of the length of texts and time. Teaching vocabulary and grammar features would be beneficial for students. Reading comprehension and summary writing abilities should be assessed to check the students individually.

Banjoungmanee (2005) compared students' English reading comprehension and their reflective thinking before and after studying through SQ4R. It was a one group design with 26 Matthayomsuksa 5 students in Regina Coeli College, Chiang Mai. They studied English reading and writing course in the first semester of the academic year 2005. The experimental instruments were eight SQ4R technique lesson plans. The data collecting instruments were reading comprehension test and reflective journals of each lesson plan from the second to the eight lesson plans. The findings implied that the students' reading comprehension and reflective thinking ability increased after being taught through SQ4R. The researcher suggested that teacher should spend more time to employ SQ4R to teach reading comprehension. Other reading techniques should be used when students felt bored after using SQ4R technique for a long time. The reading passages should be up to date and fit with the students' interests.

Lao-amnat (2013) studied English reading comprehension achievement and students' satisfaction towards learning English reading comprehension through SQ4R of the second year English major students of Phetchabun Rajabhat University. The samples were 35 students. They were chosen with simple

random sampling. The experimental instruments were SQ4R- based lesson plans, English reading comprehension achievement test, and a satisfactory questionnaire. The findings revealed that the English reading achievement after a treatment was significantly different at the level .05. The students' satisfaction towards learning English reading comprehension through SQ4R was at the highest level.

Yonchai (2013) studied the development of English reading comprehension through SQ4R of 40 Matthayomsuksa 3 students, Suakokwittasun School, Wapiphatum District, Mahasarakham Province. The experiment was done in the second semester of the academic year 2012. The research instruments were 6 instructional plans, a 30-item with 4-multiple choice achievement test and a 28–item with 5-rating scale for studying students' learning avidity in English. The findings revealed that the students' posttest mean scores were significantly higher than the pretest at the .01 level. The students' avidity in English learning was at a high level.

Songthin (2013) compared the effectiveness of using SQ4R and KWL Plus on reading comprehension and writing abilities. The samples were 70 Matthayomsuksa 3 students in Pra Bathnasingpithayakhom School in the academic year 2011. The research experimental instruments were 18 lesson plans of both reading techniques. The research instruments were a 30-item reading comprehension test and a 6 item reading comprehension test. The findings revealed that the students' reading and writing abilities after using SQ4R and KWL Plus were higher. The samples that were taught through KWL Plus made higher scores than SQ4R at the .05 level. Vocabulary and language structures should be taught, especially for the students in primary and secondary school levels.

From the above mentioned reviewing, SQ4R was conducted with different groups and different levels of students. The results of the studies indicated that SQ4R was an effective reading strategy. It helped students enhance their reading comprehension abilities.

2.4.2.2 Previous studies in other subjects

Kaewkam (2015) explored the students' abilities on reading comprehension of Thai language by comparing SQ4R and Traditional Method. The subjects were 80 Matthayomsuksa 1 students in Thawaranukul School in the academic year 2013. The research instruments were lesson plans, achievement test and a

questionnaire. The result showed that students in SQ4R group made significantly higher score than Traditional Method at the .05 level. The students' satisfaction was at a high level.

Luesopa and others (2015) studied the effects of SQ4R on reading comprehension in Thai language. The samples were 32 Matthayomsuksa 1 students at Kee Lek Khyo Praiwan Wittaya School, Roi-Et Province. The research experimental instruments were 6 instructional plans for 12 hours. The research instruments were a 30-item with 4-multiple choice achievement test of reading comprehension, and a 20-item with 5 rating scale questionnaire for assessing students' satisfaction. The findings revealed that the posttest mean scores in Thai language reading comprehension of the students who learned through the SQ4R method were significantly higher than those of the pre-test at the .01 level. The students' satisfaction after learning through the SQ4R was at the highest level.

Jittakarn (2012) investigated the students' development on reading comprehension in Thai subject by employing SQ4R with graphic organizers. The subjects were 26 Prathomsuksa 2 students in Ban Po Mo School, Songkla. The research experimental instruments were 12 lesson plans, achievement test, 30 items comprehension test and a satisfaction questionnaire on SQ4R with graphic organizers. The findings indicated that the students' learning achievement and reading comprehension abilities were higher. The students' satisfaction was at the highest level.

From the reviewing of the previous studies, SQ4R was employed with primary and secondary school students in Thai language. The results revealed that the students' reading comprehension abilities were improved after SQ4R was employed.

2.4.3 Previous studies on SQ4R in other countries

Hasibuan (2011) compared the effect of SQ4R and Accelerated Learning on students' achievement in reading comprehension. The participants were 60 second year students of Islamic State Senior High School. They were divided into two groups. The first group was taught through SQ4R and the other was taught using Accelerated Learning. The Pretest and Posttest were used as the research instruments. The result of the study indicated that the students' ability in reading comprehension of the two groups was improved. The students who were taught by the SQ4R technique were better than the students who were taught through Accelerated Learning.

Sada (2015) studied the students' reading comprehension on the recount text by using SQ4R and booklet. The participants were 25 ninth grade students in SMPN 1 Sungai Betung. The instruments were the field note, observation and written test. The written test consisted of multiple choice test and essay. The result of the study revealed that the students' reading comprehension was higher after the SQ4R and booklet were used. The researcher suggested that selecting familiar texts was useful for students to recall their prior knowledge. A set of questions can be prepared to help control the out of topics response of the students from the above reviewing, SQ4R was studied and compared with other reading techniques. The results revealed that the students made a better improvement after SQ4R was employed.

CHAPTER 3

METHODOLOGY

This chapter details the research methodology under these following topics: participants, research instruments, reading passages, SQ4R and Applied SQ4R teaching procedures, duration of the study, data collection and data analysis.

3.1 Participants

Subjects

The subjects who participated in this study were 78 Grade 9 students at Kanthararom School, Kanthararom District, Sisaket Province in the academic year 2015. They studied Fundamental English E23101 and were selected by using Simple Random Sampling. They were divided equally into two groups. The first group was taught through SQ4R and the second was instructed by using Applied SQ4R.

3.2 Research instruments

To meet the goal of this study, the following three types of research instruments were used.

3.2.1 The Pre-Posttest Paper

The pretest and posttest were the same paper tests. They were designed to assess the students on reading comprehension in the levels of understanding the meaning of words and sentences, identifying the main ideas and identifying the details. These levels of understanding come from the ninth grade level indicator of the English Curriculum. Standard F1.1.4 states that the students should be able to choose or specify the topic, main idea and supporting details about what has been read from various types of media, as well as provide justifications and examples for illustration (Ministry of Education, 2008).

The pretest and posttest were the same of 30 questions with totally 30 scores. The first part had 26 questions, and each of the first 26 questions had four multiple choice answers. The other four questions were the writing test where the students were asked to

identify the main topics and subtopics of the written materials in English. These 26 question items were at first drawn from 45 items and examined by the three experts; the researcher's advisor who is a specialist in teaching English and two English teachers who have direct research experience. The three experts checked the appropriateness of the test with the proficiency level of the students in terms of its content validity, appropriateness of vocabulary, sentences, the relevancy of objectives, and the levels of comprehension. The topics and contents of the reading passages in the pretest and posttest were closed to the topics that the students learned during their experiment.

In the writing section, there were four writing questions. Each question carried eight marks giving a total of thirty two points. After, the thirty two points were divided by eight giving to have four points. When 26 points from the first part of the pretest and posttest were added to the 4 points from the writing part, the total scores were 30. To help students know what aspects of language abilities they required to perform in their writing task and the teacher to know what he/she was going to assess, the following writing criteria was provided. These criteria were adapted from Udom's (2002; cited in Potaya, 2003) study and were shown in Table 3.1 below.

Table 3.1 Writing assessment rubrics

Items	Scores	Descriptors
Topics	4	- Clearly and accurately identify the topics by using their own words.
	3	- Identify the topics mostly in the students' own words.
	2	- Identify the topics and much of them are copied directly from the text.
	1	- Try to identify the topics but few of them relevant to the topics but still can be able to understand.
	0	- Write irrelevant points or write out of the topics or not able to write anything.

Table 3.1 Writing assessment rubrics (Continued)

Items	Scores	Descriptors
Subtopics	4	- Clearly and accurately identify the subtopics by using their own words.
	3	- Identify the subtopics mostly in the students' own words.
	2	- Identify the subtopics and much of them are copied directly from the text.
	1	- Try to identify the subtopics but few of them relevant to the topics but still can be able to understand.
	0	- Write irrelevant points or write out of the topics. Not able to write anything.

Resource: Adapted from Udom (2002)

3.2.2 The students' satisfaction questionnaire

The students' satisfaction questionnaire was constructed in Thai language to examine the students' satisfactions after being instructed through SQ4R and Applied SQ4R techniques. The questionnaire contained two sections.

