

**THE DEVELOPMENT OF ENGLISH READING
LESSONS IN SCIENCE AND TECHNOLOGY FOR
ENGLISH 1 STUDENTS AT SURANAREE UNIVERSITY
OF TECHNOLOGY**

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the Degree of Master of Arts in English Language Studies
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การพัฒนาบทเรียนเพื่อการอ่านข้อความภาษาอังกฤษทางวิทยาศาสตร์
และเทคโนโลยีสำหรับนักศึกษารายวิชาภาษาอังกฤษ 1
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วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
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AT SURANAREE UNIVERSITY OF TECHNOLOGY**

Suranaree University of Technology has approved this thesis submitted in partial fulfillment of the requirements for a Master's Degree.

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การวิจัยนี้มีวัตถุประสงค์เพื่อพัฒนาบทเรียนการอ่านเพื่อแก้ปัญหาความไม่เข้าใจการอ่าน
ข้อความภาษาอังกฤษทางวิทยาศาสตร์และเทคโนโลยี

มีวิธีดำเนินการวิจัยประกอบด้วย (1) ศึกษาปัญหาการอ่านข้อความภาษาอังกฤษทางวิทยา
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คอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้นตามเกณฑ์มาตรฐาน 80/80 (3) เปรียบเทียบผลสัมฤทธิ์ทางการ
เรียนของนักเรียนในกลุ่มควบคุมที่เรียนบทเรียนจากตำราปกติและกลุ่มทดลองที่เรียนด้วยบทเรียน
คอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้น และ (4) ดำเนินการปฏิบัติการย้อนกลับและผลสะท้อนของนักศึกษาที่มี
ต่อการเรียนด้วยบทเรียนคอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้น กลุ่มตัวอย่างจำนวน 2 กลุ่มในการวิจัย
ครั้งนี้ได้จากการสุ่มด้วยการสุ่มแบบเจาะจง โดยกลุ่มที่ 1 คือกลุ่มที่ใช้ศึกษาปัญหาการอ่านข้อความ
ภาษาอังกฤษทางวิทยาศาสตร์และเทคโนโลยี เป็นนักศึกษาปีที่ 1 มหาวิทยาลัยเทคโนโลยีสุรนารี
อำเภอเมือง จังหวัดนครราชสีมา ที่ได้เรียนรายวิชาภาษาอังกฤษ 1 มาแล้วในภาคเรียนที่ 1 ปีการ
ศึกษา 2544 จำนวน 12 คน และอาจารย์ที่มีประสบการณ์ในการสอนรายวิชาภาษาอังกฤษ 1 จำนวน
11 คน มารับการสัมภาษณ์และกรอกแบบสอบถาม 3 รอบ ด้วยการประยุกต์ใช้วิธีเดลฟาย ส่วนกลุ่ม
ที่ 2 คือกลุ่มที่ทดลองเรียนบทเรียนเพื่อการอ่านข้อความภาษาอังกฤษทางวิทยาศาสตร์และ
เทคโนโลยี จำนวน 83 คน โดยแบ่งเป็นกลุ่มควบคุมจำนวน 45 คน และกลุ่มทดลองจำนวน 38 คน
ทั้งสองกลุ่มนี้ได้เรียนรายวิชาภาษาอังกฤษ 1 ในห้องเรียนตามปกติ ในการทดลองนี้ ทั้งสองกลุ่มได้
ทดสอบก่อนเรียน หลังจากนั้นกลุ่มควบคุมได้เรียนบทเรียนเพื่อการอ่านจากตำราปกติ กลุ่มทดลอง
ได้เรียนผ่านบทเรียนคอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้น หลังเรียนจบบทเรียนแต่ละบท กลุ่มทดลอง
จะเขียนบันทึกความคิดเห็นเกี่ยวกับบทเรียนนั้นๆ จากนั้นให้นักศึกษาทั้งสองกลุ่มทำแบบทดสอบ
หลังเรียน ข้อมูลจากการดำเนินการวิจัยได้รับการวิเคราะห์ด้วยการหาค่าพิสัยระหว่างควอไทล์, การ
หาค่ามัธยฐาน การวิเคราะห์ความแปรปรวนร่วม (ANCOVA), การหาค่าเฉลี่ย (\bar{x}) และค่าร้อยละ

ผลการวิจัยก่อนการพัฒนาบทเรียนคอมพิวเตอร์ช่วยสอนโดยใช้การสำรวจจากการ
สัมภาษณ์และแบบสอบถามด้วยวิธีเดลฟายประยุกต์ พบว่า ปัญหาในการอ่านข้อความภาษาอังกฤษ

ทางวิทยาศาสตร์และเทคโนโลยี ของนักศึกษารายวิชาภาษาอังกฤษ 1 ตามอันดับแรกที่นักศึกษาและอาจารย์มีความคิดเห็นสอดคล้องกันคือ (1) ขาดความรู้ด้านคำศัพท์ (2) ขาดความรู้ในการใช้ กลวิธีการอ่านที่ถูกต้อง (3) ไม่เข้าใจข้อความที่ยาวและซับซ้อน บทเรียนคอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้นมีค่าประสิทธิภาพ 84.15 / 81.65 ซึ่งเป็นไปตามเกณฑ์ที่ตั้งไว้ 80/80 คะแนนที่ได้จากการสอบหลังเรียนของกลุ่มทดลองและกลุ่มควบคุมแตกต่างกันอย่างมีนัยสำคัญทางสถิติอย่างยิ่ง นอกจากนี้ ผลการบันทึกความคิดเห็นของนักศึกษาในกลุ่มทดลองแสดงให้เห็นว่า นักศึกษามีความคิดเห็นที่ดีต่อการเรียนผ่านบทเรียนคอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้น ร้อยละ 69.75 พบว่ามีทักษะการอ่านที่ดีขึ้น สามารถนำทักษะการอ่านที่ได้ไปใช้อ่านบทความอื่นๆและการสอบได้ และร้อยละ 57.23 พบว่าบทเรียนคอมพิวเตอร์ช่วยสอนที่พัฒนาขึ้นทำให้การเรียนการอ่านสนุกสนานและน่าสนใจ

BENJAMART THANASOONTORNREK : THE DEVELOPMENT OF
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CAI/CAI READING LESSONS/ READING LESSONS/COMPUTER-ASSISTED INSTRUCTION

This research aims to develop reading lessons to solve the problems of reading comprehension of English science and technology texts.

The research methodology included (1) to study the problems of reading English science and technology texts for SUT English 1 students; (2) to determine the efficiency of computer-assisted instruction on reading lessons based on the 80/80 standard; (3) to compare students' learning achievement of the control group which was taught by a traditional method and the experimental group who studied the reading lessons from computer-assisted instruction; and (4) to explore the students' feedback and reflection on the CAI reading lessons. Through purposive sampling, two groups of samples were used. Group one, utilized for the study of English 1 students' reading problems, included 12 first-year students who took English 1 in trimester 1/2001 and 11 English 1 teachers at Suranaree University of Technology in Nakhon Ratchasima. They were interviewed and responded to three-round questionnaires using applied Delphi technique. Group two consisted of 83 students who were taking the English 1 in trimester 2/2547 and were divided into the Control Group of 45 students and the Experimental Group of 38 students to study the reading

lessons. After taking a pre-test, the Control Group was taught by the researcher using traditional methods, whereas the Experimental Group was taught by computer-assisted instruction. After each lesson, the students in the Experimental group wrote their journals, giving their feedback or comments on the lessons. After that, both groups were asked to take a post-test. The research data was analyzed with interquartile range, median, ANCOVA, arithmetic mean (\bar{x}), and percentage.

The findings of examining the students' reading problems through interviews and questionnaires using applied Delphi technique indicated that both students and teachers had corresponding opinions about the first three ranks of students' reading problems for English science and technology texts. They were the lack of vocabulary knowledge and of appropriate reading strategies and the inability to understand long and complex sentences embedded in the reading text. The efficiency of computer-assisted instruction for reading lessons was 84.15/ 81.65 which met the prescribed criterion 80/80. The learning achievement of students in the experimental group was higher than the control group with a statistically significant difference. The students' opinions towards learning via computer-assisted instruction were positive. The results indicated that 69.75 % of the students in the experimental group improved their reading skills and comprehension, and they could use the skills for reading texts in other areas and exam texts. In addition, 57.23 % found that learning reading lessons through computer-assisted instruction was enjoyable and interesting.

School of English

Academic Year 2004

Student's Signature_____

Advisor's Signature_____

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CHAPTER I

INTRODUCTION

1. 1 Introduction

This chapter introduces the study of the development of English reading lessons in science and technology for English 1 students at Suranaree University of Technology. The sections in this chapter provide a background and a context for the present study, which includes the definition, purposes, and expected outcomes of the study. The chapter also concludes the scope of the study and defines the terms used in this study.

1. 2 Rationale and Significance of the Study

Reading comprehension is well recognized as one of the major problems of many foreign language learners. Even students in higher education who have studied English for many years still have difficulties in understanding English texts, especially in the expository style (Soranasataporn, 1997; Ward, 2001). Especially, reading in a foreign language for academic purposes, e.g. science and technology, requires more language demands than that of a second or foreign language (Chen, 1992). In other words, reading comprehension of science and technology texts involves not only word or sentence understanding, but also the knowledge of particular content, sub-technical vocabulary and text organization, and reading strategies (Trimble, 1985). Accordingly, a question arisen is how language teachers

can empower their students to achieve their reading goals in those areas. Many research studies have been conducted to develop effective reading approaches and instructions, viewed to arrange conditions and provide the enhanced learning environment where learners can most benefit from their better comprehension (LeLoup and Ponterio, 2000). However, while reading professionals and teachers have attempted to find effective reading approaches to promote learners' reading skills in these areas such as Tawfiq (1984), Aumpayub (1990), Sutman and others (1993), and Parkinson (2000), the investigation of students' reading problems has been done simultaneously such as Love (1990) and Soranasataporn (1997). Furthermore, many studies have been investigated in terms of language problems, reading strategy problems and background knowledge problems.

Concerning the students who have limited English proficiency, their unique needs and problems in reading of these texts emerge due to the complexity of the text structure and vocabulary, and the students' limited English proficiency. Similarly, the students who are studying at Suranaree University of Technology (SUT), where education in many science and technology fields is taught, have encountered problems in understanding these academic texts. Most textbooks and journals in these fields are written in English and usually contain complex linguistic features: lexical, structural and discourse features, different text organization patterns such as comparison/contrast, problem-solution, cause/effect and unfamiliar content. Therefore, students need to be prepared to cope with any reading difficulty derived from such texts.

In the academic year 2001, more than half of the total number of new students was low English proficiency students. That is, they had low scores: 11-42/100, in the

English placement test. It is assumed that most students have a limited English background. Due to their limited proficiency in English, the students may have potential problems in learning English, especially reading in science and technology, which require both formal and content knowledge of such texts. Therefore, there is a need for instructional strategies and support that can assist students to develop their language learning. Nevertheless, very few studies, concerning students' reading problems and instructional support have been conducted to help SUT students with limited English proficiency to improve their reading comprehension.

After reviewing the English 1 syllabus, which had been utilized since 2000-2001, the researcher found that English I curriculum generally aimed at preparing students for four language skills: listening, speaking, reading and writing. The courses comprised of tutorial and multi-media components. In the tutorial class, particular skills such as English medium classroom behaviours and effective language learning strategies were mainly emphasized. Classroom activities, such as group discussion, understanding the context, and writing activities that assisted students to express opinions about what they read, were used to enhance language learning skills. Regarding multi-media or Computer-assisted language learning (CALL), students had opportunities to expand their ability to cope with unfamiliar materials especially scientific and technology texts, to take actions when comprehension is obstructed and to practice language skills which included reading, listening skills, as well as vocabulary and grammar practice. The learning materials were taken from several sources from the fields of science and technology taught at the university. English was the main language used in the language class.

In summary, language study skills in four areas: listening, speaking, reading and writing, and the initial use of strategies for academic reading, writing and preparation for listening to authentic academic discourse were mainly emphasized in English 1. This seemed to be sufficient for first-year students. However, there were doubts if the students with low English proficiency would have any difficulty in reading comprehension and whether they needed any particular tutorial or instruction to improve their reading skills.

Thus, the researcher took this opportunity to examine students' problems of reading English texts in scientific and technological content, and develop instructional materials to improve their reading comprehension.

1.3 Purposes of the Study

The study aims to...

- 1.3.1 identify reading problems for English for science and technology texts of SUT English I students.
- 1.3.2 develop lessons to solve the problems of reading comprehension of English science and technology texts.
- 1.3.3 compare the achievements of the experimental group and the control group.
- 1.3.4 to explore the students' feedback and opinions on the computer-assisted instruction.

1. 4 Research Questions

- 1.4.1 What are the reading problems for English Science and Technology texts of SUT English I students?
- 1.4.2 What are the aspects of efficient lessons for reading comprehension in English science and technology texts?
- 1.4.3 Are there any differences between the experiment and control group learning achievement?
- 1.4.4 What are the students' feedback and opinions on the reading lessons developed to improve their reading comprehension?

1. 5 Research Hypotheses

- 1.5.1 The computer-assisted instruction for reading lessons will have an efficiency on the 80/80 standard.
- 1.5.2 Learning achievement for the experimental group will be significantly higher than that of the control group.
- 1.5.3 The experimental group will have a positive attitude towards learning the courseware.

1. 6 Scope and Limitations of the Study

The objectives of the present study were to investigate reading problems and to develop reading lessons for first-year students who were taking English 1 at Suranaree University of Technology (SUT). Therefore, the subjects of this study may not be representative of students who study in the same fields at other universities since the students may have different backgrounds, learning environment

and needs. The findings are used to describe the subject of this study, that is, first-year students who studied English 1 course in the second trimester/2004 at Suranaree University of Technology.

1.7 Expected Outcomes

The researcher expects the findings of the study will provide efficient lessons which can solve reading problems for English 1 students who are using English science and technology texts. In addition, the findings from the interviews and questionnaires will reveal the difficulties that English 1 students have in reading English texts and serve as guidelines for teachers to prepare instruction in their reading classes. Implications of reading instruction in English Science and Technology texts, and development of classroom settings and materials will be spelt out. In addition, the research findings are also expected to report the students' opinions about the use of computer-assisted instruction to teach reading skills.

1.8 Terms Used in the Context of the Present Study

- 1.8.1 **English 1 Students** mean the students who are taking English 1 course in the first year at Suranaree University of Technology (SUT). They are from different fields of study.
- 1.8.2 **English text in science and technology** refer to the passages used in the English 1 textbook in 2001 (Economics 1 & 2).
- 1.8.3 **Reading lessons via computer-assisted instruction (CAI)** are the lessons developed in the form of a computer program (Authorware

version 5.2) and used to facilitate English 1 students' reading comprehension of English science and technology texts.

1.8.4 **Students' attitude** refers to the English 1 students' feedback or opinions about the reading lessons via computer-assisted instruction.

1.8.5 **Student journal** refers to students' documentation of their feedback, opinions or comments about the reading lessons via computer-assisted instruction.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews the related literature and studies pertaining to reading skills. The discussed sections include reading definition and process, various reading strategies that enhance comprehension, approaches and computer-assisted instruction (CAI). It describes in detail the nature of reading, reading problems, computer-assisted instruction and English curriculum. Lastly, this chapter concludes with previous research on computer-assisted instruction, both international and in Thailand.

2.2 Reading

2.2.1 Definition of Reading

Reading comprehension is not only the ability to understand the information that is presented in written form, but a complex process that relies on the interactions between the reader, the text, and the interaction of the reader and the text (Rumelhart, 1977, quoted in Aebbersold and Field, 1997). Goodman (1988) explains that reading is a psycholinguistic process which starts with the linguistic features produced by the writer and ends with the construction of meaning by the reader. In conclusion, reading comprehension takes place not only from the interaction between the

linguistic features of the text and the reading ability of the reader, but it also involves the use of his or her prior knowledge related to the text.

2.2.2 Reading Process

Many researchers have discussed the three models of the reading process, which are bottom-up, top-down and the interactive processes. The processes are discussed below.

1. Bottom-up process

Booth et al (1999) states that the bottom-up reading model is a process by which readers make meanings out of the linguistic features of the written text. Bloomfield and Barnhart (1961) indicate that it is the first task of reading: reading the code or letters which represent phonemes or sounds out of the letters. Dechant (1991) also describes the bottom-up model as the process when a reader first processes the smallest linguistic unit (letter level), gradually compiling smaller units (word level) to decode and understand the higher units (sentence level). So, it can be concluded that the bottom-up reading model is a process that reader needs to do in order to identify letter features and link the letters to words, sentences or paragraphs which s/he makes meanings from them.

2. Top-down process

McCormick (1988) asserts that reading is a matter of bringing meaning to print, not extracting meaning from print. Day and Bamford, (1998) describe that the top-down process involves the reader's cultural, syntactic, linguistic and historical knowledge about language to make assumptions or predictions to form meanings out of the text. Booth et al (1999) also define this reading model so that it emphasizes what the reader brings to the text (e.g. prior knowledge) and reading is driven by

meaning. Therefore, the top-up reading process can be described as a process in which a reader uses his prior cultural, linguistic, syntactic, historical knowledge in constructing meaning out of the text.

3. Interactive process

It is now well accepted that reading involves the integration of both bottom-up and top-down processes, namely, the interactive process. Spiro (1980) implies that

“Reading is a multilevel interactive process, that is text must be analyzed at various levels, with units of analysis going from letter to the text as a whole. In addition to processing the explicit features of text, the reader must bring considerable preexisting knowledge to the reading comprehension process. The interaction of text-based and knowledge-based processes and of levels within each is essential... .”

(Spiro, 1980)

It is apparent that Spiro views reading as a complex process by which a reader needs both linguistic features and knowledge of the world to create meaning when s/he reads a text. Goodman (1981) declares that the goal of the top-down reading process is to make meaning from text by using a combination of letters and sounds, as well as syntactic and semantic cues to construct meaning. Eskey and Grabe (1988) describe this reading model as “...the interaction of the reader’s several kinds of knowledge and the interaction of the reader and the text”. Carrell and Eisterhold (1988) explains that reading is the interactive process between the reader’s prior knowledge and the text. This means that comprehension involves more than the readers’ knowledge of linguistic features, but also their background knowledge and experience with the text. In addition, Aebersold and Field (1997) describe that a

reader employs both bottom-up and top-down processes, either alternately or simultaneously to construct their comprehension of a text, depending on text types, readers' prior knowledge, language proficiency level, motivation, strategy use and beliefs about the reading. In sum, since reading involves the reader, the text and the interaction of the reader and the text, it is necessary that the reader use both linguistic knowledge of the target language and knowledge of the world in order to create meaning out of the printed message.

2.2.3 Reading Strategies Enhancing Reading Comprehension

Center for advancement of learning: Learning strategies database (1999) emphasizes different reading comprehension strategies which can help readers develop their comprehension of a text. These strategies are strategies used to deal with reading difficulties in general, which are general fix-up strategies, strategies used with academic texts, or non text reading comprehension; strategies related to interest and concentration, such as strategies used to improve motivation and concentration; strategies related to vocabulary, which include general approach to unfamiliar vocabulary words, predictions based on context, word elements, affixes and roots; and strategies related to text organization such as textbook organization, text skimming, creative mapping for content reading.

2.2.4 Behaviors of Effective and Ineffective Readers

Nuttall (1996), Day, R. R., and Bamford, J. (1998) and Center for advancement of learning (1999) mentioned the differences of reading behaviors of able or effective readers and less able or ineffective readers as described below.

Effective readers have a purpose of reading in mind. That is, they know what they want to find out and determine appropriate reading strategies for that purpose.

For instance, if they want to find out what the text is all about, they preview the text by scanning the title, section headings, and visual aids. While reading, the effective readers will concentrate on what they want to find out, use different reading strategies to enhance their comprehension such as fix-up strategies when lack of understanding occurs, use contextual analysis to understand new terms, use text structure to assist comprehension, and organize and integrate new information to assure their understanding. After reading, they summarize the main ideas and reflect on what was read. If they still have an unclear understanding, they look for additional information from other sources to enhance their comprehension.

In contrast, ineffective readers start reading without preparation by not knowing why and how to approach the text. They easily lose concentration due to a lack of reading focus. Their aim is to read on and on till the end of the text, not knowing what to do when a lack of understanding occurs, not recognizing key words nor text organization to facilitate their reading. Moreover, they do not relate what they read to what they already know. Worse than that, they do not know that they do not understand and do not check their understanding. The differences between these characteristics show that the reading behaviours and strategies they use play crucial roles in comprehending a text.

2.2.5 Factors Affecting Reading Comprehension

Many studies examine factors that affect reading comprehension. However, in this study, three major concerns are discussed in detail: readers' background, instructional factors or reading approaches used to teach reading skills, and language curriculum. In this section, the reader-related factors affecting reading comprehension are discussed. To start with, first language (L1) reading strategies

affect their second/foreign language reading comprehension. In other words, the efficient L1 readers use their L1 reading skills to facilitate reading in another language (Royer and Carlo, 1991, quoted in Aebersold and Field, 1997). Second, learners who have solid metacognitive knowledge in their first language—the ability that readers are aware of their reading purposes, know how to achieve those purposes and can perform appropriate behaviours to enhance their comprehension—will apply such knowledge in second language learning and reading (McNeil, 1984). Third, inadequate linguistic, cultural and historical knowledge of the second or foreign language causes reading problems. Put another way, the language readers must have a certain level of proficiency in the target language to be able to read the text in that language. Fourth, the differences between the first and the second languages affect the learners' reading comprehension. In other words, the readers will find it easier to learn or read in another language when their L1 writing features and rhetorical structures are similar to those of second or foreign language. Lastly, motivation is an efficient agent in reading. This means, the more readers find reading in another language relevant and meaningful to their needs and interest, the more they are eager to read (Diaz-Santos, 2000).

In addition, the schema theory explains that the reader's prior knowledge play an important role in reading comprehension (Carrell, 1987; Carrell and Eisterhold, 1988). This schema can be categorized into two groups: the content schema or the knowledge of the subject matter, and the formal schema or the knowledge of linguistic forms and the organizational structures of different text types. In other words, if readers have experiences or knowledge about what they read, it is much easier for them to understand the content in the text. On the other hand, if they

recognize the formation of the language and the organization of the text, they will find it easy to understand the gist of the texts. Furthermore, the limited vocabulary and structural knowledge can obstruct the foreign language readers from comprehending the text (Nuttall, 1996). Grabe's (1988) notion of reading as an interactive process implies that the English for academic purposes reader most probably has more limited content and formal schemata as well as less knowledge of the language used in the text. Thus, s/he finds it difficult to understand the text. Especially in science and technology texts, where particular words and technical terms are often used. Also, text types are considered to cause reading comprehension. Put simply, reading narrative texts, such as newspapers, fables, short stories, advertisements and dramas, requires less effort to comprehend than reading expository texts, like scientific articles, philosophy books and educational research (Richard, 1981; and McNeil, 1984).

2.2.6 Reading Approaches

How students learn to read in another language is often determined by the reading approach that teachers use. This can affect individual students' development of reading skills since they have different background and learning styles. Below are summaries of some of the reading approaches, commonly used in language classes. The approaches include intensive and extensive reading, whole language, skills building, and resource-based learning.

2.2.6.1 Intensive Reading Approach

This approach is commonly used in a regular reading class, where students work with short texts under the guidance of the teacher. The aim of intensive reading is to help students construct detailed meaning from the text; to develop reading skills,

such as to identify the main ideas and recognizing text signals; and to enhance vocabulary and grammatical knowledge (Renandya, Sundara Rajan, & Jacobs (1999). Similarly, Nuttal (1996) claims that intensive reading is intended primarily to train reading strategies which students can use with different texts. She adds that intensive reading emphasizes two areas: skills-based and text-based teaching. In skill-based lessons the focus is on developing particular skills such as discussing what inferences a reader can make, and understanding what is implied or stated. In order to do this the reader has to read many texts, which offer opportunities to practice the skills. On the other hand, the text-based lessons focus on the understanding of the text itself. The reader uses all the reading skills, such as skimming, scanning, previewing that s/he has learned to comprehend the text at different levels—main ideas or details (Aebersold & Field 1997). Just as in the skill-based lessons, the reader needs a number of short texts for reading practice, usually followed by many exercises.

2.2.6.2 Extensive Reading Approach.

It is also referred to as Free Voluntary Reading, Book Flood, Uninterrupted Sustained Silent Reading (USSR), Drop Everything and Read (DEAR), and Silent Uninterrupted Reading for Fun (SURF) (Lituanas, Jacobs & Renandya, 2000). The key of extensive reading is that when students read for general comprehension or for pleasure in large quantities of texts of their own choosing, their ability to read will improve (Aebersold & Field, 1997). Moreover, it is strongly emphasized that extensive reading focuses on the content being read, rather than on language skills. The main goals of the extensive reading approach are to help students to develop their positive affects, which are attitudes and motivation in second/foreign reading, to be aware of what purposes they are reading and use appropriate reading strategies, to

develop their word recognition ability and reading speed, to learn how to choose reading materials appropriate for their interests and language ability (Day and Bamford, 1998). Students at higher levels can expand their content knowledge as well as reading skills through reading extensively.

2.2.6.3 Skills Building Approach.

Similar to intensive reading approach, the skills building approach is based on the idea that reading skills can be built up by accumulation of skills, such as word recognition, comprehension skill and study skills (Burnes and Page, 1985). It is the teacher's responsibility to decide what skills their students are weak at, or need to comprehend a text. Then, the instruction and learning materials students need to achieve those skills can be prepared. The drawback of this approach is what criteria the teachers use to decide what skills their students need and what difficulties they have in comprehending a text. To put it another way, "language learning is an activity where people have significantly different requirements from one another depending on who they are, what their goals are and what experiences and knowledge they bring with them" (Lian, 1996). It is critical to determine what skills students should learn in order to comprehend a text since each individual has different needs.

2.2.6.4 Whole Language Approach.

Regarding whole language principles, the development of literacy is emphasized. It is believed that the function of language both oral and written is to construct meaning or understanding, and that language is both personal and social; that is, it serves both thinking and communicating. In term of reading, learners need to predict, select, confirm and self-correct as they make meaning out of print in order to achieve the main purpose of reading, that is, comprehension (Wagner, 1989).

Further, learners learn to read by reading the whole text, which is opposite to the traditional approach, i.e. behaviourist approach, focusing on prepacked pieces of passages with exercises and drills. Similarly, the concept of reading and writing whole texts is reinforced (Weaver, 2000). Regarding the task assignments in a whole language classroom, while working with authentic materials, students have options to determine what they will do or learn, which requires them to take responsibility for their learning. At the same time, the teacher acts as a facilitator, supporter and monitor as needed. From this statement, the whole language learning environment creates opportunities for students to find out what they want to know.

2.2.6.5 Resource-based learning

Basically, resource-based learning stresses that it is the learner's job to work with resources in order to learn about the tasks through their experiences in problem solving. Through this way, they can accumulate the necessary information strands to formulate meaningful knowledge about the task (Lavery, 1997). In other words, learners have opportunities to identify what they know about the topic and what they need to know, where to look for information, and how to reflect on their own their learning. Therefore, the teacher may predictably create the conditions that allow learners to engage themselves in the rich contexts of the target language. It is emphasized that students, especially in higher education, should think critically about their problem-solving tasks and determine what they need to do to achieve their goals by using available resources.

2. 3 Computer Technology and Language Learning

Constructivists believe that learning is an active process by which all people construct their own perspectives of the world, or meanings, through individual experiences and schema (Hein, 1991). Constructivists focus on preparing the learner for problem solving in ambiguous situations. On the other hand, learning another language involves not only the new codes, which are characters and function, system, etc., but also the content and culture. What the learners need to be able to do is more than just memorizing new words and grammar or practicing pronunciation (Frommer, 1998). The notion of the learners' responsibility for their own learning and of the change of the teacher's role to a facilitator becomes crucial in language instruction. Therefore, computer technology has been utilized to facilitate learners' development in language learning, to provide learners the learning environments and tools that allow them exposure to the rich context of the target language and learn at their own pace, level, need and interest, and to get involved actively in their own learning.

2. 3. 1 Definitions of Computer-Assisted Instruction

Cotton (1991) summarizes the definitions of the terms used by educators and researchers: Bangert-Drowns, et al. (1985), Batey (1987), Grimes (1977), Samson et al. (1986), and Stennett (1985). Cotton reports about the use of computers in education: computer-based education, computer-based instruction, computer-assisted instruction and computer-managed instruction which are defined as follows.

Computer-based education (CBE) and computer-based instruction (CBI) are the broadest terms. They refer to any kind of computer use in educational settings, including drill-and-practice, tutorials, simulations, instructional management, supplementary exercises, programming, database development,

writing using word processors, and other applications. They may refer either to stand-alone computer learning activities or to computer activities which reinforce material introduced and taught by teachers.

Computer-assisted instruction (CAI) most often refers to drill-and-practice, tutorial, or simulation activities offered either by themselves or as supplements to traditional, teacher directed instruction.

Computer-managed instruction (CMI) can refer either to the use of computers by school staff to organize student data and make instructional decisions or to activities in which the computer evaluates students' test performance, guides them to appropriate instructional resources, and keeps records of their progress.

However, the main focus of this study is the most commonly used and most frequently researched kind of educational computer use, computer-assisted instruction (CAI).

Merrill, et al. (1986) asserts that CAI can be referred to as an interactive instructional tool in which a computer is used to present learning material, monitor learning, and choose supplementary instructional material that meets individual learner needs.

Means & Olson (1995), Owston (1997), Valdez et al. (1999), cited in Holum and Gahala (2004) state that CAI is an electronic tool used for learning. It is utilized to enhance the learning environment by assisting students in gaining mastery over a specific skill.

Allessi and Trollip (1991) state that CAI is the use of a computer as a medium of instruction for tutorial, drill and practice, simulation, or games. CAI is used for

both initial and remedial training, and typically does not require that a computer be connected to a network or provide links to learning resources outside of the course.

According to Kulik, Kulik & Shwalb (1986), as quoted in Christopher Janicak (1999), CBT programs can be classified as:

1. computer-assisted instruction (CAI), in which the program provides drill and practice;
2. computer-managed instruction (CMO), in which the program evaluates the student's test performance, guides him/her to appropriate instructional resources and tracks progress; and
3. computer-enriched instruction (CEI) in which the computer serves as a simulator or programming device.

Educational Resources Information Center. (n.d.) ERIC Thesaurus Computer Sciences Corporation describes CAI as an interactive instructional technique in which a computer is used to present instructional material, monitor learning, and select additional instructional material in accordance with individual learner needs.

From the definitions mentioned previously, computer-assisted instruction can be concluded as the use of computers to present instruction to students. It involves the interaction between a computer system and students. CAI is designed to help students learn new material or improve their knowledge of materials.

2. 3. 2 Advantages of Computer Assisted Instruction in Language Learning

Frommer (1998) describes the significant features of the computer enhanced language learning as follows. Firstly, the computer is multisensory. It can display text, images and sound, at the same time, and allow learners to relate what they read

to what they hear and see in the motion pictures, which reinforces their learning, and fosters their retention, retrieval and recall. Secondly, the computer is multidimensional and extensible. That is, learners can access learning materials in various ways. For example, learners can use the hypertext to link to other data or to transparent reading, which can be described as the data appearing when being pointed to. Another way is to use glosses, which can appear in text, visuals, motion video and sound. Besides, learners can access the materials in a non-linear format, as well as in multiple views. Thirdly, the computer provides learners an interactive learning experience. This means, the nature of computer function requires learners to take action to continue the task. This results in learners' interactive and active participation. Furthermore, the interactive features of the computer enhances learning by providing both reinforcing and correcting feedback, and by creating anxiety-free learning environment. Fourthly, the computer provides authentic communication. For instance, e-mails and chat have become common in today's communication. Lastly, the most important computer feature is that it allows learners to learn at their own level, interest and need. Capper and Copple (1985), Kinnaman (1990), and Louie (1985) found that CAI students have more of an internal locus of control. In other words, it is necessary that learners be in control of their learning. Educational tutorial software is an example of learning materials, which allows learners to determine what, when and how to learn, including what tools or aids they can use, such as glosses, dictionary, and clipboard for note taking. Therefore, it is apparent that the use of computers in language classes can affect students' language development.

Due to the characteristics of computer-assisted instruction, Frommer (1998) and Allessi and Trollip (2005) describe numerous benefits of CAI as follows.

1. CAI can save learners' time as it allows them to study the lessons at their own pace, sequence and speed (Batey 1986, Capper and Copple 1985, Edwards et al 1975).
2. CAI can give immediate feedback to reinforce students' learning (Bationo 1992).
3. CAI can create a positive learning atmosphere for slow learners as they can learn alone and have no pressure while learning at their own pace (Robertson et al 1987, Kinnamman 1990, and Louie 1985, Rupe 1986).
4. Multimedia characteristics, such as graphics, animated images and sounds, in the CAI can create various kinds of learning activities, which makes the learning activities pleasant and real.
5. CAI allows individualized learning, as well as progress monitoring (Bialo and Sivin 1990, Robertson et al 1987)
6. CAI can keep students' learning performance, which can be used for further instruction.
7. CAI can manage large amounts of information, which allow learners to experience various sources of knowledge and numerous teaching methods.
8. CAI provides consistent and reliable instruction to any learner, no matter when, where or with whom s/he learns the lessons (Kulik, Bangert and Williams 1983, Rupe 1986).
9. CAI enables learners to achieve their learning objectives with less time and cost; at the same time the learners can improve (Capper and Copple 1985, Bangert-Drowns 1985, Kulik, Kulik, and Bangert-Drowns 1985).

10. CAI allows learners to learn unconsciously some skills like communication, spelling and deductive reasoning, which learners need to respond to the program instruction in an orderly and logical way in order to complete the task Kinnamman 1990, and Louie 1985).
11. Finally, learning with CAI requires learners to have important word processing and typing skills. Thus, learners have positive outcomes associated with the use of word processors in writing such as more accurate spelling, more variety of sentence structure, and greater variety of word usage (Batey 1986, Kinnamman 1990, and Bialo and Sivin 1990).

2. 3. 3 Disadvantages of Computer Assisted Instruction in Language

Learning

The uses of computer-assisted instruction are now well known in almost all fields. Frommer (1998), Allessi and Trollip (2005) and Birkets (1994) mention that there are some limitations which users should be aware of.

1. The cost of computerized instruction and maintenance is still expensive.
2. There is a lack of high-quality materials for use with computers. There are some technical problems. For example, some CAI programs are compatible with particular computer specifications. In addition, there are copyright problems in which learners need to get permission from the publishers before using them.
3. The users often expect CAI to help them learn with little effort. In fact, they still need to work in order to learn as much as possible.

4. CAI still has a limited range of some learning objectives such as emotional or attitude objectives. Most programs emphasize gaining particular knowledge or comprehension.

5. Despite skillful computer programmers, the construction of CAI requires a lot of planned and costly work

6. Program designers should be aware of all possible responses that learners might have given to particular problems. Otherwise, learners' responses could be rejected.

7. Learners who often learn with CAI usually have less human interaction since they tend to work on their own at the computers.

8. Some typical instructions of CAI like the linear or the lock-step order are boring to some learners, especially adults.

9. CAI needs to find more innovative methods to stimulate interest. Or else, learners might not be motivated to do the tasks in the program.

10. The design and production of CAI for educational objectives is often less exciting than ones for other purposes.

11. Working in front of a computer screen for a long time may cause eye strain.

2. 3. 4 Modes of Computer Assisted Instruction

Hankul (2000) mentions the different modes of computer-assisted instruction as follows.

1. Tutorial

The computer program is designed to present new information or lessons which teachers want their students to learn. Learning objectives are set and

lesson activities are developed accordingly. Students will participate in exercises and interact with the computer, get feedback and redo the exercises as much as they need. This method can be used as remedial instruction.

2. Drill and Practice

The lesson aims to train learners on a particular objective that students have already learned in regular classes, but are not yet competent. The lessons include reviewing or practicing activities in various types and levels of difficulty. Immediate feedback is provided. The examples of this instruction are frequently done for vocabulary drills, math exercises and grammar.

3. Games

This type of CAI is another form of drill and practice in the motivational format. Gee (2004) noted that gaming is a means to motivate and reinforce a wide variety of learning. The program creates a contest for players to achieve the highest scores, that is, learners are confronted with problems designed to make them form particular skills to accomplish a task. After that, new problems keep coming for the learners to solve until they reach the desired scores or goals. Good games allow learners to customize to their own levels of competence and styles of learning, multiple solutions to problems, differential rewards for different levels of play and regular feedback about the players' progress. Some games manage to get harder for those doing too well and easier for those doing poorly.

4. Discovery

Discovery program provides a large database of information specific to a course or content area and challenges the learners to analyze, compare, infer and evaluate based on their exploration of the data. That is, the program sets a problem or

task for learners to achieve by using the sources of information available in the database and making hypotheses and finally developing principles from their findings.

5. Simulation

The simulation program provides an approximation of reality that does not require the expense of real life or its risks. This program is used for lessons that allow learners to experiment in a simulated situation, examine the available choices and make decisions. The lessons are, for example, medical diagnosis, laboratory experiments, and pilot training.

6. Problem Solving

This program aims to teach specific problem solving skills and strategies. The program will present a problem which learners need to find accurate solutions by working with the information available. Learners have a chance to try out different solutions at the same time receiving feedback and developing the best way to accomplish the task.

2. 3. 4 The Model Design of Computer Assisted Instruction

Well-designed computer-assisted instruction results in efficient learning. The following model design done by Alessi and Trollip (1991) cited in Sa-ard (2004) and Thongthao (2000) involves seven important steps.

Step One: Preparation

The first step requires a well-prepared plan to ensure that the design is efficient and well-organized. The procedures are as follows.

1. Determining goals and objectives

In this step the learning goals and objectives will be clearly determined. This includes the general and performance objectives, learning strategies, the initial activities, supplementary exercises and tests which correspond to the objectives in the traditional or teacher-directed lesson plans. Before the designer creates the model design s/he needs to study the background of the target learners in advance in order to respond accurately to the needs of the learners.

2. Collecting Resources

In this step the designer makes sure that s/he has relevant information resources ready for each lesson, which includes the materials for content, instructional development and an instructional delivery system, i.e. a computer program.

3. Learning the Contents

It is necessary that CAI designers study the contents of each lesson thoroughly. Otherwise, it will result in failure in designing the lesson sequences, formats, materials and tests. In addition, the content and learning objectives also play important roles in making decisions about the use of instructions, feedback and even performance tests.

4. Generating Ideas

Brainstorming is used to obtain a wide variety of ideas from a designing team. There are four rules of brainstorming that the team should be aware of. First of all, *suspending judgment*, the team members should not make any criticism about others' work, which might interrupt others' ideas. Secondly, *free wheel* means that each member should have independent initiative. That is, s/he should be allowed to design the lesson freely without pressure or influences. Thirdly, *quantity*, the design team

should try to generate as many ideas as they can for the lesson design. Lastly, *crossing fertilize* means that the idea should be continually stimulated. Consequently, the step of generating ideas results in a wide variety of input for the design.

Step Two: Designing Instruction

After collecting the ideas for lesson design, the designing team starts the following important steps: eliminating ideas, analyzing the possible design plan ideas, designing the preliminary lesson and evaluating and revising. This leads to the determination of what forms or characteristics the instruction will take.

1. Elimination of Ideas:

This will begin with eliminating the repetition of ideas or the designs that are impossible to put into practice, and gathering the remainder of interesting ideas for reconsideration.

2. Task and Concept Analysis:

This is the attempt to analyze the content that the students will study, including the tasks they are required to learn or practice. Furthermore, the analysis of the lesson concept involves carefully considering all the possible content until the final content is refined and defined.

3. Preliminary Lesson Description:

This step includes the identification of clear learning objectives, type of CAI to be used, steps in learning, learning activities, sequencing, and the necessary skills required, including creative activities which will stimulate continuous learning. This is a primary factor to be considered when designing an instructional program.

4. Evaluation and Revision of the Design.

It is important to design the instruction in a systematic way, as well as to assess each learning objective regularly, not only after but also during the designing stage. Then revision should be made before the next objectives are formed.

Step Three: Flowcharting Lesson

A flow chart is a series of symbols which represent the steps and sequences of the learning activities. The designing of lesson flowcharts is not to display the details of the content on the computer screen, but the order or sequence of the instruction that a learner uses during the lesson, such as the 'next' or 'back' buttons, or the consequence after a learner finishes an exercise. The flowchart represents the structure of the computer-assisted instruction, such as what will be displayed if a student selects the wrong answer or when the lesson will be completed. A flow chart is one important step which allows learning to continue smoothly and at the same time enhance the learner's interest and knowledge.

Step Four: Creating Storyboard

The fourth step of preparation is to display the lesson content as images for each frame on paper in order to present the lesson content in multiple forms appropriately on the computer screen. The presentation of lesson content on the storyboard should be evaluated and revised until it reaches agreeable satisfaction. This will help in examining the contents that might not be clear, confusing, missing, too easy or difficult for the learners.

Step Five: Programming the Lesson

This is the process of shifting storyboard into a CAI program. Writing the program means using a computer program, e.g. an Authorware program to create CAI lessons. The lesson designer should have sufficient knowledge about the advantages and disadvantages of each computer program in order to best select an appropriate program to be used. This will, consequently, ensure the highest quality lesson. The factors of selecting a computer program are the budget, the programmer's experience, the available hardware and the characteristics of the lessons.