The first section consisted of 15 items which is adjusted from Sangkaew's (2009) research. The students were asked about the suitableness of time, learning atmosphere, process in learning, its contents and the benefits of the two reading techniques. The five points Likert rating scales were used in order that the students rated their level of satisfactions on the scale of 1-5 (1 means **completely unsatisfied**, 2 means **unsatisfied**, 3 means **satisfied**, 4 means **very satisfied** and 5 means **completely satisfied**.) The students were asked to answer the questionnaire by choosing only one rating scale out of five to reflect their satisfaction on the questionnaire. The mean score from the students' satisfactions were interpreted based on the criteria shown in Table 3.2

Table 3.2 Criteria for satisfaction rating scale interpretation

Ranges of the means	Levels of satisfaction
4.21-5.00	Very high
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Very low

Resource: Attapan (2002 as cited in Sukkrong, 2010)

The second section comprised of 2 questions. In this part, the subjects were requested to express their opinions, problems and suggestions regarding the treatment. (See Appendix B).

3.2.3 Teacher's Observation Sheet

During the treatment, the two groups of students were observed by using the criteria in the Teacher's Observation Sheet which consisted of 10 questions. (See Appendix C) The observed behaviors were interpreted into three levels depending on the frequency of the observed behaviors occurred: 1 = Not yet, 2 = Sometimes and 3 = Frequently. The data from the observation helped the researcher seek in depth information and also reflect the students' response towards these two reading techniques in terms of the classroom atmosphere, the students' attention on the tasks, the ability in applying the strategies into real practice and the individual demands for more explanation from the teacher and peers.

3.3 Reading Passages

The reading passages used in this study were taken from the English textbooks for Grade 9 level. They were suitable for the requirement of SQ4R's processes. Seven topics were selected according to the researcher's advisor to check their appropriateness. These seven topics again were presented to the students to vote for only four topics depending on their interests. The four reading texts which the students chose are shown below.

Table 3.3 The four selected reading topics

Number	Student's Textbook	Contents
1	Scooter - Page 76	A Young Pop Star
2	Scooter - Page 86-87	Greenhouse Effect
3	My World 3 - Page 71	Google
4	Got it - Page 11	Fast Food Originals

3.4 SQ4R and Applied SQ4R Teaching Procedures

To arrange the sequence of instruction, the researcher considered the level of difficulty of vocabulary, language structures and the complexity of the reading passages. These reading passages are drawn from commercial texts which are selected by Ministry of Education. Therefore, it is suitable for Thai students in Grade 9 level. The sequences of instruction of both techniques were demonstrated below:

Table 3.4 The sequences of teaching and learning activities

Weeks	The teaching and learning activities
1	Pretest
1	A Young Pop Star
2	Greenhouse Effect
3	Google
4	Fast Food Originals
4	Posttest

The four lesson plans using SQ4R and Applied SQ4R process were designed. Both techniques shared the same four reading passages. The steps in teaching and learning of both strategies were described in Table 3.5

Table 3.5 SQ4R and Applied SQ4R teaching procedures

SQ4R teaching procedure	Applied SQ4R teaching procedure
1. Students are divided into a group of 5 or 6.	1. Students are divided into a group of 5 or 6. **Vocabulary and language structures instruction**
2. Teacher provides a handout that contains vocabulary and its meanings with the grammar point to students to study by themselves.	2. Teacher presents and explains the meanings of vocabulary and the sentence structures in the text with the provided handout to students.
S-Survey 3. Teacher asks students to survey the text by looking at its topics, subtopics, pictures, graphs, etc. to see the overall picture of the text.	**S-Survey** 3. Teacher asks students to survey the text by looking at its topics, subtopics, pictures, graphs, etc. to see the overall picture of the text.
Q-Question 4. Teacher models the students to turn topic, subtopic, graph or picture to be questions. 5. Ask each group of students to discuss, brainstorm and guess what the text will be about. 6. Ask students to form the Wh-questions by using the information they gained from the survey stage.	**Q-Question** 4. Teacher models the students to turn topic, subtopic, graph or picture to be questions. 5. Ask each group of students to discuss, brainstorm and guess what the text will be about. 6. Ask students to form the Wh-questions by using the information they gained from the survey stage.

Table 3.5 SQ4R and Applied SQ4R teaching procedures (Continued)

SQ4R teaching procedure	Applied SQ4R teaching procedure
7. Ask each group of students to write down their questions on a provided chart paper. Teacher observes and gives some suggestions while the students work in group.	7. Ask each group of students to write down their questions on a provided chart paper. Teacher observes and gives some suggestions while the students work in group.
R1-Read 8. Students in each group start to read the text attentively to find the details and main ideas of each paragraph using the questions they have as a guideline in reading. 9. Ask students to highlight or underline and write the question numbers to the information that answer the questions they have. 10. Teacher observes and assists students if they have any problems and asks them to add more questions if they want to.	**R1-Read** 8. Students in each group start to read the text attentively to find the details and main idea using the questions they have as a guideline in reading. 9. Ask students to highlight or underline and write the question numbers to the information that answer the questions they have. 10. Teacher observes and assists students if they have any problems and asks them to add more questions if they want to.
R2- Recite 11. Motivate students to take turn asking and answering the questions with peers or groups without looking at the questions and the answers they have. 12. Teacher can correct them if they make some mistakes.	**R2- Recite** 11. Motivate students to take turn asking and answering the questions with peers or groups without looking at the questions and the answers they have. 12. Teacher can correct them if they make some mistakes.

Table 3.5 SQ4R and Applied SQ4R teaching procedures (Continued)

SQ4R teaching procedure	Applied SQ4R teaching procedure
R3- Review 13. Ask students to re-read the text to correct and confirm the answers and information after their reading.	**R3- Review** 13. Ask students to re-read the text to correct and confirm the answers and information after their reading.
R4-Record 14. Students note down their groups' answers on the provided chart and in their notebooks. 15. Teacher models and helps them how to summarize the text in their own words. (Only the first lesson) 16. Ask each group of students to display their group work on the board. 17. Teacher and friends give some comments about their work.	**R4-Record** 14. Students note down their groups' answers on the provided chart and in their notebooks. 15. Teacher models and helps them how to summarize the text in their own words. (Only the first lesson) 16. Ask each group of students to display their group work on the board. 17. Teacher and friends give some comments about their work.

3.5 Duration of the study

The study conducted during the first semester of the academic year 2015 over a total of 4 weeks (4 periods). Two days before the experiment started, the two grouped subjects were tested using the same pre-test. After that they were instructed with the same four expository texts. The first group was taught through SQ4R whereas the other group used Applied SQ4R. These experiments were done outside of their regular classes. SQ4R students were taught on Monday mornings in a guidance class while Applied SQ4R students were taught on Thursday mornings in an O-net tutorial class. After the posttest, the two groups were asked to answer the satisfaction questionnaire towards SQ4R and Applied SQ4R reading techniques.

3.6 Data Collection

This study was carried out in the first semester of the year 2015. The pretest was administered in the last week of July, 2015, two days before the experiment started. During the 4 weeks in August, the two groups of students were taught using SQ4R and Applied SQ4R. During the learning session, the students were observed using the criteria in the Teacher Classroom Observation Form. The teacher observation helped the teacher see the students' response and the progress while they participated during the teaching and learning process. At the end of the last lesson in August, the students answered the questionnaire about their satisfaction towards SQ4R and Applied SQ4R techniques. A day later, both groups of participants wrote the post-test exam.

3.7 Data Analysis

After the treatment, the three types of research instruments: the pretest and posttest scores, the students' questionnaire and the teacher's observation sheet were analyzed both quantitatively and qualitatively.

To answer the first research question: "Can SQ4R and Applied SQ4R help improve the students' abilities on English reading comprehension?" A dependent t-test was used to determine the English reading comprehension improvement before and after the treatment of both techniques.

To answer the second research question: "Which reading technique is more effective, SQ4R or Applied SQ4R?" The posttest scores of both groups were analyzed using an independent t-test and mean score to see the differences between SQ4R and Applied SQ4R techniques.

To answer the third research question: "Are the students satisfied with both reading techniques SQ4R and Applied SQ4R?, to see whether the students were satisfied with SQ4R and Applied SQ4R techniques, the questionnaire and the observed data were analyzed. The questionnaire elicited the level of the students' satisfactions meanwhile the teacher classroom observation reflected the students' behaviors and responses during the treatment session.

CHAPTER 4
RESULTS OF THE STUDY

In this chapter, the results from the pretest, posttest, the questionnaire and the teacher's observation were analyzed.

Before answering the first research question, the pretest scores on reading comprehension of the SQ4R and Applied SQ4R subjects were analyzed by using the mean scores and the standard deviation. The two sets of data were compared in order to find out whether the two groups of students had similar reading abilities.

The independent t-test results compared on both groups pretest scores are shown in Table 4.1 below.

Table 4.1 The Pretest scores of the SQ4R and Applied SQ4R subjects

Reading techniques	No. of subjects	$\bar{X}$	SD	t	Sig. (2-tailed)
SQ4R Group	39	11.59	1.860		
		11.5897	1.8598	.938	.970
Applied SQ4R Group	39	12.00	2.000		

Table 4.1 presents the mean score and the standard deviation score on reading comprehension of the two grouped subjects. The pretest mean scores of the SQ4R subjects was 11.59 and the standard deviation was 1.860 whereas the pretest mean scores of the Applied SQ4R subjects was 12.00 and the standard deviation was 2.00. The statistics indicated that the two grouped subjects had no different reading abilities.

To answer the first research question, "Can SQ4R and Applied SQ4R help improve the students' English reading comprehension?", the pretest scores of the SQ4R and Applied SQ4R subjects were compared to the posttest scores of its own technique in order to see the improvement of the subjects after intervention. The

pretest and posttest scores of the SQ4R students were presented in Table 4.2 and the pretest and posttest scores of the Applied SQ4R students were presented in Table 4.3 below.

Table 4.2 Results on the pretest and the posttest mean scores of the SQ4R group

SQ4R Group	No. of subjects	X̄	SD	t	Sig.
Pretest	39	11.59	1.860	15.632	.000**
Posttest	39	17.21	2.536		

Significant at the .01 level (**$p < 0.01$)

Table 4.2 presented the mean and the standard deviation score of the pretest and posttest on reading comprehension of the SQ4R subjects. The pretest's mean score was 11.59. The posttest's mean score was 17.21. The posttest's mean score was significantly higher than the pretest score at the .01 level. This can be concluded that SQ4R can significantly help increase the students' reading comprehension abilities.

Table 4.3 Applied SQ4R pretest and posttest reading comprehension scores

Applied SQ4R Group	No. of subjects	X̄	SD	t	Sig.
Pretest	39	12.00	2.00	20.135	.000**
Posttest	39	19.15	3.710		

Significant at the .01 level (**$p < 0.01$)

Table 4.3 presented the mean and the standard deviation score of the pretest and posttest reading comprehension scores of the Applied SQ4R subjects. The pretest's mean score was 12.00 and the standard deviation was 2.000. The posttest mean score was 19.15 and the standard deviation was 3.710. The posttest's mean score was significantly higher than the pretest score at the .01 level. This shows that the Applied

SQ4R reading technique can help develop the students' reading comprehension abilities.

To answer the second research question, "Which reading technique, SQ4R or Applied SQ4R, is more effective?", the posttest scores of the SQ4R and Applied SQ4R subjects were analyzed and compared by using an Independent t-test to find out which group of the subjects made better improvement or higher scores on reading comprehension after the two reading techniques had been employed. The posttest scores of the SQ4R and Applied SQ4R subjects were compared and presented in Table 4.4 below.

Table 4.4 SQ4R and Applied SQ4R posttest scores

Teaching Technique	No. of subjects	$\bar{x}$	SD	t	Sig.
SQ4R	39	17.21	2.536	2.708	.002*
Applied SQ4R	39	19.15	3.710		

Significant at the .01 level (**p<0.01)

Table 4.4 presented the posttest's mean score of the subjects in the SQ4R and Applied SQ4R. The mean score of the SQ4R subjects was 17.21 and the mean score of the Applied SQ4R was 19.15. The mean score of the Applied SQ4R was significantly higher than that of SQ4R at P<0.01(t=2.708). The difference between the mean scores of the SQ4R and Applied SQ4R was significantly different at the .01 level. Based on the presented statistics, it can be concluded that Applied SQ4R was more effective than SQ4R reading technique.

To answer the third research question, "Are the students satisfied with both reading techniques SQ4R and Applied SQ4R, the data from the questionnaire and the teacher observation were analyzed. The first section of the questionnaire reflected the three highest and the three lowest levels of satisfaction of each group subjects towards both reading techniques. The second section was the students' comments and suggestions during learning process. The data from the teacher's observation reflected

the students' behaviors and responses during learning process. The data from the questionnaire and the teacher observation were discussed below.

From the first section of the questionnaire, the levels of satisfaction towards both reading techniques SQ4R and Applied SQ4R were analyzed using the mean score. The three highest levels of satisfaction of SQ4R subjects were presented in Table 4.5 while the three highest levels of satisfaction towards Applied SQ4R were also presented in Table 4.6

Table 4.5 The three highest levels of students' satisfaction towards SQ4R technique

Items	Question items	Means	Levels of satisfaction
5	Students are contented working with their friends.	4.15	High
8	Questioning before reading helps promote reading comprehension.	4.13	High
13	Contents are interesting.	4.10	High

Table 4.5 presented the three highest levels of satisfaction towards SQ4R. It was discovered that the subjects in SQ4R reading technique were satisfied to working with their friends. The level of satisfaction was rated at the level of 4.15.

The second most satisfied went to "Questioning before reading helps promote reading comprehension." The third went to "Contents are interesting." Three of them were rated at a high level.

The first lowest levels of satisfaction toward SQ4R technique was 'The time is suitable for teaching contents.' It was rated at 3.74. The second went to 'The atmosphere is enthusiastic and conducive for learning.' It was rated at 3.79. The third one was 'Contents are suitable for students.' Although, these three questions were ranked in the three lowest levels of satisfaction, but the scores were still in a high level (See Appendix G). It indicated that in the overall pictures students were satisfied with SQ4R reading technique.

Table 4.6 The three highest levels of satisfaction towards Applied SQ4R technique

Items	Question items	Means	Levels of satisfaction
4	Students have a chance to express and exchange their ideas in a relaxed atmosphere.	4.18	High
8	Questioning before reading helps promote reading comprehension.	4.15	High
6	The teaching procedure is simple and easy for the students to apply.	4.03	High
7	The survey stage encourages the students to find the answers.	4.03	High
9	Questioning and answering verbally help reading more understandable for students.	4.03	High
12	Contents are suitable for students.	4.03	High

Table 4.6 presented the three highest levels of satisfaction towards Applied SQ4R technique. The statistics revealed that the students were most satisfied to have a chance to express and exchange their ideas in a relaxed atmosphere. This item was rated at 4.18. The second one was "Questioning before reading helps promote reading comprehension." It was rated at 4.15. The joint third ones were "The teaching procedure is simple and easy for the students to apply.", "The survey stage encourages the students to find the answers.", and "Questioning and answering verbally help reading more understandable for students." They were rated at 4.03 in a high level.

The questionnaire also revealed the students' three lowest levels of satisfaction toward Applied SQ4R. The first lowest one was 'Reviewing the answers after the reading help students in correcting or improving their reading abilities.'

The average score is at 3.79. The second was 'The time is suitable for teaching procedures.' The level of satisfaction was rated at 3.87. The third was 'The time is suitable for teaching contents.' The results were similar to the SQ4R technique.

Although, these three questions were ranked to be the three lowest, but students were still satisfied with Applied SQ4R reading technique. The scores were shown in Appendix G.

For the second section of the questionnaire, the students' comments and suggestions were discussed into two points: something they liked and something they did not liked, which needed to be improved.

Concerning what the students liked, the two grouped subjects were satisfied with group work and generating questions before reading. Group work in a relaxed atmosphere decreased their stress and with a cooperative group, they were able to complete their class assignment. For questioning, the students stated that questioning was challenging and made them read purposely. One major problem during this stage was that generating questions with correct grammar or sentence structure was difficult for them. Another good point was they liked the realistic reading passages like "Google" and "Fast Food Originals".

Time was the thing that the students did not like, which needed to be improved. This included the time for the teaching and learning process and the period of time having a treatment. During the experiment, the students suffered from so many activities like "Youth Day Activities", and a midterm test. All of these activities forced students to struggle in order to succeed in their work. These problems greatly affected students' attention on learning. The second problem was the reading passages. Although the students agreed that reading passages were realistic which they could encounter or experience in the day-to-day life, at the same time they found that the reading texts were quite long that they had to spend more time and effort to finish it. Shortening the reading materials was useful and it made reading more possible for them.

The teacher's observation sheet

The final data derived from the teacher's observation. It helped teacher seek in depth information about the students' behavior and responses during the learning process. The data was discussed into three main points: the participative and cooperative atmosphere, the demand of individual explanation from teacher or peers and the application of employing reading techniques in their group work.

With regard to the participative and cooperative atmosphere, it was discovered that the participative and cooperative atmosphere in the classroom was interpreted at a 'frequently' level for both SQ4R and Applied SQ4R students. This could be seen in every stage of SQ4R and Applied SQ4R learning activities. The students helped survey the reading passages and construct their own questions through brainstorming and group discussions. Although generating their own questions was something new, difficult and different from their regular classes which most of the questions were prepared by the teachers. The students were able to complete the tasks with the help of the members in the groups.

Concerning the demand of individual explanation from teacher or peers, it was interpreted at 'frequently' level. The students still needed help from both the teacher and peers when they used SQ4R and Applied SQ4R teaching strategies in their real practice. They were able to use pictures, headings, subheading to help them in understanding the texts. They encountered problems when they constructed their own questions. Many students produced the questions by transferring Thai language structures into English. Help and suggestions were not deniable in this stage.

Regarding for applying the reading technique in their group work, it was noticed that most of the students were able to use the Survey stage to help them in turning topics, subtopics into their group questions which they were instructed and modeled in the first lesson. Surveying was used and clearly seen in the third lessons. Most of them were able to turn the reading topic like "Google" to be "What is Google?", "Fast Food Originals" to be "What is Fast Food?" or "What is the history of Fast Food?" to be their first question in their reading. In the question stage, both groups of students showed their best effort to construct their own questions through brainstorming and group discussion. In this stage, students spent quite a long time and the demand of individual explanations from the teachers or peers were still needed. As pointed out earlier, constructing their own questions was something new and difficult for the students at this level. It was time-consuming at this stage, where students need to be trained and teachers need to be patient to see their progress.