Step Six: Production of Supporting Materials

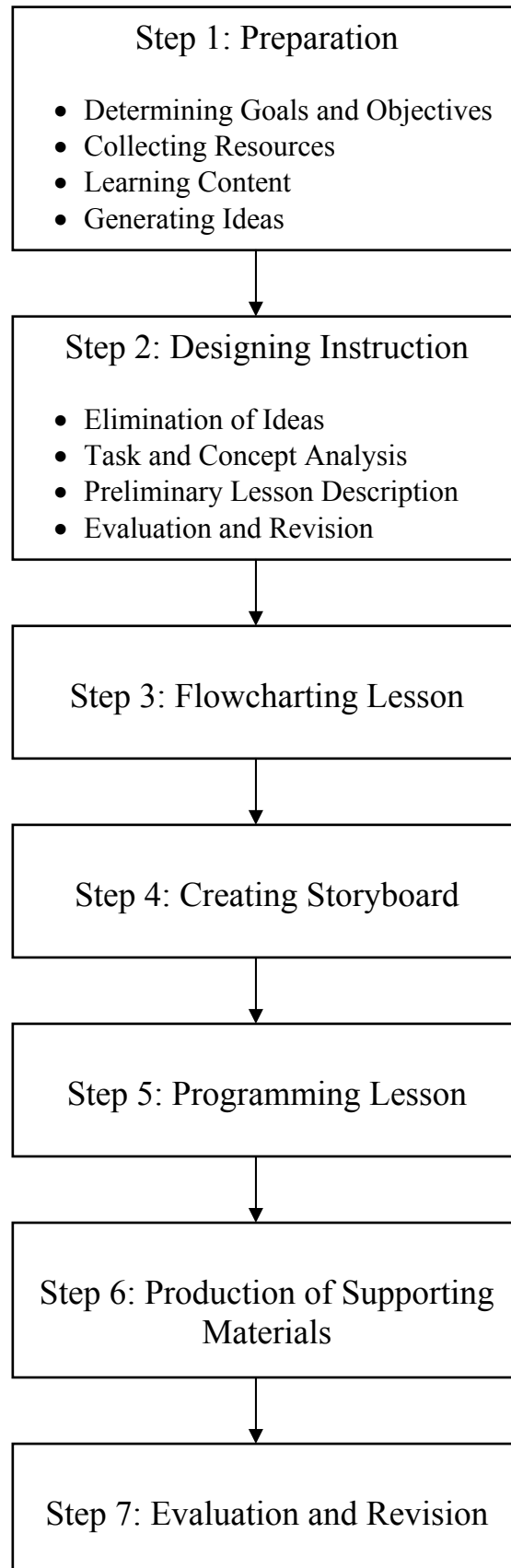
The supporting materials can be categorized in four groups, which are a student handbook, an instructor handbook, a trouble shooting manual and additional documents such as worksheets.

Step Seven: Evaluation and Revision

The CAI program and documents (e.g. manuals and worksheets) should be investigated and corrected. Particular areas such as lesson presentation and program operation should be checked and assessed by a program specialist. The designer should observe target learners' behaviours during the instructional process, and/or interview the learners after completion of instruction. A post-test could be used for evaluation. The evaluation and revision step can be done by a specialist in the pilot study.

In conclusion, the seven steps of designing a CAI are flexible guidelines. Despite the significance of systematic procedures for CAI design, the modification of the design process is sometimes necessary. Non-linear procedures of CAI design are acceptable.

Figure 2.1: CAI Design Model of Alessi and Trollip, 1991



2.4 Computers and Reading

Currently computers are widely used for teaching language skills such as reading. Reinking (1988) stated that computer instruction is effective for a wide variety of reading skills and concept areas. Marjorie R. Simic (1993) suggested how teachers can integrate computers into reading/writing instruction.

2.4.1 Reading instruction via computer should emphasize meaning and reading comprehension. In other words, students should have a chance to work with whole meaningful texts, to use what they learn in meaningful ways, to work with computer materials that are relevant to their interests, experiences and purposes, and when working with word-recognition programs, the individual words should be in a meaningful context.

2.4.2 Reading instruction via computer should promote active participation and stimulate thinking. This means that students should have a chance to realize their learning purposes, to be able to control their learning activities, and to monitor their own learning.

2.4.3 Reading instruction via computer should support and increase students' knowledge of text structure. Put simply, students have a chance to expose themselves to various text structures both narrative and expository, and to work with text structures in creative ways.

2.4.4 Reading instruction via computer should make use of content from a variety of subject areas. That is to say, students can use computer as a tool to practice reading strategies in all subject areas. Therefore,

students should use computers along with other modes of instruction such as books, tapes or videos

2.4.5 Reading instruction via computer should integrate reading and writing.

For example, when students create text for other people to read or use, this allows them to make their text comprehensive.

2. 5 English for Science and Technology (EST)

Many EFL students have difficulties in understanding English Science and Technology (EST) texts. Linguists state that teaching scientific texts via vocabulary and syntax is not sufficient (Durongphan, 1981). The nature and characteristics of EST are different from other forms of written English (Trimble, 1985). English for science and technology concerns English text written for academic, professional and occupational purposes including commercial journals in scientific and technological materials for the workers in, for example, industrial companies. The major concerns of EST text are to present facts, hypotheses, and other similar kinds of information.

Trimble, (1985) asserts that EST rhetoric, considered as one of the factors of reading comprehension, is defined as the process an author uses to write a text, as well as the ways that information is organized. The organization of the text is determined by the purposes and specific readers. Rhetoric can be divided into 4 levels. Level 1 presents the objectives of the whole text such as detailing an experiment, making a recommendation, presenting a new hypothesis or theory, and presenting other types of EST information. This information is usually found in the introductory section of the text. Level 2 contains the major pieces of text that are combined to form the whole text. These pieces of text are indicated by section headings or sub-headings. Level 3 details the specific rhetorical functions. It may

include one or more related paragraphs to form one section of Level 2. This level presents written EST discourse, which includes descriptions, definitions, classifications, instructions, and visual-verbal relationships between a visual aid and its accompanying text. Level 4 presents relationships within and between the sentences or information of the rhetorical units of Level 3. Similar to text organization patterns of the other expository text, text can be organized into orders, which are time and space; or in patterns which include cause and effect, comparison-contrast, exemplification, order of importance, etc.

Trimble, (1985) also adds that another factor of EST affecting reading comprehension is its rhetorical-grammatical relationships such as passive-stative distinctions, which refer to sentences containing passive forms of verbs; modal use in the rhetoric of instructions such as the use of ‘should’ in EST context may mean ‘must’; problems with the definite article, for instance, the missing ‘the’ in instructions of doing something e.g. Dip perma strip into cement. Another factor that many EFL readers have while reading EST is lexicon. This includes sub-technical vocabulary which has special meanings in specific contexts, e.g. ‘an arsenic-fast virus” means ‘a virus resistant to arsenic’; noun compounds which are two or more nouns plus adjectives, e.g. automatic controller action.

2. 6 Previous Research Studies

There have been attempts to help foreign language students to develop their reading comprehension skills in science and technology texts. Many studies emphasize the effectiveness of different types of reading strategies. For example, Perez (1990) studies how the knowledge of rhetorical structure helps improve reading

and writing skills. The results show that students who have been taught the technique get higher scores in reading comprehension.

Amer (1994) investigates the effect of knowledge-map, and underlining training on the reading comprehension of scientific texts. The knowledge-map is similar to the display chart that presents information in the form of node-link identifying the relationships between nodes. This strategy claims to facilitate the organization, presentation and acquisition of information. On the other hand, the underlining strategy can improve recall of the underlined information being read. The results report that both knowledge-map and underlining training groups performed better in reading comprehension than the control group, but there is no significant difference between the two strategies.

Marshall and Gilmour (1993) examine the problems of Papua New Guinea students in comprehending EST texts. They state that students lack lexical knowledge in EST including subtechnical vocabulary, which the researchers refer to as words expressing relations that exist between the key scientific concepts. The researchers suggest pre-reading vocabulary activities to activate students' schemata of the text content as well as appropriate strategies to increase students' vocabulary recognition when confronted with unfamiliar texts. Extensive reading is also recommended.

Kuo (1993) discusses the considerations Taiwanese teachers have regarding material development for the EST class at university level. The author concludes that teachers can use published EST textbooks as data sources with a variety of texts, skills, activities, tasks and select what is appropriate and can be adapted for their students. Simultaneously, teachers can use supplementary materials to meet their

students' needs. In addition, the integration of content-based and skills approaches, authentic materials which are selected or designed to suit students' proficiency level, and process-oriented materials are recommended for the EST classes.

Stapa (2002) studied learning styles which enhanced learning for English for Academic Purposes (ESP) learners. The subjects were 53 Malaysian students who were doing a course called English for Hospitality Purposes offered by the Faculty of Language Studies, National University of Malaysia and three teachers who were teaching these students. A thirteen-item questionnaire was used to examine the subjects' opinions. The results showed that the subjects preferred both receptive and productive skills emphasized equally in class, working in pairs or small groups, learning new vocabulary in sentences rather than in a writing activity, seeing more instructive television programs, and active involvement in English. These findings of learning and teaching strategies could be used to design the instructional activities for ESP students.

Kavaliauskienė (2002) conducted research on learners' views about their learning needs and expectations in learning ESP at university. Different types of questionnaires were used for gathering data from 23 respondents. The results were considered as recommendations for changes in teaching and learning strategies. The findings revealed that nearly three fourths of the students had average difficulty in ESP vocabulary, tenses, and prepositions. Speaking skill is a priority to over half of the learners. ESP reading is not considered easy to almost two thirds of learners. Though a vast majority of students said they knew how to read, the students did not seem to have been taught the reading sub-skills, like skimming and scanning. They preferred to translate ESP passages word for word, which made reading slow and

boring. Students' weakness in reading skills could not be seen in class because learners do all the reading as assignments, and the speed of reading was never checked in class due to the shortage of time. Only reading comprehension for ESP materials was checked only on a regular basis by different means - through vocabulary tasks, comprehension questions or creative assignments, all of which clearly revealed learners' difficulties in coping with professional materials.

Also, there have been studies in Thailand which attempted to facilitate students' reading comprehension in scientific texts. For examples, Songchanthamane (1981) mentions that reading strategies and linguistic abilities are necessary for the development of reading comprehension skills of ESP students at Mahidol University.

Durongphan (1981) investigates the awareness of three groups of subjects: native-non-science, native science and non-native science students, to the rhetorical functions of tense for certain scientific texts. Materials used in the study were a short multiple-choice test. The findings show that most non-native science students were not aware of rhetorical functions of tense in scientific materials. They seem to understand that the use of tenses only relates to the condition of time. The researcher suggests that teaching technical reading to foreign language learners should not only train them to be aware of rhetorical functions of tense but also look for various types of clues by giving practices of EST materials to identify all the language clues.

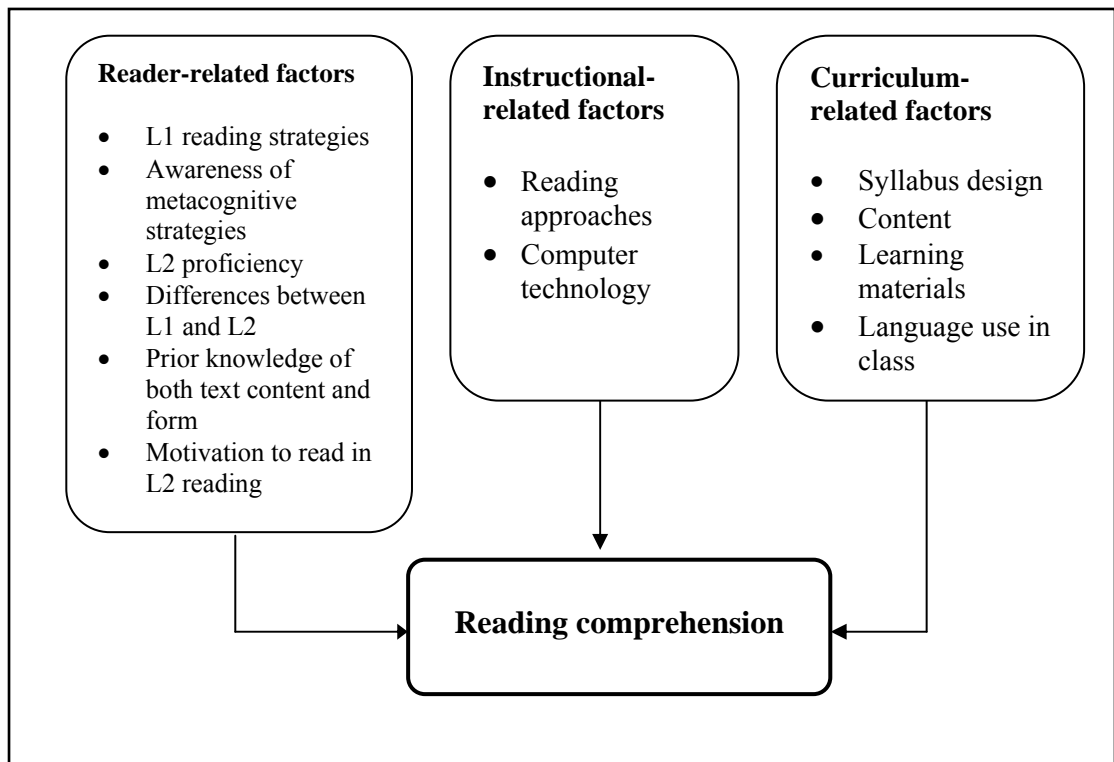
Aumpayub (1990) investigates the effectiveness of the student-generated question technique in reading texts in science of first year nursing students at Mahidol University. The experimental group was trained to ask questions during reading while the control group was taught by being asked questions by the teacher. The same materials were used. The results concluded that students who generate their own

questions while reading make better achievement than those who do not. The students, who read and ask themselves questions, activate their prior knowledge to predict what they read, are aware of how much they understand and determine what strategy they will use to improve their reading comprehension.

Soranastaporn, et al. (1997) investigated the needs and problems of English usage in 4 skills: listening, speaking, reading and writing of Sports Science students at the College of Sport Science, Mahidol University. Questionnaires and interviews were used to collect the data from both current students and alumni, teachers in the field and managers of sport clubs. The results show that students' reading subskill such as reading reports is their problem. On the other hand, teachers claimed that students need to learn to read technical terms as well as developing general vocabulary. Comprehension of simple sentences and text are also implied as problems.

The review of related literature reveals different factors associated with reading comprehension, which the researcher summarized into three major categories: the reader-related, instructional and curriculum-related factors. The theoretical framework below was developed to present a specific view of crucial factors of learning to read in a foreign language. Accordingly, the researcher designed the research investigation procedures from this framework.

Figure 2.2: Theoretical Framework



CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

In order to respond to the research questions of the present study, the researcher has considered various methods. The purpose of this chapter is to present the research methodology used in the investigation and the reasons for these choices. This includes the subjects, the instruments, the data collection, the data analysis, and the statistical method.

3.2 Research Methodology

The present study includes three major concerns. First, reading problems were investigated with student and teacher interviews and questionnaires with the Delphi Technique. Then, reading lessons via CAI were developed, based on the information from the questionnaires. Lesson efficiency was examined using the E1/E2 formula. Finally, pre- and post-tests were used to evaluate achievement of their reading comprehension whereas student journals were employed to explore opinions and feedback from the lessons. The statistical analysis of the data included ANCOVA, arithmetic mean, and percentage. Details of the research methods are described in section 3.4. In the next section, reasons for the selection of the study methods are provided.

3.3 Rationale for the Selection of Data Collection Techniques for the Study

To ensure the accuracy of the obtained data, the following data collection methods for the present study are discussed in more detail: oral interviews, questionnaires administered with the Delphi Technique and student journals.

3.3.1 Oral interview

In general, the survey methods that researchers employ to collect data are oral interviews and questionnaires (Robson, 1993; Punch, 1997). To discover problems in reading English science and technology texts, one way is to ask the students. That is, an oral interview is suggested. However, to increase the reliability of the data, information from others in the English department can provide important evidence about the situation (Yin, 1994). As such, the researcher determined that teacher interviews should also be done.

A researcher's decision on the type of interview to be used in his or her study depends on how much control and the degree of formality s/he wishes (Nunan, 1992). Therefore, the researcher of the present study decided to use a semi-structured interview as it allowed the interviewer to get the wanted information from pre-set interview items; at the same time the interviewer can be more flexible with the way s/he guides the interview, based on his or her perception about what seems appropriate to ask, omit, clarify or include during the sessions (Robson, 1993).

3.3.2 Questionnaires

Questionnaires are one of the means to obtain factual information, such as background, knowledge and behaviour, as well as measures of attitudes, values, opinions or beliefs from people (Punch, 1998). According to the use of the Delphi

technique in examining the subjects' opinions about the problems of reading English texts in science and technology, three-round questionnaires were used. The open question questionnaire was used for the first round to allow the subjects to freely express their ideas (Gillham, 2000). The questionnaire contained a set of questions concerning a topic in question. The second questionnaire contained the subjects' opinions about reading problems, learning and teaching strategies, which were written in the form of scale-rating statements, and were used to facilitate responding. The last questionnaire was the same as the second one but includes the means and interquartile ranges to allow the subjects to see their correspondence and to confirm their answers.

3. 3. 3 Delphi Technique and the questionnaires

The Delphi survey technique was originally developed in the 1950 by two research scientists at the RAND Corporation, Olaf Helmer and Norman Dalkey (Custer, Sarcella and Stewart, 1999). It was originally utilized to gather opinions from specialists or experts' about an issue of interest without bringing them together to avoid critical and political encounters (Stuter, 1996; Snell, 1997). It was a means of reaching a consensus on a concerned issue in group settings. Presently, the Delphi Technique also refers to the process of sharing ideas or concerns about a project, program or any topic in question from either a group of people who are directly involved, or those who are interested (Robson, 1993). This technique uses questionnaires as a means for collecting data. The Delphi Technique can be conducted for the following purposes: to predict future phenomena of a situation, to investigate strategy probe, to survey preference, and to examine the current situation (Chuongthaisong, 1997). The Delphi Technique can provide researchers the more reliable information than the regular questionnaires, save more time and expenses in

holding a conference or meetings, and avoid the political issues possibly occurring in a meeting (Chuongthaisong, 1997). Therefore, the researcher used this technique to gather information concerning the students' reading problems in the English 1 course, and opinions or suggestions about the reading instruction. The obtained information can serve as a source for designing reading instruction.

According to Boonorn (1979) quoted in Chuongthaisong (1997), statistics show that the number of people participating in the process affects the results of the study. The more people involved in the process, the less error there will be. The following table is modified from Chuongthaisong (1997).

Table 3.1: Number of people participating in the process

Number of Participants	Error	Error Rate
1-4	1.20-0.71	0.50
5-8	0.70-0.59	0.12
9-12	0.58-0.55	0.04
13-16	0.54-0.51	0.04
17-20	0.50-0.49	0.02
21-24	0.48-0.47	0.02
25-28	0.46-0.45	0.02

The procedures of the Delphi Technique for educational research can be summarized as follows.

1. The researcher selects experts or a group of concerning people and sends them letters asking for their cooperation to respond to questionnaires.

2. After agreeing to participate in the research, the experts or concerning people respond to the open-ended questionnaire for the first round.
3. The researcher collects the questionnaires, analyzes the responses and develops a scale-rating questionnaire based on the findings of the open-ended questionnaire.
4. The researcher sends the rating-scale questionnaires to participants and asks them to respond to the questions for the second round.
5. The researcher collects and analyzes the rating-scale questionnaires.
6. The researcher develops another rating-scale questionnaire including the median and interquartile range for each question item as well as a mark on the scale which each participant has made for that item in the previous rating-scale questionnaire.

The statistics used for data analysis of the questionnaire are:-

Median

$$Md = L_0 + \left[\frac{\frac{N}{2} - F}{f} \right] i$$

Md = median

L_0 = Lower limit of the class

F = cumulative frequency

f = frequency

N = sample size

i = class interval

The median obtained from the participants' responses is used to interpret the result according to the following criteria (Yanthong, 1989 cited from Chuongthaisong, 1997).

Less than 1.50	=	the participants least agree with the statement
1.50 – 2.49	=	the participants less agree with the statement
2.50 – 3.49	=	the participants moderately agree with the statement
3.50 – 4.49	=	the participants strongly agree with the statement
4.50 and up	=	the participants very strongly agree with the statement

Interquartile range (Srisa-ard, 1989 cited from Chongthaisong, 1997)

IR	=	$Q_3 - Q_1$
IR	=	Interquartile range
Q_3	=	Quartile 3
Q_1	=	Quartile 1

Quartile 3 and 1 (Wongrattana, 1994 cited in Chongthaisong, 1997)

$$Q_x = L_0 + i \left[\frac{\frac{NX}{4} - F}{f} \right]$$

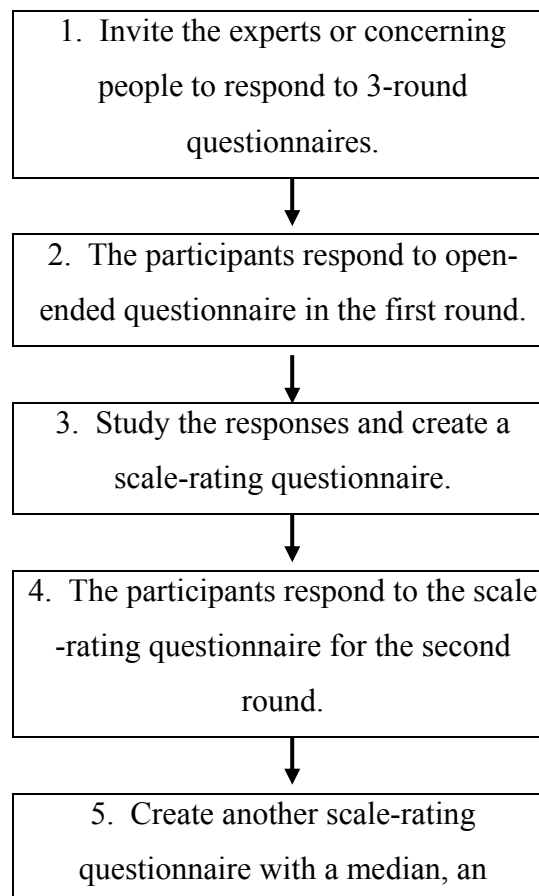
Q_x	=	quartile
L_0	=	lower limit of the class
i	=	class interval
N	=	sample size
X	=	the position of the quartile
F	=	cumulative frequency
f	=	the frequency of the score range that the quartile exists

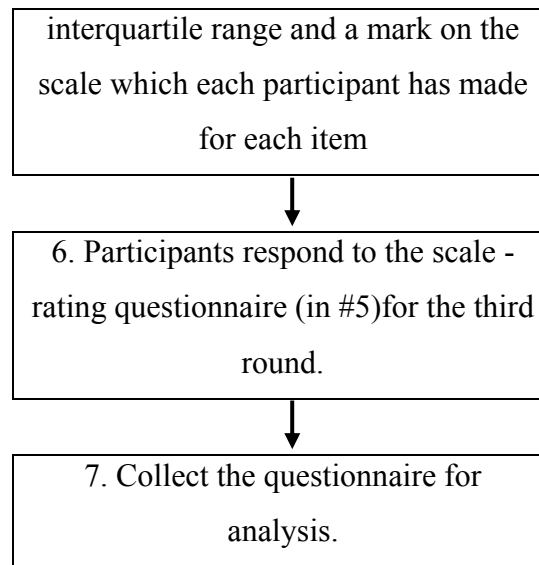
The criteria used to compare the interquartile ranges.

The item or statement that has the interquartile range ≥ 1.50 shows the corresponding of the experts' opinions (Yanthong, 1990).

7. Then, the participants will be asked to respond to the questionnaire mentioned above for the third round. Their job is to reconsider their previous responses and decide whether they will confirm their responses. If not, they will need to make new ratings; and if their new ratings are out of the interquartile ranges, they will be asked to give reasons.
8. The researcher will collect the questionnaires for further analysis. The obtained results will be prioritized to indicate the students' problems from the highest rank to the lowest. (See the procedure chart below).

Figure 3.1: Delphi Technique Procedures





However, there are some constraints needed to be aware of. That is, the selection of the people involved may not include adequate experts or concerned people; questionnaires may be delayed or lost in transit; and the participants may feel bothered to respond to many questionnaires. However, these problems can be solved. Researchers can limit the number of persons involved to the number of participants that still provide sufficient data with the least error. To prevent delay or lost of questionnaires, they can be collected by the researchers. The number of questionnaires can be done in two or three rounds as soon as the researchers get a consensus or agreement from most participants.

3. 3. 4 Student journals

Journals are used in research when some behaviors are difficult or impossible to observe such as emotional feelings or sexual behaviors (Robson, 1993). It provides primary data as it is participant-generated, that is, the participants themselves record what they do or feel from their own perspectives. Moreover, journals provide supportive data, or as supplementary information and serve as evidence for the interpretation of the findings. However, student journals or diaries also have

disadvantages, as students may not be familiar with writing a journal or diary; the language used in the journal can be a problem; and the unstructured, subjective or open-ended nature of the journal can make it difficult for students to determine what to write. Furthermore, this research tool requires a lot of responsibility from participants in keeping records of their behavior (Intraraprasert, 2000).

Nevertheless, to solve the difficulties in using the journals mentioned above, researchers can facilitate writing by inventing entries of concerned issues in a student journal sheet to give the participants a framework. Though the structured journal tends to bias the data given, the unstructured one makes it difficult to interpret the data (Robson, 1993). Thus, broad entries in the journals are recommended. Developing the journal framework in the participants' native language can avoid language problems. In addition, an explanation or training in how they can fill in the journal can be given in advance. It is suggested that participants document their opinions, reactions or thoughts as soon as possible to avoid memory problems.

3. 4 Population and Sample

The research involved both English I students, and teachers at Suranaree University of Technology (SUT), Nakhon Ratchasima, Thailand. The students were studying in all fields of engineering. Most of them were from around Nakhon Ratchasima, and the rest were from other parts of the country. On the other hand, the teacher population was SUT teachers who had experiences in teaching the English 1 course.

The study was conducted in two phases: the survey phase and the experiment phase. For the survey phase, the sample was twelve English 1 students and eleven

English 1 teachers. Two out of ten students and two teachers were invited for the interviews in the first trimester/2001. The other ten students and nine teachers were asked to respond to questionnaires.

For the experiment phase, the sample was randomly selected from the population of 824 first-year students who were studying in the second trimester, in the Academic Year 2004. These students were grouped based on their English Entrance Examination scores in 2004. There were fifteen English 1 classes, consisting of about 45-50 students in each class. Two classes which had similar test scores (23-45 scores) were randomly selected, and were classified into a control group of 45 students who would study through teacher's manual and an experimental group of 43 students who would study the reading lessons via computer-assisted instruction. However, five students in the experimental group did not attend the CAI reading classes regularly, they were then cut out of the group. Therefore, there were only 38 students in the experimental group.

Table 3.2: Subjects of the study

Research Purposes	Instruments	Subjects
1. To identify the reading problems	• Oral Interviews	• two first-year students, who took English 1 • two teachers who have experiences in teaching English 1
	• Questionnaires	• ten first-year students, who were studying English 1 • nine teachers who had experiences in teaching English 1
2. To examine the efficiency of the lessons	• Reading lessons via CAI	52 English 1 students
	• Journals	
3. To compare learning achievement between the experimental and the control groups	• Pre and posttests	83 English 1 students
4. To investigate students' opinions about the lessons	• Journals	38 English 1 students

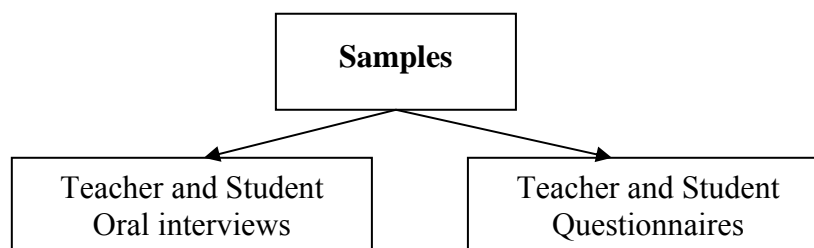
3.5 Research Design

This research consists of 2 phases: Phase 1: Survey phase was to explore problems of reading English texts in science and technology via interviews and questionnaires; and Phase 2: Experiment phase was to compare learning achievement between the experimental and control groups after they had studied the reading

lessons. Thus, this study was quasi - experimental research. After taking the pre-test, the experimental group was taught by the computer-assisted instruction on reading lessons while the control group was taught by the researcher using the teacher's manual. After each lesson, the students in the experimental group were asked to write a journal expressing their opinions or feedback. Then both groups took the post-test afterwards. The research design is illustrated in Figures 3.2: Research design.

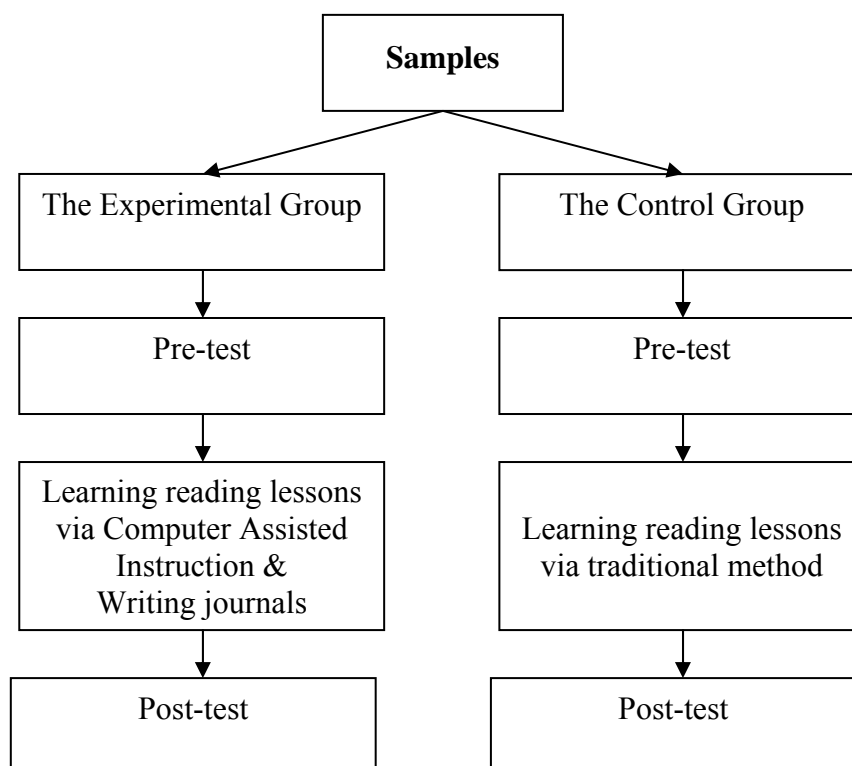
Figure: 3. 2: Research Design

Survey Phase: Exploring students' reading problems



Experiment Phase: Comparing learning achievement between the Experimental and

Control groups



3.6 Variables

3.6.1 Independent Variables

The independent variables included the 2 types of instruction: an instruction based on the teacher's manual and the one on computer-assisted instruction.

3.6.2 Dependent variable

The dependent variable was students' learning achievement of both the experimental and the control groups.

3.7 Instruments

The following instruments were used to collect data for this study: student and teacher oral interviews, questionnaires using the Delphi Technique, reading lessons via computer-assisted instruction, pre and post tests and student journals. These instruments were presented according to the research objectives: to identify reading problems, to develop reading lessons and to find the efficiency of the lessons in promoting students' reading comprehension, and to explore the students' feedback and reflections on the computer-assisted instruction.

3.7.1 To Identify Reading Problems

3.7.1.1 Student and Teacher Oral Interviews

Open-ended interviews were used to elicit problems in reading English science and technology texts. This method allows interviewees to freely express their perceptions and feelings about the research issue. However, the focused interview approach was employed to allow the researcher, as the interviewer, some control during the interview sessions. That is to say, the researcher can obtain focused information, be open to relative issues, can control time to a certain extent, and allow

the participants freedom to express their views. The interviews were done in the Thai language. Each session took approximately 30 minutes per person. With the participants' permission, an audio tape recorder was used to record the entire session.

3.7. 1. 2 Questionnaires Using the Delphi Technique

The collection of the data from the perspectives of learners who encountered the problems, and from teachers who were considered as specialists in teaching reading in those fields was conducted through this method. In addition, the Delphi Technique was employed to collect data as well as to examine the reliability of the results.

3.7.2 To Develop and Determine the Efficiency of the Reading Lessons

Reading lessons were used to help improve reading comprehension in the problem areas most subjects reported in the oral interviews and questionnaires. Therefore, the lesson design incorporated the subjects' information and that from the literature review. Passages from English 1 curriculum, books, journals and on-line articles were used. The lesson activities included both instructional and practical activities, and a pre and post-test for each lesson in science and technology (focusing on Economics) content. The lessons were examined for efficiency according to the E1/E2 formula.

To Determine Learning Achievement between the Experimental and Control Groups

Pre and post-tests were developed to assess reading achievement, both before and after the reading lessons. Through achievement scores of the tests, the researcher could see whether students improved their reading skills in the problem areas, and simultaneously developed their reading comprehension.

To explore the students' feedback and opinions on the computer-assisted instruction.

In this study, student journals allowed the students to express their opinions or reactions about the lesson activities and materials, their learning progress or learning problems. The student journal sheet that the students used was written both in Thai and English for the purpose of facilitating students expressing their feedback and opinions. A broad outline and some examples were provided for the students to record their overall feedback and opinions about the lessons. The students could also write any other issues relevant to the lessons in the journals. The researcher conducted training in how to write in the journal form for the students.

3. 8 Construction and Efficiency of the Instruments

The construction and efficiency of the instruments were carried out by consultation with a research professional, an educational material specialist and a statistician. The following are the procedures of instrument construction and the examination of their efficiency.

3. 8.1 Student and Teacher Interviews

Sets of questions for student and teacher oral interviews were determined by the research questions based on the literature review, and prepared by the researcher. The questions included the participants' personal background, reading experiences (for the student interview), problems in reading English science and technology texts and opinions about learning and teaching activities for reading classes students should

receive. These sets of questions were proposed to and corrected by the research specialists for validity and reliability.

3. 8. 2 Questionnaires

According to the Delphi technique, there were 3 sets of questionnaires. The first set was composed of open-ended questionnaires: one for students and the other for teachers. Both of them were written in Thai. Based on the research questions, the questionnaires consisted of 3 main parts: questions concerning students' personal information, reading problems for English science and technology texts, and opinions about learning and teaching activities for reading classes. However, questions related to reading history and experiences were added only in the student questionnaires.

The second set was the scale-rating questionnaires for students and teachers. In constructing the second set, the researcher, first, analyzed and categorized the findings of student and teacher open-ended questionnaires into groups. Then the researcher developed question items derived from the first questionnaires. The content and wording of the questionnaires were examined and corrected by research professionals.

For the last set of questionnaires, the researcher developed another set of scale-rating questionnaires including a median and an interquartile range for each question item as well as a mark on the rating scale which each respondent has made for that item in the previous scale-rating questionnaires. As mentioned in section 3.3.3 under questionnaires using the applied Delphi technique, the efficiency of this instrument was examined by using the applied Delphi technique.

3. 8. 3 Reading Lessons

The reading lessons were designed and developed by the researcher. The lessons were developed to solve English 1 reading problems by exploring students and teachers' opinions through oral interviews and questionnaires. The first three items from both the lists that matched were utilized for developing reading lessons for this research. They were the inability to understand diverse meanings of some general vocabulary in science and technology texts, lack of appropriate reading strategies and the inability to understand long and complex sentences. The lesson activities included both instructional and practical activities, and tests. From a supplementary questionnaire, the Economics lessons were identified to be the most difficult lessons. Thus, vocabulary, structures and passages from English 1 Economics lessons as well as from newspapers and on-line articles were included in the reading lessons. The lessons included 3 vocabulary lessons (guessing word meanings from clues, guessing word meanings from word formation, and Economics words); 3 reading techniques (skimming, scanning and finding main ideas); and 2 grammar lessons (relative and if clauses). The lessons were written and corrected by the specialists.

Achievement scores of the exercises and the post-tests from the try-outs were calculated for efficiency by using E_1 / E_2 with the following formula.

Formula 1

$$E_1 = \frac{\bar{x}}{A} \times 100$$

E_1 = Efficiency of the Process

\bar{x} = Average score students obtained from the exercises

A = Total score of the exercises in the lessons

$$E_2 = \frac{\bar{x}}{B} \times 100$$

E_2 = Efficiency of the Product

\bar{x} = Average score students obtained from the post-test

B = Total score of the post-test in the lessons

(Brahmawong, 1978)

For the language subjects the results should not be lower than 80/80 because the improvement of language skills cannot be changed and evaluated immediately after the students have finished the lessons. The improvement will occur after a period of time (Taweerat, 1995).

To evaluate the efficiency of the lesson, the examination was done in three steps of try-outs. The purpose of each try-out was to improve the lessons. The subjects for the try-outs studied the lessons, did the exercises and took the post-tests. The subjects' achievement scores from both exercises and post-tests were computed for the efficiency of the lessons.

The One to One Try-Out

The first step was one-to-one try-out. Three students with different language proficiency levels, which represented able, moderate and less able students participated in this step. The criteria of discriminating the samples into different levels of English proficiency are: an able student refers to students who have the English placement test scores over 50%, a moderate student got between 31-49 scores, and a less able student got below 30. The three students were asked to take a pre-test, and then they participated in the reading lessons via CAI for 9 fifty-minute periods. After each lesson, they were asked to write in their journals to express their feedback and opinions about the lesson. The researcher revised the student journals

for the purpose of improving the quality of the CAI program. The researcher clarified program instructions, added some explanation in lesson presentation, exercises and program instructions, and inserted images in some lessons in order to facilitate learning.

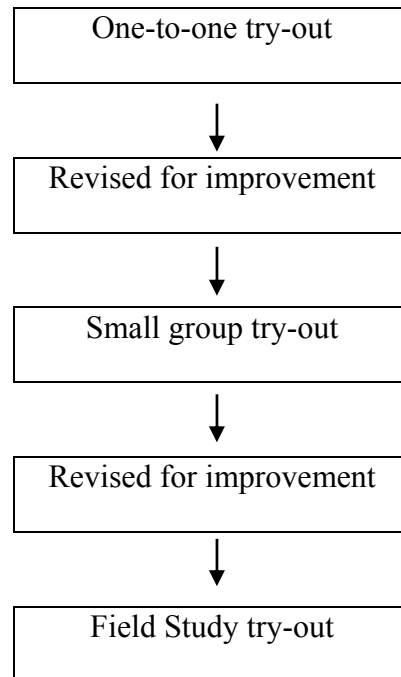
The Small Group Try-Out

The following try-out was the small group, consisting of 9 students with three different levels of language proficiency. The same procedures were done with this group of students. After analyzing the data from the exercises and test scores, and student journals, the researcher revised the lessons as follows. The researcher added more exercises and modified exercises, content and structures, pictures, program functions and lesson instructions as well as translation into Thai for some lessons mentioned by the students, deleting some abundant details, and changing font sizes, colours, formats and the timing speed of some activities in the program.

The Field Study Try-Out

The last step was the field study try-out. This step contained a class of 30 students. The same try-out procedures were used. After the third try-out, the CAI met the prescribed criteria of 80/80 level and was ready for the experiment.

Figure 3. 3: Procedures of the Reading Lesson Try-outs



3. 8. 4 Pre- and Post-tests

The tests used for evaluating reading comprehension both before and after the reading instruction were developed by the researcher. Each test consisted of four reading passages with twenty multiple-choice questions. The test development was conducted as follows.

1. The researcher set the testing objectives corresponding to the learning objectives in the reading lessons.
2. The researcher studied and consulted with a specialist about the testing principles and procedures of test construction.
3. The researcher developed a multiple-choice test with four alternatives.
4. The items of the test were improved and corrected by the specialists.
5. The researcher conducted a pilot study with a class of English 1 students.

6. An item analysis was carried out from the data obtained from the pilot study. Each question was analysed for the level of difficulty and discrimination power (r) by using the Item Response Theory or IRT software programme developed by Assoc. Prof. Dr. Sirichai Kanjanavasi, Assoc. Prof. Kanit Khaimook, and Assoc. Prof. Dr. Suwimol Wongwanit, lecturers at Suranaree University of Technology. The criteria used to select the test items was $0.3 \leq p \leq 0.7$, and (r) is equal or more than 0.2.

Formula 1: Test Difficulty formula

$$P = \frac{R}{N}$$

$$P = \text{Difficulty of the test}$$

$$R = \text{Number of students who answer a test item correctly}$$

$$N = \text{Number of students who take the test item}$$

Formula 2: Discrimination formula

$$D = \frac{R_U - R_L}{\frac{n}{2}}$$

$$D = \text{Discrimination index}$$

$$R_U = \text{Number of students who correctly answered in the high group}$$

$$R_L = \text{Number of students who correctly answered in the low group}$$

$$n = \text{Number of students in both the high and low group}$$

7. Further revision was made with the inappropriate items.
8. The researcher administered the revised test with a class of English 1 students.

9. The reliability of the test was determined by using Kuder-Richardson's formula (K.R.20). The IRT software programme was used to calculate the reliability of the test and it was accepted at $KR-20 \geq 0.7$ (see Appendix L). The K.R. 20's formula is presented below.

Formula 3 : K.R.20

$$r_{tt} = \frac{n}{n-1} \left\{ 1 - \frac{\sum pq}{S_t^2} \right\}$$

n = Number of questions

p = The number of students who correctly answered each question

q = The number of students who incorrectly answered each question = $1 - p$

S_t^2 = Variance of the total score

10. The test items in the post-test were derived from the ones in the pre-test. To avoid problems of student recall from the test, the researcher rearranged the passages and test items.

3. 8. 5 Student Journals

The student journal sheet consists of a framework of concerned issues such as what students learn or like/dislike about the lessons, what learning activities most facilitate their learning. It is written in Thai aiming to facilitate the participant's writing. The framework in the student journals was edited by the research specialist.

3. 9 Data Collection

The researcher sent letters to the Dean of Institute of Social Technology and the Head of School of English at SUT, asking for the permission to conduct the present research. After receiving permission, the researcher followed the data collection procedures below.

3. 9. 1 To identify reading problems for English science and technology texts, student and teacher interviews and questionnaires were implemented.

a. Student and teacher interviews

Two students and two teachers were invited for interviews which were conducted by the researcher. The data obtained from the oral interviews was translated into English by the researcher. Then, the researcher analyzed and grouped the findings into categories.

b. Questionnaires using the applied Delphi technique

The researcher sent letters to ten English teachers inviting them to respond to questionnaires. For students, invitations were also made in class. Ten students were needed for the questionnaire sessions. After the students and teachers agreed to participate in the questionnaire session, they responded to questionnaires, using the Delphi technique, for three rounds one at a time. (The Delphi technique was described in the section 3.3.3: Delphi technique and the Questionnaire.) This process was done within two weeks. The researcher facilitated the student sessions. The time for each session was not limited; however, it took no longer than 20-25 minutes. For the teachers, questionnaires were sent to ten who agreed to participate in this session. After that, the researcher collected the three-round questionnaires for analysis.

3. 9. 2 To determine students' learning achievement between the experimental and control groups , pre- and post-tests were used.

Before the lessons, a pre-test was utilized to measure English proficiency of both control and experimental groups in reading comprehension of English science and technology texts. Both the control and the experimental groups were studying in an English I class. Then, the experimental group was scheduled to study nine 50-minute reading lessons 9 weeks in a row. After the reading lessons, both groups took a post-test. The scores from both pre- and post-tests were calculated and compared to determine the development in reading comprehension of both groups.

3. 9. 3 To examine opinions about the reading lessons, student journals were used.

After each lesson, the experimental group wrote in their journals expressing their opinions, or feedback about the lessons. The researcher collected the student journals for further analysis.

3. 10 Data Analysis

The following sections discussed the methods of analyzing the data obtained from each data collection technique in order to answer the research questions.