In the reading stage, the students were able to use their group questions to be their guideline while they read. They underlined or highlighted the reading materials and wrote the questions' numbers when they found the information that answered the

questions they had. Underlying or highlighting with the questions' numbers was also helpful for students in the review stage. In the recite stage, it was found that students had a problem with incorrect pronunciation when they asked and answered the questions verbally. Copying the sentences from the reading passages or using Thai language structures were often found in the record stage.

From the above discussion, although students had some problems during the learning process, in the overall pictures they had positive responses towards SQ4R and Applied SQ4R. At the same time, instruction and suggestions from the teacher and peers were still required by most of the students.

CHAPTER 5

DISCUSSION

This chapter presents the discussion of the results in the previous chapter, conclusion, limitations and the recommendations for further study.

5.1 Discussion

This study aimed to find out the answers to the three research questions: "Can SQ4R and Applied SQ4R help improve the students' English reading comprehension?", "Which reading technique, SQ4R or Applied SQ4R, is more effective?" and "Are the students satisfied with both reading techniques SQ4R and Applied SQ4R?" The data derived from the three types of research instruments: pretest-posttest reading comprehension test, the students' satisfaction questionnaire and the teacher's observation sheet were discussed as below:

5.1.1 Can SQ4R and Applied SQ4R help improve the students' English reading comprehension?

Based on the first research question, the posttest scores on reading comprehension revealed that both the SQ4R and Applied SQ4R students made significantly higher scores at the .01 level. The findings of this study supported the studies of Potaya (2003), Banjongmanee (2005), Lao-amnat (2013), Yonchai (2013), Kaewkam (2015) Hasibuan (2011) and Sada (2015). The results proved that the students' reading comprehension was improved after SQ4R and Applied SQ4R reading technique was employed. This may come from the following reasons.

The first possible reason is that SQ4R and Applied SQ4R contain systematic learning processes. The two reading techniques provide active learning through each step of the learning activities. Surveying allows students see the overall picture of the reading texts and also gives directions in reading (Parry, 2009). Both groups of students take advantages from pictures, graphs, topics or subtopics and link these information with their previous knowledge or experiences in the surveying stage to

help them construct their own questions. These questions make reading more purposeful, that is, readers know what to do about the reading texts. Through surveying, students obtain a basic idea of what will be read which makes it easier to understand the content. Questioning before reading provides an opportunity for students to set their goals in reading. Good readers have clear goals in mind. The goals help them evaluate whether the text or their reading is meeting their goals (Duke & Pearson, 2002). The questioning stage is also beneficial for readers to predict the questions in their test. Moreover, generating their own questions helps students elicit a greater understanding of the reading text, demonstrates greater thought complexity and engagement (Bowker, 2010 and Tofade and others, 2013). Questioning, especially student-generated questions, is a useful strategy that improves students' reading comprehension (Khaki, 2014).

In the reading stage, each group of students read carefully and attentively to search for the relevant information that answered the questions in mind. Highlighting and underlying were used to facilitate their reading. All activities in the reading stage were done through their group work. The assistance from the teacher and peers or the group helped increase the students' confidence in developing their reading skills (Alderson, 2000; Anderson, 2008; Farrell, 2002; Lynch, 1996, Moore 2010 as cited in Sangcharoon 2010, Nunan 1999 and Silberstein 1994). Taking turns to ask and answer orally without looking at the reading text can help the students not only memorize the information from the reading passage but also improve short and long-term memory. Then, they, repeatedly read in the review stage. This time, they checked and compared the answers they had. By doing this, students had a better understanding about the reading materials before they record all the answers they have in their own words.

In the writing section, it was discovered that neither groups of students perform well in this part. This might be because summary writing is a difficult skill and new to them. It requires a variety of cognitive knowledge and a high thinking order. Although there was a slight improvement in writing ability but students still needed more practices.

Based on the above mentioned discussion, it can be said that SQ4R and Applied SQ4R are useful in increasing the students' reading comprehension abilities. The students can bring the application of these two techniques to be their individual

reading habits with other English reading lessons and the other subjects with different content areas as well.

The second possible reason is that providing appropriate reading materials with familiar, up-to-date and realistic topics were useful for the students. Familiar topics help students easily link their past experiences to the new incoming information while up-to-date and realistic topics help them to be interested in what they read and eager to find the answers. This supports Banjoungmanee (2005), Lao-amnat (2013) and Sada's (2015) suggestion that the reading passages should be modern and fit with the students' interests.

5.1.2 Which reading technique is more effective: SQ4R or Applied SQ4R?

"Which reading technique is more effective, SQ4R or Applied SQ4R?" The posttest mean scores of the subjects in the SQ4R and Applied SQ4R were compared. The mean score of the SQ4R subjects is 17.21 meanwhile that of the Applied SQ4R is 19.15. The obtained data indicated that Applied SQ4R helped the students to better improve in English reading comprehension. The possible reason is that providing participative learning environment with the assistance of teaching and presenting students with the relevant vocabulary and the required grammar knowledge in Applied SQ4R process help increase the students' reading abilities. Several researchers pointed out the effects of vocabulary and grammar knowledge on students' reading abilities. For instance, Mehigan (2009) stated that "language learning based activity is fundamentally and profoundly dependent on vocabulary knowledge – knowledge of words and word meanings". Limitation in vocabulary knowledge makes students encounter difficulties with reading comprehension and in turn limit their vocabulary growth. In effective language instruction, teachers need to provide rich and varied language experiences, foster awareness and love of language and words, directly teach individual words and teach word learning strategies. Jahangard, Moinzadeh & Karimi (2012) stated that teaching vocabulary before reading not only helps readers to build the background knowledge needed for reading but also show them how to activate or access such knowledge in the reading process. Having relevant linguistic schema, therefore, makes reading more possible and comprehensible for the readers.

Furthermore, explicit grammar teaching is helpful for students as it brings positive effects on students' reading comprehension (Geleren, et al., 2007). The rules or grammatical structures that are learnt consciously can be applied into unconscious of comprehension and production (Cook, 2008 cited in Weisi 2012). However, vocabulary and grammar are two essential elements in every language which cannot be separated from each other. Vocabulary and grammar are like two sides of the language coin. Therefore, understanding these two components lead students understand any language better (Jordens & Zeter, 2013). This supported Lao-amnat (2013), Banjongmanee (2005) and Potaya's (2003) suggestion that the language teachers should teach vocabulary and grammatical structures in SQ4R in order to facilitate the students reading comprehension.

5.1.3 Are the students satisfied with both reading techniques SQ4R and Applied SQ4R?

The data from the questionnaire and the teacher's observation revealed that in the overall pictures the students had a positive attitude towards SQ4R and Applied SQ4R techniques. This can be noticed from the three most satisfied levels of the two reading techniques. Both groups of students were contented working with groups and friends. They had more chance to express and exchange their ideas in a relaxed atmosphere. The levels of satisfaction of the two grouped subjects were rated at high levels. This maybe because working together increases the students talking time. The students discuss and negotiate with friends that help them understand better (Harmer, 1991). Furthermore, a small group work provides more opportunities for students to communicate with each other to share suggestions, insights, feedback about successes, and failures. Researchers also claim that a teacher's dominance in class makes it dull and it kills the students' interests (Kundo & Tutto, 1989 cited in Raja, 2012).

Moreover, the students in SQ4R and Applied SQ4R groups agreed that questioning before reading made their reading more purposeful. It motivated them to eagerly find the answers.

5.2 Conclusion

Based on the results of this study, it can be concluded that:

(1) SQ4R and Applied SQ4R can help develop the students' English reading comprehension;

(2) Comparing the two reading techniques, Applied SQ4R can lead students to a better improvement on reading comprehension than SQ4R;

(3) Both groups of students were satisfied with the two reading techniques in a high level.

5.3 Limitations of the study

Although the findings from the study reflected the positive results, the study had some limitations as given below.

(1) This study was conducted with the Grade 9 students at Kanthararom School, the results may not be generalized to all students who are studying at the same level in the other classes of Kanthararom School or other schools.

(2) Students had the limitations about constructing Wh-questions and writing a summary. These limitations caused them spend longer time in these stages that affect the time to practice the other steps in SQ4R and Applied SQ4R strategies.

(3) In the comprehension test of this study, summary writing was evaluated by asking the students to write the main topics and subtopics of the text. This may not enough to answer and see the progress of the students' writing abilities.

(4) The question items in the students' satisfaction questionnaire did not cover all teaching and learning process of the SQ4R and Applied SQ4R strategies. The information gained from the students may not reflect all real problems during the teaching and learning process.

5.4 Recommendations for further study

Based on the findings of this study, some recommendations for further studies are given below:

(1) Further studies should be done with different levels and schools.

(2) Students should be trained to generate prior to the intervention the Wh-question and summary writing, even in the Thai language.

(3) Teachers should evaluate summary writing by asking students to summary in a short paragraph both in English and Thai language to see whether the students arrive the goal of reading.

(4) The question items in the students' satisfaction questionnaire should cover all steps of the two reading techniques. These questions mirror the real problems during the teaching and learning process.

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APPENDICES

APPENDIX A
ENGLISH READING COMPREHENSION TEST

The Pretest and Posttest Exams

English Reading Comprehension	**Matthayomsuksa 3**
90 Minutes	**30 marks**

<u>คำชี้แจง</u> ข้อสอบมีทั้งหมด 2 ตอน

      ตอนที่ 1 เป็นข้อสอบปรนัยชนิดเลือกตอบ 4 ตัวเลือก จำนวน 26 ข้อ ข้อละ 1 คะแนน รวม 26 คะแนน

      ตอนที่ 2เป็นข้อสอบอัตนัย เขียนสรุปหัวข้อหลัก (main topic) หัวข้อรอง (subtopics) จากเรื่องที่อ่าน จำนวน 4 เรื่อง เรื่องละ 1 คะแนน รวม 4 คะแนน

Part 1

Directions: Choose the correct answer by marking an X on a, b, c or d on the answer sheet.

Passage 1

    The beef we use in hamburgers is ground beef. It was possibly created by Mongolians over 800 years ago. But who first put the beef in between pieces of bread and called it a hamburger?

    Three different cities in the United States all say that they were the first to invent America's favorite food. Some people say that Fletcher Davis from Athens, Texas invented hamburgers. "Old Dave." as people called him, was selling ground beef sandwiches at his diner as early as the 1880s. Some years later, they say that a group of Germans called his sandwich a "hamburger" because people from the German city of Hamburg ate this kind of beef.

    Other people believe that the hamburger came from a different city called Hamburg- Hamburg, New York. At the 1885 fair in this American city, the Menches brothers were selling pork sandwiches. When there was no more pork, the brothers used ground beef and gave the sandwich a new name, the "hamburger."

    The third possible inventor of the hamburger was Charlie Nagreen, also known as "Hamburger Charlie." from Seymour, Visconsin. He said that in 1885 he invented the world's first hamburger at a fair. Seymour now celebrates the invention of the hamburger every year. In 1989, it was the home of the world's largest ever burger that weighed over 2,500 kg!

Source: Puchta, Herbert & Stranks, Jeff, English in Mind Workbook 3, P. 18

1. From the passage, who possibly invented ground beef used in hamburger?

    a. A group of Germans

    b. Charlie Nagreen

    c. Fletcher Davis from Athens

    d. Mongolian people

2. What do we call food which has some beef in between pieces of bread?

    a. Hamburger

    b. Ground beef

    c. Pizza

    d. Sandwich

3. Who is **NOT** said to be the first hamburger inventor in this passage?

    a. Fletcher Davis

    b. Charlie Nagreen

    c. Old McDonald

    d. The Menches brothers

4. Which is **NOT** the three cities related to hamburger?

    a. Athens, Texas

    b. Hamburg, New York

    c. Seymour, Visconsin

    d. Charlie, Nagreen

5. "Three different cities in the United States all say that they were the first to **invent** America's favorite food."

The word "**invent**" means_____

    a. cook

    b. create

    c. sell

    d. celebrate

6. What should be the best title of this article?

    a. The Amazing hamburger

    b. The history of hamburger

    c. The first hamburger maker

    d. Who was the first hamburger maker?

Passage 2

     Stephen King was born in Portland, Maine in 1947. His father disappeared when Stephen was just three years old. He wrote his first short story when he was seven years old.

     When Stephen was 11, he and his brother and mother went back to Maine. His mother had to look after Stephen, his brother and his grandparents. Stephen grew up and went to university in Maine and many of his novels take place **there**.

     Stephen couldn't find a job as a teacher after he graduated from university, so he worked in an industrial laundry. He also wrote stories which were published in magazines. Then, in the autumn of 1971 he got a job as a teacher. He **kept on** writing short stories and novels in the evenings and at weekend. He got married in 1971. He and his wife, Tabitha, have three children.

     About 30 years ago, he published his first novel, *Carrie*. It was so successful that he didn't need to work as a teacher anymore. He gave up his job and became a full time writer.

Source: Musiol. Mady, Villarroel, Magaly & Dague, Sarah. Scooter Course Book 3, P.22-23

7. When did Stephen King write his first short story?

    a. When his father disappeared

    b. When Stephen was just three years old

    c. When he was only seven years of age

    d. When his family moved back to Maine

8. Where do many of his novels take place?

    a. In Portland primary school

    b. In the industrial laundry

    c. In the school where he worked as a teacher

    d. In a university in Maine

9. What did Stephen do after he graduated from university?

    a. He worked as a teacher in a university.

    b. He worked in an industrial laundry.

    c. He got married with Tabitha.

d. He had to look after his grandparents.

10. Stephen grew up and went to university in Maine and many of his novels take

place **there**. The word "**there**" refers to_____

a. A University in Maine

b. An industrial laundry

c. A magazine publisher

d. His father homeland

11. How old was Stephen when he got married?

a. In autumn of 1947

b. By the year 1971

c. Twenty four years of age

d. Thirty years ago

12. Which is **TRUE** about the passage?

a. Stephen started his writing when he was still young.

b. Stephen stopped his writing after he worked as a teacher.

c. Stephen 's grandparents took care of him and his brother.

d. Stephen had to finish only his high school.

13. He **kept on** writing short stories and novels in the evenings and at weekend.

The word "**kept on**" means_____

a. gave up

b. stopped

c. continued

d. finished

14. This passage is mainly about_____

a. Stephen King's Life Turn

b. Stephen King's Life Story

c. Stephen King and his family

d. Stephen King's novels

Passage 3

Most of us think of global warming as something that is bad for our planet. Every time you open a newspaper, there is an article about how the temperature on the Earth is rising, causing floods, droughts and perhaps even earthquakes. Another common complaint is that winters used to be cold and summers hot, but now there isn't much differences between **them**.

Scientists say that global temperatures have risen 0.6 degrees centigrade over the last 140 years. The question is, should we see this as something unnatural? Climate change is not something new. When talking about global warming, we should look at more than the last century. This is because Earth has been in existence for billions of years, and during that time there have been both warm and ice ages.

There have been computer predictions that in fifty years' time parts of Europe could be under water. With higher temperatures, the polar ice caps are melting and making sea levels rise. Yet many scientists say that the global climate is too complex for current computers to predict and that we shouldn't believe these predictions.

The fact that the world is getting warmer should definitely concern us, but we shouldn't exaggerate the problem. At the end of the day, there is a strong possibility that the dangers are not as great as we are fear.

Source: Carton, Angela and others, Bridge 3, P. 6. Edu Zone.

15. According to the passage, which is **NOT** mentioned as the disasters?

     a. Droughts

     b. Earthquakes

     c. Floods

     d. Volcanic eruptions

16. The common complaint about global warming is_____

     a. winter is too cold.

     b. summer is very hot.

     c. there is no difference between summer and winter.

     d. winters are hot while summers are cold.

17. Why should we look at more than the century when talking about global warming?

    a. Global warming is something new to our earth.

    b. Global warming used to happen long before in the past.

    c. Global warming is something unnatural.

    d. Global warming helps us predict about our earth.

18. Another complaint is that winters used to be cold and summers hot, but now there isn't much difference between **them**.

The word "**them**" refers to_____

    a. other complaints

    b. winters and summers

    c. global warming effects

    d. floods, droughts and earthquakes

19. Why are sea levels rising?

    a. The earth's temperature is lower.

    b. The polar ice caps melt.

    c. It turns to be a warm period of the year.

    d. The global climate is too complex.

Passage 4

Sir Timothy Berners-Lee is a British computer scientist who invented the World Wide Web. He received a knighthood from the British Queen for his efforts (so he is called 'Sir'). He is a director of W3C, which looks after the Web's development. A leading British newspaper ranked him as the world's greatest living genius. Today's world would be very different without his discovery.

Berners-Lee was born in 1955 to parents who were mathematicians and computer scientists. He grew up with numbers and electronics and managed to build his own computer. He went to Oxford University and was banned from using the computers for hacking. Berners-Lee graduated with a degree in physics. His first jobs after graduating were as a computer programmer and software developer.

Berners-Lee spent the 1980s on a project based on sharing and updating information online. In 1991, he put the first website online. It explained what the World Wide Web was and how it was used. He gave his idea to the world for free. In 1994, Berners-Lee founded W3C to set standards and improve the quality of the Web.

Berners-Lee now spends his time between W3C and as a professor of computer science in England. He also writes about the future of the Web. In 2004, he was named as the first ever winner of the Millennium Technology Prize. He has a string of other awards and is listed as one of 'Time' magazine's 100 most important people of the 20th Century.

Resource: Copyright © www.FamousPeopleLessons.com

20. What nationality is Sir Timothy Berners-Lee?

      a. American

      b. British

      c. German

      d. Swiss

21. What does Berners-Lee do?

      a. He works as a computer scientist.

      b. He hacks some data from his university.

      c. He produces his own computer.

      d. He is a famous hacker of his time.

22. Why was Berners-Lee banned when he studied in university?

      a. Because he managed to build his own computer.

      b. Because he hacked the university's for some information.

      c. Because he could not do well in any subjects.

      d. Because he moved to another university.

23. What was Berners-Lee first job?

      a. A mathematician

      b. A computer scientist

      c. A computer hacker

      d. A software developer

24. What is his famous work?

      a. He is a famous British mathematician.

      b. He is a head of leading British newspaper.

      c. He works in a modern computer company.

      d. He invented the World Wide Web for Internet users.