3. 10. 1 Student and Teacher Interviews

Since interviews were done orally and the responses were noted down in Thai; the results were transcribed into English in order to make it easy for analysis. The data obtained was grouped into categories by the researcher and used as resources for developing questionnaires later.

3. 10. 2 Three-round Questionnaires

The results of open-ended questionnaires in the first round were categorized in groups: reading problems, learning and teaching. For the scale-rating questionnaires, descriptive statistics, which were means, standard deviations, medians and interquartile ranges were used to calculate each item. Consensus on the priorities of the items was determined by computing the interquartile range of each item. Items were ranked according to the medians and means from the highest to the lowest values.

3. 10. 3 Pre and Post Tests

The analysis of students' scores from pre- and post-tests was done by arithmetic means (\bar{x}). ANCOVA analysis was employed to remove extraneous variability that derives from pre-existing individual differences, such as students' English background knowledge or English proficiency level of the students. Pre-test, a covariate, was used to adjust the variability. The ANCOVA model by Scheffe is an uncontrolled variables-reducing experimental design. The computer software programme SPSS was used for analysis.

3. 10. 4 Student Journals

After the data from student journals was collected from the participants at the end of each lesson, content analysis was employed. The researcher categorized the findings into groups. The results were described in both percentage and descriptive data.

CHAPTER IV

DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter presents the research results and discussions according to the purposes of the present research which are...

- 4.1.1 to identify problems of reading English for science and technology texts of SUT English I students.
- 4.1.2 to develop reading lessons used to solve problems of reading comprehension for English science and technology texts.
- 4.1.3 to compare achievement in reading comprehension between the experimental and the control groups.
- 4.1.4 to explore students' feedback and reflections on the developed CAI reading lessons.

According to the research questions, the research results have been organized in four main sections. The first section discusses the findings of the exploration of students' problems of reading English texts in science and technology. Then the second section presents the results of the development of computer-assisted instruction for the reading lessons. The third section presents the results of the comparison of the learning achievement between the control group who learned the reading lessons through the teacher's manual and the experimental group who learned

via computer-assisted instruction. In the fourth section the findings of opinions and feedback on the computer instruction were described. Then discussion is made in the final section.

4.2 Results

4.2.1 The Results from Exploration of Reading Problems for English Science and Technology Texts.

To identify the problems that English 1 students had in reading English texts in science and technology, the researcher explored problems from students and teachers through oral interviews and questionnaires. The data was transcribed, grouped into categories and translated into English. The findings were as follows.

4.2.1.1 The Results of Oral Interviews.

A. Teacher Interviews

The teacher interview was composed of three parts. The first part was concerned with teacher background information; the second part was about problems of reading English texts found in English 1; and the last part was learning and teaching strategies that promoted English I reading comprehension in science and technology content.

Two experienced teachers were interviewed for about half an hour, one at a time. One teacher, who has been teaching English as a second language (ESL) for more than sixteen years, and has taught English 1 for more than four years at SUT, and the other, has taught ESL and English 1 for more than two years. Both of them agreed that students had problems of reading comprehension, which were those of vocabulary, grammar and reading techniques. In addition, one teacher mentioned that

the students who had less English proficiency also lack prior knowledge of the text being read and usually read and translated all English vocabulary in the text. The other stated that the students did not spend their time practicing reading in English, lacked motivation to read, and had no reading habits and purpose. Moreover, they spent a lot of time reading a short text, which caused the problem of text recall.

Concerning the factors that help English 1 students develop their comprehension of English texts in science and technology, both teachers indicated reading materials and classroom instruction were crucial for reading comprehension. A teacher stated that authentic text should be used, whereas the other favoured the adapted text. Regarding classroom instruction, both teachers agreed that the activities that included the four skills enhanced reading comprehension. One teacher added two more factors: curriculum and students' motivation to read affected student's learning to read as well. The curriculum should integrate four language skills in each lesson, include various types of reading materials, and use activities to create prior knowledge of the text. She also added that English should be used as the instructional language in class. In the same token, the other teacher pointed out that English translation appropriate to students' levels should be used. However, students' native language could be used occasionally.

Regarding learning strategies that students should use, one teacher pointed out that students should set their goals in developing their reading skills, and create and implement the plans to achieve those goals. Moreover, she suggested that students develop good study skills, make use of media which could support their learning to read, and assess themselves regularly such as taking a mini-TOEFL test available every year. On the other hand, the other teacher stated that students should prepare

themselves before coming to class, e.g. looking up word meanings from a dictionary, or read the text in advance. Also, students should have good grammar skills and self-motivation to promote their reading ability. English Learning Resource Unit could be a place where they practice their reading skills.

In terms of reading instruction, both teachers stated that the following activities should be done: creating students' motivation to read, utilizing a wide variety of reading materials, integrating all language skills in a lesson and discussion should be done as one of the reading activities. In addition, a teacher suggested that reading techniques like skimming and scanning be taught in class; and teachers regularly evaluate students' learning.

B. Student Interviews

The student interview was composed of four parts. The first part concerned student's background information; the second part was about students' reading background and experience; the third part was problems of reading English texts found in English 1; and the last part was learning and teaching that help English I students better comprehend English texts in science and technology.

Two English 1 students were interviewed for about 20 to 30 minutes, one at a time. Both were students from the Institute of Engineering. They had studied English since primary school, which was about 10 years. They assumed that their English abilities in listening and speaking were poor whereas the reading and writing were fair. The last English grades they got for English at secondary school were B and C; and for English 1 were B+ and C. Both of them agreed that English was very important in their daily lives, studies and future work.

In terms of their reading background, both of them ever read Thai text in science and technology. The reading strategies they used to read such text were surveying the text by looking at the pictures and titles or current events that were interesting; then, they read the whole text and tried to figure out what the text was all about. The problem they had in reading Thai text in science and technology was vocabulary. They solved this problem by looking up the vocabulary meanings in a dictionary. If they could not find the meaning of any technical word, one student skipped that word while the other read for more information from other related books and reread the text until she thought she comprehended it, or asked someone for help. Regarding reading English texts in English 1, the problems they had were vocabulary, finding the main idea of the text and the lack of appropriate reading strategies. Similarly, to solve those problems, they reread the text as many times as they needed until they understood the text, or studying on their own from other related books. Otherwise, they would ask their teacher for help.

Factors that students thought would help them to comprehend English text were preparation before class, teaching activities, which emphasized vocabulary and grammar. Moreover, they wanted the integration of the four language skills in class.

Learning and teaching strategies that a student thought would help English 1 students improve their reading comprehension for English texts in science and technology were the use of a variety of exercises, a slow pacing of instruction for the slow learners, and the use of both Thai and English as the instructional languages.

4.2.1.2 The Results of Questionnaires.

The investigation was conducted with both students and teachers through questionnaires using the applied Delphi technique. For the first round open-ended

questionnaires, the data was categorized and generated for statements for the second round scale-rating questionnaires. In the second round, rates that each respondent made were calculated for medians and interquartile ranges in order to present the group's corresponding opinions. Same statistics were used with the data from the third-round questionnaires. However, the findings for this round were ranked for top priority. The ranks were based on the medians and interquartile range of ≤ 1.50 level, which demonstrated the correlation of all participants' opinions on each statement. Tables 4.1 and 4.2 present the lists of reading problems in the first three ranks from both teacher and student questionnaires. (See Appendices E and F for more details.)

A. The Results of Students' Opinions about Reading Problems

The students agreed that a lack of vocabulary knowledge was the most important problem, followed by a lack of appropriate reading strategies, inability to understand long and complex sentences, a lack of technical vocabulary in each subject, problem-solving strategies, motivation, knowledge of text types and organization, and prior knowledge of the text. In addition, they found that they could not find the main idea of a text, nor could they relate their prior knowledge to the text being read.

Table 4.1 presents the first three ranked problems with which students had a corresponding opinion. The data was compared with the findings of teacher questionnaires and analysed for designing reading lessons.

Table 4.1: Students' Opinions about their Reading Problems

Ranks	Priority Statements	Rating scales	Medians	Interquartiles
1	• Inability to understand diverse meanings of some general vocabulary in science and technology texts.	4	4.50	0.50
2	• Lack of appropriate reading strategies.	4	4.00	0.00
3	• Inability to understand long and complex sentences.	4	4.00	0.25

B. The Results of Teachers' Opinions about Students' Reading Problems

All teachers agreed that the following four reading problems were the most significant problems. First, the problems were the inability to understand long and complex sentences, lack of practice after class, limited knowledge of general and subtechnical vocabulary, and an inability to relate their prior knowledge to the text. The second rank includes the inability to find the main ideas, use of excessive time for reading and lack of prior knowledge about the text. The third rank concerns the lack of reading strategies, motivation, critical thinking skills and reading habits, including inappropriate reading behaviors: such as reading an English text based on Thai patterns and structures, and reading every word in an English text. Another problem rated as the third rank is the inability to understand diverse meanings of some general vocabulary in science and technology text. The lack of knowledge about text types and organization is the final rank for teacher questionnaires.

Table 4.2 shows the first three ranked problems with which teachers had a corresponding opinion about English 1 students' reading problems.

Table 4. 2: Teachers' Opinions about English 1 Students' Reading Problems

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
1	• Inability to understand long and complex sentences	5	5	0.00
1	• Lack of practice after class	5	5	0.00
1	• Limited knowledge of general and subtechnical vocabulary	5	5	0.00
1	• Inability to relate their prior knowledge to the text	4	4	0.00
2	• Inability to find the main idea of the text	5	5	0.50
2	• Use of excessive time for reading each passage	4	4	0.50
2	• Lack of prior knowledge about the text	5	4	0.50
3	• Lack of accurate and appropriate reading strategies	5	5	1.00
3	• Read and translate the English text based on Thai patterns and structures	5	5	1.00
3	• Lack of critical thinking skills during reading	5	5	1.00
3	• Lack of reading habits	5	4.5	1.00
3	• Inability to understand diverse meanings of some general vocabulary in science and technology text	4	4	1.00
3	• Read and translate every word in the English text	4	4	1.00
3	• Lack of motivation	4	4	1.00

The data from Tables 4.1 and 4.2 presents the lists of reading problems in the first three priorities from both teacher and student questionnaires. It can be seen that there are similarities and differences in the students and teachers' opinions about the problems. However, the first three items from both the students' and teachers' lists that matched one another were utilized for developing reading lessons for this research. They were the inability to understand diverse meanings of some general vocabulary in science and technology texts, a lack of appropriate reading strategies and the inability to understand long and complex sentences. These problems were analysed and used as the crucial data for designing reading lessons for the present study.

4.2.2 The Results of the Development of Computer-Assisted Instruction on Reading Lessons

The researcher conducted trials on the computer-assisted instruction lesson in order to improve the courseware. There were three trials to evaluate CAI lessons: one-to-one, small group and field study trials. The results of three trials are shown in Table 4.3.

Table 4.3: The Results of the Three Trials

Trials	E1	E2
	(Efficiency of Process)	(Efficiency of Product)
One- to -one	73.30	68.30
A small group	81.10	74.40
The field study	84.15	81.65

The analysis of the trials showed that the efficiency of the process and product for the one-to-one and small group trials were below the prescribed criteria of 80/80. This could be explained that the content and instruction did not cover the learning objectives and were not appropriate to students' learning abilities. According to students' opinions and feedback from student journals, it was found that students required more explanation, a variety of exercises, pictures and translation for some lessons. Moreover, features and levels of difficulty of exercises did not match with the ones in post-tests. Therefore, the lessons were revised and retried. Consequently, the result of the field study trials demonstrated that the CAI reading lessons got 84.15 for the efficiency of the process and 81.65 for efficiency of the product, which met the criteria of 80/80. This corresponded well to the first hypothesis in Chapter 1.

4.2.3 The Results of Students' Learning Achievement for Experimental and Control Groups

The experimental and control groups took pre and post-tests to determine their learning achievement both before and after studying the reading lessons. The results showed that the learning achievement of both groups increased (see Table 4.4).

Table 4.4: Learning achievements for the experimental and control groups

GROUP	Test	Mean	Std. Deviation	n
Control	Pre-test	11.53	3.01	45
	Post-test	13.71	2.69	45
Experimental	Pre-test	9.32	2.78	38
	Post-test	14.05	2.80	38

Table 4.4 shows that both the control and experimental groups got higher mean scores after studying the reading lessons. In addition, to examine whether their learning achievements increased significantly, pre and post-test scores of each group were compared and calculated for statistical differences. The results were presented in Tables 4.5 and 4.6.

Table 4.5: The Statistical Difference of pre and post-tests for the control group

Control Group	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence				
				Interval of the				
				Difference				
Pretest				Lower	Upper			
Posttest	-2.18	2.67	.40	-2.98	-1.37	-5.464	44	.000

Table 4.6: The Statistical Difference of pre and post-tests for the experimental group

Experimental Group	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pretest – Posttest	-4.74	2.81	.46	-5.66	-3.81	-10.450	37	.000

According to Tables 4.5 and 4.6., it is apparent that there are significant differences between pre and post-test scores of both control and experimental groups were significantly different at the level of .05. This indicates that both students who

studied reading lessons via computer-assisted instruction and those who studied the lessons by the traditional methods had better learning achievements after studying the reading lessons.

4.2.4 Results of Comparison of the Learning Achievements of Both Groups

The pre and post-test scores of the experimental group and the control group were compared with an analysis of covariance or the ANCOVA model. Table 4.7 presents the results to show that there were significant differences.

Table 4.7: Results of Students' Learning Achievement

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	137.333	1	137.333	23.458	.000
Intercept	587.784	1	587.784	100.400	.000
PRE-TEST	137.333	1	137.333	23.458	.000
Error	474.209	81	5.854		
Total	16573.000	83			
Corrected Total	611.542	82			

a R Squared = .225 (Adjusted R Squared = .215)

The table above shows that the control and the experimental students' learning achievement between the mean scores of pre-test and the post-test were significantly different ($F = 23.458^{**}$). Most importantly, the mean score of the post-test ($\bar{x} =$

14.05), which the students from the experimental group gained, was higher than that of the control group ($\bar{x} = 13.71$), which corresponded well to the second hypothesis as stated in Chapter 1.

4.2.5 The Results of Students' Opinions About the Computer-Assisted Instruction

To examine the students' attitudes towards CAI reading lessons, students from the experimental group were asked to write journals. The data was categorized into two major groups: advantages of CAI lessons and their limitations which included suggestions for the CAI reading lessons, and was calculated for frequency with percentages. Codes were used to quote students' opinions for each category. The findings were presented as follows.

A. Advantages of CAI Lessons

Table 4.6 illustrates the results of the students' opinions on the lessons from the experimental group about the lessons. Students found that learning reading lessons by CAI was beneficial (69.75%), enjoyable, interesting and easy to learn (57.23%).

Table 4.8: Students' opinions on reading lessons by CAI

Lesson	Benefits	Enjoyable/Interesting
1. Guessing word meanings from clues	84.21	68.42
2. Guessing word meanings from word formation	68.42	44.73
3. Skimming	63.15	52.63
4. Finding main ideas	76.31	39.47

5. Scanning	76.31	73.68
6. Economic words	73.68	73.68
7. Relative clauses	60.52	57.89
8. If-clauses	55.26	50.00
Total mean value	69.75	57.23

Regarding benefits of CAI reading lessons, students noted that the lessons improved their reading skills, e.g. guessing word meanings, skimming and scanning techniques, after they had studied the lessons. Student comments were:

I got few points for the pre-test. ... After I had studied the lesson and practiced the exercises, I have learned more about skimming. Consequently, I got more points for the post-test. (Student SK 8, Lesson: Skimming)

... I have learned a lot from this lesson. ... I have learned types of If-clauses and how to use them correctly. (Student IC 36, Lesson: If-Clauses).

I could comprehend a sentence even though I did not know some of the vocabulary. I have used the techniques of guessing word meanings (Student GA 7, Lesson: Guessing word meaning 1).

(See more quotations in Appendix N)

In addition, students could read more efficiently. As one student stated, *“The lesson taught me a lot about how to scan a text. I could read faster, I do not need to read slowly as before.”* (Student SC 27, Lesson: Scanning), while another student commented that, *“The scanning technique helps me find answers faster. As far as I am concerned, I found I could learn and do the exercises more rapidly* (Student SC 37, Lesson: Scanning).

Another benefit the students gained was that the lessons increased their comprehension of English texts. They did not need to read every word in a passage to learn the general idea of a text. After studying the lessons, they could understand English texts better. A student expressed that, *“In this lesson, I can understand how to find the main idea without reading every word in a sentence. I just look briefly across the passage because there are key words frequently found in the text which are related to the main idea”* (Student SK 34, Lesson: Skimming).

Furthermore, the lessons enhanced independent learning. Littlewood (1981) stated that *“learning is more effective when learners are active in the learning process, assuming responsibility for their learning and participating in the decisions that affect it.”* The nature of CAI lessons promoted independent learning. First of all, students could study the lesson by themselves and evaluate their own learning. In addition, the nature of CAI made the lessons interesting, as one student stated, *“This lesson is about a rapid reading technique, which made me understand the text quickly. With attractive formats, appropriate exercises and pre and post-tests, the lesson enhanced independent learning. ...”* (Student SK 20, Lesson: Skimming). Students could also select what to learn and repeat the lesson as much as they needed. From student comments, they favoured various types of exercises to practice reading skills. Student comments were:

I have increased my vocabulary. Especially the twelve words in the economics lesson, I could remember them all because I have practiced them so many times that I could recall them. ...There are a variety of exercises, which are appropriate with the content. (Student E 25, Lesson: Economics words).

I could understand how to find the main ideas very well. I like the exercises because they made me understand the lesson. (Student F4, Lesson: Finding main ideas).

Practicing the exercises is a good activity because they enabled students to develop their abilities efficiently ... (Student IC 3, Lesson: If-clauses).

CAI lessons also provide feedback. Providing feedback to students lets them know how they are doing and helps them to correct errors of understanding and fill in gaps in knowledge (Cotton, 2001). Feedback helps monitor students' learning. One student noted, *"I could understand how to find the main ideas more. I like the lesson presentation, which is clearly described, and has a variety of examples. I like the exercises the most because they made me understand the lesson. When I made mistakes, there were explanations (feedback and answers were given)"* (Student F 3, Lesson: Finding main ideas). Obviously, the nature of CAI fosters independent learning.

The other benefit students gained from CAI lessons is that they can use reading techniques for their exams and studies; as students stated,

Learning like this is very good. The lesson promotes my English skills and I can also use this technique for my study (Student SC 14, Lesson: Scanning).

It is a good lesson. I can use the knowledge for regular classes (Student IC 11, Lesson: If-clauses).

I have learned how to scan texts, which we need everyday to read English texts. ... (Student SC 21, Lesson: Scanning).

In terms of enjoyment and attractiveness, generally, students found the lessons non-threatening and interesting. In reflecting on lessons, students commented that in most lessons they liked the learning activities, lesson presentation, sequence

and program interface which included screen design, methods of interaction as well as the general operation of the program. They made learning interesting, enjoyable and easy to understand (see Table 4.6). As a result, the students were eager to learn and had positive feedback on CAI lessons. In addition, most students asserted that pictures facilitated and reinforced their understanding of words or sentences. Games in some lessons also created an enjoyable learning atmosphere. Their comments were:

There are activities that helped me better understand the lesson. They are very beneficial. They stimulated me to learn, get involved in the activities, and do exercises. They are very interesting (Student GB 25, Lesson: Guessing word meanings 2).

This vocabulary lesson is easy to understand...with pictures ... and Thai translation facilitates comprehension. Games, ..., are also entertaining (Student E 9, Lesson: Economics words).

In this lesson I like the lesson presentation a lot because it facilitated my understanding. ... Lesson interface also stimulated me to learn. The examples are not too difficult to understand (Student RC 29, Lesson: Relative clauses).

Most importantly, CAI lessons created a positive attitude towards learning English; as students reflected that the CAI lesson as a whole (the lesson presentation, content, tests and exercises) stimulated their learning. Students expressed that,

Learning the lessons by CAI ... promoted my reading comprehension because it is an enjoyable learning, and that it is easy to study. ...I think learning by CAI creates a positive attitude towards English (Student IC 33, Lesson: If-clauses).

I know how to find main ideas better than before, and have learned many new words which were previously unknown. Learning in the computer laboratory is not as boring as in a classroom. ... (Student F 5, Lesson: Finding main ideas).

B. Limitations and Suggestions for CAI Lessons

In journals, students mentioned some limitations of the lessons which can be summarized as follows. First, some students found it difficult to understand the explanation, tips of reading techniques or even the meanings of vocabulary which were defined in English. Though students were allowed to use an online dictionary during their study time, there were some maintenance and connection problems. Therefore, they requested a dictionary program in CAI lessons and teacher's assistance to facilitate their understanding. Student comments were:

I fairly understand If-clauses. However, it would be better if you (teacher) would give me some explanation. I did not understand some vocabulary in the lesson. (Student IC 21, Lesson: If-clauses).

This lesson contained unfamiliar content and provided a lot of details. I did not understand much because it was difficult to guess the meanings of unknown words in a text. ... (Student F 26, Lesson: Finding main ideas).

.... I did not understand some directions. There should be a dictionary program or translation in CAI. (Student SK 26, Lesson: Skimming).

Second, as students have different learning styles and needs, they required different learning materials and activities that better enhanced their learning. Some students wanted more examples and exercises while others expressed that they preferred more fun activities, e.g. games or competitive exercises as well as listening practices while reading texts.

... I need more sample sentences of how to use each relative pronoun (Student RC 24, Lesson: Relative clauses).

There should be more exercises to help students better understand the lesson (Student SK 11, Lesson: Skimming).

There should be more games for practicing new vocabulary (Student E 14, Lesson: Economics words).

I want to listen to the lesson presentation while studying the lesson (Student GB 31, Lesson: Guessing word meanings 2).

Another concern is that some students found the level of difficulty of tests and exercises were inappropriate to their abilities. Two to five students commented that the exercises in some lessons (i.e. relative clauses, if-clauses, finding main ideas and guessing word meanings lessons) were either too difficult or too easy.

Since exercises were designed for all levels of students' abilities, CAI reading lessons included exercises with different levels of difficulty. Student comments were:

Exercises were good practice, but I did not do well on exercises because I did not understand some of the vocabulary (Student SC 6, Lesson: Scanning).

... I did not do well on exercises. The content was good, but I could not read the English texts. (Student GB 15, Lesson: Guessing word meanings 2).

The last limitation of CAI lessons, mentioned in student journals, is that some students asked for teacher's assistance and supplementary instruction to reinforce their understanding of CAI lessons. Student comments were:

The lesson was interesting and enjoyable, but I would like the teacher to re-teach the lesson to reinforce my understanding (Student IC 18, Lesson: If-clauses).

Though learning by CAI is useful, I prefer a lecture. (Student GA 31, Lesson: Guessing word meanings 1).

It was a good lesson, but I would like to listen to lectures more (Student IC 26, Lesson: If-clauses).

In summary, the feedback and opinions from the student journals indicated that students perceived CAI lessons beneficial, enjoyable, interesting, and easy to learn. The data from student journals reflect that they have a positive attitude towards the lessons. However, students also mentioned the limitations and made suggestions for the lessons.

4.3 Discussion

This section presents a discussion of the results in response to the research purposes and hypotheses declared in the first chapter.

Concerning reading problems English 1 students had, the results from both interviews and questionnaires indicated that the students' reading problems were that students lacked vocabulary knowledge and appropriate reading strategies necessary to facilitate their comprehension, and were unable to understand long and complex sentences embedded in a text. The results correspond well to many researchers. For instance, Nuttall (1996) asserted that limited vocabulary and structural knowledge can obstruct foreign language readers from comprehending a text. Similarly, Marshall and Gilmour (1993) stated that the reading difficulty resulted from the lack of lexical knowledge in EST including subtechnical vocabulary. In addition, Songchanthamane (1981) mentioned that reading strategies and linguistic abilities are necessary for the development of reading comprehension skills of ESP students.

In terms of developing and examining the efficiency of CAI reading lessons, the lessons were implemented in three trials. According to the criteria of determining the CAI efficiency, the efficiency of the process (E_1) should not be different from the product (E_2) at the level of .05. In case the efficiency of the process (E_1) is higher

than that of the product (E_2), it is possible that students might access available sources to help them with difficulties they had while doing exercises. This means, they could go back and review the learning areas they had problems with as much as they need and redo exercises. Another possibility is that the procedures and features of the process or exercises did not relate to those of the product or post-tests. In other words, exercises had different features and levels of difficulty from those of the post-tests. For instance, students were asked to answer comprehension questions in multiple-choice exercises, while the post-test required them to write answers. Another example is that students practice reading short paragraphs in exercises; in contrast, they read long passages for post-tests. The latter possibility could also occur if the efficiency of the product is higher than that of the process. Thus, students' learning achievement for the process and product could result from the possibilities mentioned above.

For the present research, the efficiency of CAI reading lessons was at a level of 84.15/81.65 after the three trials. This indicated that the efficiency of the product was lower than that of the process. It could be explained that when students took a post-test, they did not have time to go back and review what they had difficulties with since the learning time was limited within a 50-minute period. After that, they were required to write their opinions about the lesson in the form of a student journal for the last 10 minutes. However, the efficiency of the reading lessons for the present research has met the prescribed criteria of 80/80.

Regarding the learning achievements of the experimental and the control groups, the mean scores of the post-tests of the experimental group and the control group were compared. The result showed that the students in the experimental group

who learned the reading lessons by CAI had a higher average post-test score ($\bar{x} = 14.05$) than the control group ($\bar{x} = 13.71$), who were taught by traditional methods. The results correspond well to the second hypothesis that the learning achievement of the experimental group was significantly higher than that of the control group. This can be stated that CAI promotes students' learning achievement

Regarding the subject's opinions and feedback about reading lessons via computer-assisted instruction, the findings from student journals reflected that they had positive attitudes towards learning reading lessons via CAI. The students commented that they improved reading skills and comprehension of English texts, enjoyed reading and were motivated to read. For example, they had improved their reading skills such as guessing word meanings from clues, identifying main ideas and distinguishing the main clause from the subordinate clause. Consequently, their reading comprehension improved. Students also mentioned that learning CAI reading lessons was enjoyable due to its attractive and interactive features, and variety of exercises. They were motivated to practice reading skills in multi-exercises like multiple-choice, fill-in exercises and games. With feedback students were motivated to learn more. CAI was also helpful for their tests and they could use the reading techniques for their studies. Moreover, they preferred CAI to be used as a supplement to traditional instruction.

The findings of the present study are consistent with results reported by previous researchers (Bialo and Sivin (1990); Braun (1990); Lawton and Gerschner (1982) cited in Cotton (1991). The participants mentioned that they liked CAI because it was fun and entertaining and self-paced. CAI also individualized and motivated learning, and was excellent for drill and practice. Furthermore, the use of

CAI led to more positive attitudes than the use of conventional instruction (Kulik, Bangert, and Williams 1983; and Roblyer (1988) cited in Cotton (1991).

CHAPTER V

COMPUTER-ASSISTED INSTRUCTION FOR READING LESSONS

5.1 Introduction

The chapter presents the computer-assisted instruction entitled Reading Lessons for English 1 Students. The lessons are presented in two major parts: an overview of the computer-assisted instruction reading lessons and their components. Illustrations of the lessons are also demonstrated.

5.2 An Overview of the Computer-Assisted Instruction (CAI)

The CAI lessons were developed with an authoring program (Authorware version 5.2). The lessons aim to promote English 1 students' reading skills relating to vocabulary, grammar in complex sentences and reading techniques. The theme of the lessons is Economics. The selection of vocabulary, passages and grammar points is based on Economic lessons from English 1 curriculum (2001). The CAI consists of nine lessons which include three lessons for vocabulary, three for reading techniques, two for grammar and a review lesson. Reading materials were taken from various sources such as English 1 curriculum, books, newspapers and online articles. Tests and exercises include multiple choices, cloze, matching and drag-and-drop exercises, as well as games.

An orientation to the CAI program and a brief introduction to each lesson was done by the researcher at the beginning of each class. Students were supposed to study each CAI reading lesson on their own within a 50-minute period. However, the researcher acted as a facilitator in the computer laboratory. Students were allowed to use an online dictionary.

5.3 Components of the CAI Reading Lessons

The computer-assisted instruction is composed of four main sections. First, the introduction to the CAI reading lessons provides learning guides on steps of studying the reading lessons and how to use the program. The second section includes three vocabulary lessons while the third section has three lessons of reading techniques. The final section presents lessons on grammar and ends up with a review lesson. Therefore, the CAI lessons are illustrated according to the sections mentioned above.

5.3.1 An Introduction to the CAI Reading Lessons

This part provides an overall information about the lessons, learning guides on steps of studying the reading lessons, how to use the program and a lesson menu. The pages are presented as follows.

COMPUTER-ASSISTED INSTRUCTION ON READING SKILLS FOR ENGLISH I STUDENTS

- About CAI
- Learning Objectives
- Learning Guides
- Lessons
- Exit



Welcome Friends

About CAI

The computer-assisted instruction (CAI) lessons aim to sharpen English I students' reading skills in terms of vocabulary, grammar in complex sentences and basic reading techniques. On top of that, they are expected to facilitate students' reading comprehension of short passages in economic context. In addition, students will be able to learn the lessons individually and at their own pace.

The lessons are designed by Mrs. Benjamart Thanasoontornrerk, as part of her research.

August 2004

● Back

Learning Objectives

After the lessons, you will be able to ...

- define the meanings of unknown vocabulary, especially in an economic context.
- understand the uses of grammar in complex sentences frequently found in a text.
- use reading techniques: skimming, scanning and finding main ideas of short passages.

● Back

Learning Guides

How to use the program



The reading program consists of 9 lessons. The lessons focus on practicing vocabulary, grammar and reading techniques. In each lesson, there are three main sections: pre and post tests, lesson presentations, and exercises in each lesson.



Steps of studying the reading lessons:-



1. Take the pretest before studying.
2. Study each lesson and practice the exercises.
3. Take the posttests.
4. After each lesson, write your comments about the lessons in the "Your Journal" paper.

ภาษาไทย

Back

คำแนะนำในการเรียน

How to use the program



โปรแกรมบทเรียนเพื่อการอ่าน ประกอบด้วยบทเรียน 9 บท
บทเรียนนี้เน้นฝึกฝนทางด้านการอ่าน คำศัพท์ ไวยากรณ์ และเทคนิค
การอ่าน ในแต่ละบทเรียนมี 3 ตอนหลักด้วยกัน คือ ทดสอบก่อน
และหลังเรียน การนำเสนอบทเรียน และแบบฝึกหัด



ขั้นตอนในการเรียนบทเรียนเพื่อการอ่าน



1. ทดสอบความรู้ก่อนเรียน (Pre/Posttest)
2. เรียนเนื้อหาแต่ละบทเรียน และทำแบบฝึกหัด
3. ทดสอบความรู้หลังเรียน (Pre/Posttest)
4. หลังจบบทเรียนแต่ละบท เขียนความคิดเห็นของท่านเกี่ยวกับบทเรียนนั้นลงในกระดาษบันทึก
(Your Journal)

English

Back

How to use the program

คำแนะนำไทย



Directions and buttons used in this program







Buttons: click these buttons to...

- | | |
|---------------------|-------------------------|
| ● Next | go to the next page |
| ● Back | go to the previous page |
| ● Exit | exit the program |
| ● If-Clauses | go to If-clauses lesson |

Other buttons e.g.

Directions:

- | | |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| - Choose the answer |  to click on the best choice given |
| - Drag and drop |  to move a word to a blank in a sentence, or to a photo by clicking on it, with the left button pushing down while dragging. |
| - Type a letter or a word onto a blank |  to fill in the blank with the choice given. |
| - Click on a sentence |  to choose the best sentence as the main idea of the paragraph |

Learning guides page

Back

วิธีใช้โปรแกรม
คำแนะนำไทย

ปุ่มและคำสั่งต่างๆที่ใช้ในโปรแกรม

ปุ่ม:

● Next	ไปหน้าถัดไป
● Back	กลับไปหน้าก่อนหน้านี
● Exit	ออกจากโปรแกรม
● If-Clauses	ไปบทเรียนเรื่อง IF-Clauses

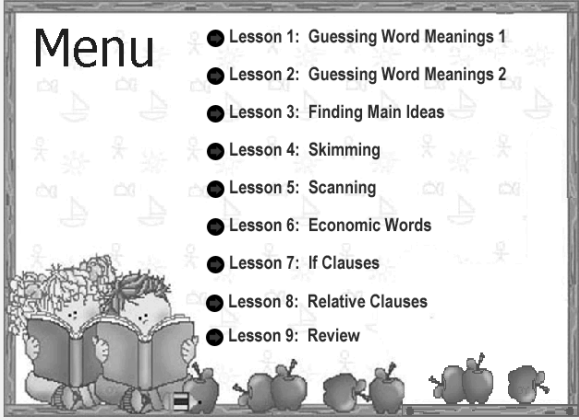
และปุ่มอื่นๆเช่น

คำสั่ง:

Choose the answer	คลิกตัวเลือกที่ดีที่สุด
Drag and drop	ลากคำไปบนช่องว่างในประโยคหรือรูปภาพ โดยคลิกลงบนคำนั้นแล้วลากไปโดยไม่ต้องปล่อยเมาส์
Type a letter or a word onto a blank	พิมพ์ตัวอักษรหรือคำลงในช่องว่าง
Click on the main idea	คลิกประโยคที่มีใจความสำคัญของย่อหน้านั้น

English
● Back

LESSONS



- Lesson 1: Guessing Word Meanings 1
- Lesson 2: Guessing Word Meanings 2
- Lesson 3: Finding Main Ideas
- Lesson 4: Skimming
- Lesson 5: Scanning
- Lesson 6: Economic Words
- Lesson 7: If Clauses
- Lesson 8: Relative Clauses
- Lesson 9: Review

● Back

Hello, Welcome to reading Lessons.

5.3.2 Vocabulary Lessons

There are three vocabulary lessons, which are Lesson 1: Guessing word meaning 1, Lesson 2: Guessing word meaning 2, and Lesson 6: Economics words. Each lesson has an introduction (lesson objectives and content), pre/posttests, lesson presentation and exercises. The pages are presented as follows.

Lesson 1: Guessing word meanings 1

LESSON 1: GUESSING WORD MEANINGS I



- About the lesson
- Learning objectives
- Pre/Posttest
- Guessing word meanings
- Exercises



● Back

Hello. Welcome to reading Lessons.

About the lesson

In this lesson, you will learn to guess word meanings from ...

- definition clues: words that define unknown vocabulary (mean, be referred to, ...).
- exemplification clues: words that suggest examples of the unknown vocabulary (for example, such as,...).
- synonyms/antonyms: words that have similar or opposite meanings to the unknown vocabulary.
- context clues: words or sentences that help you guess the meanings of the unknown vocabulary.
- punctuations: the punctuation marks (e.g. commas, dashes and brackets) that help define the unknown words..
- After the lesson, write your comments about the lessons in Your Journal.

● Back

Learning Objectives

You will be able to ...



- define the meanings of vocabulary from different context clues.
- comprehend the meanings of unknown vocabulary in short passages.

● Back

LESSON 1: GUESSING WORD MEANINGS I

Home

 Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

1. Many Thai herbs, Kha-min, Plai, and Aloe vera, are used in cosmetics, shampoo, soap, etc..

- ☐ fruits
- ☐ plants
- ☐ animals
- ☐ vitamins



Hello. Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

 Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

2. A coconut tree gives us many benefits. We can use its fruit for food; trunk for making furniture; leaves for making hats and toys; and stems for making brooms.

- ☐ careful things
- ☐ useful things
- ☐ beautiful things
- ☐ dangerous things



Hello. Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

 Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

3. The oil prices are getting higher. Now the government encourages people to use gasohol because it is cheaper than benzyne.

- ☐ gives
- ☐ makes
- ☐ controls
- ☐ supports



Hello. Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

 Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

4. Oil, butter and cream give us a lot of fat. Similarly, meat, eggs and nuts provide a lot of protein.

- ☐ take
- ☐ give
- ☐ serve
- ☐ borrow



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

 Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

5. SARS is contagious. In contrast, cancer is not.

- ☐ can be eaten
- ☐ can be portable
- ☐ can be changed
- ☐ can be transmitted



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

 Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

6. The fire extinguishers (chemicals used for putting out fire) should be checked every month.

- ☐ something you use to make a fire
- ☐ something you use when there is a fire
- ☐ something you use to switch off a light
- ☐ something you use when you want to cook



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

7. Artificial flowers are referred to the flowers which are made of paper, plastics, foams, fish scales, etc.

- ☐ false
- ☐ natural
- ☐ fresh
- ☐ old



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

8. Soldiers use many kinds of such as knives, guns, rifles and bombs.

- ☐ tools
- ☐ weapons
- ☐ pottery
- ☐ cutlery



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

9. Examples of communication sectors are

- ☐ Cherdchai Co., BTMA and BTS
- ☐ Charoen Pokaphand and Sahaphat groups
- ☐ The Mall groups and Robinson Group
- ☐ Samart Corp., Shin Corp. and AIS



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Home

Pre and Posttests

Direction: Click on the best meanings of the highlighted vocabulary.

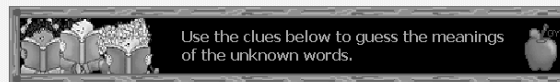
10. The crop is defined as a plant such as a grain, fruit or vegetable grown in large amounts by farmers.

- ☐ plant
- ☐ grain
- ☐ fruit
- ☐ vegetable



Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Definition Clues

Synonyms

Context Clues

Antonyms

Exemplification Clues

Punctuation Marks



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Definition Clues

are words that define the meanings of unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

mean

is defined as

is referred to

is/are known as

is/are

A currency means the type of money that a country uses.



Australian dollar



Thai baht



Singaporean dollar



สกุลเงินตรา



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Definition Clues

are words that define the meanings of unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

mean

is defined as

is referred to

is/are known as

is/are

Commerce **is defined as** the exchange of goods or services, especially for money.



การแลกเปลี่ยน
ซื้อขายสินค้า

Check & Click



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Definition Clues

are words that define the meanings of unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

mean

is defined as

is referred to

is/are known as

is/are

Service sector **is referred to** a group of businesses that provide services to customers, such as hotels and restaurants.



กลุ่มธุรกิจที่ให้บริการ

Check & Click



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Definition Clues

are words that define the meanings of unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

mean

is defined as

is referred to

is/are known as

is/are

To export **is** to send goods to other countries for sale.



Check & Click



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Definition Clues

are words that define the meanings of unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

mean

is defined as

is referred to

is/are known as

is/are

Foreign exchange **is known as** the place where people can sell and buy the currencies of other countries.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Context Clues

are words or sentences that explain the meaning of the unknown words

Click on the texts below and try to guess the meaning of the highlighted words.
Put your mouse on the words to check their meanings.

Text 1

Text 2

Text 3

Text 4

Text 5



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Context Clues

are words or sentences that explain the meaning of the unknown words

Click on the texts below and try to guess the meaning of the highlighted words.
Put your mouse on the words to check their meanings.

Text 1

Text 2

Text 3

Text 4

Text 5

TEXT 1

Water (H₂O) consists of two hydrogen atoms and one oxygen atom which are **bonded** together. They *join tightly* and are difficult to break.

join tightly



Next text



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Context Clues

are words or sentences that explain the meaning of the unknown words

Click on the texts below and try to guess the meaning of the highlighted words.
Put your mouse on the words to check their meanings.

Text 1

Text 2

Text 3

Text 4

Text 5

TEXT 2

To help the village people develop their OTOP goods, the governmental sector gives them financial support. The private sector also provides them trainings in designing and packaging.



Next text

● Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Context Clues

are words or sentences that explain the meaning of the unknown words

Click on the texts below and try to guess the meaning of the highlighted words.
Put your mouse on the words to check their meanings.

Text 1

Text 2

Text 3

Text 4

Text 5

TEXT 3

People need water to drink, wash their clothes, do their farming, etc. Animals and trees also need water for their living. We can see that water is necessary for all living things.



Next text

● Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Context Clues

are words or sentences that explain the meaning of the unknown words

Click on the texts below and try to guess the meaning of the highlighted words.
Put your mouse on the words to check their meanings.

Text 1

Text 2

Text 3

Text 4

Text 5

TEXT 4

One of the rural people's problems is that they are very poor. So the government uses OTOP project to get rid of their problem of poverty.



Next text

● Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Context Clues

are words or sentences that explain the meaning of the unknown words

Click on the texts below and try to guess the meaning of the highlighted words.
Put your mouse on the words to check their meanings.

Text 1

Text 2

Text 3

Text 4

Text 5

TEXT 5

Computers have many benefits. *First, they are fast. Also, they can work well with lots of information at the same time. In addition, they can keep information for a long time. Moreover, computers are almost always correct.*



Next text



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Exemplification Clues

are words that give examples for the unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

for example

for instance

such as

e.g.

like

Many OTOP goods are handicrafts, for instance, Benjarong, wood carving and lacquerware.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I



Exemplification Clues

are words that give examples for the unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

for example

for instance

such as

e.g.

like

Denominations, for example, 20, 50 and 100 baht bank notes in Thai currency are in different colours.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Exemplification Clues

are words that give examples for the unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

for example for instance such as e.g. like

A computer virus can damage your computer, such as,
destroying your hard disk or deleting your data files



Check & Click



 Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Exemplification Clues

are words that give examples for the unknown words

The words in the boxes below can help you guess the meanings of the unknown words.

for example for instance such as e.g. like

Some groups of village people produce beverages e.g.
green tea, fruit juice, herbal drinks and wines.



Check & Click



 Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Exemplification Clues

are words that give examples for the unknown words

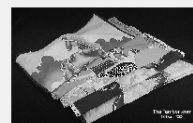
The words in the boxes below can help you guess the meanings of the unknown words.

for example for instance such as e.g. like

Tourists often buy souvenirs like pottery and batiks in
Sukhothai.



Check & Click



 Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Synonyms

are words that have similar or same meanings

The words in the boxes below can help you find the synonyms of the unknown words.

or

similar to

similarly

In the same way

like

When you boil water, it becomes water vapor or *gas*, which goes into the air.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Synonyms

are words that have similar or same meanings

The words in the boxes below can help you find the synonyms of the unknown words.

or

similar to

similarly

In the same way

like

Similar to water and oil, milk is liquid.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Synonyms

are words that have similar or same meanings

The words in the boxes below can help you find the synonyms of the unknown words.

or

similar to

similarly

In the same way

like

Scissors are used for *cutting* paper. In the same way, teeth are used for chewing food.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Synonyms

are words that have similar or same meanings

The words in the boxes below can help you find the synonyms of the unknown words.

or

similar to

similarly

In the same way

like

Gas stoves *have taken the place of* electric stoves.
Similarly, computers replace typewriters.



Check & Click



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Synonyms

are words that have similar or same meanings

The words in the boxes below can help you find the synonyms of the unknown words.

or

similar to

similarly

In the same way

like

Scissors are used for *cutting* paper. In the same way,
teeth are used for chewing food.