25. Who ranked him the world's greatest living genius?

      a. The British Queen

      b. A director of W3C

      c. A leading British newspaper

      d. A group of software developers

26. When did Berners-Lee's first online website appear?

      a. In the year 1991

      b. During the year 2004

      c. After he won the Millennium Technology Prize

      d. After he became a professor of computer science

Name_____class_____Number_____

Part 2

Directions: Write the main topics and the subtopics of the 4 reading passages above.
ให้นักเรียนเขียนสรุปหัวข้อหลัก (main topics) หัวข้อรอง (subtopics) จากเรื่องที่อ่าน

Passage 1

Main topic _____

Subtopics

1._____

2._____

3._____

Passage 2

Main topic _____

Subtopics

1._____

2._____

3._____

Passage 3

Main topic _____

Subtopics

1._____

2._____

3._____

Passage 4

Main topic _____

Subtopics

1. _____

2. _____

3. _____

Name_____class_____Number_____

APPENDIX B

THE STUDENTS' SATISFACTION QUESTIONNAIRE

THAI AND ENGLISH VERSION

แบบสอบถามความคิดเห็นของนักเรียนที่มีต่อกระบวนการจัดการเรียนการสอน

<u>**คำชี้แจง**</u> กรุณาตอบคำถามทุกข้อโดยกาเครื่องหมาย ✓ ในข้อที่ตรงกับความคิดเห็นของนักเรียนที่มี
    ต่อการจัดกระบวนการเรียนการสอนมากที่สุด

<u>**ส่วนที่ 1**</u> ข้อมูลทั่วไป

( ) ชาย ( ) หญิง ห้อง ม. 3/_____

<u>**ส่วนที่ 2**</u> ความคิดเห็นของนักเรียนต่อการบวนการจัดการเรียนการสอน

5	หมายถึง	พึงพอใจอย่างยิ่ง
4	หมายถึง	พึงพอใจมาก
3	หมายถึง	พึงพอใจ
2	หมายถึง	ไม่พึงพอใจ
1	หมายถึง	ไม่พึงพอใจอย่างยิ่ง

<u>**ส่วนที่ 3**</u> ประเด็นคำถาม

ประเด็นคำถาม	ระดับความคิดเห็น				
	5	4	3	2	1
<u>**ด้านระยะเวลา**</u>					
1. ระยะเวลาในการเรียนเหมาะสมกับกิจกรรมตามขั้นตอนการสอน					
2. ระยะเวลาในการเรียนเหมาะสมกับเนื้อหา					
<u>**ด้านบรรยากาศ**</u>					
3. นักเรียนมีความสนุกและกระตือรือร้นในการทำกิจกรรมการเรียนรู้ ตามขั้นตอนของวิธีการสอน					
4. นักเรียนมีโอกาสแสดงความคิดเห็นและแลกเปลี่ยนความคิดเห็นใน บรรยากาศที่ผ่อนคลาย					
5. นักเรียนมีความสุขในการทำงานร่วมกับผู้อื่น					
<u>**ด้านการจัดกระบวนการเรียนการสอน**</u>					
6. เป็นวิธีการสอนที่มีระบบและขั้นตอนไม่ซับซ้อน					
7. การสำรวจและการตั้งคำถามจากบทอ่านกระตุ้นความสนใจในการ ค้นหาคำตอบ					

ประเด็นคำถาม	ระดับความคิดเห็น				
	5	4	3	2	1
8. การตั้งคำถามก่อนการอ่านทำให้ผู้เรียนเข้าใจบทอ่านง่ายขึ้น					
9. การถามและตอบคำถามปากเปล่าหลังการอ่านทำให้ผู้เรียนเข้าใจบทอ่านมากขึ้น					
10. การทบทวนคำตอบหลังการอ่านทำให้ผู้เรียนบอกรายละเอียดของเรื่องที่อ่านได้ดีขึ้น					
11. การทบทวนคำตอบทำให้ผู้เรียนแก้ไขและพัฒนางานด้วยตนเองได้					
ด้านเนื้อหา 12. เนื้อหามีความเหมาะสมกับระดับของผู้เรียน					
13. เนื้อหามีความทันสมัยและน่าสนใจ					
ด้านประโยชน์ที่ได้รับ 14. นักเรียนได้แนวคิดจากวิธีการเรียนไปพัฒนาการอ่านได้ดียิ่งขึ้น					
15. นักเรียนสามารถประยุกต์และนำวิธีการอ่านนี้ไปใช้ในการอ่านในชีวิตประจำวันได้					

Adapted from Sangkaew (2009)

ข้อเสนอแนะ
1. สิ่งที่นักเรียนชอบจากการจัดการเรียนการสอน

_____

_____

_____

_____

2. สิ่งที่นักเรียนไม่ชอบจากการเรียน/สิ่งที่ควรปรับปรุง

_____

_____

_____

_____

Students' satisfaction questionnaire towards SQ4R / Applied SQ4R

Directions: Please answer the questions by marking ✓to the number that corresponds with your level of satisfaction towards SQ4R or Applied SQ4R teaching and learning processes.

Part 1 General information

Sex ( ) Male ( ) Female ( ) M. 3/____

Part 2 Levels of satisfaction towards teaching and learning processes

5	means	completely satisfied
4	means	very satisfied
3	means	satisfied
2	means	unsatisfied
1	means	completely unsatisfied

Part 3 Question items

Question items	Levels of satisfaction				
	5	4	3	2	1
Time 1. The time is suitable for teaching procedures.					
2. The time is suitable for teaching contents.					
Atmosphere 3. The atmosphere is enthusiastic and conducive for learning.					
4. The atmosphere is conducive for students to express and exchange ideas.					
5. Students are contented working with their friends.					
Teaching procedures 6. The teaching procedure is not complex or difficult for the students to apply.					
7. The survey and question stage motivates the students to find the answers.					

Question items	Levels of satisfaction				
	5	4	3	2	1
8. Questioning before reading helps promote reading comprehension.					
9. Questioning and answering verbally help reading more understandable for students.					
10. Reviewing the answers after the reading help students about detail of the reading texts.					
11. Reviewing the answers after the reading help students in correcting or improving their reading abilities.					
12. Contents are suitable for students.					
13. Contents are interesting and up to date.					
Benefits 14. Students can apply the reading technique to other reading texts.					
15. Students can apply the reading technique in their day to day life.					
Total scores					

Adapted from Sangkaew (2009)

Part 2 Write comments and suggestions according to your opinion.

1. Write down what you like.

_____

_____

_____

2. Write down what you do not like and it needs to be improved.

_____

_____

_____

APPENDIX C

THE TEACHER'S OBSERVATION SHEET

SQ4R/APPLIED SQ4R

Teacher Classroom Observation Sheet

Instructor _____ Course_____

Date _____ Class_____

Directions: Below is a list of students' behaviors that will be observed during their

classes.

Respond to each statement using the following scale:

Frequently	Sometimes	Not yet
3	2	1

Lists of behaviors observed	Frequently 3	Sometimes 2	Not yet 1
1. The atmosphere of the classroom is participative.			
2. Be attentive to instruction and tasks.			
3. Participate in class and actively engage in the materials.			
4. Be cooperative in group work.			
5. Be able to help make decisions that benefit the group.			
6. Support lesson with useful classroom discussions.			
7. Demand individual explanations from teachers or peers.			
8. Apply reading technique in group work.			
9. Stay on tasks and show best effort.			
10. Be able to complete class assignments.			

More Comments

_____

_____

_____

_____

_____

APPENDIX D

SQ4R AND APPLIED SQ4R LESSON PLANS

SQ4R Lesson Plan 1

English Reading Comprehension	**Matthayomsuksa 3**
Topic : A Young Pop Star	**50 Minutes**

1. Standards of Learning

Standard F1.1: Understanding of and capacity to interpret what has been heard and read from various types of media, and ability to express opinions with proper reasoning

Standard F1.2: Endowment with language communication skills for exchange of data and information; efficient expression of feelings and opinions

Standard F1.3: Ability to present data, information, concepts and views about various matters through speaking and writing

2. Concept

The ability to read the text about "A Young Pop Star" helps students know the meaning of words, phrases and sentences. Understand the details of the reading materials and apply the knowledge to their everyday lives.