Check & Click



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Synonyms

are words that have similar or same meanings

The words in the boxes below can help you find the synonyms of the unknown words.

or

similar to

similarly

In the same way

like

Like the other mammals, cows feed their babies with milk.



Check & Click



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Antonyms

are words that have opposite meanings

The words in the boxes below can help you find the antonyms.

unlike

but

while/whereas

in/by contrast

Unlike his brother who was very *lazy*, Sam was studious.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Antonyms

are words that have opposite meanings

The words in the boxes below can help you find the antonyms.

unlike

but

while/whereas

in/by contrast

The home designer told us that 1.75 million baht would suffice for our new house. But, in fact, it was *not enough*.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Antonyms

are words that have opposite meanings

The words in the boxes below can help you find the antonyms.

unlike

but

while/whereas

in/by contrast

The home designer told us that 1.75 million baht would suffice for our new house. But, in fact, it was *not enough*.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Antonyms

are words that have opposite meanings

The words in the boxes below can help you find the antonyms.

unlike

but

while/whereas

in/by contrast

Whereas other kinds of trees *die* in a very cold weather, the fir trees can survive.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Antonyms

are words that have opposite meanings

The words in the boxes below can help you find the antonyms.

unlike

but

while/whereas

in/by contrast

Land is *the place where land animals live*. In contrast, water is the habitat of aquatic animals.



Check & Click

Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Punctuation Marks

are the marks that give readers more information about the unknown words.

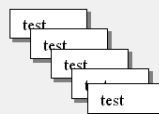
The marks in the boxes below tell you meanings the word.

dashes - -

commas ,

brackets (...)

A teacher is *duplicating* - - *making copies* - - the final test.



Back

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Punctuation Marks

are the marks that give readers more information about the unknown words.

The marks in the boxes below tell you meanings the word .

dashes - -

commas ,

brackets (....)

A hacker, a person who breaks into other people's computers, often does harmful things to your computer.



[Back](#)

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LESSON 1: GUESSING WORD MEANINGS I

Punctuation Marks

are the marks that give readers more information about the unknown words.

The marks in the boxes below tell you meanings the word .

dashes - -

commas ,

brackets (....)

The CNN announcer (a person who reports news on TV) has just reported on the situation in the south of Thailand.



[Back](#)

Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Exercises

- Exercise I
- Exercise II
- Exercise III



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Hello, Welcome to reading Lessons.

LESSON 1: GUESSING WORD MEANINGS I

Scores 0 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

1. The postman asked a recipient to sign his name before taking the registered mail.

- ☒ a person who gets the mail
- ☐ a person who sends the mail
- ☐ a person who check the mail
- ☐ the person who exchange the mail



LESSON 1: GUESSING WORD MEANINGS I

Scores 1 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

2. In 2003 the sales of OTOP goods has been 30 million baht in value. The government expects that it will reach 40 million baht in 2004.

- ☒ knows
- ☐ thinks
- ☐ takes
- ☐ sells



Answer: thinks

LESSON 1: GUESSING WORD MEANINGS I

Scores 1 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

3. Presently, there is a lot of anti-virus software used to eradicate the computer viruses.

- ☐ install
- ☐ show
- ☐ keep
- ☐ remove



LESSON 1: GUESSING WORD MEANINGS I

Scores 1 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

4. The goods such as fresh meat and furniture cannot be exported to European countries.

- ☐ things for eating
- ☐ things for sale
- ☐ things for export
- ☐ things for import



LESSON 1: GUESSING WORD MEANINGS I

Scores 1 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

5. Many farmers and gardeners have used too much pesticides and insecticides in their farming. These agriculturists have damaged their lands a lot.

- ☐ lands for farming
- ☐ pests and insects
- ☐ pesticides and insecticides
- ☐ farmers and gardeners



LESSON 1: GUESSING WORD MEANINGS I

Scores 1 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

6. Because the oil price gets higher, more drivers use the cars which are compatible with the gasohol.

- ☐ able to be used
- ☐ able to be borrowed
- ☐ able to be transferred
- ☐ able to be moved



LESSON 1: GUESSING WORD MEANINGS I

Scores 2 / 10

[Home](#)

[Exercise I](#)

Direction: Click on the best meanings of the highlighted vocabulary.

7. Scissors are for cutting. Similarly, teeth are for chewing food.

- ☐ cutting
- ☐ tasting
- ☐ licking
- ☐ cleaning



LESSON 1: GUESSING WORD MEANINGS I

Scores 3 / 10

[Home](#)

[Exercise I](#)

Direction: Click on the best meanings of the highlighted vocabulary.

8. Because of the high price of the crude oil, many manufacturers are increasing the prices of their products..

- ☐ selling
- ☐ rising
- ☐ keeping
- ☐ exchanging



LESSON 1: GUESSING WORD MEANINGS I

Scores 2 / 10

[Home](#)

[Exercise I](#)

Direction: Click on the best meanings of the highlighted vocabulary.

9. Water freezes at the temperature of 0 degree Celcius.

- ☐ become normal
- ☐ becomes gas
- ☐ becomes liquid
- ☐ becomes solid



LESSON 1: GUESSING WORD MEANINGS I

Scores 3 / 10

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

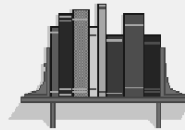
10. This clear chemical is detrimental, but that yellow one is quite safe.

- ☐ dangerous
- ☐ gentle
- ☐ cheap
- ☐ expensive



LESSON 1: GUESSING WORD MEANINGS I

Exercise II



● Exercise A

● Exercise B

● Back



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

Exercise II

A: Direction: Match the words with their correct meanings.

Meanings

- a. same
- b. over-decorated
- c. plants
- d. Chemical substance used for killing ants, mosquitoes or cockroaches.
- e. comfortable
- f. needed, very important.

1. Shieldtox, Baigon, or Raid are examples of insecticide.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

Exercise II

A: Direction: Match the words with their correct meanings.

Meanings

- a. same
- b. over-decorated
- c. plants
- d. Chemical substance used for killing ants, mosquitoes or cockroaches.
- e. comfortable
- f. needed, very important.

2. Some words have similar meanings, but some have different meanings.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

Exercise II

A: Direction: Match the words with their correct meanings.

Meanings

- a. same
- b. over-decorated
- c. plants
- d. Chemical substance used for killing ants, mosquitoes or cockroaches.
- e. comfortable
- f. needed, very important.

3. It is necessary to help save water today. It has not rained for a few months.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

Exercise II

A: Direction: Match the words with their correct meanings.

Meanings

- a. same
- b. over-decorated
- c. plants
- d. Chemical substance used for killing ants, mosquitoes or cockroaches.
- e. comfortable
- f. needed, very important.

4. Some Thai herbs, (Kha-min and Aloe vera) are used in different kinds of cosmetics.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

Exercise II

A: Direction: Match the words with their correct meanings.

- Meanings**
- a. same
 - b. over-decorated
 - c. plants
 - d. Chemical substance used for killing ants, mosquitoes or cockroaches.
 - e. comfortable
 - f. needed, very important.

5. In fact, I'd like my new house to be designed simply. But it turned out to be very ornate as my wife wanted.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

B: Direction: Match the words with their correct meanings.

- Meanings**
- a. eat
 - b. take out
 - c. animals that feed their babies with their milk.
 - d. very excellent or outstanding, unlike the others.
 - e. animals that live both on land and in water.
 - f. in the country, out of town

1. This handbag is very unique. It is done manually, with a special design and made of good-quality material. You will never see any other bag like this one.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

B: Direction: Match the words with their correct meanings.

- Meanings**
- a. eat
 - b. take out
 - c. animals that feed their babies with their milk.
 - d. very excellent or outstanding, unlike the others.
 - e. animals that live both on land and in water.
 - f. in the country, out of town

2. Many people in a big city consume too much fat from fast food such as french fries, fried chicken, burgers. That is why they are fat.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

B: Direction: Match the words with their correct meanings.

Meanings

- a. eat
- b. take out
- c. animals that feed their babies with their milk.
- d. very excellent or outstanding, unlike the others.
- e. animals that live both on land and in water.
- f. in the country, out of town

3. While rural people are underweight, the people in big cities are overweight.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 5

Home

B: Direction: Match the words with their correct meanings.

Meanings

- a. eat
- b. take out
- c. animals that feed their babies with their milk.
- d. very excellent or outstanding, unlike the others.
- e. animals that live both on land and in water.
- f. in the country, out of town

4. Frogs and toads, which live mainly on land, are kinds of amphibians.



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 7

Home

Exercise III

A. Direction: read this passage.

What is a business?

Presently, business means the production, distribution, and sale of goods and services for a profit. Production is the changing of materials into products, or the creating of services. One example is the changing of iron ore into car parts. Next, these products need to be moved from the factory to the marketplace. This is known as distribution. Cars are moved from a factory to a car showroom in town. Third is the sale of goods and services. Sale is referred to the exchange of a product or service for money. A car is sold to someone in exchange for money. Goods are products that people either need or want; for example, cars can be classified as goods. Services, on the other hand, are activities that a person or group performs for another person or organization. For instance, an auto mechanic performs a service when he repairs a car. Finally, making a profit is one important thing. Profit means the money that is left after all the costs are paid. In short, making a profit is a primary goal of business activity.

Meanings

- a. Activities that a person or group performs for another person or organization.
- b. The money that we get after we pay all the costs.
- c. Products that a buyer wants.
- d. The business plan that a company makes.
- e. The combination of activities: production, distribution, sale of goods and services and making a profit.
- f. The exchange of goods or services for money.
- g. Making products or creating the services.
- h. Transporting products to the marketplace.

1. Business



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 7

Home

Exercise III

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2. Production



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 7

Home

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3. Distribution



LESSON 1: GUESSING WORD MEANINGS I

Score 0 / 7

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Exercise III

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4. Sale



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Exercise III

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5. Profit



LESSON 1: GUESSING WORD MEANINGS I

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- g. Making products or creating the services.
- h. Transporting products to the marketplace.

6. Goods



LESSON 1: GUESSING WORD MEANINGS I

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Exercise III

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7. Services



Lesson 2: Guessing word meanings 2

LESSON 2: GUESSING WORD MEANINGS II



- About the lesson
- Learning objectives
- Pre/Posttest
- Word formation
- Exercises



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Hello, Welcome to reading Lessons.

Learning objectives



You will be able to

...

- define the meaning of vocabulary from its form.
- use appropriate words in the context.
- comprehend the meaning of unknown vocabulary in context.

● Back

Learning objectives



You will be able to

...

- define the meaning of vocabulary from its form.
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- comprehend the meaning of unknown vocabulary in context.

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LESSON 2: GUESSING WORD MEANINGS II

Home



Pre and Posttests

Direction: click on the best meaning of the underlined word.

1. Sudan is an agrarian country in Africa.

- ☐ about farming
- ☐ about industry
- ☐ about fishery
- ☐ about petroleum



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

2. Some Asian countries devalued their currencies during the economic crisis.

- ☐ added the value of
- ☐ increased the value of
- ☐ exchanged the value of
- ☐ reduced the value of



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

3. Smoking in public places such as hospitals and schools is illegal.

- ☐ under control
- ☐ against the law
- ☐ totally allowed
- ☐ partly possible



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

4. Many companies have got into financial problems.

- ☐ about economy
- ☐ about money
- ☐ about education
- ☐ about management



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

5. If Thailand can export more fruits to European countries, there will be many benefits.

- ☐ advantages
- ☐ drawbacks
- ☐ increases
- ☐ economy



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

6. Because the oil price gets higher, the government encourages people to use biodiesel.

- ☐ manages
- ☐ makes
- ☐ supports
- ☐ controls



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

7. One-2-Call is the pre-paid phone service of AIS.

- ☐ use the service right away
- ☐ use the service before other people
- ☐ pay for the service after using it
- ☐ pay for the service before using it



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

8. Bird flu is contagious. In contrast, cancer is not.

- ☐ disconnected
- ☐ communicable
- ☐ transmittable
- ☐ portable



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

9. People who surf on the Internet must be careful about the malicious programs.

- ☐ slow
- ☐ dangerous
- ☐ attached
- ☐ downloadable



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LESSON 2: GUESSING WORD MEANINGS II

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Pre and Posttests

Direction: click on the best meaning of the underlined word.

10. It is difficult for the disabled to find jobs. Some of them are deaf or blind. Some do not have arms or legs. It is necessary we support them.

- ☐ wise
- ☐ needed
- ☐ valuable
- ☐ understandable



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LESSON 2: GUESSING WORD MEANINGS II



Word Formation



You can learn the meaning of a word from its parts which are roots, prefixes and suffixes.

- Roots
- Prefixes
- Suffixes



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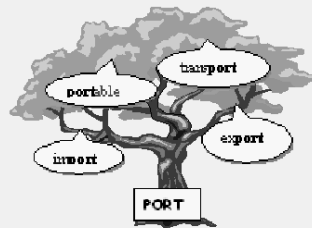
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LESSON 2: GUESSING WORD MEANINGS II

Roots



A root contains a basic meaning of the word. Knowing the meaning of a root enables you to guess the meaning of many other words.



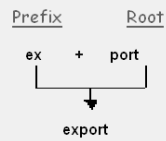
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LESSON 2: GUESSING WORD MEANINGS II

Direction: Put your mouse on the words to see their meanings.

Example 1:



My company exports rice to Italy.



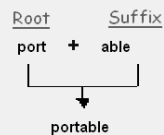
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LESSON 2: GUESSING WORD MEANINGS II

Direction: Put your mouse on the words to see their meanings.

Example 1:



A laptop computer is very popular now because it is portable and easy to use.



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LESSON 2: GUESSING WORD MEANINGS II

Examples of Roots

Put your mouse on each word to see its meaning.

Roots	Meanings	Example words
agra, agri	field	agricultural, agrarian
annu	year	annually, anniversary
bene	good, well	beneficial, benefit
cide	kill	insecticide, herbicide
cred	believe, trust	credible, credit
dict	say	predict, dictation
manu	hand	manual, manicure
mis, mit	send, spread	emit, transmit

agricultural

(adj.) concerning with farming e.g. growing crops and feeding cows etc. = เกี่ยวข้องกับการเกษตรกรรม

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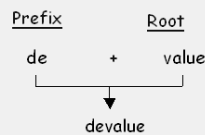
LESSON 2: GUESSING WORD MEANINGS II

Prefixes



The **prefix** is a group of letters that add *in front of* a root or word and give a new meaning to the original word.

Example:



The government devalued Thai baht in 1997 because of the economic problems.

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LESSON 2: GUESSING WORD MEANINGS II

Examples of Prefixes

Put your mouse on each word to see its meaning.

Prefixes	Meanings	Example words
dis-	not	disadvantages, disconnect
in, im, il, ir	not	incorrect, impossible, illegal, irresponsible
un-	not	unimportant, unnecessary
de-	reduce, remove	devalue, decrease
Ex-	out	export, exit
In-, im-	In, inside	import, intake, inhale
mis-	wrong	misunderstand, misuse
pre-, fore-	before	precede, prepaid
post-	after	posttest, postwar
re-	again, back	return, reuse, recycle
over-	more than, too much	overestimate, overproduce
under-	below	underestimate, undervalue

disadvantages

(n) bad or weak points = ข้อเสีย

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LESSON 2: GUESSING WORD MEANINGS II

Suffixes



A suffix is a few letters that come after a root or word.

Example: careful happiness computerize



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LESSON 2: GUESSING WORD MEANINGS II



It usually changes the function (part of speech) of the original word.

Some suffixes change the meaning of the original word to the opposite (such as *-less*).

Root

Suffix

(v.) practice + able
↓
(adj) practicable



The plan is practicable .
We can start doing it now.

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LESSON 2: GUESSING WORD MEANINGS II

Types of Suffixes



- ☐ Noun suffixes
- ☐ Verb suffixes
- ☐ adjective suffixes



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LESSON 2: GUESSING WORD MEANINGS II

Noun Suffixes are the suffixes that make a word become a noun.

Suffixes

-ty, -ity
-ance, -ence
-ment
-tion, -sion
-y, -ery
-ness
-er
-ee
-or
-ist, -ant

Example words

productivity possibility
assistance difference
government management
devaluation vision
recovery machinery
illness happiness
employer fertilizer
employee trainee
investor governor
economist assistant

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LESSON 2: GUESSING WORD MEANINGS II

Verb Suffixes are the suffixes that make a word become a verb.

Direction: put the mouse on each word to learn its meaning.

Suffixes

-ize
-en
-fy, -ify

Example words

fertilize systematize computerize
broaden strengthen shorten
simplify verify clarify

Words

broaden:

Definitions

to increase the range of something
= ทำให้(บางสิ่ง)กว้างขึ้น

Back

Hello, Welcome to reading Lessons.

LESSON 2: GUESSING WORD MEANINGS II

Adject Suffixes are the suffixes that make a word become an adjective.

Suffixes

-ic
-able, -ible
-al, -ial
-ful
-less

Example words

economic systematic
agreeable practicable
formal financial
careful harmful
stainless homeless

Words

harmful

Definitions

: being dangerous = เป็นอันตราย

Back

Hello, Welcome to reading Lessons.

LESSON 2: Guessing word meanings II

Exercises



Exercise 1: Roots

Exercise 2: Prefixes

Exercise 3: Suffixes



Back

LESSON 2: Guessing word meanings II

Exercise 1: Roots



Root A

Root B



Back

LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise 1: Roots

Root A

Direction: Type the letters (a, b, c, ...) which contain the meanings of the underlined words in the boxes.

- a. Every year
- b. To send out
- c. The business that are relating to producing, preparing and selling the farm products.
- d. To send goods to another country for sale.
- e. To say that someone has done something wrong.
- f. A chemical used for killing unwanted plants.

1. Some agribusiness companies like Charoen Pokphand could not sell their products in the European markets.

c

✓ Correct!



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise I: Roots

Root A

Direction: Type the letters (a, b, c, ...) which contain the meanings of the underlined words in the boxes.

- a. Every year
- b. To send out
- c. The business that are relating to producing, preparing and selling the farm products.
- d. To send goods to another country for sale.
- e. To say that someone has done something wrong.
- f. A chemical used for killing unwanted plants.

2. Your salary will be reviewed annually.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise I: Roots

Root A

Direction: Type the letters (a, b, c, ...) which contain the meanings of the underlined words in the boxes.

- a. Every year
- b. To send out
- c. The business that are relating to producing, preparing and selling the farm products.
- d. To send goods to another country for sale.
- e. To say that someone has done something wrong.
- f. A chemical used for killing unwanted plants.

3. Suchart was indicted for selling heroin.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise I: Roots

Root A

Direction: Type the letters (a, b, c, ...) which contain the meanings of the underlined words in the boxes.

- a. Every year
- b. To send out
- c. The business that are relating to producing, preparing and selling the farm products.
- d. To send goods to another country for sale.
- e. To say that someone has done something wrong.
- f. A chemical used for killing unwanted plants.

4. A lot of people complained about the use of herbicide in farming.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise I: Roots

Root A

Direction: Type the letters (a, b, c, ...) which contain the meanings of the underlined words in the boxes.

- a. Every year
- b. To send out
- c. The business that are relating to producing, preparing and selling the farm products.
- d. To send goods to another country for sale.
- e. To say that someone has done something wrong.
- f. A chemical used for killing unwanted plants.

5. A factory often emits bad smells, which annoys the people who live in that area.



LESSON 2: Guessing word meanings II

Exercise II: Prefixes



Prefixes A

Prefixes B

Prefixes C



Back

LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes A

Direction: choose the correct meanings of the underlined words.

1. Suda works in a company that imports leather from India.

- ☐ buys
- ☐ sells
- ☐ produces
- ☐ brings in



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes A

Direction: choose the correct meanings of the underlined words.

2. Thai currency was devalued to 45 baht per a dollar in 1997.

- ☐ reduced the value
- ☐ made in a cheap price
- ☐ exchanged with US currency only
- ☐ changed to another currency



LESSON 2: Guessing word meanings II

Score 1 / 5

Home

Exercise II: Prefixes

Prefixes A

Direction: choose the correct meanings of the underlined words.

3. China exports many kinds of low-priced goods to many other countries.

- ☐ produces low-quality goods
- ☐ changed one currency to another
- ☐ exchanged its goods with other countries
- ☐ sends goods to other country for sale.



LESSON 2: Guessing word meanings II

Score 1 / 5

Home

Exercise II: Prefixes

Prefixes A

Direction: choose the correct meanings of the underlined words.

4. Living in the pleasant environment is very beneficial to our health.

- ☐ dangerour
- ☐ useful
- ☐ enjoyable
- ☐ hopeless



LESSON 2: Guessing word meanings II

Score 2 / 5

Home

Exercise II: Prefixes

Prefixes A

Direction: choose the correct meanings of the underlined words.

5. To help save trees, we should reuse some used paper.

- ☐ make something from the used paper
- ☐ use the other blank side of the used paper
- ☐ develop new material from used paper
- ☐ use other materials instead of paper



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes B

Direction: Choose the correct meanings of the underlined words.

- a. stopped
- b. against the laws
- c. not needed
- d. not happy
- e. important
- f. removed the control of something

1. It is unnecessary to think about the past. Do the best for now and plan for tomorrow.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes B

Direction: Choose the correct meanings of the underlined words.

- a. stopped
- b. against the laws
- c. not needed
- d. not happy
- e. important
- f. removed the control of something

2. My teacher was dissatisfied with my report. She told me to do it again.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes B

Direction: Choose the correct meanings of the underlined words.

- a. stopped
- b. against the laws
- c. not needed
- d. not happy
- e. important
- f. removed the control of something

3. It is illegal to cut trees in the national parks.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes B

Direction: Choose the correct meanings of the underlined words.

- a. stopped
- b. against the laws
- c. not needed
- d. not happy
- e. important
- f. removed the control of something

4. Rice prices have been decontrolled.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes B

Direction: Choose the correct meanings of the underlined words.

- a. stopped
- b. against the laws
- c. not needed
- d. not happy
- e. important
- f. removed the control of something

5. The project was discontinued without any reason.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes C

Direction Choose the correct meanings of the underlined words.

- a. given money in advance
- b. used something in a wrong way.
- c. become well again.
- d. made something too much
- e. give a lower value on something
- f. give the value to something

1. Farmers have overproduced rice this year. So the price is going down.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes C

Direction Choose the correct meanings of the underlined words.

- a. given money in advance
- b. used something in a wrong way.
- c. become well again.
- d. made something too much
- e. give a lower value on something
- f. give the value to something

2. These chemicals can be dangerous, if misused.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes C

Direction Choose the correct meanings of the underlined words.

- a. given money in advance
- b. used something in a wrong way.
- c. become well again.
- d. made something too much
- e. give a lower value on something
- f. give the value to something

3. Don't undervalue the children's drawings. They usually tell us about what children think.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes C

Direction: Choose the correct meanings of the underlined words.

- a. given money in advance
- b. used something in a wrong way.
- c. become well again.
- d. made something too much
- e. give a lower value on something
- f. give the value to something

4. One-2-call is one of the prepaid phone services.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise II: Prefixes

Prefixes C

Direction: Choose the correct meanings of the underlined words.

- a. given money in advance
- b. used something in a wrong way.
- c. become well again.
- d. made something too much
- e. give a lower value on something
- f. give the value to something

5. Thailand's export has been very successful; therefore, the economy has started to recover.



LESSON 2: Guessing word meanings II

Exercise III: Suffixes



Suffixes A

Suffixes B

Suffixes C



Back

LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes A

Direction: Fill in the blanks with the appropriate words below.

assistance management recovery
happiness productivity devaluation

1. Many importing businesses cannot go on because of the of Thai baht.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes A

Direction: Fill in the blanks with the appropriate words below.

assistance management recovery
happiness productivity devaluation

2. Our economy shows signs of . More goods have been exported.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes A

Direction: Fill in the blanks with the appropriate words below.

assistance management recovery
happiness productivity devaluation

3. Bangkok Bank can run its business successfully because it has good .



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes A

Direction: Fill in the blanks with the appropriate words below.

assistance management recovery
happiness productivity devaluation

4. Better living of people brings to everyone.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes A

Direction: Fill in the blanks with the appropriate words below.

assistance management recovery
happiness productivity devaluation

5. Farmers have stopped growing rice because of the low .



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes B

Direction: Fill in the blanks with the appropriate words below.

computerize strengthen simplify
beautify fertilize shorten

1. Farmers often their lands in order to make plants grow well.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes B

Direction: Fill in the blanks with the appropriate words below.

computerize strengthen simplify
beautify fertilize shorten

2. The government needed to _____ a community by having everyone work together.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes B

Direction: Fill in the blanks with the appropriate words below.

computerize strengthen simplify
beautify fertilize shorten

3. Economists tried to _____ the financial crisis. It was very difficult to understand.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes B

Direction: Fill in the blanks with the appropriate words below.

computerize strengthen simplify
beautify fertilize shorten

4. The factory must _____ the production time. So the goods can be exported in time.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes B

Direction Fill in the blanks with the appropriate words below.

computerize strengthen simplify
beautify fertilize shorten

5. We need to the whole system; so all the work can be done quickly.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes C

Direction Fill in the blanks with the appropriate words below.

financial homeless agreeable
careful systematic valuable

1. We need to be more about how to use our money.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes C

Direction Fill in the blanks with the appropriate words below.

financial homeless agreeable
careful systematic valuable

2. Our company has a way of transporting our products.
Customers always get the goods on time.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes C

Direction Fill in the blanks with the appropriate words below.

financial	homeless	agreeable
careful	systematic	valuable

3. The hotel has got into problems. They cannot manage money well.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes C

Direction Fill in the blanks with the appropriate words below.

financial	homeless	agreeable
careful	systematic	valuable

4. If they become , the problem can be solved soon.



LESSON 2: Guessing word meanings II

Score 0 / 5

Home

Exercise III: Suffixes

Suffixes C

Direction Fill in the blanks with the appropriate words below.

financial	homeless	agreeable
careful	systematic	valuable

5. Building a dam often cause people.



Lesson 6: Economic words

LESSON 6: ECONOMIC WORDS



- About the lesson
- Learning objectives
- Pre/Posttest
- Economic words
- Exercises
- Extra activities



● Back

Hello, Welcome to reading Lessons.

About the lesson

In this lesson, there are ...

- Economic Words: you will study the meanings of the vocabulary related to the economy.
- Exercises: there are exercises for you to practice your vocabulary skills.
- Fun Stuff: enjoy yourself with the fun activities like What are the words? and Millionaire games.
- After the lesson, write your comments about the lesson in Your Journal.

● Back

Learning Objectives



You will be able to...

- define the meanings of vocabulary frequently found in economic texts.
- comprehend the meaning of economic vocabulary in short passages.

● Back

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

1. Mr. Lee often goes to foreign countries on business.

- ☐ the far away countries
- ☐ the other countries
- ☐ the poor countries
- ☐ the very cold countries



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

2. Many Thai manufacturers can export more canned food to the Middle East.

- ☐ the companies that import and export goods
- ☐ the companies that produce goods in large quantity
- ☐ the companies that sell their products only in large quantity
- ☐ the companies which run businesses in another country



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

3. It is difficult to obtain a bus ticket during New Year's day because there are too many people at the bus terminal.

- ☐ take
- ☐ get
- ☐ serve
- ☐ borrow



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

4. The government has budgeted a lot of money for One Tambon One Product project.

- ☐ planned to consider
- ☐ planned to collect
- ☐ planned to borrow
- ☐ planned to use



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

5. Export can help our country to recover soon.

- ☐ get better
- ☐ move on
- ☐ slow down
- ☐ get back



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

6. In mid 1997, about 25 baht could be exchanged for a dollar.

- ☐ changed something within a short time.
- ☐ changed something for something else.
- ☐ borrowed something from a bank.
- ☐ transferred something to other country.



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

7. His company has had financial problems for many years.

- ☐ about marketing.
- ☐ about office management.
- ☐ about business law.
- ☐ about management of money.



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

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[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

8. China uses Yuan for its currency.

- ☐ the type of money that a country uses
- ☐ the place where money is made
- ☐ the way that a country uses its money
- ☐ the department that works with the country's money



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

9. There will be an energy crisis if we do not save our natural resources such as oil and gas.

- ☐ bad difficulty.
- ☐ production.
- ☐ development.
- ☐ damage



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best meanings of the highlighted vocabulary.

10. I think IMF did not help much with our economy.

- ☐ International market
- ☐ the money we spend for a living
- ☐ the ways people spend their time
- ☐ the system of trade and industry of a country



Hello, . Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.

Click on the words below to learn their meanings.



- | | |
|--------------------------------|-----------------------------------|
| <input type="radio"/> Cost | <input type="radio"/> Financial |
| <input type="radio"/> Budget | <input type="radio"/> Foreign |
| <input type="radio"/> Crisis | <input type="radio"/> Fund |
| <input type="radio"/> Currency | <input type="radio"/> Manufacture |
| <input type="radio"/> Economy | <input type="radio"/> Obtain |
| <input type="radio"/> Exchange | <input type="radio"/> Recover |



[Back](#)

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.

 **Cost**



[Help](#)

- n. (U) The money that you have to pay for something.
n. (pl) The cost of something

Examples:

- The cost of living in the USA is very high. Things are very expensive.
- The higher price of gasoline and diesel increases the production costs of many goods.



[Back](#)

Hello, Welcome to reading Lessons.

Help

Parts of Speech



- **n.** = noun
 - n. (C)** = countable noun e.g. a book, a map, a child
 - n. (U)** = uncountable noun e.g. rice, money, happiness
 - n. (pl.)** = plural noun e.g. people, buses, currencies
- **vt.** = transitive verb (verb that needs an object) e.g. to eat, to have, to produce
- **vi.** = intransitive verb (verb that does not need an object) e.g. to sleep, to walk.
- **adj.** = adjective e.g. happy, interesting, good, difficult
- **adv.** = adverb e.g. quickly, happily, fast, well

● Back

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



Budget

Help

- n. (U)** = A plan of how much money you will have and spend
- vi.** = to plan how to spend your money

Examples:

- We have a weekly budget for food.
- I'm budgeting carefully because I want to buy a new car.



● Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



Crisis

วิกฤตการณ์

Help

- n. (C)** A time of great danger or difficulty

Examples:

- The world's crisis now is the war between America and Iraq.
- There is a crisis in Thai economy.



● Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.

Currency

เงินตรา



Help

n. (C, U) The system or type of money that a country uses.

Examples:

- Thai currency is baht.
- You can get foreign currencies at any bank.



● Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.

Economy

เศรษฐกิจ

Help

n. (C) The system of trade and industry by which the wealth of the country is made and used.

Examples:

- Our economy is getting better now.
- The economy of the country is based on agriculture.



● Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.

Exchange

Help

vt. To change something for something else

n. (C) An exchange rate or the rate of exchange

The rate at which the money of one country can be changed for the money of another country.

- I want to exchange this skirt for a bigger one.
- What's the exchange rate for a dollar?
It's 41.30 baht for a dollar.



● Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



Finance



Help

n. (U) The management of money

adj. (financial) About the management of money

Examples:

- The Minister of Finance is visiting a village.
- My business got into financial problems.
- New York and Tokyo are the important financial centers.



Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



foreign

Help

adj. belonging to a country that is not your own.

Foreign exchange (n. C) The place where people buy and sell currencies of other countries.

Examples:

- Somchai learned three foreign languages (English, Japanese and German) at his university.
- I bought dollars at a foreign exchange yesterday.



Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



fund

Help

n. (C) The money that is saved, collected or given for a particular purpose.

Examples:

- Our school has a lunch fund for poor students.
- The government is making funds for the flood damage.



Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



manufacture

Help

- v. To produce something in large quantity
n. (C) a manufacturer = A person or company that produces something in large amount.

Examples:



- Seagate is one of the leading manufacturer of electronic parts.
- Millions of Toyota cars are manufactured each year.



Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



obtain

Help

vt. To get something

Examples:

- You can obtain protein from meat, eggs and milk.
- He works hard everyday, but he obtains a little money.



Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Click on the word to check its meaning.



recover

Help

- vi. = To get better or improve after illness or bad situation.
n. (U) recovery = A return to good health after illness, or state after a difficult time.

Examples:

- It will take many years for our economy to recover.
- After a week of the flu, Peter has recovered now. He feels better. But his sister is still sick.



Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Exercises



- Exercise 1
- Exercise 2
- Exercise 3



● Back

Hello, Welcome to reading Lessons.

LESSON 1: ECONOMIC WORDS

Scores 0 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

1. Chakit is a salesman. He needs to go to many foreign countries.

- ☐ other countries
- ☐ poor countries
- ☐ far away countries
- ☐ very cold countries



LESSON 1: ECONOMIC WORDS

Score 0 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

2. Many manufacturers can export more computers to European countries.

- ☐ the companies that import and export goods.
- ☐ the companies that produce something in large quantity.
- ☐ the companies that sell their products only in large quantity.
- ☐ the companies which run a business in another country.



LESSON 1: ECONOMIC WORDS

Score 0 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

3. We can easily obtain a credit card from many banks now.

- ☐ take
- ☐ get
- ☐ serve
- ☐ borrow



LESSON 1: ECONOMIC WORDS

Score 0 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

4. A lot of money was budgeted to help small companies.

- ☐ planned to be given
- ☐ planned to be taken
- ☐ planned to be borrowed
- ☐ planned to be used



LESSON 1: ECONOMIC WORDS

Score 1 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

5. Our company started to recover from many problems.

- ☐ get better
- ☐ go down
- ☐ start again
- ☐ become bigger



LESSON 1: ECONOMIC WORDS

Score 1 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

6. In 1997 about 25 baht could be exchanged for a dollar.

- ☐ changed something within a short time
- ☐ changed something for something else
- ☐ borrowed something from a bank
- ☐ transferred money to other country



LESSON 1: ECONOMIC WORDS

Score 1 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

7. Saranya works in the financial department in a company.

- ☐ about marketing.
- ☐ about the office management.
- ☐ about the business law.
- ☐ about the management of money.



LESSON 1: ECONOMIC WORDS

Score 2 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

8. Thailand uses baht for its currency.

- ☐ the type of money that a country uses.
- ☐ the ministry that works with the country's money.
- ☐ the way that a country uses its money.
- ☐ the place where money is made.



LESSON 1: ECONOMIC WORDS

Score 2 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

9. There may be another crisis if there is another war in Iraq.

- ☐ very bad difficulty
- ☐ production
- ☐ damage
- ☐ development



LESSON 1: ECONOMIC WORDS

Score 2 / 12

Home

Exercise I

Direction: Click on the best meanings of the highlighted vocabulary.

10. The government believes that the economy will be better in 2004.

- ☐ the international market
- ☐ the money we use for a living.
- ☐ the ways people use in their everyday's life.
- ☐ the system of trade and industry of a country.



LESSON 6: ECONOMIC WORDS

Exercise II

- Exercise A
- Exercise B
- Exercise C



● Back

LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

Exercise II

A: Direction: Drag and drop the correct words onto the blanks to complete the sentences.

crisis recovery currency
financial budget foreign exchange

1. Tourists can buy Thai baht at a



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

Exercise II

A: Direction: Drag and drop the correct words onto the blanks to complete the sentences.

crisis recovery currency
financial budget foreign exchange

2. We can export more goods this year. Our economy is showing a good sign of



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

Exercise II

A: Direction: Drag and drop the correct words onto the blanks to complete the sentences.

crisis recovery currency
financial budget foreign exchange

3. There was an economic in Thailand in 1997.
Many companies lost their businesses.



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

Exercise II

A: Direction: Drag and drop the correct words onto the blanks to complete the sentences.

crisis	recovery	currency
financial	budget	foreign exchange

4. We should our money carefully for food, clothes and house rent.



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

Exercise II

A: Direction: Drag and drop the correct words onto the blanks to complete the sentences.

crisis	recovery	currency
financial	budget	foreign exchange

5. Our company has a problem now.
So we need to lay off some workers.



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

B: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

obtain	recover	economy
crisis	fund	foreign

1. The country's was in a poor state in 1997.



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

B: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

obtain	recover	economy
crisis	fund	foreign

2. I'm glad to hear that our economy has started to



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

B: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

obtain	recover	economy
crisis	fund	foreign

3. We've got some students studying at our university. They are from China and Vietnam.



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

B: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

obtain	recover	economy
crisis	fund	foreign

4. Every village has got a million baht for their One Tambon, One Product project.



LESSON 6: ECONOMIC WORDS

Score 2 / 5

Home

B: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

obtain	recover	economy
crisis	fund	foreign

5. Where can I the ticket for the football match?



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

C: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

economic	currency	manufacturer
cost	financial	exchange

1. My new radio didn't work, so I went back to the shop to
for a new one.



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

C: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

economic	currency	manufacturer
cost	financial	exchange

2. The of Japan is yen.



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

C: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

economic	currency	manufacturer
cost	financial	exchange

3. Our country has been in a poor situation for years.



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

C: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

economic	currency	manufacturer
cost	financial	exchange

4. I do not want to live in England because the of living there is very high.



LESSON 6: ECONOMIC WORDS

Score 1 / 5

Home

C: Direction: Complete the sentences with the words in the box.
Drag and drop the correct words onto the blanks.

economic	currency	manufacturer
cost	financial	exchange

5. A bad product should be returned to its



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home



Exercise III

Direction: define the highlighted words in the paragraph below.

Paragraph A

The world's economic crisis in 1997 has had strong effects on the economies of many developing countries in Asia. Thailand is one of those countries. Many businesses have faced with financial problems. As a result, some companies laid off their workers, while the others discontinued their businesses. Moreover, some local banks have been taken over by foreign banks.

Economic

- ☐ producing a profit
- ☐ about the finance of the country
- ☐ relating to the country's money, trade and industry



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home



Exercise III

Direction: define the highlighted words in the paragraph below.

Paragraph A

The world's economic crisis in 1997 has had strong effects on the economies of many developing countries in Asia. Thailand is one of those countries. Many businesses have faced with financial problems. As a result, some companies laid off their workers, while the others discontinued their businesses. Moreover, some local banks have been taken over by foreign banks.

Financial

- ☐ related to money
- ☐ related to other countries
- ☐ related to some businesses



LESSON 6: ECONOMIC WORDS

Score 1 / 6

Home



Exercise III

Direction: define the highlighted words in the paragraph below.

Paragraph A

The world's economic crisis in 1997 has had strong effects on the economies of many developing countries in Asia. Thailand is one of those countries. Many businesses have faced with financial problems. As a result, some companies laid off their workers, while the others discontinued their businesses. Moreover, some local banks have been taken over by foreign banks.

Foreign

- ☐ from other countries
- ☐ from the countries in the far distance
- ☐ from different parts of the country



LESSON 6: ECONOMIC WORDS

Score 2 / 6

Home

Exercise III

Direction: define the highlighted words in the paragraph below.

Paragraph A

The world's economic crisis in 1997 has had strong effects on the economies of many developing countries in Asia. Thailand is one of those countries. Many businesses have faced with financial problems. As a result, some companies laid off their workers, while the others discontinued their businesses. Moreover, some local banks have been taken over by foreign banks.

Economies

- ☐ the laws that countries use
- ☐ the systems that countries use to manage their money, trade and industry
- ☐ the systems that countries use to manage their people's health



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Exercise III

Paragraph B

During the economic crisis, the prices of fuel such as gasoline and diesel got higher. Since the value of our currency was changed, As a result, many manufacturers have faced with the problem of higher production cost. But they had to sell their goods at the lower prices. Finally, they made a big loss. The other effect of the currency devaluation is that the companies that obtain foreign loans will have to pay them off with the higher rate.

Crisis

- ☐ A very difficult time
- ☐ An excellent condition
- ☐ A normal state of something



LESSON 6: ECONOMIC WORDS

Score 1 / 6

Home

Exercise III

Paragraph B

During the economic crisis, the prices of fuel such as gasoline and diesel got higher. Since the value of our currency was changed, As a result, many manufacturers have faced with the problem of higher production cost. But they had to sell their goods at the lower prices. Finally, they made a big loss. The other effect of the currency devaluation is that the companies that obtain foreign loans will have to pay them off with the higher rate.

Manufacturers

- ☐ farmers
- ☐ producers
- ☐ importers



Home

Exercise III

Paragraph B

During the economic crisis, the prices of fuel such as gasoline and diesel got higher. Since the value of our currency was changed, As a result, many manufacturers have faced with the problem of higher production cost. But they had to sell their goods at the lower prices. Finally, they made a big loss. The other effect of the currency devaluation is that the companies that obtain foreign loans will have to pay them off with the higher rate.

Cost

- ☐ the money people pay to banks.
- ☐ the money that is paid for something.
- ☐ the money that is paid for fuel and fertilizers



Home

Exercise III

Paragraph B

During the economic crisis, the prices of fuel such as gasoline and diesel got higher. Since the value of our currency was changed, As a result, many manufacturers have faced with the problem of higher production cost. But they had to sell their goods at the lower prices. Finally, they made a big loss. The other effect of the currency devaluation is that the companies that obtain foreign loans will have to pay them off with the higher rate.

Currency

- ☐ the money that a country uses
- ☐ the money that can be exchanged internationally
- ☐ the rate at which the money of one country can be exchanged



Home

Exercise III

Paragraph B

During the economic crisis, the prices of fuel such as gasoline and diesel got higher. Since the value of our currency was changed, As a result, many manufacturers have faced with the problem of higher production cost. But they had to sell their goods at the lower prices. Finally, they made a big loss. The other effect of the currency devaluation is that the companies that obtain foreign loans will have to pay them off with the higher rate.

Obtain

- ☐ to get
- ☐ to pay
- ☐ to make



LESSON 6: ECONOMIC WORDS

Extra activities

● What are the words?1

● What are the words?2

● Millionaire 1

● Millionaire 2



● Back

Hello, Welcome to reading Lessons.

LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra activities

What are the words? 1

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

1. The place where someone goes to exchange or buy one type of money.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra activities

What are the words? 1

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

2. Money saved, collected or given for particular purposes.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 1

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

3. Thaksin said Thailand's.....is becoming better.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 1

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

4. In 1997 there was an economic..... in Asia.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 1

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

5. To become well or normal again after illness or bad situation.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 1

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

6. The system or type of money that a country uses.

►



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

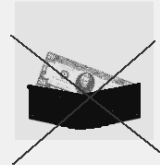
Extra
activities

What are the words? 2

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

1. I often have the..... problem at the end of the month. I don't have any money left.

►



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 2

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

2. We need to our money carefully so we can have some left to spend during summer.

►



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 2

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

3. A: What's the of repairing this computer?
B: It's 500 baht.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 2

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

4. This TV set does not work well. Can I it for the new one?

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 6

Home

Extra
activities

What are the words? 2

Direction: Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

5. If the product has any problem, you can send it back to the that produced it.

▶



LESSON 6: ECONOMIC WORDS

Score 0 / 5

Home

Extra activities

What are the words? 2

Direction:

Type in the words that best match with the definitions below.
Or fill in the blanks with appropriate words.