3. Learning Objectives

At the end of the lesson, the students should be able to

1. give meanings of the words in the text
2. formulate and answer the questions about the reading text
3. tell the main idea of the reading text
4. summarize the text in their own words

4. Contents

Vocabulary

-female, decade, popular, artist, supportive, career, perform, competition

Structure

-Past Simple

-Regular and irregular verbs

5. Teaching procedure

Teacher's Roles	Students' Roles
Lead in stage	**Lead in stage**
1. Motivate students by playing Britney's song and showing her pictures. Ask students who Britney Jean Spear is.	1. Listen to the song and look at the pictures of Britney Jean Spears and answer the teacher's question.
2. Tell the students the objective of the lesson.	2. Listen and study the objective of the lesson.
3. Ask students to form a group of 5 or 6.	3. Form a group of 5 or 6.
4. Provide markers and a piece of chart paper to each group.	4. Receive markers and a chart paper.
5. Explain the SQ4R teaching and learning process.	5. Listen to the explanation on SQ4R teaching and learning process.
Teaching stage	**Teaching stage**
6. Handout the reading text (A Young Pop Star) with an individual worksheet.	6. Receive the reading passage and an individual worksheet.
S-Survey	**S-Survey**
7. Ask students in each group to survey or skim the reading text using the pictures, graphs or the topic to find the main point of the text.	7. Survey or skim the text to find the main point of the text.
Q - Question	**Q - Question**
8. Explain and model students to turn the topic, subtopic etc. into questions. Ask each group to write down their questions on a given chart paper. (Teacher can help students construct their questions.)	8. Study how to turn the topic, subtopics or etc. into questions. Write down the questions in the given chart papers.
9. Tell students in each group to read the text carefully to find the answers based on the questions they have in the question stage.	9. Read carefully to answer all the questions they have.

Teacher's Roles	Students' Roles
R1-Read	**R1-Read**
10. Ask students to take note, highlight where the text answers the questions in the question stage. Add more questions on the chart paper if they want to.	10. Take note or highlight where the text answers the questions in the question stage. Add more questions and write down on a chart paper.
R2-Recite	**R2-Recite**
11. Encourage students in each group to take turn asking questions with their friends and the rest orally answer the questions.	11. Take turn asking and answering the questions orally in the group.
R3-Review	**R3-Review**
12. Motivate students to re-read and review the text to check the correctness of all the answers they have.	12. Re-read and review the text to check the correctness of the answers.
R4-Record	**R3-Record**
13. Model students to write down all answers on a given chart paper and ask them to write down the questions and answers in their individual worksheets.	13. Record all questions and answers in a chart paper and individual worksheets.
14. Ask every student in every group to summarize the text individually in their own words, and then present to the group.	14. Summarize the text individually in their own words and present to the group.
15. Ask each group display their group work on the board and other group students give some comments.	15. Display their group work on the board and give some comments.
16. Make a lesson conclusion and give students homework to help them have a better understanding about the reading text.	16. Listen to a lesson conclusion and receive the homework exercise.

6. Teaching aids

1. Pictures
2. Handout (A Young Pop Star)
3. Chart papers
4. Marker pens
5. Worksheets

A. Before you read

Look at the topic and pictures. Survey the text and ask the questions.

A young pop star

Britney Jean Spear was born on December 2nd, 1981 in Kentwood, Louisiana. She grew up in the same town. She is a star who is rising fast and she is turning to be one of the most popular female singers of the decade. In the same week in the 1999, her first single, *Baby one more time,* and her first album were both at number one. Britney is the first female artist to have such immediate success in the world of pop.

Britney's family has been very supportive to her career. They helped her started performing when she was very small and during that time she took up ballet and basic gymnastics. Later, Britney competed in gymnastics competition. She did well and won several titles. At that time, she also joined a dance company which often toured her state, Louisiana. She competed in solo and group dance competitions. She also sang at these events. A producer saw her at the audition and told her mother that she was a very talented girl. So, she went to New York for three summers and studied dance. She was going to be in an all girl vocal-group but she decided that she wanted a solo career as a pop singer.

Britney really loves pop music. Her favourite singers are Michael Jackson, Mariah Carey and Whitney Houston. Because of her career, she had to finish her high school with private tutors. "I need a lot of help in geometric and Spanish." She loves performing and bringing music to so many people.

B. Glossary

female (n.)	สตรี	decade (n.)	ระยะเวลา 10 ปี
popular (adj.)	เป็นที่นิยม	artist (n.)	นักแสดง
career (n.)	อาชีพ	perform (v.)	แสดง
competition (n.)	การแข่งขัน		

C. Grammar

Past Simple

We use the **Past Simple** for actions that started and finished in the past.

ใช้ **Past Simple** กับการกระทำที่เกิดขึ้นและสิ้นสุดในอดีต

Britney Jean Spear <u>grew up</u> in Kentwood, Louisiana. (irregular verb)

Britney <u>competed</u> in gymnastics competition. (regular verb)

<u>Did</u> she <u>love</u> pop music?

Yes, she <u>did</u>.

No, she didn't.

Time expressions: คำที่บ่งบอกเวลาที่เป็นอดีต

yesterday	เมื่อวาน	last week	สัปดาห์ที่แล้ว
last month	เดือนที่แล้ว	last year	ปีที่แล้ว
two days ago	สองวันที่ผ่านมา	two weeks ago	สองสัปดาห์ที่ผ่านมา

D. Questioning

Write down the questions and your answers about the text.

Questions	Answers
1. _____ _____	1. _____ _____
2. _____ _____	2. _____ _____
3. _____ _____	3. _____ _____
4. _____ _____	4. _____ _____
5. _____ _____	5. _____ _____
6. _____ _____	6. _____ _____
7. _____ _____	7. _____ _____

E. Writing

Summarize the text in your own words.

A Young Pop Star

Exercise

A. Vocabulary

A. Match the words with their definitions.

_____1. female (n.)	a. profession, occupation
_____2. single (adj.)	b. to act in front of an audience
_____3. supportive (adj.)	c. to travel places giving shows
_____4. career (n.)	d. to meet what you want
_____5. perform (v.)	e. helpful, giving encouragement
_____6. tour (v.)	f. a song from an album
_____7. event (n.)	g. a competition
_____8. tutor (n.)	h. a private teacher
_____9. success (n.)	j. woman

B. Choose a word from the box to complete the sentences.

```
tutor      event      female      career      single
```

1. Another word for woman is _____.

2. A CD with only one song on it is a _____.

3. Britney have successful singing _____.

4. The next _____ in the sport competition is the 100 metre race.

5. If you don't understand everything in class, sometimes you need to get a

   _____ to help you.

B. Comprehension

A. Tick / if the statement is true and x if it is not.

_____1. Britney comes from Louisiana.

_____2. Britney was sixteen when she was her first album.

_____3. Britney's family did not like her career.

_____4. She sang with a pop group.

_____5. She likes her career.

_____6. Britney had to hire private teacher to teach in high school.

B. Match the headings to the paragraphs.

1. A star at 18   Paragraph_____

2. A typical young woman   Paragraph_____

3. A supportive family   Paragraph_____

APPENDIX E

THE RESULTS OF THE STUDENTS' PRETEST AND

POSTTEST SCORES

The students' pretest and posttest scores on SQ4R and Applied SQ4R

Students' No.	SQ4R		Applied SQ4R	
	Pretest (30)	Posttest (30)	Pretest (30)	Posttest (30)
1	12	17	15	24
2	12	16	12	19
3	11	15	11	17
4	14	18	12	16
5	12	21	14	21
6	13	20	15	24
7	11	16	17	23
8	13	20	11	16
9	13	19	12	19
10	11	15	11	17
11	13	16	10	16
12	14	17	13	23
13	13	19	11	16
14	11	18	12	23
15	10	14	10	16
16	14	17	11	17
17	16	23	11	15
18	13	18	10	12
19	12	18	13	22
20	11	17	9	14
21	10	16	13	22
22	14	16	10	14
23	11	14	12	17

Students' No.	SQ4R		Applied SQ4R	
	Pretest (30)	Posttest (30)	Pretest (30)	Posttest (30)
24	11	17	12	21
25	13	22	15	24
26	11	20	13	22
27	12	18	15	25
28	7	18	12	20
29	10	14	12	23
30	10	15	10	16
31	11	19	11	17
32	8	14	12	18
33	12	15	13	24
34	9	15	11	19
35	11	22	11	17
36	11	19	11	18
37	9	12	9	16
38	9	14	9	16
39	14	17	15	25

APPENDIX F

THE STATISTICS ON ENGLISH READING COMPREHENSION

TEST

Group 1

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	11.59	39	1.860	.298
	Posttest	17.21	39	2.536	.406

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	39	.515	.001

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-5.615	2.243	.359	-6.343	-4.888	-15.632	38	.000

Group 2

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	12.00	39	2.000	.320
	Posttest	19.15	39	3.710	.594

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	39	.865	.000

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1	Pretest - Posttest	-7.154	2.219	.355	-7.873	-6.435	-20.135	38	.000

2 Group Statistics

T-Test

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Group 1	39	17.21	2.536	.406
	Group 2	39	19.15	3.710	.594

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
										95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Score	Equal variances assumed	10.022	.002	-2.708	76	.008	-1.949	.720	-3.382	-.515
	Equal variances not assumed			-2.708	67.144	.009	-1.949	.720	-3.385	-.512

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Group 1	39	17.21	2.536	.406
	Group 2	39	19.15	3.710	.594

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
										95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
Score	Equal variances assumed	10.022	.002	-2.708	76	.008	-1.949	.720		-3.382	-.515
	Equal variances not assumed			-2.708	67.144	.009	-1.949	.720		-3.385	-.512