6. To get something

▶

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1

Enjoy

Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

1. What is the currency of Germany now?

0 baht

■ mark

■ euro

■ peso

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1

Enjoy

Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

2. Among these 3 men, who is the richest man?

0 baht

■ Bill Clinton

■ Bill Gates

■ Prince of Brunei

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

2,000 baht

3. Where is the manufacturer of the most famous hand watches, 'Rolex' from?

- ☐ Switzerland
- ☐ France
- ☐ United States of America

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

0 baht

4. Where can you easily check for the currency rates?

- ☐ At the Stock Exchange
- ☐ On television
- ☐ At the bank

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

1,000 baht

5. Which country is a member of OPEC?

- ☐ Brunei
- ☐ Indonesia
- ☐ Syria

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

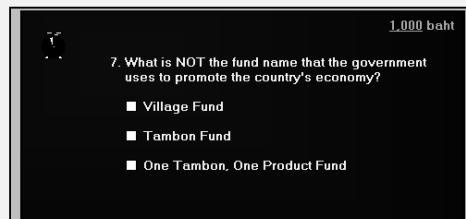
Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

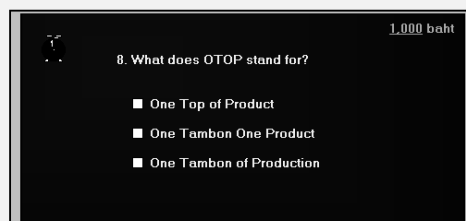
Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

1,000 baht

9. What kind of product of Thailand is exported the most?

- ☐ Rice
- ☐ Handicrafts
- ☐ Ready-made clothes

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 1



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

1,000 baht

10. What does OPEC stand for?

- ☐ Organization of Petrol-Engineering Countries
- ☐ Organization of Petrol Enterprise Countries
- ☐ Organization of Petroleum Exporting Countries

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 2



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.

0 baht

1. What does APEC stand for?

- ☐ Asia-Pacific Economic Cooperation
- ☐ Asean-Pacific Economic Conference

LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 2



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

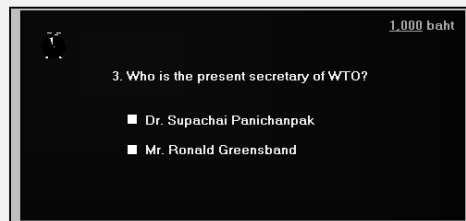
Millionaire Game 2



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

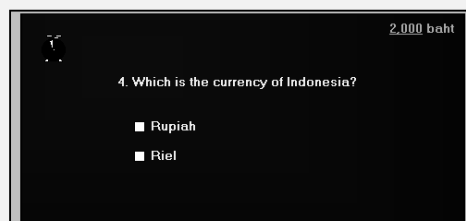
Millionaire Game 2



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 2



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

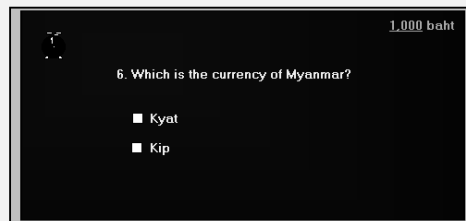
Millionaire Game 2



Directions:

* Answer each question within 30 seconds.

* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

Home

Extra activities

Millionaire Game 2



Directions:

* Answer each question within 30 seconds.


* You will get 1,000 baht for each correct answer.



LESSON 6: ECONOMIC WORDS

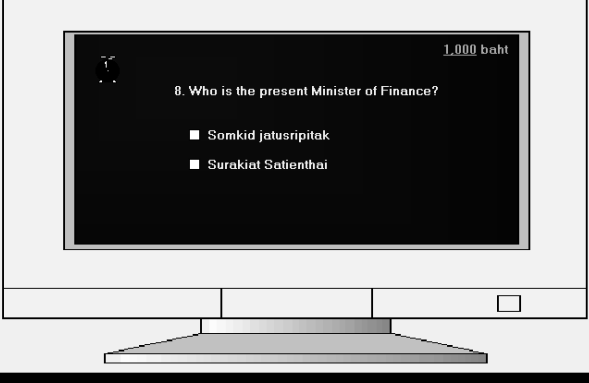
Home
Extra activities

Millionaire Game 2



Directions:

- * Answer each question within 30 seconds.
- * You will get 1,000 baht for each correct answer.



1,000 baht


8. Who is the present Minister of Finance?

- Somkid Jatusripitak
- Surakiat Sathienthai

LESSON 6: ECONOMIC WORDS

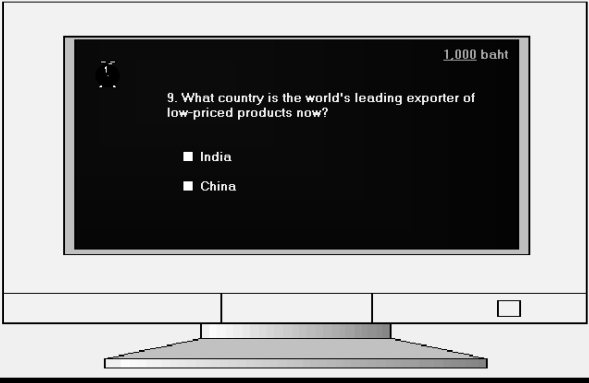
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Extra activities

Millionaire Game 2



Directions:

- * Answer each question within 30 seconds.
- * You will get 1,000 baht for each correct answer.



1,000 baht


9. What country is the world's leading exporter of low-priced products now?

- India
- China

LESSON 6: ECONOMIC WORDS

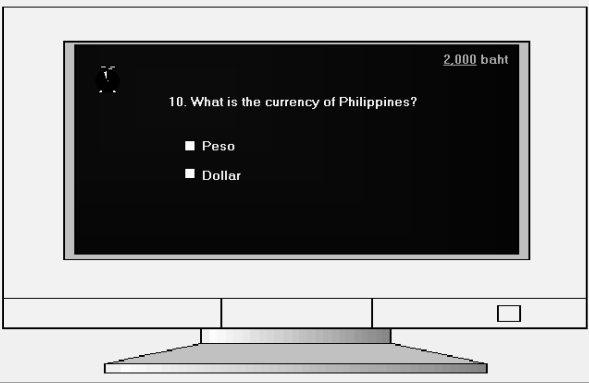
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Extra activities

Millionaire Game 2



Directions:

- * Answer each question within 30 seconds.
- * You will get 1,000 baht for each correct answer.



2,000 baht

10. What is the currency of Philippines?

- Peso
- Dollar

5.3.3 Reading Technique Lessons


There are three lessons for reading techniques, which are Lesson 3: Finding main ideas, Lesson 4: Skimming, and Lesson 5: Scanning. Similar to the vocabulary lessons, each lesson has an introduction (lesson objectives and content), pre/posttests, lesson presentation and exercises. The pages are presented as follows.

Lesson 3: Finding main ideas

LESSON 3: FINDING MAIN IDEAS



- About the lesson
- Learning objectives
- Pre/Posttest
- Finding main ideas
- Exercises



[● Back](#)

Hello, Welcome to reading Lessons.

About the lesson

This lesson includes ...

- Finding main ideas: a reading technique to find the key sentence telling you what a text is all about.
- Exercises: to practice your reading skills.
- After the lesson, write your comments about the lesson in "Your Journal".

[● Back](#)

Learning objectives

You will be able to



- identify the main ideas of short paragraphs, and
- use this reading technique (finding main ideas) to read short passages.

● Back

LESSON 3: FINDING MAIN IDEAS

Home

Pre and Posttests

Direction: choose the main idea of this paragraph.

Text 1:

Internet Thailand Public Co.Ltd, or known as INET, the leading Internet Service Provider, has Inet-Speedy service now. This service can make data transmission three times faster than usual. The users who want high-speed connection at low cost will enjoy surfing websites. The pre-paid hours service is available at www.thai.com 24 hours a day.

Adapted from INET news at <http://www.inet.co.th/newsflash/220503-eng.html>

- ☐ INET has the fast Internet service.
- ☐ INET users enjoy surfing on the net.
- ☐ INET search for information for users.



Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Home

Pre and Posttests

Direction: choose the main idea of this paragraph.

Text 2:

Exports of One-Tambon-One-Product (OTOP) agricultural goods are expected to get more than two hundred million baht this year. Eight agricultural products which are exported this year are rice, coffee, rubber, bananas, mangosteens, durians, rambutans and longans. These exports have gone to many markets such as China, Malaysia, Japan, India, Switzerland, the US and Italy. Next year Thailand hopes to get more than five hundred million baht from OTOP exports. The government will continue to support OTOP producers and also find new export markets for them.

Adapted from economic news at <http://etha.mcot.net/query.php?nid=30097>

- ☐ OTOP agricultural exports are popular in Thailand.
- ☐ OTOP agricultural exports can make a lot of money.
- ☐ OTOP goods are only from agricultural products.



Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Home

 Pre and Posttests

Direction: choose the main idea of this paragraph.

Text 3:

The canned tuna business is booming in both the local and foreign markets. Now Thai people who look for healthy food eat more tuna fish. It is believed that the consumption of canned tuna would increase of 15 %, as valued about 700 million baht. On the other hand, Thailand is the world's biggest manufacturer of canned tuna, and exports them to many countries in Europe and America. Thailand produced canned tuna 290, 000 tonnes in 2002, which help recover the country's economy from the economic crisis in 1997.

Adapted from news at <http://etna.mcot.net/query.php?nid=30334>

- ☐ Thailand imports more tuna for its people.
- ☐ Thai people eat more tuna because it is nutritious.
- ☐ Thailand's canned tuna business is very successful.



Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Home

 Pre and Posttests

Direction: choose the main idea of this paragraph.

Text 4:

Health officials killed more than 1.2 million chickens and other poultry in Hong Kong on Monday. The merchants in the nearby markets were told to stop business and kill all their chickens – as well as ducks, geese, pigeons, quails and partridges. A health official told reporters that the imported chickens from China and those from local farms at Cheung Sha Wan was the main cause in the new outbreak of the bird flu. Hong Kong has stopped importing chickens from China until tests confirm that the birds on the mainland are clear of the disease.

Adapted from news at <http://bangkokpost.com>

- ☐ People in Hong Kong did not eat chicken .
- ☐ There was an outbreak of bird flu in Hong Kong.
- ☐ The merchants in Hong Kong stopped killing chickens.



Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Home

 Pre and Posttests

Direction: choose the main idea of this paragraph.

Text 5:

Inet-ISDN service is a digital Internet connection which is available all the time and allows the telephone usage with the speed of 64 or 128 Kbps. It allows large data transmission such as listening to the radio via Internet, conducting video conference, downloading multimedia files and playing on-line games. There are two packages: *ISDN-Gold* for small and medium size business or any organization doing e-commerce, and *ISDN-Home* is for general users who want fast and reliable connection and for those who do business from home.

Adapted from news at <http://www.inet.co.th/newstflash/260503-eng.html>

- ☐ The Inet-ISDN service gives a long Internet connection.
- ☐ The Inet-ISDN service is only for people who do businesses.
- ☐ The Inet-ISDN service gives the fast Internet connection with large data transmission



Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS



answer

1. INET has the fast Internet service.
2. OTOP agricultural exports can make a lot of money.
3. Thailand's canned tuna business is very successful.
4. There was an outbreak of bird flu in Hong Kong.
5. The Inet-HSDN service gives the fast Internet connection with large data transmission

● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS



- What is the main idea?
- How can you find the main idea?
- Where is the topic sentence?
- Golden rules



● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

What is the main idea?



The *main idea* is what the author (writer) write about his paragraph .


Usually, the main idea comes in a sentence, called as the '*topic sentence*'.

If you find the main idea, you will find it easier to understand what you read.

● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

 How can you find the main idea?



When reading a paragraph, ask yourself 2 questions below.


- 1: Who or what is this paragraph about? (Topic)
- 2: What does this paragraph say about the topic?



Next

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

 How can you find the main idea?

Example 1: Read this paragraph.

There are two kinds of elephants - the African and the Indian. The African elephant is larger and darker; it also has larger ears and a more sloping forehead. Both can be tamed, but the Indian elephant is more easily trained to do work. When an African elephant sleeps, it usually stands up, but the Indian one usually sleeps lying down.

1: Who or what is this paragraph about?

Answer: Elephants

2: What does this paragraph say about the topic?

Answer: 2 kinds of elephants




Topic sentence: There are 2 kinds of elephants.

Next

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

 How can you find the main idea?

Example 2: read this paragraph.

English is spoken by pilots and air traffic controllers on all the airways of the world. Most web sites use English on their pages. And over 70 percent of the world's mail is written in English. In addition, more than 60 percent of the world's radio programs are in English. Clearly, English is an international language.

Adapted from English for communication and study skills: English Program, Rajadhat Suan Dus

1: Who or what is this paragraph about?

Answer: English

2: What does this paragraph say about the topic?

Answer: English is used almost everywhere



Topic sentence: English is an international language.

Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Where is the topic sentence?



The topic sentence can be found in different positions in a paragraph.

Click at the icons below to see some examples.

- ☐ At the beginning ☐ In the middle ☐ At the end
- ☐ No where



Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Where is the topic sentence?



Very often, the topic sentence is found at the beginning of a paragraph, like this one below.

A computer is such an amazing thing since it can do many things for you. For example, it is a calculating machine that can speed up calculations. It is a big electronic filing cabinet which can store a lot of data such as your customers' names and addresses, students' test scores, reports, company's projects, etc. It is a typewriter that let you type and print any kind of document - - letters, memos, time tables, images or legal documents. It is a personal communicator that you can use to connect with other computers and with people around the world. Also, you can entertain yourself with the CD movies and music or relax with computer games.

Adapted from What can computers do?, Infotech: English for computer users (1996). By Santiago Remacha Esteras, Cambridge: Cambridge University Press. p. 4.



Next

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LESSON 3: FINDING MAIN IDEAS

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Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Where is the topic sentence?



Sometimes it's in the middle of the paragraph.

Electricity is a servant for modern man. It provides power to do a lot of work for him. It heats homes and stores. It cools buildings by running air conditioners. Electricity can also be very dangerous to man. Lighting, a form of electricity, has started many fires and killed many people. Other injuries and deaths have come from electricity in the home.

From: Reading for general purposes ..Rajadhat Nakhon Ratchasima



● Next

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

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From: Reading for general purposes ..Rajadhat Nakhon Ratchasima



● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Where is the topic sentence?



It's also found at the end of the paragraph.

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From: English for communication and study skills. English Program.Rajadhat Swan Dust



● Next

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

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From: English for communication and study skills: English Program: Rajadhat Suan Dusit



● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Where is the topic sentence?



Sometimes the main idea is not written directly in a text. To identify the main idea, follow the steps below.

1. Ask yourself 2 questions about the text:

- ?**
- What is the text about? (topic)
 - In what way/area does the text mainly discuss about the topic above?

2. Look for the title name of the text and clues in the text. They can help you identify the main idea.

● See an example



Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Where is the topic sentence?

DOWRY

In some countries men have to pay money to their bride's parents according to the amount asked. Men elsewhere trade pigs, goats, shells, metal tools, such as axes and knives, for wives. In East African societies where cattle are the primary currency, a bride can be worth anywhere from 5 to 50 cows, depending on the particular society and its resources.

From: English for communication and study skills: English Program: Rajadhat Suan Dusit

These are for my wife.



Topic = 'dowry' = the money or things that a man gives to the parents of the woman he wants to marry to.

Clues = money, animals or tools.

The main idea = The price a man pays for a wife is various.



● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Golden Rules

Click on us !



RULE 1



RULE 2



RULE 3



RULE 4



RULE 5

Rule 1: The topic sentence is a sentence telling readers what the text is all about.



Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Golden Rules

Click on us !



RULE 1



RULE 2



RULE 3



RULE 4



RULE 5

Rule 2: Each paragraph has one important main idea.



Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Golden Rules

Click on us !



RULE 1



RULE 2



RULE 3



RULE 4



RULE 5

Rule 3: The topic sentence can be any sentence in a paragraph, but usually it is at the beginning or end of the paragraph.



Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Golden Rules

Click on us !



RULE 1



RULE 2



RULE 3



RULE 4



RULE 5

Rule 4: If the topic sentence is not written directly, read the whole paragraph and look at the topic title and clues that are related to the topic.



● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Golden Rules

Click on us !



RULE 1



RULE 2



RULE 3



RULE 4



RULE 5

Rule 5: Like a paragraph, a passage with many paragraphs usually has one main idea sentence in the introductory paragraph.



● Back

Hello, Welcome to reading Lessons.

LESSON 3: FINDING MAIN IDEAS

Exercises

● Level 1

● Level 2



● Back

LESSON 3: FINDING MAIN IDEAS

Score 0 / 5

Home

LEVEL I

EXERCISES

DIRECTIONS: read this paragraph. Click on the sentence that you think is the topic sentence.

Paragraph A

Money

The sizes and shapes of coins are different in various countries, and the size and color of paper money also vary. In India, for example, some coins have square sides. In Japan, some coins have holes in the center. In the United States, all paper money is the same size and the same color; only the printing on the bills is different. Most other countries have various sizes and colors for different values of paper money.

From: English for communication and study skills: English Program Rajabhat Suan Dusit



LESSON 3: FINDING MAIN IDEAS

Score 0 / 5

Home

LEVEL I

EXERCISES

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From: English for communication and study skills: English Program Rajabhat Suan Dusit



LESSON 3: FINDING MAIN IDEAS

Score 1 / 5

Home

LEVEL I

EXERCISES

DIRECTIONS: read this paragraph. Click on the sentence that you think is the topic sentence.

Paragraph B

Good health

Exercise is important for astronauts, especially on long space flights. The heart, blood vessels and muscles may be weak because the body does not work much in the weightless condition. Recreation, or activity done for relaxation, is also necessary on long space flights to ensure good mental health. Books, games and tape decks with recorded music can make the astronauts feel relaxed. Thus, good physical and mental health is essential for such travel.

Adapted from: English for communication and study skills: English Program Rajabhat Suan Dusit



LESSON 3: FINDING MAIN IDEAS

Score 1 / 5

Home

LEVEL I

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Adapted from: English for communication and study skills: English Program.Rajadibha



LESSON 3: FINDING MAIN IDEAS

Score 1 / 5

Home

LEVEL I

EXERCISES

DIRECTIONS: read this paragraph. Click on the sentence that you think is the topic sentence.

Paragraph C

Reading

Many readers find it difficult to recognize the grammar which appears in the text, and a large number of the words too. Very often, they do not understand some familiar words which have different meaning when existing in technical context. Moreover, text in science and technology often has long and complex sentences. In addition, foreign text contains thoughts and culture which are quite different from those of the readers. These are reasons why reading text in a foreign language is not easy.

From: English for communication and study skills: English Program.Rajadibha Suan Dusit



LESSON 3: FINDING MAIN IDEAS

Score 1 / 5

Home

LEVEL I

EXERCISES

DIRECTIONS: read this paragraph. Click on the sentence that you think is the topic sentence.

Paragraph D

Protecting children

There are various steps a parent can take to protect children when they are alone in the house. If children are sometimes home alone when the telephone rings, they should be told not to tell the caller their parents are away. Instead, they should say, "My parents can't come to the phone now." They should also lock the doors and not open them to a stranger for any reason. And the phone number of a trusted neighbor should be handy, so a child can call if he or she needs help.

Source: How to become an efficient reader, Sutanthawibul, S. 2003, p. 34.



LESSON 3: FINDING MAIN IDEAS

Score 1 / 5

Home

LEVEL 1

EXERCISES

DIRECTIONS: read this paragraph. Click on the sentence that you think is the topic sentence.

Paragraph E

Credit cards

It is very convenient to obtain goods and services since you have a credit card. You can use it almost anywhere in the world. There are many companies that provide this service and you can get a card easily. However, a credit card can be disadvantageous, too. You can still use it even when you do not have money in your account. Another reason is that the company that issues the card to you also charges you for any money that you do not pay each month (your debt). The company will charge a percentage of that amount in interest. If you owe the company \$ 500 and do not pay it that month, the company adds from \$6 to \$8.50 to the \$ 500. Then you owe from \$ 506 to \$ 508.50. The interest is added every month, so the bill that is not paid gets bigger and bigger.

Adapted from: English for communication and study skills: English Program.Rajadhat Suan Dusit



LESSON 3: FINDING MAIN IDEAS

Score 0 / 4

Home

LEVEL 2

EXERCISES

DIRECTION: read the following paragraphs, and find their main ideas.

Paragraph A

The exchange rate is the price of foreign currency. It is the amount of one currency that must be paid to obtain 1 unit of another currency. If a nation wants to buy goods and services (imports) from other nations, it must somehow obtain the foreign currencies needed to make payment for these imports. For example, if an American firm wishes to buy a German machine, it will need to pay in dollars or marks. The exchange rate between U.S. dollars and German marks is \$.50 for a mark. We can say that 2 marks can be exchanged for \$1. Suppose that the price of the German machine is 100,000 marks. This means that the American firm will have to give its bank \$ 50,000 to obtain the 100,000 marks to pay the German manufacturer.

Adapted from: SUT's English I lessons, 2000.

This paragraph is about

- ☐ the exchange rate and how to buy German currency
- ☐ the exchange rate and how to pay for goods of another country



LESSON 3: FINDING MAIN IDEAS

Score 1 / 4

Home

LEVEL 2

EXERCISES

DIRECTION: read the following paragraphs, and find their main ideas.

Paragraph B

In the middle of the 1980s, the economy in Thailand began to grow quickly. A lot of money and funds came freely in and out of the country. Later, in 1993, the Bangkok International Banking Facilities (BIBF) were formed. The BIBF allowed banks in Thailand to borrow foreign currency from abroad. As a result, a lot of foreign currency flowed into Thailand. But the problem began when these funds or money were used in the businesses of low productivity. In the middle of 1996 serious economic problems began in Thailand. Then in the middle of 1997 the government had to devalue the Thai currency. Because of the devaluation, foreign debts and imported goods became much more expensive. Many businesses were to close down.

Adapted from: SUT's English I lessons, 2000.

This paragraph is about

- ☐ The financial crisis in Thailand
- ☐ Thai economy in 1980s.



LESSON 3: FINDING MAIN IDEAS

Score 1 / 4

Home

LEVEL 2

EXERCISES

DIRECTION: read the following paragraphs, and find their main ideas.

Paragraph C

Thai farmers become poorer following the economic crisis in 1997-98 because of higher production costs. A survey by the Ministry of Agriculture showed that the net income of farmers fell by 6.29 per cent. The main reason for this was the higher cost of imported fertilizers and pesticides which resulted from the devaluation of the baht in mid 1997. The higher cost of fuel also contributed to higher costs.

Adapted from: SUT's English I lessons, 2000.

This paragraph is about

- ☐ Thai farmers become poorer because of the higher costs of production
- ☐ Thai farmers become poorer because of the devaluation of fertilizers and pesticides



LESSON 3: FINDING MAIN IDEAS

Score 2 / 4

Home

LEVEL 2

EXERCISES

DIRECTION: read the following paragraphs, and find their main ideas.

Paragraph D

During the economic crisis many people had financial difficulties. Many farmers had obtained loans outside the formal financial system. Such loans had increased from 9% to 17%. Some of these farmers had problems in paying their debts. A lot of farm and factory workers moved back to their hometowns due to the lay-off policy. They wished to return to find jobs in the cities again when the economy recovered. However, it will be difficult for these workers to get jobs since many industrial jobs have been done by machinery.

Adapted from: SUT's English I lessons, 2000.



This paragraph is about

- ☐ The difficult time Thai farmers had during the economic crisis
- ☐ The difficulties many people had during the economic crisis



Lesson 4: Skimming

LESSON 4: SKIMMING



- About the lesson
- Learning objectives
- Pre/Posttest
- Skimming
- Exercises

● Back

Hello, . Welcome to reading Lessons.


About the lesson

In this lesson, you will ...

- Skimming technique: you will learn how to read for a general idea of a text.
- Exercises: there are exercises to practice the skimming technique.
- After you finish the lesson, write your feedback about the lessons in Your Journal.

● Back

Learning objectives



You will be able to ...

- use the skimming technique to read short passages.
- read for the general idea of a text.

● Back

LESSON 4: SKIMMING

Home

Pre and Posttests

Direction: Skim the paragraph below and match it with the correct main idea.

What is the text about?

- a. Thai currency
- b. Ways to learn how to use a computer
- c. Things people do on the web.
- d. What is a web?
- e. What is the Internet?
- f. History of the Internet
- g. Benefits of computers

Paragraph 1

There are a number of ways to learn how to use a computer. For example, some companies provide computer classes at work for their staff. Most universities offer courses for their students in using computer programs. A book is another way to learn. There are many books about computers in bookstores and libraries. A final option is that you can learn from a friend. After a few hours of practice, you may be able to use a software program. Even though you may not be an expert, you will probably have fun!

Answer:

Hello, . Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

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- f. History of the Internet
- g. Benefits of computers

Paragraph 2

The Internet is a network of millions of computers linked together by telephone lines, fiberoptic cables, satellite, and microwave connections. The center of the Internet is a high-speed network of supercomputers.

Answer:

Hello, . Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

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- f. History of the Internet
- g. Benefits of computers

Paragraph 3

The World Wide Web, usually known as "the Web", is the part of Internet where millions of Web pages are connected. These pages contain texts, images, and sound from people all over the world. A typical Web page looks like a magazine page, but with your mouse you can click on "live" areas on the page to go to a new screen.

Answer:

Hello, . Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

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- f. History of the Internet
- g. Benefits of computers

Paragraph 4

You can use the web for research, business, entertainment, or personal interests. Some specific things people do on the Web are sending e-mail, going shopping, finding jobs, getting the latest news, ordering a meal, and making travel plans. And the list gets longer everyday!

Answer:

Hello, . Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

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Direction: Skim the paragraph below and match it with the correct main idea.

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- f. History of the Internet
- g. Benefits of computers

Paragraph 5

Our currency is the Thai Baht. It comes, typically, in 20, 50, 100, 500 and 1000 baht bank note denominations. And 1, 5 and 10 baht coins. Although you may find a few lower denominations such as the 10 baht bank note, but these are being phased out since the Asian economic crisis of the late 90's.

Answer:

Hello, . Welcome to reading Lessons.

LESSON 4: SKIMMING

answer



Back

Hello, . Welcome to reading Lessons.

LESSON 4: SKIMMING



- Skimming
- Tips of skimming
- Examples of skimming



● Back

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

What is skimming?



Skimming is reading for a general idea of a text.



● Next

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

What is skimming?



Readers look quickly at some words and skip unimportant ones.



● Next

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

What is skimming?



We often skim when we read newspaper, magazines, advertisements, or stories.



Next

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

What is skimming like?



Skimming is like looking at a photo.
Things you see in a photo can tell you the story.

Click here →



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



A man

A woman

A girl

A boy

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



a woman



at the Mall

at school

at a kiosk



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



a woman at a kiosk



carrying bananas

cooking

washing fruits



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



a woman at a kiosk carrying bananas



daytime

nighttime



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



APEC logo

OTOP logo

The Mall Logo

a woman at a kiosk carrying bananas daytime



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



APEC logo

OTOP logo

The Mall Logo

a woman at a kiosk carrying bananas daytime



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



a lot of bananas

a lot of durians

a lot of vegetables

a woman at a kiosk carrying bananas daytime OTOP logo



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Home

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



a stove / spoons / a refrigerator

boxes / big bowls / baskets

a woman at a kiosk carrying bananas daytime OTOP logo a lot bananas



Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Directions: Look at the photo below. **Drag and drop** the right words that match a person or things onto the photo.



a woman at a kiosk carrying bananas daytime OTOP logo a lot bananas
boxes / big bowls / baskets



Good! After skimming the picture, we learn that a woman possibly sell bananas as OTOP goods at a kiosk during daytime.

Next

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

What is skimming?



Skimming a paragraph is like skimming the picture.



Move your eyes quickly across the paragraph. Look for information (who, what, when or where) in the paragraph to find out what it is all about.

You do not look at every detail when skimming the picture. Similarly, you do not need to read every word in a paragraph.



Back

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING



Tips of Skimming

- Survey the whole passage first.
- Read the first and last sentences of each paragraph completely.
- **DO NOT read every word**, but **READ** quickly for ...
 - a. major words e.g. nouns, verbs, connectors (but, also, moreover,...)
 - b. words related to the title (if any)_
 - c. direction words e.g. first, next, after that, then, finally, etc._
 - d. number sequences e.g. first, second, third, etc.
 - e. words marked with *italic* or boldface or underlined type
 - f. pictures, charts, or graphs.

Reference: *The Arts of Efficient Reading* by Spache, G.D. & P.C. Berge.

● Back

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Examples of Skimming

Direction: Read the paragraph and choose the best main idea of the text.

Paragraph 1: Virus Sources

Email is now the **biggest** source of computer viruses. Why is this? **Previously**, viruses were transferred by floppy disks, and they spread slowly since users would **avoid** using unknown disks or had them scanned for viruses before using them. **Presently**, users use email widely, and they can exchange files much more quickly. Many new viruses have been transmitted through email and infect computers as easily as clicking on an icon. Today viruses can spread faster through email.

From Headway Science 7B: Biology by Vedavalli, Paul & Moorthy, 1983.

- ☐ Email is very useful today.
- ☐ Email can transfer text and images.
- ☐ Email is the biggest source of computer viruses.

That's right !

● Next

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Examples of Skimming

Direction: Read the paragraph and choose the best main idea of the text.

Paragraph 2: Thai Food

Thai food is not eaten with chopsticks, but with a fork and spoon. The spoon is held in the right hand and the fork is used to push food onto it. Since Thai food is prepared in small pieces, there is no need to use a knife. Thai food is generally not served in courses. All dishes are ordered together and eaten in whatever order they arrive.

Adapted from: Dinning in Bangkok.com

- ☐ How Thai food is eaten.
- ☐ How Thai food is cooked.
- ☐ How Thai food is set on the table.

Sorry ! This is not the main idea.

● Back

Hello, Welcome to reading Lessons.

LESSON 4: SKIMMING

Exercises

- Exercise I
- Exercise II
- Exercise III



● Back

LESSON 4: SKIMMING

Scores 0 / 5

Home

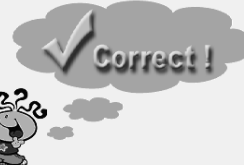
Exercise I: Skim the paragraph below and click on the best main idea.
Paragraph 1

There are a number of ways to learn how to use a computer. For example, some companies provide computer classes at work for their staff. Also, most universities offer courses for their students in using computer programs. A book is another way to learn. There are many books about computers in bookstores and libraries. A final option is that you can learn from a friend. After a few hours of practice, you may be able to use a software program. Even though you may not be an expert, you will probably have fun!

Source: SUT's English 1 curriculum (2002)

Main ideas

- ☐ Thai currency
- ☐ Ways to learn how to use a computer
- ☐ Things people do on the web
- ☐ What is a web?
- ☐ What is the Internet?
- ☐ History of the Internet
- ☐ Benefits of computers



LESSON 4: SKIMMING

Score 1 / 5

Home

Exercise I: Skim the paragraph below and click on the best main idea.
Paragraph 2

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LESSON 4: SKIMMING

Score 0 / 5

Home

Exercise I: Skim the paragraph below and click on the best main idea.

Paragraph 3

The World Wide Web, usually known as "the Web", is the part of Internet where millions of Web pages are connected. These pages contain texts, images, and sound from people all over the world. A typical Web page looks like a magazine page, but with your mouse you can click on "live" areas on the page to go to a new screen.

Source: SUTS English 1 curriculum (2002)

Main ideas

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- ☐ Things people do on the web
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- ☐ What is the Internet?
- ☐ History of the Internet
- ☐ Benefits of computers



LESSON 4: SKIMMING

Score 0 / 5

Home

Exercise I: Skim the paragraph below and click on the best main idea.

Paragraph 4

You can use the web for research, business, entertainment, or personal interests. Some specific things people do on the Web are sending e-mail, going shopping, finding jobs, getting the latest news, ordering a meal, and making travel plans. And the list gets longer everyday!

Main ideas

- ☐ Thai currency
- ☐ Ways to learn how to use a computer
- ☐ Things people do on the web
- ☐ What is a web?
- ☐ What is the Internet?
- ☐ History of the Internet
- ☐ Benefits of computers



LESSON 4: SKIMMING

Score 0 / 5

Home

Exercise I: Skim the paragraph below and click on the best main idea.

Paragraph 5

Our currency is the Thai Baht. It comes, typically, in 20, 50, 100, 500 and 1000 baht bank note denominations, 25 and 50 satangs, and 1, 5 and 10 baht coins. Although you may find a few lower denominations such as the 10 baht bank note, but these are being disappeared since the Asian economic crisis of the late 90's.

Main ideas

- ☐ Thai currency
- ☐ Ways to learn how to use a computer
- ☐ Things people do on the web
- ☐ What is a web?
- ☐ What is the Internet?
- ☐ History of the Internet
- ☐ Benefits of computers



LESSON 4: SKIMMING

Score 0 / 4

Home

EXERCISE 2: Skim the paragraphs below and match them with the appropriate main ideas on the top using drag and drop.

- a. The export of Mutmee
- b. The patterns of Mutmee
- c. The use of Mutmee clothes
- e. The promotion of Mutmee

1. One of the northeastern people's rich cultural heritage is the production of a unique silk fabric known as as Mutmee. Mutmee silk is done by tying the silk threads according to the pattern before they are dyed. Actually, Mutmee can be made of both silk and cotton. But Mutmee silk is much more popular.

d. How Matmee is made



LESSON 4: SKIMMING

Score 1 / 4

Home

EXERCISE 2: Skim the paragraphs below and match them with the appropriate main ideas on the top using drag and drop.

- a. The export of Mutmee
- c. The use of Mutmee clothes
- d. How Matmee is made
- e. The promotion of Mutmee

2. Typical Mutmee designs are nature motives: animals such as birds, serpents (large snakes), trees or flowers.

b. The patterns of Mutmee



LESSON 4: SKIMMING

Score 1 / 4

Home

EXERCISE 2: Skim the paragraphs below and match them with the appropriate main ideas on the top using drag and drop.

- a. The export of Mutmee
- b. The patterns of Mutmee
- c. The use of Mutmee clothes
- d. How Matmee is made

3. At the beginning of the 1980's, Mutmee was promoted in the villages of the Northeast by Queen Sirikit. Since then the manufacture of Mutmee silk has helped develop the economy of this poorest region of the country. Trade organizations under the patronage of the Queen help in the marketing.

e. The promotion of Mutmee



LESSON 4: SKIMMING

Score 1 / 4

Home

EXERCISE 2: Skim the paragraphs below and match them with the appropriate main ideas on the top using drag and drop.

- | | |
|------------------------------|---------------------------|
| a. The export of Mutmee | b. The patterns of Mutmee |
| c. The use of Mutmee clothes | d. How Matmee is made |
| e. The promotion of Mutmee | |

4. Previously, Mutmee was produced to use in a family, mostly in religious ceremonies (Visakha Bucha's or Maka Bucha's days).or on special days such as wedding days. Today, Mutmee clothes are now accepted as formal wear and are commonly seen at social meetings. Mutmee is popular among Thai men as well as women.



LESSON 4: SKIMMING

Score 0 / 4

Home

EXERCISE 3: Skim the paragraph below and click on the correct main idea.

Paragraph 1

One Tambon One Product (OTOP) was started by the present government. It began with one of the government's policies, to get rid of farmers' poverty. Since every Thai tambon (subdistrict) has a variety of local products, and local people has strong skills in developing things, In 2002 Thailand exported OTOP products for over 10 million baht. And it was expected that exports would be over 20 million baht in 2003.

Adapted from [One Tambon One Product](http://www.smethai.net/thr/07/2003) available at <http://www.smethai.net/thr/07/2003>

Main ideas

- ☐ The export of OTOP products
- ☐ The OTOP products
- ☐ Strengthening the OTOP
- ☐ The background of OTOP
- ☐ The objective of OTOP



LESSON 4: SKIMMING

Score 0 / 4

Home

EXERCISE 3: Skim the paragraph below and click on the correct main idea.

Paragraph 2

The OTOP project is to let people who live in communities to use their skills in manufacturing products. At the same time, the government and the private sector would help these people to develop the products and to look for the markets. By this way the government can create jobs, income and strengthen the communities.

Main ideas

- ☐ The export of OTOP products
- ☐ The OTOP products
- ☐ Strengthening the OTOP
- ☐ The background of OTOP
- ☐ The objective of OTOP



LESSON 4: SKIMMING

Score 0 / 4

Home

EXERCISE 3: Skim the paragraph below and click on the correct main idea.

Paragraph 3

Examples of the OTOP products are food and drinks, clothes and garments, herbal medicines, household decorations, and wooden furniture items. More than 10,000 items are now produced and developed under the OTOP project. About 460 items have been selected as good quality products.

Main ideas

- ☐ The export of OTOP products
- ☐ The OTOP products
- ☐ Strengthening the OTOP
- ☐ The background of OTOP
- ☐ The objective of OTOP



LESSON 4: SKIMMING

Score 0 / 4

Home

EXERCISE 3: Skim the paragraph below and click on the correct main idea.

Paragraph 4

To strengthen the OTOP, the OTOP committee has set guidelines to select the champions of products from each province and on the national level. This will make the people in each village try to improve the quality of their products all the time.


Main ideas

- ☐ The export of OTOP products
- ☐ The OTOP products
- ☐ Strengthening the OTOP
- ☐ The background of OTOP
- ☐ The objective of OTOP




Lesson 5: Scanning

LESSON 5: SCANNING



- About the lesson
- Learning objectives
- Pretest
- Scanning
- Exercises
- Posttest



● Back

Hello. Welcome to reading Lessons.


About the lesson

In this lesson, you will ...

- Scanning: the reading technique which is used for reading for specific details of a text.
- Exercises: to practice this reading technique.
- After you finish the lesson, write your feedback about the lessons in Your Journal.

● Back

Learning Objectives



You will be able to ...

- search for particular pieces of information in short passages.
- use scanning technique to read short passages.

● Back

LESSON 5: SCANNING

Pretest

Direction: Scan for the answer to the question below.

1. How many "advice"s are in the box below?



advise	advice	admire	advice
advisee	advice	addict	devise
advice	advise	advertise	advisor
device	admin	address	advice

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Pretest

Direction: Scan for the answer to the question below.

1. How many "advice"s are in the box below?

- ☐ 3
☐ 4
☐ 5
☐ 6

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Pretest

Direction: Scan for the answer to the question below.

2. You have 25 seconds to answer the question below.



Question: How many 'currency(ies)' are in the paragraph below?

The exchange rate is the price of foreign currency. It is the amount of one currency that must be paid to obtain 1 unit of another currency. If a nation wants to buy goods and services (imports) from other nations, it must obtain the foreign currencies to pay for these imports. If an American firm wishes to buy a German machine, it will need to pay in dollars or marks. The exchange rate between U.S. dollars and German marks is \$.50 for a mark. We can say that 2 marks can be exchanged for \$1.

Source: SUT's English 1's curriculum:unit 5 Economics (2002)

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Pretest

Direction: Scan for the answer to the question below.

2. You have 25 seconds to answer the question below.

Question: How many 'currency(ies)' are in the paragraph below?

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Pretest

Direction: Scan for the answer to the question below.

3. Scan for the answer the questions on the right.

Symbols	Currency Names
AUD	Australian Dollar
BEF	Belgian Franc
ND	Brunei Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
FRF	French Franc
GBP	British Pound
HKD	Hong Kong Dollar
IDR	Indonesian Rupiah
INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.1. How many countries use 'Franc' for their currencies?

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Pretest

Direction: Scan for the answer to the question below.

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INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.2. What is the currency of Iraq?

- ☐ Franc
- ☐ Rupee
- ☐ Dinar
- ☐ Riel



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Pretest

Direction: Scan for the answer to the question below.

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INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.3. What is the symbol of Laos currency?

☐ KAK

☐ KHR

☐ LKR

☐ LAK



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Pretest

Direction: Scan for the answer to the question below.

3. Scan for the answer the questions on the right.

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INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.4. What countries use 'Rupee' for their currencies?

☐ Indonesia and India

☐ India and Iraq

☐ India and Sri Lanka

☐ Sri Lanka and Iraq



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Pretest

Direction: Scan for the answer to the question below.

3. Scan for the answer the questions on the right.

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IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.5. What is the symbol of Swiss currency?

☐ CHE

☐ CFH

☐ CHF

☐ CSF



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING



- Scanning
- Tips of scanning
- Examples of scanning



● Back

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

Scanning is reading for specific information in a text.



● Next

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

Readers look quickly across the page until they find what they are looking for.



● Next

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

We scan when we want to look up meanings of words in a dictionary.



healthy

heap /hi:p/ n. [C] 1. a large number or amount of sth which is piled up in an untidy way: All his clothes are in a heap on the floor! 2. heaps [plural] (informal) a large number or amount; plenty: There's heaps of time before the train leaves. There are heaps of places to go to. (IDIOM) heaps better, more older, etc. (informal) much better, etc.

heat



Next

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

We also scan when we look for a phone number.



Jones Teresa 123 Clay Avenue 01-8956226



Next

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

Moreover, we scan when we look for particular numbers or percentage



Where the exports go

Jan-Sept 2002

Thailand's traditional and non-traditional export markets

	Value (US\$ mil)	Change (% 1-0-01)
Major markets	33,186	-4.8
US	10,020	-0.2
Japan	7,230	-2.8
EU (15)	7,881	-7.9
ASEAN (5)	0,541	0.3
Minor markets	7,133	7.8
Hong Kong	2,718	6.7
Taiwan	1,426	-2.6
South Korea	1,021	14.5
Australia/New Zealand	1,377	16.8
Canada	576	-2.1
New markets	8,075	8.7
China	2,305	12.8
Indonesia	1,091	4.1
Middle East	1,039	15
Africa	1,084	41
Latin America	877	5.7
Eastern Europe	348	30.2
India	313	-12.6
South Asia	789	4.7
Others	1,011	40.3
Total	50,549	2.6

Source: Export Promotion Department

Next

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

Very often, we scan when we look for a job in a newspaper.



● Next

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

What is scanning?

We often use scanning in everyday's reading.



● Back

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Tips of scanning

- Ask yourself what you want to know.
- Survey the text lay-out first in order to help you find the information quickly.
- Move your eyes quickly down the page until you find what you want.
- Concentrate on finding specific words and phrases. Skip unnecessary information.
- It is not necessary to understand every word.
- Reread the information you find to make sure you get the right answer.



● Back

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Examples of scanning

2. You have 7 seconds to find the number.

Question: How many '583's are there in this box?



853	538	638	583	568
638	583	553	358	563
683	538	385	593	583



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Examples of scanning

2. You have 7 seconds to find the number.

Question: How many '583's are there in this box?