The students' satisfaction scores on SQ4R and Applied SQ4R technique

Questions	Mean Scores (SQ4R)	Mean Scores (Applied SQ4R)
ด้านระยะเวลา 1. ระยะเวลาในการเรียนเหมาะสมกับกิจกรรมตามขั้นตอนการสอน	3.91	4.05
2. ระยะเวลาในการเรียนเหมาะสมกับเนื้อหา	3.86	4.02
ด้านบรรยากาศ 3. นักเรียนมีความสนุกและกระตือรือร้นในการทำกิจกรรมการเรียนรู้ตามขั้นตอนของวิธีการสอน	3.64	4.23
4. นักเรียนมีโอกาสแสดงความคิดเห็นและแลกเปลี่ยนความคิดเห็นในบรรยากาศที่ผ่อนคลาย	3.91	4.11
5. นักเรียนมีความสุขในการทำงานร่วมกับผู้อื่น	3.70	4.50
ด้านการจัดกระบวนการเรียนการสอน 6. เป็นวิธีการสอนที่มีระบบและขั้นตอนไม่ซับซ้อน	3.61	4.35
7. การสำรวจและการตั้งคำถามจากบทอ่านกระตุ้นความสนใจในการค้นหาคำตอบ	3.82	4.47
8. การตั้งคำถามก่อนการอ่านทำให้ผู้เรียนเข้าใจบทอ่านง่ายขึ้น	4.05	4.26
9. การถามและตอบคำถามปากเปล่าหลังการอ่านทำให้ผู้เรียนเข้าใจบทอ่านมากขึ้น	4.00	4.44
10. การทบทวนคำตอบหลังการอ่านทำให้ผู้เรียนบอกรายละเอียดของเรื่องที่อ่านได้ดีขึ้น	4.08	4.38
11. การทบทวนคำตอบทำให้ผู้เรียนแก้ไขและพัฒนางานด้วยตนเองได้	4.08	4.11

Questions	Mean Scores (SQ4R)	Mean Scores (Applied SQ4R)
ด้านเนื้อหา		
12. เนื้อหามีความเหมาะสมกับระดับของผู้เรียน	3.73	4.11
13. เนื้อหามีความทันสมัยและน่าสนใจ	4.05	4.44
ด้านประโยชน์ที่ได้รับ		
14. นักเรียนได้แนวคิดจากวิธีการเรียนไปพัฒนาการอ่านได้ดียิ่งขึ้น	4.11	4.52
15. นักเรียนสามารถประยุกต์และนำวิธีการอ่านนี้ไปใช้ในการอ่านในชีวิตประจำวันได้	4.00	4.35
คะแนนรวม	**3.98**	**3.99**

Part 2 Write comments and suggestions according to your opinion.

1. Write down what you like

_____

_____

_____

_____

_____

_____

2. Write down what it needs to be improved

_____

_____

_____

_____

APPENDIX H

THE SAMPLE OF THE STUDENTS' SATISFACTION SCORES

แบบสอบถามความคิดเห็นของนักเรียนที่มีต่อกระบวนการจัดการเรียนการสอน

<u>คำชี้แจง</u> กรุณาตอบคำถามทุกข้อโดยกาเครื่องหมาย ✓ ในข้อที่ตรงกับความคิดเห็นของนักเรียนที่มีต่อการจัด
กระบวนการเรียนการสอนมากที่สุด

<u>ส่วนที่ 1</u> ข้อมูลทั่วไป

( ) ชาย ( ) หญิง ห้อง ม. 3/____

<u>ส่วนที่ 2</u> ความคิดเห็นของนักเรียนต่อการบวนการจัดการเรียนการสอน

5	หมายถึง	พึงพอใจอย่างยิ่ง
4	หมายถึง	พึงพอใจมาก
3	หมายถึง	พึงพอใจ
2	หมายถึง	ไม่พึงพอใจ
1	หมายถึง	ไม่พึงพอใจอย่างยิ่ง

<u>ส่วนที่ 3</u> ประเด็นคำถาม

ประเด็นคำถาม	ระดับความคิดเห็น				
	5	4	3	2	1
<u>ด้านระยะเวลา</u>					
1. ระยะเวลาในการเรียนเหมาะสมกับกิจกรรมตามขั้นตอนการสอน			✓		
2. ระยะเวลาในการเรียนเหมาะสมกับเนื้อหา			✓		
<u>ด้านบรรยากาศ</u>					
3. นักเรียนมีความสนุกและกระตือรือร้นในการทำกิจกรรมการเรียนรู้ตามขั้นตอนของวิธีการสอน		✓			
4. นักเรียนมีโอกาสแสดงความคิดเห็นและแลกเปลี่ยนความคิดเห็นในบรรยากาศที่ผ่อนคลาย	✓				
5. นักเรียนมีความสุขในการทำงานร่วมกับผู้อื่น	✓				
<u>ด้านการจัดกระบวนการเรียนการสอน</u>					
6. เป็นวิธีการสอนที่มีระบบและขั้นตอนไม่ซับซ้อน		✓			
7. การสำรวจและการตั้งคำถามจากบทอ่านกระตุ้นความสนใจในการค้นหาคำตอบ		✓			

APPENDIX I

THE SAMPLES OF STUDENTS' WORK

A. Before you read

Look at the picture. Survey the text and ask the questions.

Fast Food Originals

① Sandwiches, pizzas, and hamburgers are all known as fast foods. ② They are called fast food because they are all created to busy people who did not have time to sit down for a proper meal. The sandwich was invented in England. Some people believe that it got its name from the town called Sandwich in England. But the true story is that it was created ⓑ by John Montagu, who was the Earl of Sandwich. Montagu loved to play cards. While playing with his friend one evening, he felt hungry, but because he did not want to leave the card table, he asked his servant to bring him some meat between two ⓒ slices of bread. This way he could eat without interrupting the card game. This was the very first sandwich.

Many people associate the hamburger with the United States. Certainly one of America's most popular exports is McDonald's hamburger. But Americans did not invent hamburger. It was created in ⑤ Germany, and gets its name from the city of Hamburg. This was the last city that many Europeans saw before they sailed off to new life in America.

③ The pizza is another fast food. People commonly believe that Italians invented the pizza. However, the very first pizza was invented thousands of years ago by people ④ travelling across Europe. Then in the 1800s, an Italian baker created modern pizza for the Italian Queen Margherita. On top of the dough, he put food to represent the colors of the Italian flag: red tomato, white mozzarella cheese, and green basil. And today, Pizza Margherita remains the favorite pizza for millions of people all over the world.

Source : Nunan, David, Got it 3, P. 11

B. Glossary

associate (v.) เชื่อมโยง	believe (v.) เชื่อ	busy (adj.) มีธุระ วุ่น
create (v.) ทำ สร้าง	export (n.) ส่งออก	interrupt (v.) ขัดจังหวะ
invent (v.) ประดิษฐ์ สร้าง	meal (n.) มื้ออาหาร	original (n.) ดั้งเดิม
proper (adj.) เหมาะสม	servant (n.) คนรับใช้	without (adv.) ปราศจาก

C. Grammar

Passive Voice

*We use passive voice: เราใช้ passive voice เมื่อ

a. when we are more interested in the action than the person doing it
(เมื่อให้ความสนใจในผลของการกระทำมากกว่าตัวผู้กระทำ)

   Fast foods are created to busy people.

b. when we don't know who does the action (เมื่อไม่รู้ว่าใครเป็นผู้กระทำ)

   The sandwich is sold in that shop.

c. When it is obvious who does the action (เมื่อรู้ชัดเจนว่าใครเป็นผู้กระทำ)

   Fast foods are eaten all over the world.

*If we want to talk about the person doing the action, we use by.

   The pizza is eaten by Jerry.

Present Simple passive

We make **Present Simple passive** with am, are or is and the past participle of the main verb (คำกริยาช่องที่ 3 ของคำกริยาหลัก)

   Martin is told by everyone that he's got talent.

Past Simple passive

We make **Past Simple passive** with was or were and the past participle of the main verb (คำกริยาช่องที่ 3 ของคำกริยาหลัก)

   The sandwich was invented in England.

B. Comprehension

A. Tick / if the statement is true and x if it is not.

_____/_____1. Sandwiches, pizzas and hamburgers are fast food.

_____/_____2. Fast food are created for people who don't have time to sit down

and eat.

_____3. Sandwich was first invented in the United States of America.

_____4. Sandwich is a special food that serves in a card table only.

_____5. Hamburger got its name from the town "Hamburg".

_____6. The first pizza was invented by Italian.

B. Match the headings to the paragraphs.

1. The history of pizza   Paragraph____3____

2. The history of sandwich   Paragraph____1____

3. The link of the United States and hamburger   Paragraph____2____

D. Questioning

Write down the questions and your answers about the text.

Questions	Answers
1. What are fast food?	1. Sandwiches, pizzas, and hamburgers are all known as fast foods.
2. Why are all Sandwiches, pizzas and hamburger as fast food?	2. They are called fast food because they are all created to busy people who did not have time to sit down for a proper meal.
3. Did people commonly believe that Italians invented Pizzas?	
4. Who invented Sandwich?	4. Yes, they did
5. Where was hamburger invented?	5. John montagu
6. What is sandwich look like?	6. Germany
7. When did Italian baker Created modern for the Italian Queen marinatie?	7. Two slices of bread have some meat between them
	7 Then in the 1800s.

E. Writing

Summarize the text in your own words.

Fast Food Originals

The history of sandwich.

The link of the United States and hamburger

The history of Pizza.

_____

_____

_____

_____

_____

_____

_____

_____

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