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Examples of scanning

3. You have 8 seconds to find the word.

Click on the word 'industrious'.



idea	impossible	include
ignorant	improve	information
illustrate	increase	injure
imitate	industrial	innocence
immediately	industrious	inquire
immigrant	industry	insane
impatience	influence	insanity



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Examples of scanning

4. Read the paragraph below and answer the question.

Question: How many ways can you learn how to use a computer?

☐ 3

☐ 4

☐ 5

☐ 6

There are a number of ways to learn how to use a computer. For example, some companies provide computer classes at work for their staff. Also, more universities offer day and night courses for their students in using application software. A book is another way to learn. There are many books about computers in bookstores and libraries. A final option is that you can learn from a friend. After a few hours of practice, you may be able to use a software program. Even though you may not be an expert, you will probably have fun.

Source: SUT's English 1 curriculum: unit 3 Technofocus (2002)



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING



● Back

Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Exercises



Exercise 1

Exercise 2

Exercise 3

Exercise 4

Exercise 5

Exercise 6

Exercise 7

Exercise 8

Exercise 9



● Back

LESSON 5: SCANNING

Exercise 1 : You have 7 seconds. Find the phone number of Jones who lives at 232 Pins Avenue. Then **CLICK** on his or her phone number.



Jones, Selena	325 Oak Avenue	01-5462611
Jones, Selena	323 Pine Avenue	01-5462654
Jones, Selena	232 Herb Street	01-5462611
Jones, Sonay	254 Baily Lane	01-1603687
Jones, Tailor	232 Pinn Avenue	06-2323687
Jones, Teresa	123 Clay Avenue	01-8956226
Jones, Terra	393 East Street	09-8795613
Jones, Terra	223 Pine Street	06-5446320
Jones, Terry	232 Pine Avenue	01-1611778
Jones, Tina	73/1 Dorsen Street	09-1605885
Jones, Tina	323 Pine Avenue	01-1603232
Jones, Tina	17 Grand Road	01 7356689



LESSON 5: SCANNING

Exercise 2 : You have 10 seconds to find the word(s).

Question : How many 'computer's can you see in this paragraph?

Answer :



Computers are helpful at work in many ways. First, they are fast. They work with information much more quickly than a person does. Also, computers can manage lots of information at the same time. In addition, they keep or store information for a long time. They do not forget things they people do. Furthermore, the information kept in the computer memory can be retrieved and re-used at a later time. Finally, computers are almost always correct. Even though they are not perfect, they usually make fewer mistakes than people do.

Source: SUT'S English 1's curriculum (2002)



LESSON 5: SCANNING

Exercise 3 : You have 10 seconds to find the advantages (good points) of the computers.

Question : How many advantages of the computers can you find in the above paragraph?

Answer :



Computers are helpful at work in many ways. First, they are fast. They work with information much more quickly than a person does. Also, computers can manage lots of information at the same time. In addition, they keep or store information for a long time. They do not forget things they people do. Furthermore, the information kept in the computer memory can be retrieved and re-used at a later time. Finally, computers are almost always correct. Even though they are not perfect, they usually make fewer mistakes than people do.

Source: SUT's English 1 curriculum (2002)



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 4 : MATCHING

DIRECTIONS: you have 15 seconds to look up the meanings of the words from the dictionary below.
Drag and drop the right words to their correct meanings.



Chink v. to make a light ringing sound.

Chisel n. [C] a tool with a sharp end that is used for cutting or shaping wood, stone, etc.

Chivalry n. [U] behavior which shows particular respect, usually of men towards women.

Chives n. [plural] a plant with purple flowers and long thin leaves that are used in cooking. Chives taste similar to onions.

Cholera n. [U] a serious disease that causes diarrhea and vomiting.

Chink

Chisel

Chivalry

Chives

Cholera

1. A plant with purple flowers and long thin leaves that are used in cooking.



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 4 : MATCHING

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Cholera n. [U] a serious disease that causes diarrhea and vomiting.

Chink

Chisel

Chivalry

Chives

Cholera

2. A tool with a sharp end that is used for cutting or shaping wood, stone, etc.

...



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 4 : MATCHING

DIRECTIONS: you have 15 seconds to look up the meanings of the words from the dictionary below.
Drag and drop the right words to their correct meanings.



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Chink

Chisel

Chivalry

Chives

Cholera

3. To make a light ringing sound.



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 4 : MATCHING

DIRECTIONS: you have 15 seconds to look up the meanings of the words from the dictionary below.
Drag and drop the right words to their correct meanings.



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Cholera n. [U] a serious disease that causes diarrhea and vomiting.

Chink

Chisel

Chivalry

Chives

Cholera

4. A serious disease that causes diarrhea and vomiting.



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 4 : MATCHING

DIRECTIONS: you have 15 seconds to look up the meanings of the words from the dictionary below.
Drag and drop the right words to their correct meanings.



Chink v. to make a light ringing sound.

Chisel n. [C] a tool with a sharp end that is used for cutting or shaping wood, stone, etc.

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Chives n. [plural] a plant with purple flowers and long thin leaves that are used in cooking. Chives taste similar to onions.

Cholera n. [U] a serious disease that causes diarrhea and vomiting.

Chink

Chisel

Chivalry

Chives

Cholera

5. Behavior which shows particular respect, usually of men towards women.



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 5 : MATCHING

DIRECTIONS: you have 20 seconds to look up the meanings of the words from the dictionary below.
Drag and drop the right words to their correct meanings.



Chlorine n. [U] a greenish-yellow gas with a strong smell, that is used for making water safe to drink or to swim in.

Choir n. [C] a group of people that sing together.

Choke v. [I, T] 1. to be or to make sb unable to breathe because sth is stopping air getting into the lungs. 2. [T] (usually passive) **choke sth (up) (with sth)** to fill a passage, space, etc. so that nothing can pass through.

Chirp n. [C] the short high sound that a small bird makes.

Chiropodist n. [C] a person whose job is to care for people's feet.

Choke

Choir

Chirp

Chlorine

Chiropodist

1. A person's job is to care for people's feet.



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 5 : MATCHING

DIRECTIONS: you have 20 seconds to look up the meanings of the words from the dictionary below.

Drag and drop the right words to their correct meanings.



- Chlorine** n. [U] a greenish-yellow gas with a strong smell, that is used for making water safe to drink or to swim in.
- Choir** n. [C] a group of people that sing together.
- Choke** v. [I, T] 1. to be or to make sb unable to breathe because sth is stopping air getting into the lungs. 2. [T] (usually passive) **choke sth (up) (with sth)** to fill a passage, space, etc. so that nothing can pass through.
- Chirp** n. [C] the short high sound that a small bird makes.
- Chiropodist** n. [C] a person whose job is to care for people's feet.

Choke Choir Chirp Chlorine Chiropodist

2. A group of people who sing together especially in a church.



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 5 : MATCHING

DIRECTIONS: you have 20 seconds to look up the meanings of the words from the dictionary below.

Drag and drop the right words to their correct meanings.



- Chlorine** n. [U] a greenish-yellow gas with a strong smell, that is used for making water safe to drink or to swim in.
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- Chirp** n. [C] the short high sound that a small bird makes.
- Chiropodist** n. [C] a person whose job is to care for people's feet.

Choke Choir Chirp Chlorine Chiropodist

3. The short high sound that a small bird makes. .



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 5 : MATCHING

DIRECTIONS: you have 20 seconds to look up the meanings of the words from the dictionary below.

Drag and drop the right words to their correct meanings.



- Chlorine** n. [U] a greenish-yellow gas with a strong smell, that is used for making water safe to drink or to swim in.
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- Chirp** n. [C] the short high sound that a small bird makes.
- Chiropodist** n. [C] a person whose job is to care for people's feet.

Choke Choir Chirp Chlorine Chiropodist

4. To be or to make someone unable to breathe because something is stopping air getting into the lungs.



LESSON 5: SCANNING

Score 2 / 5

Home

EXERCISE 5 : MATCHING

DIRECTIONS: you have 20 seconds to look up the meanings of the words from the dictionary below.

Drag and drop the right words to their correct meanings.



- Chlorine** n. [U] a greenish-yellow gas with a strong smell, that is used for making water safe to drink or to swim in.
- Choir** n. [C] a group of people that sing together.
- Choke** v. [I, T] 1. to be or to make sb unable to breathe because sth is stopping air getting into the lungs. 2. [T] (usually passive) **choke sth (up) (with sth/to fill a passage,** space, etc. so that nothing can pass through.
- Chirp** n. [C] the short high sound that a small bird makes.
- Chiropodist** n. [C] a person whose job is to care for people's feet.

Choke Choir Chirp Chlorine Chiropodist

5. A greenish-yellow gas with a strong smell, that is used for making water safe to drink or to swim in.



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 6 : Scan these ads briefly and click on the correct answers the following questions.

2002 BENZ CL500
Silver, Like New, Low
Mileage, Full Option
THB 10, 800, 000.-
T. 0-999-222-55

2002 BMW 318
Auto, black,
6 air bags, CD player
1.58 mil.
Tel. 01-3322091

93 BENZ 220E
Original Condition,
Metallic Blue, Air Bag,
Max, Auto
THB 800, 000.-
T. 02-351-8016

9 Month Brand New
CHEVROLET ZAFIRA
Yellow, ABS,
Double-Airbag
Only 845, 000 Bht.
T. 01-3355649

WANTED TO BUY
ALL KINDS OF USED CAR
.....CALL.....
DANNY 01-9094645
PIK 01-5642651

TOYOTA PRADO
3400 CC, Air Bag,
ABS, Immaculate
1.38 M.
T. 01-9871212

1. Which car is the most expensive?

- ☐ Benz 220E
- ☐ Benz CL500
- ☐ BMW 318
- ☐ Chevrolet Zafira



LESSON 5: SCANNING

Score 0 / 5

Home

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9 Month Brand New
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.....CALL.....
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PIK 01-5642651

TOYOTA PRADO
3400 CC, Air Bag,
ABS, Immaculate
1.38 M.
T. 01-9871212

2. How much does '93 BENZ 220E cost?

- ☐ More than 10 million baht
- ☐ 1.38 million baht
- ☐ 845, 000 baht
- ☐ 800, 000 baht



LESSON 5: SCANNING

Score 0 / 5

Home

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PIK 01-5642651

TOYOTA PRADO
3400 CC, Air Bag,
ABS, Immaculate
1.38 M.
T. 01-9871212

3. What color is BMW 318?

- ☐ Silver
☐ Blue
☐ Yellow
☐ Black



LESSON 5: SCANNING

Score 0 / 5

Home

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2002 BENZ CL500
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THB 10, 800, 000.-
T. 0-999-222-55

2002 BMW 318
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ALL KINDS OF USED CAR
.....CALL.....
DANNY 01-9094645
PIK 01-5642651

TOYOTA PRADO
3400 CC, Air Bag,
ABS, Immaculate
1.38 M.
T. 01-9871212

4. If you want to sell your car, what telephone number should you call?

- ☐ 01-3322091
☐ 01-5642651
☐ 01-9871212
☐ 01-3355649



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 6 : Scan these ads briefly and click on the correct answers the following questions.

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Original Condition,
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Double-Airbag
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WANTED TO BUY
ALL KINDS OF USED CAR
.....CALL.....
DANNY 01-9094645
PIK 01-5642651

TOYOTA PRADO
3400 CC, Air Bag,
ABS, Immaculate
1.38 M.
T. 01-9871212

5. If you want a car with double airbags, which car should you buy?

- ☐ Benz 220E
☐ BMW 318
☐ Toyota Prado
☐ Chevrolet Zafira



LESSON 5: SCANNING

Score 0 / 6

Home

EXERCISE 7: Scan this text and fill in the blanks with the appropriate words.

Thailand's new export market

China is one of Thailand's major export markets. Thailand can export more goods to China. Thailand expands its fruit markets in China. Thai rambutans, jackfruit, durians and mangoes are expected to find a large market in China as Chinese people have more buying power. Thailand could export more fragrant rice to China from 3.9 million tonnes in 2002 to 4 million tonnes in 2003. The export of Thai shrimps and chicken was likely to improve in 2003 because the government has solved the problems of food safety.

Adapted from Export available at <http://bangkokpost.com/news>

1. _____ is one of Thailand's major export markets.



LESSON 5: SCANNING

Score 0 / 6

Home

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Adapted from Export available at <http://bangkokpost.com/news>

2. Thailand expands its _____ markets in China.



LESSON 5: SCANNING

Score 0 / 6

Home

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Adapted from Export available at <http://bangkokpost.com/news>

3. The fruits that Thailand exports to China are _____, jackfruit, durians and mangoes.



LESSON 5: SCANNING

Score 0 / 6

Home

EXERCISE 7: Scan this text and fill in the blanks with the appropriate words.

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Adapted from Export available at <http://bangkokpost.com/news>

4. Thailand could export fragrant rice to China _____ tonnes in 2002.



LESSON 5: SCANNING

Score 0 / 6

Home

EXERCISE 7: Scan this text and fill in the blanks with the appropriate words.

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Adapted from Export available at <http://bangkokpost.com/news>

5. Thailand could export more fragrant rice in | _____ |



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 8: Scan the text below answer the questions as followed.

Thailand's shopping places

The most convenient places to buy clothes in Thailand are Bangkok's department stores. Of course, people may find even cheaper clothes in markets, for example at the Pratunam Market near the Indra Hotel or at Phrakong down at Soi 71 Sukhumvit Rd.

However, the department stores are best prepared for foreign visitors who usually require larger sizes clothes. In addition, the department stores are a one-stop shopping place where they can buy clothes, footwear, toiletries and other items for daily needs. Also, it's usually a pleasant air-conditioned place where they can enjoy shopping all day, without worrying about too hot weather. Furthermore, the salespersons there can speak at least some English - enough for the talk that is needed to buy items. Those foreigners who want exclusive items which cannot be found in the department stores can go to hundreds of boutiques and specialty shops around Siam Square.

source: <http://www.saqadeethailand.com/travelinfo/shop/clothes.html>

1. Where is the place where people can buy cheap clothes?

- ☐ At department stores
- ☐ At markets
- ☐ At specialty shops



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 8: Scan the text below answer the questions as followed.

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source: <http://www.sagadeethailand.com/travelinfo/shop/clothes.html>

2. Where is the best place where foreigners can find large-sized clothes?

- ☐ At department stores
- ☐ At markets
- ☐ At specialty shops



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 8: Scan the text below answer the questions as followed.

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source: <http://www.sagadeethailand.com/travelinfo/shop/clothes.html>

3. How many good points of department stores are there for foreign visitors?

- ☐ 3
- ☐ 4
- ☐ 5



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 8: Scan the text below answer the questions as followed.

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The most convenient places to buy clothes in Thailand are Bangkok's department stores. Of course, people may find even cheaper clothes in markets, for example at the Pratunam Market near the Indra Hotel or at Phrakonong down at Soi 71 Sukhumvit Rd.

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source: <http://www.sagadeethailand.com/travelinfo/shop/clothes.html>

4. According to the passage, what is **NOT** the good points of department stores. ?

- ☐ They are usually air-conditioned.
- ☐ They are usually located near the bus stops.
- ☐ They have clothes in large sizes foreigners wants



LESSON 5: SCANNING

Score 1 / 5

Home

EXERCISE 8: Scan the text below answer the questions as followed.

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source: <http://www.saqadeethailand.com/travelinfo/shop/clothes.html>

5. If you cannot find any clothes you like in a department store, where can you go?

- ☐ At department stores
- ☐ At markets
- ☐ At specialty shops



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 9: Scan this text and fill in the blanks with the appropriate words.

Somrak Kamsing



Mr. Somrak Kamsing, born on January 16, 1973 at Baan Noan Somboon, Baan Had Sub-district, is the second son of Mr. Dang and Mrs. Prayoon Kamsing. A son of a boxer, Somrak was trained to box by his own father and later by Mr. Narong Kongnarong, a friend of his father's, who runs a boxing camp. Somrak Kamsing began boxing when he was only seven, and won a 90-baht reward.

Mr. Somrak Kamsing got a job in the Royal Navy and became an amateur boxer of the Navy Club Team. He represented Thailand in the 26th Olympic Games in Atlanta, the U.S.A. and won a gold medal.

1. Somrak was born on



LESSON 5: SCANNING

Score 0 / 5

Home

EXERCISE 9: Scan this text and fill in the blanks with the appropriate words.

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Mr. Somrak Kamsing got a job in the Royal Navy and became an amateur boxer of the Navy Club Team. He represented Thailand in the 26th Olympic Games in Atlanta, the U.S.A. and won a gold medal.

2. His father's name is Mr.



LESSON 5: SCANNING

Score 0 / 6

Home

EXERCISE 9: Scan this text and fill in the blanks with the appropriate words.

Somrak Kamsing



Mr. Somrak Kamsing, born on January 16, 1973 at Baan Noan Somboon, Baan Had Sub-district, is the second son of Mr. Dang and Mrs. Prayoon Kamsing. A son of a boxer, Somrak was trained to box by his own father and later by Mr. Narong Kongnarong, a friend of his father's, who runs a boxing camp. Somrak Kamsing began boxing when he was only seven, and won a 90-baht reward.

Mr. Somrak Kamsing got a job in the Royal Navy and became an amateur boxer of the Navy Club Team. He represented Thailand in the 26th Olympic Games in Atlanta, the U.S.A. and won a gold medal.

3. He started boxing when he was years old.



LESSON 5: SCANNING

Score 0 / 6

Home

EXERCISE 9: Scan this text and fill in the blanks with the appropriate words.

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Mr. Somrak Kamsing, born on January 16, 1973 at Baan Noan Somboon, Baan Had Sub-district, is the second son of Mr. Dang and Mrs. Prayoon Kamsing. A son of a boxer, Somrak was trained to box by his own father and later by Mr. Narong Kongnarong, a friend of his father's, who runs a boxing camp. Somrak Kamsing began boxing when he was only seven, and won a 90-baht reward.

Mr. Somrak Kamsing got a job in the Royal Navy and became an amateur boxer of the Navy Club Team. He represented Thailand in the 26th Olympic Games in Atlanta, the U.S.A. and won a gold medal.

4. He got baht for his first boxing fight.



LESSON 5: SCANNING

Score 0 / 6

Home

EXERCISE 9: Scan this text and fill in the blanks with the appropriate words.

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Mr. Somrak Kamsing, born on January 16, 1973 at Baan Noan Somboon, Baan Had Sub-district, is the second son of Mr. Dang and Mrs. Prayoon Kamsing. A son of a boxer, Somrak was trained to box by his own father and later by Mr. Narong Kongnarong, a friend of his father's, who runs a boxing camp. Somrak Kamsing began boxing when he was only seven, and won a 90-baht reward.

Mr. Somrak Kamsing got a job in the Royal Navy and became an amateur boxer of the Navy Club Team. He represented Thailand in the 26th Olympic Games in Atlanta, the U.S.A. and won a gold medal.

5. He got a gold medal in the in Atlanta.



LESSON 5: SCANNING

Posttest

Direction: Scan for the answer to the question below.

1. How many 'device's are in the box below? _____.



devise	advice	admire	device
devisee	device	addict	devise
device	devide	deviser	devising
demice	admin	device	advice



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Posttest

Direction: Scan for the answer to the question below.

1. How many 'device's are in the box below? _____.

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Posttest

Direction: Scan for the answer to the question below.

2. You have 20 seconds to answer the question below.

Question: How many 'exchange(d)' are in the paragraph below?



The exchange rate is the price of foreign currency. It is the amount of one currency that must be paid to obtain 1 unit of another currency. If a nation wants to buy goods and services (imports) from other nations, it must obtain the foreign currencies to pay for these imports. If an American firm wishes to buy a German machine, it will need to pay in dollars or marks. The exchange rate between U.S. dollars and German marks is \$.50 for a mark. We can say that 2 marks can be exchanged for \$1.

Source: SUT's English 1's curriculum:unit 5 Economics (2002)



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Posttest

Direction: Scan for the answer to the question below.

2. You have 20 seconds to answer the question below.

Question: How many 'exchange(d)' are in the paragraph below?

☐ 3

☐ 4

☐ 5

☐ 6



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Posttest

Direction: Scan for the answer to the question below.

3. Scan the answers for the questions on the right.

Symbol	Currency Name
AUD	Australian Dollar
BEF	Belgian Franc
ND	Brunei Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
FRF	French Franc
GBP	British Pound
HKD	Hong Kong Dollar
IDR	Indonesian Rupiah
INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.1. How many countries use 'Dollar' for their currencies?

☐ 3

☐ 4

☐ 5

☐ 6



Hello, Welcome to reading Lessons.

LESSON 5: SCANNING

Home

Posttest

Direction: Scan for the answer to the question below.

3. Scan the answers for the questions on the right.

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AUD	Australian Dollar
BEF	Belgian Franc
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CAD	Canadian Dollar
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FRF	French Franc
GBP	British Pound
HKD	Hong Kong Dollar
IDR	Indonesian Rupiah
INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee

3.2. What is the currency of Cambodia?

☐ Franc

☐ Rupee

☐ Dinar

☐ Riel



Hello, Welcome to reading Lessons.

Home

Posttest

Direction: Scan for the answer to the question below.

3. Scan the answers for the questions on the right.

Symbol	Currency Name
AUD	Australian Dollar
BEF	Belgian Franc
ND	Brunei Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
FRF	French Franc
GBP	British Pound
HKD	Hong Kong Dollar
IDR	Indonesian Rupiah
INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee


3.3. What is the symbol of Hong Kong currency?

☐ HDK

☐ HKD

☐ DHK

☐ KDH



Hello, Welcome to reading Lessons.

Home

Posttest

Direction: Scan for the answer to the question below.

3. Scan the answers for the questions on the right.

Symbol	Currency Name
AUD	Australian Dollar
BEF	Belgian Franc
ND	Brunei Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
FRF	French Franc
GBP	British Pound
HKD	Hong Kong Dollar
IDR	Indonesian Rupiah
INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee


3.4. What country uses 'Won' for its currency?

☐ Canada

☐ Belgium

☐ Brunei

☐ Korea



Hello, Welcome to reading Lessons.

Home

Posttest

Direction: Scan for the answer to the question below.

3. Scan the answers for the questions on the right.

Symbol	Currency Name
AUD	Australian Dollar
BEF	Belgian Franc
ND	Brunei Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
FRF	French Franc
GBP	British Pound
HKD	Hong Kong Dollar
IDR	Indonesian Rupiah
INR	Indian Rupee
IQD	Iraqi Dinar
JPY	Japanese Yen
KHR	Cambodian Riel
KRW	Korean Won
LAK	Laos Kip
LKR	Sri Lankan Rupee


3.5 What is the symbol of Brunei currency?

☐ NB

☐ BEF

☐ ND

☐ CAD



Hello, Welcome to reading Lessons.

5.3.4 Grammar and Review Lessons

There are two lessons for grammar, which are Lesson 7: If-clauses and Lesson 8: Relative clauses. Similar to other lessons, each grammar lesson has an introduction (lesson objectives and content), pre/posttests, lesson presentation and exercises. The pages are presented as follows.

Lesson 7: If clauses

LESSON 7: IF CLAUSES



- About the lesson
- Learning objectives
- Pre/Posttest
- If clauses
- Exercises

[Back](#)

Hello, Welcome to reading Lessons.

About the lesson

This lesson includes ...

- If-clauses: you will learn about the definition, purposes and structure, and types of If-clauses. However, only If-clause Type 1 will be focused in detail.
- Exercises: there are exercises for you to practice your grammar skill.
- Pre and Posttests: take the test to see how much you have known about the lesson
- After the lesson, write your comment about the lesson in Your Journal.

[Back](#)

Learning Objectives



You will be able to ...

- understand the characteristics of If-clauses, and their functions.
- use the correct forms of If-clause: Type 1.

● Back

LESSON 7: IF CLAUSES

Home

Pre and Posttests

Direction: choose the best answer.

1. If you want to exchange some money, you _____ to the Bangkok bank on Main Street.

- ☐ go
- ☐ goes
- ☐ must go
- ☐ should go



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

Home

Pre and Posttests

Direction: choose the best answer.

2. She _____ you if you help her.

- ☐ give
- ☐ gives
- ☐ gave
- ☐ will give



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

[Home](#)

Pre and Posttests

Direction: choose the best answer.

3. If someone breaks into your house, you _____ the police right away.

- ☐ call
- ☐ will call
- ☐ calling
- ☐ should call



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

[Home](#)

Pre and Posttests

Direction: choose the best answer.

4. I will be grateful if you _____ these boxes for me.

- ☐ carry
- ☐ carries
- ☐ carried
- ☐ should carry



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

[Home](#)

Pre and Posttests

Direction: choose the best answer.

5. If you look carefully, you _____ your name on the list.

- ☐ find
- ☐ will find
- ☐ are finding
- ☐ will be found



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

Home

Pre and Posttests

Direction: choose the best answer.

6. You harder if you want to pass the exam.

- ☐ should study
- ☐ will be study
- ☐ cannot study
- ☐ must not study



Hello. Welcome to reading Lessons.

LESSON 7: IF CLAUSES

Home

Pre and Posttests

Direction: choose the best answer.

7. Ice if you leave it outside the fridge.

- ☐ melts
- ☐ will melt
- ☐ may melt
- ☐ must melt



Hello. Welcome to reading Lessons.

LESSON 7: IF CLAUSES

Home

Pre and Posttests

Direction: choose the best answer.

8. If the oil price goes up, the cost production of many goods usually higher.

- ☐ gets
- ☐ got
- ☐ is getting
- ☐ must get



Hello. Welcome to reading Lessons.

LESSON 7: IF CLAUSES

[Home](#)

 Pre and Posttests

Direction: choose the best answer.

9. If you _____ your pen, you can get one at the shop here.


- ☐ do not have
- ☐ cannot have
- ☐ will not have
- ☐ did not have



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

[Home](#)

 Pre and Posttests

Direction: choose the best answer.

10. If you throw a stone into the water, it _____.

- ☐ sinks
- ☐ may sink
- ☐ will sink
- ☐ is sinking



Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

[answer](#)

SCORES

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[Back](#)

Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

If-Clauses



- What are if-clauses?
- What are if-clauses for?
- What is the structure of if-clauses ?
- How many types are there ?
- If-clauses: Type 1

● Back

LESSON 7: IF CLAUSES

What are If-clauses?

Read the sentences below.

What will you do if you get an F in Math?



Well, *if I get an F*, I will study harder next term.



If I get F, I will not tell Mom. She must be very angry.



If I get an F in Math, I will ask my teacher why. I think I'm good at it.

● Next

LESSON 7: IF CLAUSES

What are If-clauses?



From these answers, you can see that *If-Clauses* or *conditional sentences* refer to the actions that are not happening or did not actually happen.

But the sentences express the result of the condition. That is, Action A will happen if Action B happens.

● Back

LESSON 7: IF CLAUSES

What are If-clauses for?



We use If-Clauses ...

● to make predictions.

E.g. If the train arrives on time, we will be there before noon.



● Next

LESSON 7: IF CLAUSES

What are If-clauses?



● to give advice.

E.g. If I were you, I would study hard.



● Next

LESSON 7: IF CLAUSES

What are If-clauses for?



● to discuss mistakes.

E.g. If I had told him the truth, he would not misunderstand me.



● Next

LESSON 7: IF CLAUSES

What are If-clauses for?



● to express dreams.

E.g. If I won the first-prize lottery, I would buy a new house.



● Next

LESSON 7: IF CLAUSES

What are If-clauses for?



● to make apologies.

E.g. If I had listened to you, I would not have done such a silly thing.



● Back

LESSON 7: IF CLAUSES

What is the structure of If-clauses ?

If + subordinate clause , main clause

Examples:

If I have time, I will visit Wat Pho.

If I were rich, I would travel around the world.

If he had talked to me first, I would have forgiven him.



● Back

LESSON 7: IF CLAUSES

How many types of If-clauses are there?



There are 3 main types of If-Clauses.

- ☞ Type 1: Future possible
- ☞ Type 2: Present Unreal
- ☞ Type 3: Past Unreal



● Back

LESSON 7: IF CLAUSES

TYPE 1: FUTURE POSSIBLE



The sentence refers to the situation that will, may or may not possibly happen in the future.

Example:

If it rains, children will play inside.

You will not pass the exam if you do not study hard.



● Back

LESSON 7: IF CLAUSES

TYPE 2: PRESENT UNREAL



The sentence refers to the situation that is not real (true) at the present time.

Example: If I were a bird, I would fly high in the sky.

Sarah's mother would be unhappy if she saw her wear this ugly dress.



● Back

LESSON 7: IF CLAUSES

TYPE 3: PAST UNREAL



The sentence refers to *the situation that did not happen in the past*.

Example:

If he had not missed the bus yesterday, he would not have been late.

Martin would have passed the test if he had studied hard.



● Back

LESSON 7: IF CLAUSES

If-Clause Type I



As you know, there are 8 major types of If-Clauses. But the *If-Clause: Type 1* is mainly focused in English 1's economic lessons.

Let's study!

There are different basic patterns of **If-Clause: Type 1**: which are...

Pattern A

Pattern B

Pattern C



● Back

LESSON 7: IF CLAUSES

If-Clause Type I

Pattern A

If	present simple,	future simple.
(subordinate clause)		(main clause)



The speaker *thinks* that when Action A happens, Action B may or may not happen.

Example: If you work hard, you will succeed.



(I think) you will succeed if you work hard.

● Next

LESSON 7: IF CLAUSES

Example: You will be strong soon if you exercise everyday.

I think exercises will make you strong.



No comma is used when the *main clause* is at the beginning.

● Next

LESSON 7: IF CLAUSES

Score 0 / 5

Home



Let's practice.

Practice 1: Fill in the boxes with the correct verb forms.

Example: If she goes to our party, she (meet) will meet John there.

1. He will be surprised if she (win) the beauty contest.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Let's practice.

Practice 1: Fill in the boxes with the correct verb forms.

Example: If she goes to our party, she (meet) will meet John there.

2. Chemistry is very difficult. If you do not study hard, you (not pass) the exam.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Let's practice.

Practice 1: Fill in the boxes with the correct verb forms.

Example: If she goes to our party, she (meet) will meet John there.

3. If the pizza does not arrive in 10 minutes, we (eat) sandwiches instead.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Let's practice.

Practice 1: Fill in the boxes with the correct verb forms.

Example: If she goes to our party, she (meet) will meet John there.

4. I (miss) ... you if you move to Bangkok.



LESSON 7: IF CLAUSES

If-Clause Type I

Pattern B

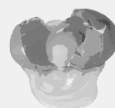
If	<u>present simple.</u>	<u>present simple.</u>
	(subordinate clause)	(main clause)



It is used for a general fact or a person's habit.
'if' means 'when' or 'whenever'.

Example 1: If you drop an egg, it breaks.

This is a fact. It is always true.



Next

LESSON 7: IF CLAUSES

Example 2: Water boils if we heat it to 100 degrees Celsius.

This is a fact. It is always true.



Next

LESSON 7: IF CLAUSES

Example 3: If Kate feels unhappy, she always reads books.



This is a habit. She always reads books when she is sad.



Notes: The sentences below have different meanings.

If-Clauses

If Kate feels unhappy, she always reads.

books.

Meanings

Whenever Kate feels back, she always read books.

If Kate feels unhappy, she will read books.

The speaker thinks that Kate will read books if she is sad. However, she may or may not do so.



Next

LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 2: Fill in the boxes with the correct verb forms.

Example: Tim usually rides a motorcycle if he (go) goes to the river.

1. If my mother (cook) | . she always makes something delicious.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 2: Fill in the boxes with the correct verb forms.

Example: Tim usually rides a motorcycle if he (go) goes to the river.

2. If tourists (need) a visa, they go to an embassy.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 2: Fill in the boxes with the correct verb forms.

Example: Tim usually rides a motorcycle if he (go) goes to the river.

3. If he has any trouble, his mother always (help) him.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 2: Fill in the boxes with the correct verb forms.

Example: Tim usually rides a motorcycle if he (go) goes to the river.

4. I usually (come) home late if I have a class in the evening.



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 2: Fill in the boxes with the correct verb forms.

Example: Tim usually rides a motorcycle if he (go) goes to the river.

5. You need an ID card if you (want) to apply for a driver's license.



LESSON 7: IF CLAUSES

If-Clause Type I

Pattern C

If **present simple.** **modal + infinitive verb (V₁).**
(subordinate clause) (main clause)



This pattern is used to give suggestions.

Example 1:

If you are in a library, you should be quiet .



Next

LESSON 7: IF CLAUSES

If-Clause Type I

Pattern C

If **present simple.** **modal + infinitive verb (V₁).**
(subordinate clause) (main clause)



This pattern is used to give suggestions.

Example 2:

If you want a suitcase, you can go to the Mall.



Next

LESSON 7: IF CLAUSES

If-Clause Type I

Pattern C

Modals are, for example,
can, may, must, should, will.

If **present simple**, **modal + infinitive verb (V₁)**,
(subordinate clause) (main clause)



This pattern is used to give suggestions.

Example 3: If Somrak wants to get a gold medal, he should practice hard.



● Next

LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 3: Choose the best modals.

1. If our economy does not recover soon, we..... ask for help from IMF.

☐ should

☐ must



LESSON 7: IF CLAUSES

Score 0 / 5

Home



Try this practice.

Practice 3: Choose the best modals.

2. If Susan does not see Joe, she..... home.

☐ go

☐ might go



LESSON 7: IF CLAUSES

Score 1 / 5

Home



Try this practice.

Practice 3: Choose the best modals.

3. If we all save more energy, wehelp save the country's budget.

☐ can

☐ must



LESSON 7: IF CLAUSES

Score 1 / 5

Home



Try this practice.

Practice 3: Choose the best modals.

4. If you do not have her phone number, you write to her instead.

☐ should

☐ would



LESSON 7: IF CLAUSES

Score 1 / 5

Home



Try this practice.

Practice 3: Choose the best modals.

5. You call me anytime if you have trouble.

☐ will

☐ can



LESSON 8: IF - CLAUSES

Exercises

- Multiple choice 1
- Multiple choice 2
- Matching 1
- Matching 2



● Back

LESSON 8: IF - CLAUSES

Score 0 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

1. If you go to the other country, you _____ some cash for pocket money.

- ☐ carries
- ☐ carry
- ☐ are carrying
- ☐ should carry



LESSON 8: IF - CLAUSES

Score 0 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

2. Many manufacturers _____ if the government does not help them.

- ☐ lose
- ☐ lost
- ☐ loses
- ☐ will lose



LESSON 8: IF - CLAUSES

Score 0 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

3. If you need help, you _____ me anytime.

- ☐ can call
- ☐ will call
- ☐ would call
- ☐ must call



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

4. If my father does not find his car key, he always _____ me for help.

- ☐ asks
- ☐ asking
- ☐ should ask
- ☐ can make



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

5. The manager _____ angry if you _____ to work late.

- ☐ may come
- ☐ will be..... come
- ☐ will be..... came
- ☐ isshould come



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

6. If you want to shop for cheap clothes , you to Baiyok Tower.

- ☐ go
- ☐ should go
- ☐ are going
- ☐ would go



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

7. Ice if you leave it in the room temperature.

- ☐ melts
- ☐ will melt
- ☐ may melt
- ☐ must melt



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

8. If tourists want to visit the temple of Emerald Buddha and Grand Palace, they proper clothes.

- ☐ wears
- ☐ can wear
- ☐ should wear
- ☐ will be wearing



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

9. If she _____ her map, she can use mine!

- ☐ have
- ☐ has
- ☐ does not have
- ☐ will not have



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 1

Direction: choose the correct verb forms.

10. If air becomes hot, it _____ up.

- ☐ will go
- ☐ may go
- ☐ goes
- ☐ is going



LESSON 8: IF - CLAUSES

Score 0 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

1. These goods are on sale! If you _____ 2 packs of these, you _____ 20% discount.

- ☐ can buy..... get
- ☐ will buy..... get
- ☐ must buy.....will get
- ☐ buywill get



LESSON 8: IF - CLAUSES

Score 1 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

2. If students _____ financial problems, they _____ for help from Student Welfare Department.

- ☐ have.....are asking
- ☐ have.....can ask
- ☐ will have.....have asked
- ☐ will have.....are asking



LESSON 8: IF - CLAUSES

Score 1 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

3. If rural people are skillful in handicrafts, they _____ OTOP products very quickly.

- ☐ can produce
- ☐ have produced
- ☐ must produce
- ☐ would produce



LESSON 8: IF - CLAUSES

Score 1 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

4. If an American firm _____ to buy a German machine, it _____ to pay in dollars or marks.

- ☐ want.....need
- ☐ will want.....will need
- ☐ wanted.....needed
- ☐ wants..... will need



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

5. Presently, a teacher _____ a teaching certificate if he or she wants to teach in schools.

- ☐ has
- ☐ have
- ☐ does have
- ☐ must have



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

6. Our hotel will be easy to find if you _____ the bus at the Center Point.

- ☐ got off
- ☐ get off
- ☐ will get off
- ☐ can get off



LESSON 8: IF - CLAUSES

Score 2 / 10

Home

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

7. You _____ if you do not get what you want.

- ☐ should try harder
- ☐ will try harder
- ☐ are trying harder
- ☐ have tried harder



LESSON 8: IF - CLAUSES Score 3 / 10

[Home](#)

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

8. Hurry! If you _____ now, you can't get there in time.

- ☐ leave
- ☐ do not leave
- ☐ will leave
- ☐ cannot leave



LESSON 8: IF - CLAUSES Score 4 / 10

[Home](#)

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

9. If you pour oil onto water, it _____

- ☐ will float
- ☐ is floating
- ☐ float
- ☐ floats



LESSON 8: IF - CLAUSES Score 3 / 10

[Home](#)

MULTIPLE CHOICE 2

Direction: choose the correct verb forms.

10. You _____ your job if you keep coming to work late.

- ☐ lose
- ☐ might lose
- ☐ are losing
- ☐ must lose



LESSON 8: IF - CLAUSES Scores 0 / 6

Home

MATCHING I

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

you should exercise at least three times a week.

I'm sure our economy will be better soon.

there will be fewer tourists.

I'm sure she will help you.

what do you think will happen?

say you don't know.

you must practice it a lot more.

Subordinate clauses

Example: If you ask her,



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING I

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

you should exercise at least three times a week.

I'm sure our economy will be better soon.

there will be fewer tourists.

I'm sure she will help you.

what do you think will happen?

say you don't know.

you must practice it a lot more.

Subordinate clauses

1. If there's a disease like SARS in Thailand,



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING I

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

you should exercise at least three times a week.

I'm sure our economy will be better soon.

there will be fewer tourists.

I'm sure she will help you.

what do you think will happen?

say you don't know.

you must practice it a lot more.

Subordinate clauses

2. If anyone asks you where I am,



LESSON 8: IF - CLAUSES

Score 0 / 6

Home

MATCHING I

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

you should exercise at least three times a week.

I'm sure our economy will be better soon.

there will be fewer tourists.

I'm sure she will help you.

what do you think will happen?

say you don't know.

you must practice it a lot more.

Subordinate clauses

3. If you want to win the singing contest.



LESSON 8: IF - CLAUSES

Score 1 / 6

Home

MATCHING I

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

you should exercise at least three times a week.

I'm sure our economy will be better soon.

there will be fewer tourists.

I'm sure she will help you.

what do you think will happen?

say you don't know.

you must practice it a lot more.

Subordinate clauses

4. If Thailand exports more OTOP products.



LESSON 8: IF - CLAUSES

Score 1 / 6

Home

MATCHING I

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

you should exercise at least three times a week.

I'm sure our economy will be better soon.

there will be fewer tourists.

I'm sure she will help you.

what do you think will happen?

say you don't know.

you must practice it a lot more.

Subordinate clauses

5. If Thailand exports more OTOP products.



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING II

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

we may be willing to help her.
what will you do?
I'm sure she will help you.
we can catch the first bus to Chiangmai.
I think they will like you.
buy me these diamonds.
Mom will not get angry.

Subordinate clauses

Example: If you ask her,



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING II

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

we may be willing to help her.
what will you do?
I'm sure she will help you.
we can catch the first bus to Chiangmai.
I think they will like you.
buy me these diamonds.
Mom will not get angry.

Subordinate clauses

1. If you spend more time with the children,



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING II

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

we may be willing to help her.
what will you do?
I'm sure she will help you.
we can catch the first bus to Chiangmai.
I think they will like you.
buy me this diamond ring.
Mom will not get angry.

Subordinate clauses

2. If you really love me,



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING II

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

we may be willing to help her.

what will you do?

I'm sure she will help you.

we can catch the first bus to Chiangmai.


I think they will like you.

buy me these diamonds.

Mom will not get angry.

Subordinate clauses

3. If she talks to us politely.



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING II

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

we may be willing to help her.

what will you do?

I'm sure she will help you.

we can catch the first bus to Chiangmai.


I think they will like you.

buy me these diamonds.

Mom will not get angry.

Subordinate clauses

4. If your husband doesn't come back.



LESSON 8: IF - CLAUSES Score 0 / 6

Home

MATCHING II

DIRECTION: Complete the sentences with the clauses in the box below by using Drag and Drop.

Main clauses

we may be willing to help her.

what will you do?

I'm sure she will help you.

we can catch the first bus to Chiangmai.


I think they will like you.

buy me these diamonds.

Mom will not get angry.

Subordinate clauses

5. If you're ready before six.



Lesson 8: Relative clauses

LESSON 8: RELATIVE CLAUSES



- About the lesson
- Learning objectives
- Pre/Posttest
- Relative clauses
- Exercises
- Extra activities



● Back

Hello, Welcome to reading Lessons.

About the lesson

This lesson includes ...



- Pre/Posttests: take the tests both before and after the lesson.
- Relative clauses: learning the structure of these clauses will help you identify the main idea of a sentence clearly.
- Exercises: there are exercises for you to practice your vocabulary skills.
- Extra activities: enjoy yourself with cloze exercises.
- After you finish the lesson, write your comments about the lessons in Your Journal.

● Back

Learning Objectives




You will be able to ...

- understand the structures of relative clauses, and their functions.
- distinguish between the main clauses and relative clauses.
- use the correct forms of relative clauses.

● Back

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

1. The car he always uses was manufactured in England.


- ☐ who
- ☐ whom
- ☐ where
- ☐ which



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

2. We will meet our new manager just arrived from New Zealand.


- ☐ who
- ☐ whom
- ☐ which
- ☐ when



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

3. Countries have beautiful beaches have got a lot of money from tourism.


- ☐ who
- ☐ which
- ☐ where
- ☐ whom



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

4. The APEC conference was held in Bangkok.


- ☐ which I talked about it
- ☐ that I talked about it
- ☐ that I talked about
- ☐ about which I talked it



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

5. Our company needs a manager


- ☐ that he can work in India
- ☐ where he can work in India
- ☐ who he can work in India
- ☐ who can work in India



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

6. Maria, took a bus to Phuket had an accident last night.


- ☐ which
- ☐ who
- ☐ that
- ☐ whom



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

7. Please send the files to this email address.


- ☐ you have just saved
- ☐ you have just saved them
- ☐ what you have just saved
- ☐ whom you have just saved



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

8. The students will be trained there for 3 months.


- ☐ whom I sent to a bank
- ☐ which I sent to a bank
- ☐ that I sent them to a bank
- ☐ where I sent them to a bank



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAISES

[Home](#)

 Pre and Posttests

Direction: Click on the best words to complete the sentences below.

9. The tour guide took us to Pimai can speak six languages.

- ☐ which
- ☐ whom
- ☐ that
- ☐ -



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

[Home](#)

[Pre and Posttests](#)

Direction: Click on the best words to complete the sentences below.

10. Prime Minister Thaksin, , is now in France.

- ☐ that many people like
- ☐ whom many people like
- ☐ which many people like
- ☐ many people like



Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

- ☐ Introduction to the relative clauses
- ☐ The use of the relative clauses
- ☐ Relative pronouns as the subject: who, which, that
- ☐ Relative pronouns as the object: whom, which, that



[Back](#)

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Introduction to the Relative Clauses



Read the conversation below



That man is my Math teacher.

Which one?



The man who is sitting at the desk is my Math teacher.



[Next](#)

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Introduction to the Relative Clauses



Well, the woman uses the **relative clause** to *modify* the man she is talking about.



The man who is sitting at the desk is my Math teacher.

● Next

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Introduction to the Relative Clauses



The **relative clause** is the *statement* that gives important information about the noun it *modifies*.



The man who is sitting at the desk is my Math teacher.

● Back

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

The Use of Relative Clauses



The relative clause is used to modify the noun that it *follows*.



Harry is playing the guitar which was made in England.

● Next

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

The Use of Relative Clauses



The relative clause can modify a noun of time.



Cindy could remember the old days when she was with her sisters.



● Next

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

The Use of Relative Clauses



The relative clause can also modify a noun of place.



Royal Cliff Hotel was the place where we stayed during summer.



● Next

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

The Use of Relative Clauses



Very often, too many relative clauses can also make readers confused. (See below).

Jimmy, who is standing under the palm tree, loves to go to any beach where there are few people, and to swim to an island where he can see beautiful fishes and reefs under the sea.



● Next

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

The Use of Relative Clauses



Let's study the lesson carefully.



● Back

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the subject: who, which, that

SENTENCE A:

The users who surf on the Internet must be careful about computer viruses.



Let's see how this sentence is formed.



Main Clause: The users must be careful about computer viruses.

who

Relative Clause: The users surf on the Internet.

(subject of the verb 'surf')



● Next

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the subject: who, which, that

SENTENCE B:

Thai silk which was done in Northeast Thailand will be exported to Japan.



Let's see how this sentence is formed.



Main Clause : Thai silk will be exported to Japan.

which

Relative Clause : Thai silk was done in northeast Thailand.

(subject of the verb 'was done')







● Next

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the subject: who, which, that

SUMMARY

To modify ...	Relative pronouns:	Examples of sentences
 <input checked="" type="checkbox"/> People	(Subject) who that	 The computer users <u>who/that surf on the net</u> must be careful about computer viruses.
<input checked="" type="checkbox"/> Things and animals 	which that	 Silk <u>which/that was done in Northeast Thailand</u> will be exported to Japan.

NOTES

- The relative clause always comes after the noun that it modifies.
- 'That' can be used in the place of 'who' and 'which'.

Back

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the object: whom, which, that

SENTENCE A:

Do you know the man whom our teacher is talking to?



Main Clause:

Do you know the man?

Relative Clause:

Our teacher is talking to that man.

(object of the verb 'is talking')

Click here for more details !

Next

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the object: whom, which, that

SENTENCE A:

NOTES

- For *indefinite* noun (ไม่เจาะจง), relative pronouns (*whom*) can be omitted. (ตัดออกได้)

Do you know ~~the man~~ our teacher is talking to?

- For *definite* noun (เจาะจง), relative pronouns (*whom*) cannot be omitted. (ตัดออกไม่ได้)

Do you know *Mr. Kim*, whom our teacher is talking to?

Next

Hello. Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the object: whom, which, that

SENTENCE B:

The flowers which/that gardeners have grown for 3 months are now ready for export.



Let's see how this sentence is formed.



Main Clause : The flowers are now ready for export.

which

Relative Clause : Gardeners have grown ~~the flowers~~ for 3 month.
(object of the verb 'have grown')



Next

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

Relative pronouns as the object: whom, which, that

SENTENCE C:

Yesterday I talked to Mr.Frankins, whom our comepany invited for the meeting.



Let's see how this sentence is formed.



Main Clause: Yesterday I talked to Mr. Frankins,

whom

Relative Clause: Our company invited ~~Mr. Frankins~~ for the meeting.
(object of the verb 'invited')



Next

Hello, Welcome to reading Lessons.

LESSON 8: RELATIVE CLAUSES

EXERCISES

- ☐ Exercises 1: subject: who, which, that
- ☐ Exercises 2: subject: who, which, that
- ☐ Exercises 3: subject: who, which, that
- ☐ Exercises 4: subject: whom, which, that
- ☐ Exercises 5: subject: whom, which, that
- ☐ Exercises 6: subject: whom, which, that



Back

LESSON 8: RELATIVE CLAUSES

Exercise 1: Relative pronouns: subject of the verb

Directions: Click on the main clauses of the following sentences.

Example: You always ask questions that are difficult to answer.

You always ask questions
that are difficult to answer
questions that are difficult to answer



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 1: Relative pronouns: subject of the verb

Directions: Click on the main clauses of the following sentences.

1. Computer users who often download files from the Internet must be careful about computer viruses.

- ☐ Computer users must be careful.
- ☐ Computer users who often download files.
- ☐ Computer users must be careful about computer viruses.



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 1: Relative pronouns: subject of the verb

Directions: Click on the main clauses of the following sentences.

2. Do you know any virus program which can delete all files in the computer?

- ☐ Do you know any virus program?
- ☐ Do you know any virus program which can delete?
- ☐ Do you know any virus program can delete all files in the computer?



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 1: Relative pronouns: subject of the verb

Directions: Click on the main clauses of the following sentences.

3. A lunch fund that are worth 10 million baht is provided to rural schools.

- ☐ A lunch fund that is worth 10 million baht
- ☐ A lunch fund is provided to rural schools
- ☐ A lunch fund worth 10 million baht is provided.



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 1: Relative pronouns: subject of the verb

Directions: Click on the main clauses of the following sentences.

4. Farmers who can make their own fertilizer can save a lot of money.

- ☐ Farmers can save a lot of money.
- ☐ Farmers who can make their own fertilizer.
- ☐ Farmers can make their own fertilizer.



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 1: Relative pronouns: subject of the verb

Directions: Click on the main clauses of the following sentences.

5. The companies that export their goods need a lot of workers.

- ☐ The companies export their goods.
- ☐ The companies that need a lot of workers.
- ☐ The companies need a lot of workers



LESSON 8: RELATIVE CLAUSES

Exercise 2: Relative pronouns: subject of the verb

Direction: Choose the best answer.

Example: You always ask questions are difficult to answer.

who

which

whom



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 2: Relative pronouns: subject of the verb

Direction: Choose the best answer.

1. The man came from Singapore works for IBM.

☐ which

☐ who

☐ whom



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 2: Relative pronouns: subject of the verb

Direction: Choose the best answer.

2. Will you introduce me to the Ford manager just arrived?

☐ that

☐ whom

☐ which



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 2: Relative pronouns: subject of the verb

Direction: Choose the best answer.

3. Britney bought OTOP goods was done in Chiangmai.

- ☐ who
- ☐ whom
- ☐ which



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 2: Relative pronouns: subject of the verb

Direction: Choose the best answer.

4. Children download games are available at www.games.net.

- ☐ who
- ☐ that
- ☐ whom



LESSON 8: RELATIVE CLAUSES

Score 2 / 5

Home

Exercise 2: Relative pronouns: subject of the verb

Direction: Choose the best answer.

5. The email was sent to me is an order for herbal soap.

- ☐ which
- ☐ who
- ☐ whom



LESSON 8: RELATIVE CLAUSES

Exercise 3: Relative pronouns: subject of the verb

Direction: Combine the following sentences using *who* or *which*

Example: Saman surfs on a web site. The web site displays OTOP products.

Saman surfs on a web site which displays OTOP products.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 3: Relative pronouns: subject of the verb

Direction: Combine the following sentences using *who* or *which*

1. Our economy starts to recover. It has been in a poor state for years.

Our economy _____ starts to recover.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 3: Relative pronouns: subject of the verb

Direction: Combine the following sentences using *who* or *which*

2. The businessmen have bought OTOP goods. They are from Japan.

The businessmen _____ have bought OTOP goods



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 3: Relative pronouns: subject of the verb

Direction: Combine the following sentences using *who* or *which*

3. My company has exported souvenirs. The souvenirs were made from Sah paper.

My company has exported souvenirs |



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 3: Relative pronouns: subject of the verb

Direction: Combine the following sentences using *who* or *which*

4. Rural people have very low incomes. They are poor farmers.

Rural people | have very low incomes.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 3: Relative pronouns: subject of the verb

Direction: Combine the following sentences using *who* or *which*

5. People like to buy handicrafts. The handicrafts are produced from Ayuthaya.

People like to buy handicrafts |



LESSON 8: RELATIVE CLAUSES

Exercise 4: Relative pronouns: object of the verb

Direction: Click on the main clauses of the following sentences.

Example: I did not see the photo that you have taken.

I did not see the photo.

that you have taken.

you have taken.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 4: Relative pronouns: object of the verb

Direction: Click on the main clauses of the following sentences.

1. Is this the boy whom a dog bit?

☐ Is this the boy?

☐ whom a dog bit.

☐ the boy whom a dog bit.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 4: Relative pronouns: object of the verb

Direction: Click on the main clauses of the following sentences.

2. Please hand in the report that you did last night.

☐ that you did last night.

☐ Please hand in the report.

☐ Please did the report last night.



LESSON 8: RELATIVE CLAUSES

Score 1 / 5

Home

Exercise 4: Relative pronouns: object of the verb

Direction: Click on the main clauses of the following sentences.

3. That woman whom you met is a famous singer.

- ☐ That woman is a famous singer.
- ☐ That woman whom you met.
- ☐ That you met a famous singer.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 4: Relative pronouns: object of the verb

Direction: Click on the main clauses of the following sentences.

4. The bag which a man carried was full of medicine.

- ☐ The bag which a man carried.
- ☐ The man carried a bag.
- ☐ The bag was full of medicine.



LESSON 8: RELATIVE CLAUSES

Score 2 / 5

Home

Exercise 4: Relative pronouns: object of the verb

Direction: Click on the main clauses of the following sentences.

5. Don't eat the fruit that you do not wash.

- ☐ that you do not wash.
- ☐ Don't eat the fruit.
- ☐ Don't eat the fruit you do not wash.



LESSON 8: RELATIVE CLAUSES

Exercise 5: Relative pronouns: object of the verb

Direction: Combine the following sentences.

Example: The man works in a factory. You met him yesterday.

The man whom you met yesterday works in a factory.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 5: Relative pronouns: object of the verb

Direction: Combine the following sentences.

1. Many tourists went to Patong beach. I met them at the airport.

Many tourists | went to Patong beach.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 5: Relative pronouns: object of the verb

Direction: Combine the following sentences.

2. We work at a factory. Many people do not like the factory.

We work at a factory |



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 5: Relative pronouns: object of the verb

Direction: Combine the following sentences.

3. These bags are very expensive. Our company imported from Italy.

These bags | are very expensive.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 5: Relative pronouns: object of the verb

Direction: Combine the following sentences.

4. I have just bought a car. Toyota imported this car from Japan.

I have just bought a car |



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 5: Relative pronouns: object of the verb

Direction: Combine the following sentences.

5. The currency is called rupiah. Indonesian people use this currency.

The currency | is called rupiah.



LESSON 8: RELATIVE CLAUSES

Exercise 6: Relative pronouns: object of the verb

Directions: Complete these sentences with whom or which.

Example: Saman, whom you met yesterday works for IBM.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 6: Relative pronouns: object of the verb

Directions: Complete these sentences with whom or which.

1. A man, whom the police arrested yesterday tried to set fire to a school in Yala.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 6: Relative pronouns: object of the verb

Directions: Complete these sentences with whom or which.

2. Do not open any email from someone whom you do not know.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 6: Relative pronouns: object of the verb

Directions: Complete these sentences with whom or which.

3. The police destroyed the copied CDs .. they took from a shop yesterday.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 6: Relative pronouns: object of the verb

Directions: Complete these sentences with whom or which.

4. The Internet users feel annoyed with the spam mail ... they receive in their mailbox.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

Exercise 6: Relative pronouns: object of the verb

Directions: Complete these sentences with whom or which.

5. Mr. Yong, .. we met at the Grand Palace, is a businessman from Taiwan.



LESSON 8: RELATIVE CLAUSES

EXTRA ACTIVITIES

- ☐ Cloze 1
- ☐ Cloze 2



● Back

LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 1

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



My sister is wearing a red t-shirt likes to play games on the Internet.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 1

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



Little Anna, .. you see in this picture is Mrs. Green's daughter.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 1

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



My daughter always uses the mobile phone her Dad bought from Dubai.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 1

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



Tourists cannot export Buddha images ... are produced in Thailand.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 1

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



<http://leisure.mweb.co.th>

My favourite dessert I always order at Ban Thai restaurant is creamy sticky rice with a ripe mango.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 2

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



My sport hero ... was a champion of TD Waterhouse in 2003 was Paradorn.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 2

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



Benjarong, ... is made in Nakhon Pratom becomes very popular in Japan.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 2

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



Roger Federer, ... we saw on TV, became the Tennis champion at Wimbledon in 2003.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 2

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .



This sport car the manager imported from Germany costs \$ 6.5 millions.



LESSON 8: RELATIVE CLAUSES

Score 0 / 5

Home

CLOZE 2

DIRECTION: complete these sentences with relative pronouns:
who, which, whom or blank (-) .




The BTS sky train, you see in this photo, are always on time.




Lesson 9 : Review

LESSON 9: REVIEW



- About the lesson
- Learning objectives
- Vocabulary
- Grammar
- Reading techniques



● Back

Hello, Welcome to reading Lessons.


About the lesson

In this lesson, you will ...

- review the rules of each reading skill: vocabulary, grammar and reading techniques.
- practice exercises on the skills above.

● Back

Learning Objectives

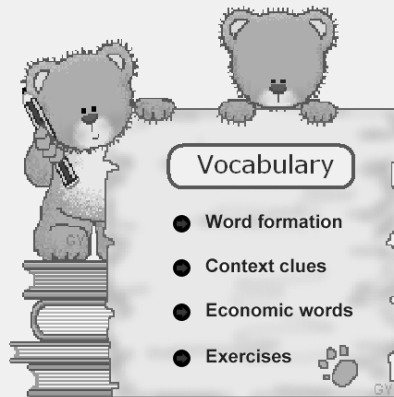


You will be able to ...

- define the meanings of vocabulary frequently found in economic texts.
- guess the meaning of unfamiliar vocabulary in context.
- practice using relative clauses and if clauses.
- practice skimming, scanning techniques to find the main ideas and details in passages.

● Back

LESSON 9: REVIEW



● Back

LESSON 9: REVIEW

Word formation

Review

- The root contains a basic meaning of a word.
- The prefix is a group of letters that is added in front of a root or word and give a new meaning to the original word.
- A suffix is a few letters that come after a root or word.

Exercise 1

Exercise 2

Millionaire

● Back

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots

1. agra, agri

Meanings

- a. say
- b. hand
- c. year
- d. field
- e. send, spread
- f. good, well
- g. believe, trust
- h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots	Meanings
2. Annu	a. say
	b. hand
	c. year
	d. field
	e. send, spread
	f. good, well
	g. believe, trust
	h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots	Meanings
3. Bene	a. say
	b. hand
	c. year
	d. field
	e. send, spread
	f. good, well
	g. believe, trust
	h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots	Meanings
4. Cide	a. say
	b. hand
	c. year
	d. field
	e. send, spread
	f. good, well
	g. believe, trust
	h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots	Meanings
5. Cred	a. say
	b. hand
	c. year
	d. field
	e. send, spread
	f. good, well
	g. believe, trust
	h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots	Meanings
6. Dict	a. say
	b. hand
	c. year
	d. field
	e. send, spread
	f. good, well
	g. believe, trust
	h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. Direction: match roots with their correct meanings.

Roots	Meanings
7. Manu	a. say
	b. hand
	c. year
	d. field
	e. send, spread
	f. good, well
	g. believe, trust
	h. kill

LESSON 9: REVIEW

Score 0 / 8

Home

Word formation

Exercise 1

A. **Direction:** match roots with their correct meanings.

Roots

8. mis, mit

Meanings

- a. say
- b. hand
- c. year
- d. field
- e. send, spread
- f. good, well
- g. believe, trust
- h. kill



LESSON 9: REVIEW

Score 0 / 5

Home

Word formation

Exercise 2

Direction: choose the best meanings of the underlined words.

1. Sudan is an agrarian country in Africa.

- ☐ about farming
- ☐ about industry
- ☐ about fishery
- ☐ about petroleum



LESSON 9: REVIEW

Score 0 / 5

Home

Word formation

Exercise 2

Direction: choose the best meanings of the underlined words.

2. Some Asian countries devalued their currencies during the economic crisis.


- ☐ added the value of
- ☐ increased the value of
- ☐ exchanged the value of
- ☐ reduced the value of



LESSON 9: REVIEW

Score 1 / 5

Home

 Word formation

Exercise 2

Direction: choose the best meanings of the underlined words.

3. Many companies have got into financial problems.


- ☐ related to economy
- ☐ related to money
- ☐ related to debts
- ☐ related to management



LESSON 9: REVIEW

Score 1 / 5

Home

 Word formation

Exercise 2

Direction: choose the best meanings of the underlined words.

4. If Thailand can export more fruits to European countries, there will be many benefits.


- ☐ advantages
- ☐ development
- ☐ drawbacks
- ☐ disadvantages



LESSON 9: REVIEW

Score 1 / 5

Home

 Word formation

Exercise 2

Direction: choose the best meanings of the underlined words.

5. A laptop computer is very popular now because it is portable and easy to use.

- ☐ can be played
- ☐ can be developed
- ☐ can be carried
- ☐ can be changed



LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



0 baht

1. What is the currency of Malaysia?

- ringgit
- euro
- peso

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



0 baht

2. The financial problem is the problem related to...

- health
- money
- housing

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



0 baht

3. Who is the *manufacturer* of ready-to-eat noodles called 'Mama'?

- Unilever Thai
- Thai Nam Thip
- Charoen Pokaphand

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



1,000 baht

4. Where can you get foreign money?

- At a post office
- At a foreign exchange
- At an insurance company

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



1,000 baht

5. This TV does not work well. Can I it for the new one?

- exchange
- transport
- borrow

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



1,000 baht

6. To obtain means

- to give
- to get
- to greet

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



1,000 baht

7. To become well or normal again after sickness or bad situation is

- ☐ To recover
- ☐ To discover
- ☐ To deliver

LESSON 9: REVIEW

Home

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.



1,000 baht

8. The crisis that the government had last year was the bird flu.

- ☐ An emergency
- ☐ A serious accident
- ☐ A very difficult situation

LESSON 9: REVIEW

The Millionaire

Directions: You have 30 seconds to answer each question. 1,000 baht is for a correct answer.




You got 2,000 baht

Back

LESSON 9: REVIEW

Context clues

 You can use the clues below to guess the meanings of unknown words :-

Definition Clues: the words that define unknown words (*e.g. means, is known as, refers to etc.*).

Exemplification clues: the words that suggest examples (*for example, for instance, such as, like, e.g.*)

Synonyms/Antonyms: the words that have similar or opposite meanings.

Context clues: the groups of words or sentences surrounding the unknown word.

Punctuations: some punctuation marks like comma, dashes and brackets.



● Exercises

LESSON 9: REVIEW

Score 0 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

1. Many Thai herbs. Kha-min, Plai, Aloe vera, are used in cosmetics, shampoo, soap, etc.

- ☐ plants
- ☐ animals
- ☐ chemicals
- ☐ vitamins



LESSON 9: REVIEW

Score 0 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

2. A coconut tree provides many benefits. We can use its fruit for food; trunk for making furniture; leaves for making hats and toys; and stems for making brooms.

- ☐ careful things
- ☐ reasonable things
- ☐ useful things
- ☐ dangerous things



LESSON 9: REVIEW

Score 0 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

3. The oil prices are getting higher. Now the government encourages people to use gasohol which is cheaper than gasoline and diesel.

- ☐ gives
- ☐ makes
- ☐ supports
- ☐ controls



LESSON 9: REVIEW

Score 0 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

4. Meat, eggs and nuts give us a lot of protein. Similarly, oil, butter and cream provide lots of fat.

- ☐ build
- ☐ develop
- ☐ use
- ☐ give



LESSON 9: REVIEW

Score 1 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

5. Bird flu is contagious. In contrast, a headache is not.

- ☐ connected
- ☐ communicable
- ☐ transmittable
- ☐ portable



LESSON 9: REVIEW

Score 1 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

6. The fire extinguishers (chemicals used for putting out fire) should be checked every month.

- ☐ something you use to make a fire
- ☐ something you use to switch off a light
- ☐ something you use when there is a fire
- ☐ something you use when you want to cook



LESSON 9: REVIEW

Score 1 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

7. Artificial flowers is referred to the flowers which are made of paper, plastics, foams, or fish scales.

- ☐ chemical
- ☐ plastic
- ☐ false
- ☐ natural



LESSON 9: REVIEW

Score 1 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

8. Soldiers use many kinds of ____, such as knives, guns, rifles and bombs.

- ☐ tools
- ☐ pottery
- ☐ cutlery
- ☐ weapons



LESSON 9: REVIEW

Score 2 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

9. Many communication sectors which are, for example, _____ have got a lot of money in their business.

- ☐ Cherdchai Co., BTS and BTMA.
- ☐ Samart Corp., Shin Corp. and AIS.
- ☐ Charoen Pokaphand and Sahaphat Pibul Corp.
- ☐ The Mall Groups, Central Group and Robinson Group.



LESSON 9: REVIEW

Score 2 / 10

Home

Context Clues

Exercise 1

Direction: choose the words that have closest meanings to the underlined words.

10. The crop is defined as a plant such as a grain, fruit or vegetable grown in large amounts by farmers.

- ☐ plant
- ☐ grain
- ☐ fruit
- ☐ vegetable



LESSON 9: REVIEW

Score 0 / 0

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

Meanings

1. A manufacturer



- a. to get
- b. to improve , to get better
- c. related to money
- d. a time of great danger or difficulty
- e. money that is borrowed from someone or a bank
- f. belong to a country that is not your own
- g. to change something for something else
- h. a type of money that a country uses
- i. the company that produces something in large quantity



LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

2. To obtain

Meanings

a. to get

b. to improve , to get better

c. related to money

d. a time of great danger or difficulty

e. money that is borrowed from someone or a bank

f. belong to a country that is not your own

g. to change something for something else

h. a type of money that a country uses

i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

3. To recover

Meanings

a. to get

b. to improve , to get better

c. related to money

d. a time of great danger or difficulty

e. money that is borrowed from someone or a bank

f. belong to a country that is not your own

g. to change something for something else

h. a type of money that a country uses

i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

4. To exchange

Meanings

a. to get

b. to improve , to get better

c. related to money

d. a time of great danger or difficulty

e. money that is borrowed from someone or a bank

f. belong to a country that is not your own

g. to change something for something else

h. a type of money that a country uses

i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

5. Currency

Meanings

a. to get

b. to improve , to get better

c. related to money

d. a time of great danger or difficulty

e. money that is borrowed from someone or a bank

f. belong to a country that is not your own

g. to change something for something else

h. a type of money that a country uses

i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

6. Foreign

Meanings

a. to get

b. to improve , to get better

c. related to money

d. a time of great danger or difficulty

e. money that is borrowed from someone or a bank

f. belong to a country that is not your own

g. to change something for something else

h. a type of money that a country uses

i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

7. Financial

Meanings

a. to get

b. to improve , to get better

c. related to money

d. a time of great danger or difficulty

e. money that is borrowed from someone or a bank

f. belong to a country that is not your own

g. to change something for something else

h. a type of money that a country uses

i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Economic words

Direction: match these words with their meanings.

Vocabulary

Meanings

8. crisis

a. to get
b. to improve , to get better
c. related to money
d. a time of great danger or difficulty
e. money that is borrowed from someone or a bank
f. belong to a country that is not your own
g. to change something for something else
h. a type of money that a country uses
i. the company that produces something in large quantity

LESSON 9: REVIEW

Score 0 / 8

Home

Exercise 1

Direction: complete the following sentences with the best words.

1. Manysuch as Charoen Pokphand and Sahapattana Pibul have reduce their production during the Iraq war.

☐ people
☐ trainers
☐ banks
☐ manufacturers

LESSON 9: REVIEW

Score 1 / 8

Home

Exercise 1

Direction: complete the following sentences with the best words.

2. It is difficult to ____a bus ticket at the Mor Chit bus terminal during a long holiday.

☐ save
☐ produce
☐ obtain
☐ borrow

LESSON 9: REVIEW

Score 1 / 8

[Home](#)

Exercise 1

Direction: complete the following sentences with the best words.

3. Exports can help our country's economy to

- ☐ stop
- ☐ recover
- ☐ review
- ☐ start



LESSON 9: REVIEW

Score 1 / 8

[Home](#)

Exercise 1

Direction: complete the following sentences with the best words.

4. Five years ago, only 25 Thai baht could befor one dollar.

- ☐ exchanged
- ☐ deposited
- ☐ borrowed
- ☐ transferred



LESSON 9: REVIEW

Score 1 / 8

[Home](#)

Exercise 1

Direction: complete the following sentences with the best words.

5. His company has hadproblems for many years.
He often borrows money from his family.

- ☐ law
- ☐ marketing
- ☐ financial
- ☐ management



LESSON 9: REVIEW

Score 1 / 8

Home

Exercise 1

Direction: complete the following sentences with the best words.

6. China uses Yuan for its

- ☐ economy
- ☐ currency
- ☐ finance
- ☐ recovery



LESSON 9: REVIEW

Score 1 / 8

Home

Exercise 1

Direction: complete the following sentences with the best words.

7. There will be an energyif we do not save our natural resources such as oil and gas.

- ☐ safety
- ☐ saving
- ☐ development
- ☐ crisis



LESSON 9: REVIEW

Score 2 / 8

Home

Exercise 1

Direction: complete the following sentences with the best words.

8. He needs to travel to countries once a month.
Next month he will go to India and Japan.

- ☐ rural
- ☐ large
- ☐ foreign
- ☐ developing



LESSON 9: REVIEW LESSON



Grammar

- Relative clauses
- If-clauses



● Back

LESSON 9: REVIEW LESSON



Relative Clauses



Relative clauses are used for modifying nouns in a sentence.

Let's review and practice !



● Next

LESSON 9: REVIEW LESSON



Relative Clauses



Relative clauses are used for modifying nouns in a sentence.

Let's review and practice !

- Patterns of relative clauses
- Exercises



● Back

LESSON 9: REVIEW LESSON

Patterns of relative clauses

1. Subject pronouns in relative clauses



who,
that

The computer users who/that surf on the net must be very careful about computer viruses.



which
that

Silk which/that was done in Northeast Thailand will be exported to Japan.

2. Object pronouns in relative clauses



whom,
that

We possibly receive mails from someone (whom/that) we do not know.



which
that

The flowers (which/that) gardeners have grown for 3 months are now ready for export.

Back

LESSON 9: REVIEW LESSON

Score 0 / 10

Home

Exercises

Direction: choose the best answer

1. The car___he always drives was manufactured in England.

- ☐ who
- ☐ whom
- ☐ what
- ☐ which

LESSON 9: REVIEW LESSON

Score 1 / 10

Home

Exercises

Direction: choose the best answer

2. We will meet our new manager ____ just arrived from New Zealand.

- ☐ who
- ☐ whom
- ☐ which
- ☐ when

LESSON 9: REVIEW LESSON

Score 1 / 10

Home

Exercises

Direction: choose the best answer

3. Some Asian countries ____ have beautiful beaches have got a lot of money from tourism.

- ☐ who
- ☐ which
- ☐ where
- ☐ whom



LESSON 9: REVIEW LESSON

Score 1 / 10

Home

Exercises

Direction: choose the best answer

4. The APEC conference_____was held in Bangkok.

- ☐ which I talked it
- ☐ that I talked it
- ☐ that I talked about
- ☐ about which I talked it



LESSON 9: REVIEW LESSON

Score 1 / 10

Home

Exercises

Direction: choose the best answer

5. The company has a job opening for a manager_____

- ☐ that he can work in India
- ☐ where he can work in India
- ☐ who he can work in India
- ☐ that can work in India



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: choose the best answer

6. Maria. _____ took a bus to Phuket, had an accident last night.

- ☐ which
- ☐ who
- ☐ that
- ☐ whom



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: choose the best answer

7. Please send the files _____ to this email address.

- ☐ you have just saved
- ☐ you have just saved them
- ☐ what you have just saved
- ☐ was just saved by you



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: choose the best answer

8. The students _____ will be trained there for 3 months.

- ☐ whom I sent to the Bangkok Bank
- ☐ which I sent to Bangkok Bank
- ☐ that I sent them to Bangkok Bank
- ☐ whom I sent them to Bangkok Bank



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: choose the best answer

9. The tour guide ____ took us to Wat Phra Kaew can speak six languages.

- ☐ which
- ☐ whom
- ☐ that
- ☐ -



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: choose the best answer

10. Prime Minister Thaksin, _____ is now in France.

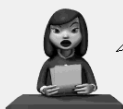
- ☐ that many people like
- ☐ whom many people like
- ☐ which many people like
- ☐ many people like



LESSON 9: REVIEW LESSON



If - Clauses



If-clauses refer to the actions that are not happening or did not really happen.

Let's review and practice !

- Patterns of if-clauses
- Exercises



● Back

LESSON 9: REVIEW LESSON

Patterns of If- clauses

➤ If + present simple, future simple.

If you work hard, you will succeed.

➤ If present simple, present simple.

If you drop an egg, it breaks.

➤ If present simple, an imperative (V₁).

If you find my key, please give it to me.

➤ If present simple, modal + infinitive verb (V₁).

If you are in a library, you should be quiet.



● Back

LESSON 9: REVIEW LESSON

Score 0 / 10

Home

Exercises

Direction: Choose the best answer.

1. If you go to Japan, you _____ some cash for pocket money.

- ☐ carried
- ☐ carries
- ☐ must carry
- ☐ should carry



LESSON 9: REVIEW LESSON

Score 1 / 10

Home

Exercises

Direction: Choose the best answer.

2. She _____ you if you help her.

- ☐ thank
- ☐ thanks
- ☐ thanked
- ☐ will thank



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

3. If someone breaks into your house, _____ the police right away.

- ☐ call
- ☐ will call
- ☐ calling
- ☐ should call



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

4. It _____ very helpful if you _____ these boxes for me.

- ☐ must be..... carry
- ☐ will be.....carry
- ☐ will be..... carried
- ☐ iswill carry



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

5. If you look carefully, you ____ your name on the list.

- ☐ find
- ☐ will find
- ☐ will not find
- ☐ do not found



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

6. You _____ to come here if you have a lot of work.

- ☐ need
- ☐ don't need
- ☐ will need
- ☐ must not need



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

7. Ice _____ if you leave it outside the fridge.

- ☐ melts
- ☐ will melt
- ☐ may melt
- ☐ must melt



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

8. If tourists want to enter a temple, they _____ their shoes.

- ☐ takes off
- ☐ can take off
- ☐ should take off
- ☐ may take off



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

9. If you _____ your pen, you can get one at the shop here.

- ☐ do not have
- ☐ cannot have
- ☐ will not have
- ☐ did not have



LESSON 9: REVIEW LESSON

Score 2 / 10

Home

Exercises

Direction: Choose the best answer.

10. If you throw a stone into the water, it _____.

- ☐ sinks
- ☐ may sink
- ☐ will sink
- ☐ is sinking



LESSON 9: REVIEW LESSON

READING TECHNIQUES



You have learned some reading techniques:
skimming and scanning.
Let's review and practice them.

Skimming

Scanning



Back

LESSON 9: REVIEW LESSON

Skimming



Skimming is reading for a general of a text.
Let's review and practice this technique.

☐ Tips of skimming

☐ Exercises



[Back](#)

LESSON 9: REVIEW LESSON

Tips of skimming



RULE 1

RULE 2

RULE 3

RULE 4



Reference: *The Arts of Efficient Reading* by Spache, G.D. & P.C. Berge.

[Back](#)

LESSON 9: REVIEW LESSON

Tips of skimming



RULE 1

RULE 2

RULE 3

RULE 4

Rule 1: Survey the whole text first. Look at the title, italic or boldface words.



Reference: *The Arts of Efficient Reading* by Spache, G.D. & P.C. Berge.

[Back](#)

LESSON 9: REVIEW LESSON

Tips of skimming



RULE 1



RULE 2



RULE 3



RULE 4

Rule 2: Read the first and last sentences of each paragraph completely.

Reference: *The Arts of Efficient Reading* by Spache, G.D. & P.C. Berge.

Back

LESSON 9: REVIEW LESSON

Tips of skimming



RULE 1



RULE 2



RULE 3



RULE 4

Rule 3: Read quickly for major words or related vocabulary, connectors, italic, boldface or underlined words.

Reference: *The Arts of Efficient Reading* by Spache, G.D. & P.C. Berge.

Back

LESSON 9: REVIEW LESSON

Tips of skimming



RULE 1



RULE 2



RULE 3



RULE 4

Rule 4: Ask yourself 2 questions:



What is the text about?

E.g. Shopping

What does the text say about the topic? E.g. Shopping in Thailand

Reference: *The Arts of Efficient Reading* by Spache, G.D. & P.C. Berge.

Back

LESSON 9: REVIEW LESSON

EXERCISES

Exercise I

Exercise II



Back

LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise 1:

Direction: skim the paragraphs below and drag and drop the right titles to their paragraphs.

- a. Nailert Market
- b. Tewes Market
- c. Pratunam Market
- d. Banglamphu Market
- e. Pak Klong Market
- f. Chatuchak Weekend Market

Paragraph 1:

This is the biggest and most popular weekend market located on Phahonyothin Road in the north of Bangkok. It is called as Chatuchak Market. Thousands of people come here on weekends to view and buy many kinds of goods ranging from clothes to handicrafts, from garden plants to pets, from utensils to antiques. For shopping lovers, this is one of the best places to try out your bargaining skills. The main part of the Weekend Market is open on Saturdays and Sundays from 8 a.m. to 6 p.m.



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 1:

Direction: skim the paragraphs below and drag and drop the right titles to their paragraphs.

- a. Nailert Market
- b. Tewes Market
- c. Pratunam Market
- d. Banglamphu Market
- e. Pak Klong Market
- f. Chatuchak Weekend Market

Paragraph 2:

Located on the intersection of Phetburi and Ratchaprarop roads, this vast bazaar is packed with countless stalls and peddlers selling numerous kinds of goods. By the way, it is an ideal place to buy fabrics and ready-to-wear clothes at low prices. Bai Yok Tower, where many fashionable boutiques are sold, is also located here, at Pratunam market.



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 1:

Direction: skim the paragraphs below and drag and drop the right titles to their paragraphs.

- a. Nailert Market
- b. Tewes Market
- c. Pratunam Market
- d. Banglamphu Market
- e. Pak Klong Market
- f. Chatuchak Weekend Market

Paragraph 3:

This is a new market complex on Phet Buri Road near Pratunam Market. The types of goods are quite similar to those in Chatuchak Market, but the market is smaller than Chatuchak Market. But it is more convenient for most visitors to go because it is right in the area where they stay. Shoppers can take buses : 2, 13, 17, 38, 54, 72, 73, 76, 77, 79, 139 to Nailert Market everyday.



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 1:

Direction: skim the paragraphs below and drag and drop the right titles to their paragraphs.

- a. Nailert Market
- b. Tewes Market
- c. Pratunam Market
- d. Banglamphu Market
- e. Pak Klong Market
- f. Chatuchak Weekend Market

Paragraph 4:

Apart from hundreds of guesthouses on Khao sarn Road, this area is a popular market for both Thai and foreign tourists. Banglamphu Market is near the Sanam Luang. Some good buys are ready-made clothes, handbags, men's and ladies' shoes, cosmetics and curios. Buses : 3, 6, 15, 19, 30, 32, 33, 43, 56, 64, 68, 82



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 1:

Direction: skim the paragraphs below and drag and drop the right titles to their paragraphs.

- a. Nailert Market
- b. Tewes Market
- c. Pratunam Market
- d. Banglamphu Market
- e. Pak Klong Market
- f. Chatuchak Weekend Market

Paragraph 5:

This is a wholesale market for fresh flowers and vegetables. Many flower vendors throughout the city buy their stock here at night and sell it on the following morning. It's best to go between 2.00am and 4.00am. People walked around looking and negotiating for flowers they needed. The market is near the King Rama I Memorial. Buses: 3, 4, 7, 9, 10, 21, 37, 42 and 82 all pass nearby. The market is over by about 10.00am.



LESSON 9: REVIEW LESSON

Score 0 / 5

Exercise 2:

Direction: Skim the paragraphs below and drag and drop the right titles to their paragraphs. You have 10 seconds to skim each paragraph.

- a. Antiques
- b. Gems
- c. Thai silk
- d. Leather Goods
- e. Thai dolls and toys
- f. Ready-to-Wear Clothes

Start



LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise 2:

Direction: Skim the paragraphs below and drag and drop the right titles to their paragraphs. You have 10 seconds to skim each paragraph.

- a. Antiques
- b. Gems
- c. Thai silk
- d. Leather Goods
- e. Thai dolls and toys
- f. Ready-to-Wear Clothes



Paragraph 1

Thailand is one of the world's leading manufacturers of ready-to-wear clothing, producing garments not only for local shops and department stores but also for the export markets. Fashion boutiques are found in every shopping mall, while cheaper clothing is available from ubiquitous street stalls.



LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise 2:

Direction: Skim the paragraphs below and drag and drop the right titles to their paragraphs. You have 10 seconds to skim each paragraph.

- a. Antiques
- b. Gems
- c. Thai silk
- d. Leather Goods
- e. Thai dolls and toys
- f. Ready-to-Wear Clothes



Paragraph 2

Shoppers can find both traditional and modern art at any antique shops. Besides that, Thai, Chinese, Burmese, and Khmer antiques are excellent buys. If you spend the time to look around and shop wisely, you may find valuable items of museum quality. However, some old items need an export license. But any reputable dealer will advise on restrictions and necessary documentation.



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 2:

Direction: Skim the paragraphs below and drag and drop the right titles to their paragraphs. You have 10 seconds to skim each paragraph.

- a. Antiques
- b. Gems
- c. Thai silk
- d. Leather Goods
- e. Thai dolls and toys
- f. Ready-to-Wear Clothes



Paragraph 3

Thailand is a major source for rubies, sapphires, and other kinds of precious stones. Buyers have the choice of selecting for individual gems, finished jewelry, or custom made items. Hand-crafted chains, bracelets, earrings, pendants and other articles are available at many gold shops in Bangkok, as well as at jewelry stores.



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 2:

Direction: Skim the paragraphs below and drag and drop the right titles to their paragraphs. You have 10 seconds to skim each paragraph.

- a. Antiques
- b. Gems
- c. Thai silk
- d. Leather Goods
- e. Thai dolls and toys
- f. Ready-to-Wear Clothes



Paragraph 4

The art of doll-making in Thailand began hundreds of years ago and remains very much alive today. Doll collectors can find a variety of detailed and beautifully crafted figures of classical dancers in full clothes, hill-tribe dolls in their traditional colorful dresses, and rural folk. For children, there is a wide variety of soft cuddly dolls.



LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise 2:

Direction: Skim the paragraphs below and drag and drop the right titles to their paragraphs. You have 10 seconds to skim each paragraph.

- a. Antiques
- b. Gems
- c. Thai silk
- d. Leather Goods
- e. Thai dolls and toys
- f. Ready-to-Wear Clothes



Paragraph 5

Thai silk is perhaps the country's best known quality product, available in many colors, designs, and widths. Silk can be used for not only dresses, suits, ties, but it is also good for curtains, wall coverings and other interior design uses.



LESSON 9: REVIEW LESSON

Scanning



Scanning is reading for specific information in a text.
Let's review and practice this technique.

Tips of scanning

Exercises



● Back

LESSON 9: REVIEW LESSON

Tips of scanning



☐ Rule 1 ☐ Rule 2 ☐ Rule 3 ☐ Rule 4 ☐ Rule 5 ☐ Rule 6

Rule 1: Ask yourself what you want to know.



● Back

LESSON 9: REVIEW LESSON

Tips of scanning



☐ Rule 1 ☐ Rule 2 ☐ Rule 3 ☐ Rule 4 ☐ Rule 5 ☐ Rule 6

Rule 2: Survey the text lay-out to see how the text is organized.



● Back

LESSON 9: REVIEW LESSON

Tips of scanning



☐ Rule 1 ☐ Rule 2 ☐ Rule 3 ☐ Rule 4 ☐ Rule 5 ☐ Rule 6

Rule 3: Then, move your eyes quickly down the page.

 Back



LESSON 9: REVIEW LESSON

Tips of scanning



☐ Rule 1 ☐ Rule 2 ☐ Rule 3 ☐ Rule 4 ☐ Rule 5 ☐ Rule 6

Rule 4: Look for key words or any related phrases.
Skip unnecessary information.

 Back



LESSON 9: REVIEW LESSON

Tips of scanning



☐ Rule 1 ☐ Rule 2 ☐ Rule 3 ☐ Rule 4 ☐ Rule 5 ☐ Rule 6

Rule 5: It is not necessary to understand every
word or sentence.

 Back



LESSON 9: REVIEW LESSON

Tips of scanning



☐ Rule 1 ☐ Rule 2 ☐ Rule 3 ☐ Rule 4 ☐ Rule 5 ☐ Rule 6

Rule 6: Re-read the information you find to make sure you get the right answer.



● Back

LESSON 9: REVIEW LESSON



EXERCISE 1

EXERCISE 2



● Back

LESSON 9: REVIEW LESSON



EXERCISE 1

Exercise A

Exercise B

Exercise C

Exercise D

Exercise E



● Back

LESSON 9: REVIEW LESSON

Home

Exercise 1

Exercise A: You have 7 seconds. Find the phone number of Smith who lives at 543 Main Street. Then CLICK on his or her phone number.

Smith, Selena	542 Oak Avenue	01-5462611
Smith, Selena	323 Pine Street	01-5462654
Smith, Selena	532 Main Street	01-5462611
Smith, Sonay	554 Baily Lane	01-1603687
Smith, Tailor	232 Pinn Avenue	06-2323687
Smith, Teresa	543 Main Street	01-8956226
Smith, Terra	353 East Street	09-8795613
Smith, Terra	543 Main Road	06-5446320
Smith, Terry	232 Pine Avenue	01-1611778
Smith, Tina	547 Grand Street	01 7356689



LESSON 9: REVIEW LESSON

Home

Exercise B: you have 15 seconds to answer the question below.

Question : Where can you find a gold shop?



Answer :

China town

This is an old business centre covering a large area around Yaowarat Road and the nearby section of Charoen Krung Road. There are many small side streets full of shops and stalls selling all types of goods including household wares and Chinese foodstuffs. Yaowarat Road is also a centre of gold shops which attract both Thai and foreign customers for their large selections and excellent workmanship.

Buses : 1, 4, 7, 25, 35, 40, 53, 73

http://www.thaiwaysmagazine.com/bangkok/bangkok_shopping_area.html



LESSON 9: REVIEW LESSON

Home

Exercise C: you have 15 seconds to answer the question below.



Question : Where can foreign shoppers get the low-priced goods?

Answer :

Where to buy

Like most big cities, there are two main types of shopping places in Bangkok. One is markets, and the other, shopping centres & department stores. Foreign shoppers who would like to touch the atmosphere of Thai-style market, seek for low-priced goods or love to bargain should go to markets. Prices in some shops and stalls in shopping centres can also be bargained, but not as much as in markets.



LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise D: you have 20 seconds to match the meanings of the following words. Drag and drop the right words to their correct meanings.



latest antique jewelry bargain popular

1. An expensive and old thing.



LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise D: you have 20 seconds to match the meanings of the following words. Drag and drop the right words to their correct meanings.



latest antique jewelry bargain popular

2. Most people like something very much.

That thing is



LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise D: you have 20 seconds to match the meanings of the following words. Drag and drop the right words to their correct meanings.



latest antique jewelry bargain popular

3. To ask for lower prices.



LESSON 9: REVIEW LESSON

Score 0 / 5

Home

Exercise D: you have 20 seconds to match the meanings of the following words. Drag and drop the right words to their correct meanings.

latest

antique

jewelry

bargain

popular

4. Newest

LESSON 9: REVIEW LESSON

Score 1 / 5

Home

Exercise D: you have 20 seconds to match the meanings of the following words. Drag and drop the right words to their correct meanings.

latest

antique

jewelry

bargain

popular

5. Things made from gold, silver and gems.

LESSON 9: REVIEW LESSON

Score 0 / 5

Home

E. Direction: read the following paragraph and answer the questions below.

Weekend Market (Chatuchak Market)

This is the biggest and most popular weekend market located on Phahonyothin Road in the north of Bangkok. Thousands of people come here on weekends to view and buy many kinds of goods ranging from clothes to handicrafts, from garden plants to pets, from utensils to antiques. For shopping lovers, this is one of the best places to try out your bargaining skills. The main part of the Weekend Market is open on Saturdays and Sundays from 8 a.m. to 6 p.m. It can be reached by buses : 3, 8, 28, 38, 39, 44, 59, 77, 134, 136, 138, 145

1. Where is Chatuchak Market ?

☐ On Phetburi Road
 ☐ On Phahonyothin Road
 ☐ On Phetkasem Road

LESSON 9: REVIEW LESSON Score 0 / 5

Home

E. Direction: read the following paragraph and answer the questions below.

Weekend Market (Chatuchak Market)

This is the biggest and most popular weekend market located on Phahonyothin Road in the north of Bangkok. Thousands of people come here on weekends to view and buy many kinds of goods ranging from clothes to handicrafts, from garden plants to pets, from utensils to antiques. For shopping lovers, this is one of the best places to try out your bargaining skills. The main part of the Weekend Market is open on Saturdays and Sundays from 8 a.m. to 6 p.m. It can be reached by buses : 3, 8, 28, 38, 39, 44, 59, 77, 134, 136, 138, 145

2. What can people buy at Chatuchak Market?

- ☐ Jewelry
- ☐ Bicycles
- ☐ Pets



LESSON 9: REVIEW LESSON Score 0 / 5

Home

E. Direction: read the following paragraph and answer the questions below.

Weekend Market (Chatuchak Market)

This is the biggest and most popular weekend market located on Phahonyothin Road in the north of Bangkok. Thousands of people come here on weekends to view and buy many kinds of goods ranging from clothes to handicrafts, from garden plants to pets, from utensils to antiques. For shopping lovers, this is one of the best places to try out your bargaining skills. The main part of the Weekend Market is open on Saturdays and Sundays from 8 a.m. to 6 p.m. It can be reached by buses : 3, 8, 28, 38, 39, 44, 59, 77, 134, 136, 138, 145

3. What skill can you try out at the market?

- ☐ Bargaining
- ☐ Listening
- ☐ Asking



LESSON 9: REVIEW LESSON Score 1 / 5

Home

E. Direction: read the following paragraph and answer the questions below.

Weekend Market (Chatuchak Market)

This is the biggest and most popular weekend market located on Phahonyothin Road in the north of Bangkok. Thousands of people come here on weekends to view and buy many kinds of goods ranging from clothes to handicrafts, from garden plants to pets, from utensils to antiques. For shopping lovers, this is one of the best places to try out your bargaining skills. The main part of the Weekend Market is open on Saturdays and Sundays from 8 a.m. to 6 p.m. It can be reached by buses : 3, 8, 28, 38, 39, 44, 59, 77, 134, 136, 138, 145

4. When is the market open?

- ☐ 8 a.m. to 6 a.m
- ☐ 8 p.m. to 6 p.m
- ☐ 8 a.m. to 6 p.m



LESSON 9: REVIEW LESSON Score 2 / 5

Home

E. Direction: read the following paragraph and answer the questions below.

Weekend Market (Chatuchak Market)

This is the biggest and most popular weekend market located on Phahonyothin Road in the north of Bangkok. Thousands of people come here on weekends to view and buy many kinds of goods ranging from clothes to handicrafts, from garden plants to pets, from utensils to antiques. For shopping lovers, this is one of the best places to try out your bargaining skills. The main part of the Weekend Market is open on Saturdays and Sundays from 8 a.m. to 6 p.m. It can be reached by buses : 3, 8, 28, 38, 39, 44, 59, 77, 134, 136, 138, 145

5. Which bus should you take to the market?

- ☐ Bus #18
☐ Bus #38
☐ Bus #58



LESSON 9: REVIEW LESSON

Home

Exercise 2

A. Direction: You have 7 seconds. Click on the word 'ceramic'.



antique	cedon	handicrafts	leather
batik	clothes	hilltribe	porcelain
benjarong	gems	jewelry	t-shirts
ceramic	goods	lacquerware	unique



LESSON 9: REVIEW LESSON

Home

B. Direction: You have 10 seconds. Click on the word 'handicrafts'.



antique	cedon	handicrafts	leather
batik	clothes	hilltribe	porcelain
benjarong	gems	jewelry	t-shirts
ceramic	goods	lacquerware	unique



LESSON 9: REVIEW LESSON

Home

C. Direction: You have 25 seconds to scan for the answer for the question below.

Question: How many kinds of local products can you buy in Chiang Mai?

Answer :

5

6

7

8

Chiang Mai is one of the world's largest centres for handicrafts and cottage industries. The extensive range of local products includes silverware, lacquerware, cotton and silk, hilltribe clothing, Burmese tapestries and hand-painted umbrellas. Pattaya also offers plentiful shopping for Thai goods, while virtually all other tourist centres give ample opportunity for buying gifts and souvenirs, as well as local specialities.



LESSON 9: REVIEW LESSON

Home

D. Direction: You have 25 seconds to find the answer to this question.

Question: What can you buy in Chiang Mai?

Answer :

leather goods

benjarong

jewelry

painted umbrella

Chiang Mai is one of the world's largest centres for handicrafts and cottage industries. The local products are, for example, silverware, lacquerware, cotton and silk, hilltribe clothing, Burmese tapestries and hand-painted umbrellas. Pattaya also offers plentiful shopping for Thai goods while virtually all other tourist centres give ample opportunity for buying gifts and souvenirs, as well as local specialities.



LESSON 9: REVIEW LESSON

Scores 0 / 6

Home

E. Direction: read the question below first. Then, scan this passage for the answers.

Pak Khlong market is a large and busy wholesale market for fresh flowers and vegetables. Many flower vendors throughout the city buy their stock here at night and sell it on the following morning. It's best to go between 2.00am and 4.00am when boats on the Chao Phraya River and trucks from nearby provinces arrive with a lot of flowers, vegetables, spices, and fruits. A bouquet of 50 roses ranged from 50 Baht to 200 baht depending on types and colors. People walked around looking and negotiating for flowers they needed.

The market is near the King Rama I Memorial. To get here, either walk south on Maharat road from Wat Pho, take a river taxi to Tha Saphan Phut or ask a taxi to go to Pak Klong Talat (Pak Khlong Market) or *sa-pahn put* (Memorial Bridge). Ordinary buses 3, 4, 7, 9, 10, 21, 37, 42 and 82 all pass nearby. The market is over by about 10.00am.

Adapted from Pak Khlong Market at <http://bangkok.thailandtoday.com>

1. What can you buy at Pak Klong Talat?

Fresh flowers and



LESSON 9: REVIEW LESSON

Score 0 / 6

Home

E. **Direction:** read the question below first. Then, scan this passage for the answers.

Pak Khlong market is a large and busy wholesale market for fresh flowers and vegetables. Many flower vendors throughout the city buy their stock here at night and sell it on the following morning. It's best to go between 2.00am and 4.00am when boats on the Chao Phraya River and trucks from nearby provinces arrive with a lot of flowers, vegetables, spices, and fruits. A bouquet of 50 roses ranged from 50 Baht to 200 baht depending on types and colors. People walked around looking and negotiating for flowers they needed.

The market is near the King Rama I Memorial. To get here, either walk south on Maharat road from Wat Pho, take a river taxi to Tha Saphan Phut or ask a taxi to go to Pak Klong Talat (Pak Khlong Market) or *sa-pahn put* (Memorial Bridge). Ordinary buses 3, 4, 7, 9, 10, 21, 37, 42 and 82 all pass nearby. The market is over by about 10.00am.

Adapted from Pak Khlong Market at <http://bangkok.thailandtoday.com>

2. **Where is Pak Klong Talat?**

Near the



LESSON 9: REVIEW LESSON

Score 0 / 6

Home

E. **Direction:** read the question below first. Then, scan this passage for the answers.

Pak Khlong market is a large and busy wholesale market for fresh flowers and vegetables. Many flower vendors throughout the city buy their stock here at night and sell it on the following morning. It's best to go between 2.00am and 4.00am when boats on the Chao Phraya River and trucks from nearby provinces arrive with a lot of flowers, vegetables, spices, and fruits. A bouquet of 50 roses ranged from 50 Baht to 200 baht depending on types and colors. People walked around looking and negotiating for flowers they needed.

The market is near the King Rama I Memorial. To get here, either walk south on Maharat road from Wat Pho, take a river taxi to Tha Saphan Phut or ask a taxi to go to Pak Klong Talat (Pak Khlong Market) or *sa-pahn put* (Memorial Bridge). Ordinary buses 3, 4, 7, 9, 10, 21, 37, 42 and 82 all pass nearby. The market is over by about 10.00am.

Adapted from Pak Khlong Market at <http://bangkok.thailandtoday.com>

3. **When should we go there?**

Between 2.00 am and am



LESSON 9: REVIEW LESSON

Score 0 / 6

Home

E. **Direction:** read the question below first. Then, scan this passage for the answers.

Pak Khlong market is a large and busy wholesale market for fresh flowers and vegetables. Many flower vendors throughout the city buy their stock here at night and sell it on the following morning. It's best to go between 2.00am and 4.00am when boats on the Chao Phraya River and trucks from nearby provinces arrive with a lot of flowers, vegetables, spices, and fruits. A bouquet of 50 roses ranged from 50 Baht to 200 baht depending on types and colors. People walked around looking and negotiating for flowers they needed.

The market is near the King Rama I Memorial. To get here, either walk south on Maharat road from Wat Pho, take a river taxi to Tha Saphan Phut or ask a taxi to go to Pak Klong Talat (Pak Khlong Market) or *sa-pahn put* (Memorial Bridge). Ordinary buses 3, 4, 7, 9, 10, 21, 37, 42 and 82 all pass nearby. The market is over by about 10.00am.

Adapted from Pak Khlong Market at <http://bangkok.thailandtoday.com>

4. **How much are a bouquet of 50 roses?**

50 to baht.



LESSON 9: REVIEW LESSON Score 0 / 6

Home

E. Direction: read the question below first. Then, scan this passage for the answers.

Pak Khlong market is a large and busy wholesale market for fresh flowers and vegetables. Many flower vendors throughout the city buy their stock here at night and sell it on the following morning. It's best to go between 2.00am and 4.00am when boats on the Chao Phraya River and trucks from nearby provinces arrive with a lot of flowers, vegetables, spices, and fruits. A bouquet of 50 roses ranged from 50 Baht to 200 baht depending on types and colors. People walked around looking and negotiating for flowers they needed.

The market is near the King Rama I Memorial. To get here, either walk south on Maharat road from Wat Pho, take a river taxi to Tha Saphan Phut or ask a taxi to go to Pak Klong Talat (Pak Khlong Market) or *sa-pahn put* (Memorial Bridge). Ordinary buses 3, 4, 7, 9, 10, 21, 37, 42 and 82 all pass nearby. The market is over by about 10.00am.

Adapted from Pak Khlong Market at <http://bangkok.thailandtoday.com>

5. How can you get there?

By walking, by a river taxi and by t



LESSON 7: IF CLAUSES



- About the lesson
- Learning objectives
- Pre/Posttest
- If clauses
- Exercises



● Back

Hello, Welcome to reading Lessons.

LESSON 7: IF CLAUSES

If-Clauses



- What are if-clauses?
- What are if-clauses for?
- What is the structure of if-clauses ?
- How many types are there ?
- If-clauses: Type 1



● Back

LESSON 7: IF CLAUSES

What are If-clauses?



From these answers, you can see that *If-Clauses* or *conditional sentences* refer to the actions that are not happening or did not actually happen.

But the sentences express the result of the condition. That is, Action A will happen if Action B happens.



● Back

LESSON 7: IF CLAUSES

If-Clause Type I

Pattern A

If	<u>present simple</u> ,	<u>future simple</u> .
(subordinate clause)		(main clause)



The speaker *thinks* that when Action A happens, Action B may or may not happen.

Example: If you work hard, you will succeed.



● Next

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The purpose of this chapter is to summarize the findings of the present study and to make recommendations for future research. The summary includes the purposes of the study, the sample, the instrumentation, the research procedure, and the results. Followed are the recommendations for the study. Suggestions for further research are made in the final section.

6.2 Conclusions

The present study has been conducted with the researcher's attempt to develop English 1 students' reading skills by exploring their reading problems, determining efficient reading lessons via computer-assisted instruction, which were intended to solve the problems, and examining whether the students had positive opinions about the CAI lessons.

Through purposive random sampling, two groups of samples were used. The first group was for exploring English 1 students' reading problems. Twelve first-year students who took English 1 course in trimester 1/2001 and eleven English 1 teachers at Suranaree University of Technology in Nakhon Ratchasima, were invited for oral interviews, and questionnaires. The second group was 83 students who were taking English 1 in trimester 2/2004. They were divided into the control group and the

experimental group to study reading lessons. After taking a pre-test, the control group was taught by the researcher using traditional methods whereas the experimental group was taught by computer-assisted instruction. After each lesson the students in the experimental group wrote in their journals expressing their feedback or comments on the CAI lessons. Then both groups were asked to take a post-test.

Concerning the instruments used for the present study, the researcher used oral interviews and three-round Delphi questionnaires to find out the students' reading problems. Then the computer-assisted instruction entitled Reading Lessons for English 1 Students was used to determine the efficiency of the lessons, including student journals utilised to examine students' opinions about learning the lessons via computer-assisted instruction. The last instruments used were the pre-test and the post-test for measuring the students' English achievement before and after the experimental stage.

The findings of the research can be summarized as follows.

1. The first three reading problems that both English 1 students and teachers had a corresponding opinion about were the inability to understand diverse meanings of some general vocabulary in science and technology texts, a lack of appropriate reading strategies and the inability to understand long and complex sentences. More problems are reported in Appendices E and F.

2. The efficiency of computer-assisted instruction for reading lessons was 84.15/81.65 which met the criterion 80/80 level.

3. The learning achievement of students in the experimental group was higher than those of students in the control group with statistically significant differences at 0.01.

4. Students had generally positive opinions about learning reading lessons via computer-assisted instruction.

6.3 The Recommendations from the Study

Based on the present study, the following recommendations could be proposed.

6.3.1 A large number of students should be involved in the oral interviews in order to gain various points of views related to problems of reading English texts in science and technology.

6.3.2 The language lessons should include a variety of learning materials and activities with different levels of difficulty, and integrate all language skills as much as possible since individual students have their own learning styles and abilities. Accordingly, learning materials and activities should be designed to meet students' needs .

6.3.3 As individual students have different levels of language abilities, their pace of learning a language also varies. Thus, time for learning the computer-assisted instruction should not be limited. Students should be allowed to study and access the program as long as they need.

6.3.4 To facilitate learning, the use of dictionary software is necessary in computer-assisted instruction since the less able students may have difficulty in understanding unfamiliar vocabulary. Otherwise, they will struggle to understand a

single word or sentence, which ends up with a negative attitude towards learning the target language.

6.3.5 Though students have computer knowledge and skills, lesson introduction and training to use computer-assisted instruction are still vital in order to familiarize students with the program formats and instructions. The designs of computer-assisted instruction vary according to learning objectives.

6.3.6 Features of computer-assisted instruction play important roles in motivating learning. The efficient design of program interface, such as formats and displays of the lesson presentation, can attract students' attention and also enhance their learning. Various types of multimedia could be used to reinforce learning as well.

6.4 Suggestions for Further Research

According to the results of the present study, the following suggestions are proposed for further study.

6.4.1 Similar research should be done with other groups of students who are required to read authentic texts in science and technology. They may have various or different problems and need higher levels of reading strategies in order to comprehend such texts.

6.4.2 According to the research findings, most students mentioned in their journals that they enjoyed learning via computer-assisted instruction. As a result, more computer programs should be developed to foster independent reading and motivation. One idea is to create computer-assisted instruction for extensive reading. That is, reading for pleasure in large quantities of texts of their own choosing not only

builds a positive attitude and motivation to read in a foreign language but also increases the vocabulary size and reading skills (Day & Bamford, 1998; Aebbersold & Field, 1997).

6.4.3 The study of reading lessons via web-based instruction should be done. As web-based instruction provides a wide learning environment which allows learners to assess lessons at their convenience and pace, and with its features, including navigation and multimedia functions, learners can make use of the available learning tools such as dictionaries, thesauruses and language-learning web sites to enhance their reading skills.

6.4.4 The study of reading behaviours that Thai students conduct when reading Thai text and their effects on reading English text should be investigated. According to the literature review and the findings of the present study, there are such reading behaviours that many students use to read English text, which caused difficulties in reading comprehension. They are, for example, reading every word in a text, reading and translating the English text based on Thai patterns and structures, and reading back and forth which takes excessive time for reading a passage.

6.4.5 The results of reading problems and instructional strategies derived from the study contribute numerous notions of the future research in reading areas. For instance, the effects of building knowledge of the text on reading achievement, and the use of authentic texts with less proficient students.

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Appendix A

Interview Guided Questions for Teachers

Objectives:

The interview aims at studying the problems of reading English texts in science and technology of English 1 students, and the potential reading lessons that facilitate reading comprehension in such texts.

Part I: Personal Information

1. How long have you been teaching English as a foreign language?
2. How long have you taught English 1 at SUT?

Part II: Reading Problems for English Science and Technology Texts in English I Course

1. From your experience teaching English I, do you think English I students have any problems in reading English texts in science and technology?

If yes, what are the problems the students usually have?

If no, ask the next question.
2. What do you think are the factors that help English I students develop their comprehension of English texts in science and technology?

(The interviewer will give the following examples when asked to clarify the question; for instance, learner-related factors: students' learning strategies; instructional factors such as different teaching approaches; or material-related factors such as using texts from a variety of sources, etc.)

**Part III: Learning and Teaching That Help the English 1 Students Better
Comprehend English Texts in Science and Technology**

What do you think would be the most efficient learning and teaching method that could help the English I students better comprehend English texts in science and technology?

Thank you very much for your kind cooperation.

Appendix B

Interview Guided Questions for Students

Objectives:

The interview aims to study the problems of reading English texts in science and technology for English 1 students, and the potential reading lessons that facilitate reading comprehension in such texts.

Part 1: Personal information

1. What is your field of study?
2. How long have you been studying English since primary education up until now?
3. What do you think are the best descriptions of your language skills, i.e. listening, speaking, reading and writing?

Good means having the ability to use the skill fluently or easily.

Fair means having the ability to use the skill moderately.

Poor means having difficulty in using the skill.

4. What were the last grade you got for an English course at secondary school and English 1 at SUT (from the previous term)?
5. Do you think that reading English text in science and technology is essential for studying in your field of study?

Part 2: Reading Background Knowledge and Experience

1. Have you ever read Thai text in science and technology?
If yes, what are your reading strategies?

If no, what kind of Thai text have you read? And what are your reading strategies in reading such text?

2. Do you have any difficulty in reading the text (#1)?

If yes, what are the reading problems? How did you solve the problems?

If no, continue with the questions in Part 3.

Part 3: Reading Problems for English Science and Technology Texts in English

I Course

1. In English 1 classes, did you have problems in reading English text?

If yes, what were the problems? How did you solve those problems?

If no, continue with question # 2.

2. What do you think are the factors that can help you develop your comprehension of English texts in science and technology?

(The interviewer will give the following examples when asked to clarify the question; for instance, learner-related factors (e.g. students' learning strategies); instructional factors (e.g. various teaching approaches); or learning and teaching material-related factors (e.g. using texts from a variety of sources, etc.).

Part 4: Learning and teaching that help the English I students better comprehend English texts in science and technology

What do you think could be the most efficient learning and teaching methods that help you better comprehend English texts in science and technology?

Thank you very much for your kind cooperation

Appendix C

Teacher Questionnaire Round 1

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Questionnaire Procedures

The present research aims at exploring reading problems of English texts in science and technology for English I students at Suranaree University of Technology; and developing reading lessons that facilitate reading comprehension of such texts. Therefore, the questionnaire is employed to gather opinions from experts and to find a consensus of the opinions. The findings of the questionnaire will then be used to develop reading lessons.

The study uses a three round Delphi process to ascertain and prioritize problems and opinions of learning and teaching methodology for efficient reading lessons. Therefore, experts will be asked to respond to questionnaires in three rounds. In the first round the experts will be asked to respond to the questions concerning reading problems, and learning and teaching methodologies that facilitate reading comprehension of science and technology texts in open-ended Questionnaire I. In the next two rounds scale-rating questionnaires will be used. Your responses will be prioritized and used to find a group consensus among experts. The results will be ranked from the highest priority to the least.

Your participation in all rounds is very essential for the valid and reliable results. The researcher hopes to receive your kind cooperation through out the

process. If you have any questions about the procedures, please contact the researcher for additional information.

The researcher guarantees that the information obtained from the questionnaires will be used for this study only, and that your full name or other identifying information will never be disclosed or referenced.

Teacher Questionnaire Round 1

Instruction

The questionnaire aims at collecting opinions of teachers, who have experience in teaching English I, about students' problems of reading English texts in science and technology; and reading lessons that facilitate the reading comprehension for such texts.

The questionnaire consists of three parts. Part 1 includes questions related to teacher's personal information; Part 2 concerns questions about the problems English I students have in reading English texts in science and technology; and Part 3 contains questions for teacher's opinions about learning and teaching methodology that help English I students better comprehend English texts in science and technology.

Please respond to all questions in the questionnaire and return it within one week. Your anonymity and confidentiality will be preserved at all times. The information obtained from the questionnaire will be analyzed for this research only.

Thank you very much for your kind cooperation.

Yours sincerely,

Benjamart Thanasoontornrer

Teacher Questionnaire Round 1

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Part 1 Personal Information

1. How long have you been teaching English as a foreign language?
_____ years.
2. How long have you taught English 1 at SUT?
_____ years.

Part 2 Reading Problems for English Science and Technology Texts in English I.

1. From your experience in teaching English I, have you found any problems English I students have reading English texts in science and technology?

☐ Yes

☐ No

(If no, continue with question number 2)

- 1.1 What are the problems students usually have?

(E.g. limited knowledge of subtechnical vocabulary, lack of prior knowledge of the text, lack of efficient reading strategies)

.....

.....

.....

.....

.....

1.2 How did you solve the students' problems?

[illegible]

2. What do you think are the factors that affect English I students' comprehension of English texts in science and technology? Please give examples.

(E.g. learner-related factors: students' learning strategies, instructional factors such as different teaching approaches, or material-related factors such as using texts from a variety of sources, etc.)

This image shows a blank sheet of white paper with six horizontal rows of small black dots, resembling primary-ruled notebook paper. The rows are evenly spaced and extend across the width of the page. There is no handwriting or other markings on the paper.

**Part 3 Learning and teaching strategies that help the English I students better
comprehend English texts in science and technology**

What do you think would be the most efficient learning and teaching strategies
that help English I students better comprehend English texts in science and
technology?

.....

.....

.....

.....

.....

Thank you very much for your kind cooperation

Teacher Questionnaire Round 2

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Instruction

This study uses a three round Delphi process to collect data from teachers and students through questionnaires. In the first round you were given an open-ended questionnaire to express your opinions about English 1 students' reading problems, and ideas of efficient learning and teaching methodology to solve problems. This second round questionnaire is to prioritize each statement (shown in each part) by the level of agreement. You are to rate the statements with the following rating scales: 5 = very strongly agree, 4 = strongly agree, 3 = agree, 2 = slightly agree, and 1 = least agree.

The questionnaire is divided into 2 parts. Part 1 concerns statements about students' reading problems of English texts in science and technology, whereas part 2 has instructions which is likely to improve reading comprehension of the text. The statements in both parts are derived from the first round questionnaire and literature review.

For the validity of the study, please respond honestly to all questions. The information you have supplied in the questionnaire will not be disclosed to anyone, but only used for this research.

Thank you very much for your kind cooperation.

(Benjamart Thanasoontornrerk)

The researcher

Teacher Questionnaire Round 2

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Direction: Make a check mark (✓) in a rating box which best describes your opinion about each statement below. If you have any additional comments, please write them in the ‘*Other*’ section at the end of each questionnaire.

5 = very strongly agree

4 = strongly agree

3 = agree

2 = slightly agree

1 = least agree.

Part 1 Reading Problems for English Science and Technology Texts in English I.

Statements	Rating Scales				
	5	4	3	2	1
1. Lack of reading habits.
2. Lack of motivation to read.
3. Use of excessive time for reading each passage.
4. Lack of appropriate reading strategies.
5. Having limited knowledge of both general and technical vocabulary.

Statements	Rating Scales				
	5	4	3	2	1
6. Inability to understand different meanings of some general vocabulary in science and technology texts.
7. Lack of prior knowledge about the text.
8. Inability to relate their prior knowledge to the text being read.
9. Inability to understand long and complex sentences.
10. Inability to find the main idea of the text.
11. Lack of self-study after class.
12. Reading and translating the English text based on Thai pattern and structures.
13. Reading and translating every word in the English text.
14. Lack of knowledge about text types and their organization, e.g. description, problem-solution, comparison-contrast, etc.
15. Lack of critical thinking skill in reading.
16. Other (Please identify).
.....
.....
.....

Part 2: Your Opinion about the Learning and Teaching Strategies for Reading

English Science and Technology Texts in English I.

A. Teachers' Opinions about Students' Learning Strategies

Statements	Rating Scales				
	5	4	3	2	1
1. Set goals and strategies to develop their own reading skills and implement plans to achieve goals.
2. Prepare for the reading class, e.g. memorizing the vocabulary or reading the text in advance.
3. Study and select the reading strategies based on their needs.
4. Self-study for English grammar, vocabulary and idioms.
5. Spend more time reading various English science and technology texts from different sources, e.g. books, magazines, journals in the library and the Internet.
6. Read the texts relevant to their interests and English ability.
7. Self-test regularly using tests from various sources.

Statements	Rating Scales				
	5	4	3	2	1
8. Motivate themselves to read more.
9. Create reading habits, e.g. setting reading time and reading everyday.
10. Collect database sources, e.g. from web sites as additional data concerning science and technology.
11. Other (Please identify).					
.....
.....
.....

B. Teachers' Opinions about Teaching Strategies

Statements	Rating Scales				
	5	4	3	2	1
1. Teach continually both general and subtechnical vocabulary in each field of science and technology according to the level of difficulty.
2. Have students read more science and technology texts to increase vocabulary knowledge.
3. Use quizzes to stimulate students to memorize the vocabulary.
4. Prepare students for the text by providing pre-reading activities concerned with the text vocabulary, grammar or content.
5. Teach accurate reading strategies and vocabulary guessing techniques.
6. Use a variety of teaching methods and select various content relevant to the students' English ability and needs.
7. Use fun activities in class.
8. Have students spend more time practicing reading skills.
9. Use modern teaching materials, e.g. CAI for independent learning.

Statements	Rating Scales				
	5	4	3	2	1
10. Teach and demonstrate speed reading techniques.
11. Assign students supplementary reading tasks from diverse sources, e.g. magazines or the Internet, and have them submit summary report.
12. Emphasize the English structures most frequently found in science and technology text.
13. Have students learn reading skills along with listening, speaking and writing skills.
14. Teach text types and their organization of science and technology, e.g. descriptives, comparison/contrast, problem/solution etc.
15. Have students with fast and accurate reading abilities share their reading strategies with the other students.
16. Use authentic reading materials (e.g. passages, reports or articles from various sources) appropriate to students' needs and English ability.
17. Assess reading comprehension regularly.

Statements	Rating Scales				
	5	4	3	2	1
18. Motivate students to read more, for example, by posing a question or problem for them to find answers/solutions, or by using the recent topics in class.
19. Use only English for class instruction.
20. Use both Thai and English for class instruction.
21. Have students read science fiction or cartoons.
22. Other (Please identify).					
.....
.....
.....

Thank you very much for your cooperation

Teacher Questionnaire Round 3

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Instruction

The third questionnaire, the last round, is for you to reconsider your responses from the second questionnaire. This questionnaire illustrates the correspondence of each statement in medians and interquartile ranges, and indicates your opinions marked with the following symbols:-

* refers to a median of opinions of all students who responded to each statement in the second questionnaire.

L J refers to an interquartile range which illustrates the rating range of all students' opinions for each statement in the second questionnaire.

X refers to your response for each statement in the second questionnaire.

You can **confirm your response** by making a check mark (✓) in front of the previous answer (e.g. ✓ x). If you want to **give a new response**, make a check mark (✓) in a rating space; and if your rating response is not within the range of interquartile, please give your reason.

For the validity of the study, please respond honestly to all questions in the questionnaire. The information you have provided in the questionnaire will not be disclosed to anyone, but only used for this research.

Thank you very much for your kind cooperation.

Benjamart Thanasoontornrerk

The researcher

Teacher Questionnaire Round 3

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Instruction

If you want to **confirm your response**, make a check mark (✓) in front of the previous answer (e.g. ✓ x). If you want to **give a new response**, make a check mark (✓) in a new rating space; and if your rating response is not within the range of interquartile, please give your reason. If you have any additional comments, please write them down in the ‘*Other*’ section at the end of each part.

Rating scales: 5 = very strongly agree, 4 = strongly agree, 3 = agree, 2 = slightly agree, 1 = least agree.

Part 1: An Example of a Teacher's Opinions about Reading Problems for English Science and Technology Texts in English I.

Statements	Rating Scales					Reasons
	5	4	3	2	1	
1. Lack of reading habits.	.X. <input type="checkbox"/>	..*. <input type="checkbox"/>
2. Lack of motivation to read.	.X. <input type="checkbox"/>	..*. <input type="checkbox"/>
3. Use of excessive time for reading each passage.	.....	..*X <input type="checkbox"/>
4. Lack of appropriate reading strategies.	..*X <input type="checkbox"/>
5. Having limited knowledge of both general and technical vocabulary.	..*. <input type="checkbox"/>X..	.....	.....	.....

Statements	Rating Scales					Reasons
	5	4	3	2	1	
6. Inability to understand different meanings of some general vocabulary in science and technology texts.	..*.. [ ]	.....	..X.	.....	....
7. Lack of prior knowledge about the text.	.....	..* [ ]	..X	.....	....
8. Inability to relate their prior knowledge to the text being read.	...	..*X [ ]	.....	.....	....
9. Inability to understand long and complex sentences.	..*X [ ]	.....	.....	.....	....
10. Inability to find the main idea of the text.	..*X [ ]	.....	.....	.....	....
11. Lack of practice after class.	..*X [ ]	.....	.....	.....	....
12. Reading and translating the English text based on Thai patterns and structures	..X [ ]	..*..	.....	.....	....
13. Reading and translating every word in the English text	..*X [ ]	.....	.....	.....	....
14. Lack of knowledge about text types and their organization, e.g. description, problem-solution, comparison-contrast, etc.	..X..	..*..	[ ]	.....	....
15. Lack of critical thinking skill in reading.	..*X [ ]	.....	.....	.....	....
16. Other (Please identify)						
.....	
.....	
.....	
.....	

A. Teachers Opinions about Students' Learning Strategies

Statements	Rating Scales						Reasons
	5	4	3	2	1		
1. Set goals and strategies to develop their own reading skills and implement plans to achieve goals.	.X..	..*..	..	.....	....	....	....
2. Prepare for the reading class e.g. memorizing the vocabulary or reading the text in advance.	.....	..*X	.....	.....	....	....	....
3. Study and select the reading strategies based on their needs.	.....	..*..	X.	....	....	.....	....
4. Self-study for English grammar, vocabulary and idioms.	..*..	..X.	.....	.....	....	....	....
5. Spend more time reading various English science and technology texts from different sources, e.g. books, magazines, journals in the library and the Internet.	..*X	....	....	.....	....	.....	....
6. Read the texts relevant to their interests and English ability.	..*..	X.	.....	.....	....	.....	....
7. Self-test regularly using tests from various sources.	.....	..*..	.X.	.....	....	.....	....

Rating Scales

Statements	5	4	3	2	1	Reasons
8. Motivate themselves to read more.	<input checked="" type="checkbox"/> X	.....	.....	.....	.....	.....
9. Create reading habits, e.g. setting reading time and reading everyday	<input checked="" type="checkbox"/> X	.....	.....	.....	.....	.....
10. Collect database sources, e.g. from web sites as additional data concerning science and technology	<input checked="" type="checkbox"/> *..	X	.....	.....	.....	.....
11. Other (Please identify)						
.....
.....
.....

B. Teachers' Opinions about Teaching Strategies

Statements	Rating Scales					Reasons
	5	4	3	2	1	
1. Teach continually both general and subtechnical vocabulary in each field of science and technology according to the level of difficulty.	. *X [ ]	.....	.....	.....	....	....
2. Have students read more science and technology texts to increase vocabulary knowledge.	. *X [ ]	.....	.....	.....	....	....
3. Use quizzes to stimulate students to memorize the vocabulary.	.....	. *X [ ]	....	.....	....	....
4. Prepare students for the text by providing pre-reading activities concerned with the text vocabulary, grammar or content.	*X [ ]	....	.....	.....	....	....
5. Teach accurate reading strategies and vocabulary guessing techniques.	. *X [ ]	.....	....	.....	....	....
6. Use a variety of teaching methods and select various content relevant to the students' English ability and needs.	*X [ ]	.....	.....	.....	....	....
7. Use fun activities in class.	*X [ ]	.....	.....	.....	....	....
8. Have students spend more time practicing reading skills.	. *X [ ]	.....	.....	.....	....	....
9. Use modern teaching materials, e.g. CAI for independent learning.	.....	. *X [ ]	.....	.....	....	....

Statements	Rating Scales					Reasons
	5	4	3	2	1	
10. Teach students and demonstrate speed reading techniques.*..	.X.	....	....	....
11. Assign students supplementary reading tasks from diverse sources, e.g. magazines or the Internet, and have them submit summary report.	*X	....	....	....	....
12. Emphasize on English structures most frequently found in science and technology text.*..	.X.	....	....	....
13. Have students learn reading skills along with listening, speaking and writing skills.	*X	....	....	....	....
14. Teach text types and their organization of science and technology, e.g. descriptives, comparison/contrast, problem/solution etc.	*X	....	....	....	....
15. Have students with fast and accurate reading abilities share their reading strategies with the other students.	*X	....	....	....	....
16. Use authentic reading materials (e.g. passages, reports or articles from various sources) appropriate to needs and English ability.	*X	....	....	....	....
17. Assess students reading comprehension regularly.	*X	....	....	....	....

Statements	Rating Scales					Reasons
	5	4	3	2	1	
18. Motivate students to read more, for example, by posing a question or problem for them to find answers/solutions, or by using the recent topics in class.	. *X	.....	...	.....	....	....
19. Use only English for class instruction.	.....	. *X	.....	....	....	....
20. Use both Thai and English for class instruction.	..*..	..X.	.....	....	....	....
21. Have students read science fiction or cartoons.	.....	.....	X..	....	....	....
22. Other (Please identify).						
.....
.....
.....

Thank you very much for your cooperation

Appendix D

Student Questionnaire Round 1

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Questionnaire Procedures

The present research aims at exploring reading problems of English texts in science and technology for English I students at Suranaree University of Technology; and developing reading lessons that facilitate reading comprehension of such texts. Therefore, the questionnaire is employed to gather opinions from experts and to find a consensus of the opinions. The findings of the questionnaire will then be used to develop reading lessons.

The study uses a three round Delphi process to ascertain and prioritize problems and opinions of learning and teaching methodology for efficient reading lessons. Therefore, experts will be asked to respond to questionnaires in three rounds. In the first round the experts will be asked to respond to the questions concerning reading problems, and learning and teaching methodologies that facilitate reading comprehension of science and technology texts in open-ended Questionnaire I. In the next two rounds scale-rating questionnaires will be used. Your responses will be prioritized and used to find a group consensus among experts. The results will be ranked from the highest priority to the lowest.

Your participation in all rounds is very essential for valid and reliable results. The researcher hopes to receive your kind cooperation throughout the process. If you have any questions about the procedures, please contact the researcher for additional information.

The researcher guarantees that the information obtained from the questionnaires will be used for this study only, and that your full name or other identifying information will never be disclosed or referenced.

Student Questionnaire Round 1

Instruction

The questionnaire aims at collecting opinions of teachers, who have experience in teaching English I, about students' reading problems for English science and technology texts; and reading lessons that facilitate reading comprehension for such texts.

The questionnaire consists of three parts. Part 1 includes questions related to teacher's personal information; Part 2 concerns questions about the problems English I students have in reading English texts in science and technologies; and Part 3 has questions for teacher's opinions about learning and teaching methodology that help English I students better comprehend English texts in science and technology.

Please respond to all questions in the questionnaire and return it within one week. Your anonymity and confidentiality will be preserved at all times. The information obtained from the questionnaire will be analyzed for this research only.

Thank you very much for your kind cooperation.

Yours sincerely,

Benjamart Thanasoontornrerk

Student Questionnaire Round 1

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Part 1 Personal Information

1. I am currently studying _____ at the institute of _____.
2. I have studied English (from primary education to the present) for _____ years.
3. My language proficiencies: listening, speaking, reading and writing are..... (Please make a check mark in the blanks below.)

	Good	Fair	Poor
Listening			
Speaking			
Reading			
Writing			

Notes: **Good** means having the ability to use the skill fluently or easily.

Fair means having the ability to use the skill moderately.

Poor means having difficulty in using the skill.

4. The last grade you got for an English course at your secondary school was, and for English 1 at SUT was

5. I think that reading English text in science and technology is

- ☐ essential
☐ not essential
- } for studying in my field of study

Part 2: Reading Background Knowledge and Experience

1. Have you ever read Thai text in science and technology?

a. ☐ Yes

What are your reading strategies?

(E.g. survey the text for headings and subheadings to get a general idea of the text, read the introduction and look at pictures, or use rapid reading to get the main idea)

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b. ☐ No

What kind of Thai text have you read?

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.....

.....

And what are your reading strategies in for such text?

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.....

2. Did you have any difficulty in reading the text in 1.a or 1.b)?

☐ Yes

☐ No (Continue with the questions in Part 3.)

If yes, what were the reading problems?

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.....

How did you solve the problems?

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Part 3: Reading Problems for English Science and Technology Texts in English I.

1. In English 1 classes, did you have any problems in reading English text?

☐ Yes ☐ No (Continue with the question 2.)

If yes, what were the reading problems?

(E.g. limited knowledge of subtechnical vocabulary, lack of prior knowledge of the text, or lack of efficient reading strategies)

[illegible]

How did you solve the problems?

[illegible]

What do you think are the factors that can help you develop your
comprehension of English texts in science and technology?

(E.g. learner-related (e.g. students' learning strategies); instructional (e.g. various teaching approaches); or learning and teaching material-related factors (e.g. using texts from a variety of sources, etc.).

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**Part 4: Learning and teaching strategies that help English I students better
comprehend English science and technology texts**

What do you think would be the most efficient learning and teaching
method that help you better comprehend English science and technology
texts?

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Thank you very much for your kind cooperation

Student Questionnaire Round 2

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Instruction

This study uses a three round Delphi process to collect data from teachers and students through questionnaires. In the first round you were given an open-ended questionnaire to express your opinions about English 1 students' reading problems, ideas of efficient learning and teaching methodology to solve the problems. The second round questionnaire is to prioritize each statement (shown in each part) by the level of agreement. You are to rate the statements with the following rating scales: 5 = very strongly agree, 4 = strongly agree, 3 = agree, 2 = slightly agree, and 1 = least agree.

The questionnaire is divided into 2 parts. Part 1 concerns statements about students' reading problems of English texts in science and technology, whereas part 2 has instructions which is likely to improve reading comprehension of the text. The statements in both parts are derived from the first round questionnaire and literature review.

For the validity of the study, please respond honestly to all questions. The information you have supplied in the questionnaire will not be disclosed to anyone, but only used for this research.

Thank you very much for your kind cooperation.

Benjamart Thanasoontornrerk

The researcher

Student Questionnaire Round 2

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Direction: Make a check mark (✓) in a rating box which best describes your opinion about each statement below. If you have any additional comments, please write them in the ‘*Other*’ section at the end of each questionnaire.

5 = very strongly agree

4 = strongly agree

3 = agree

2 = slightly agree

1 = least agree.

Part 1 Reading Problems for English Science and Technology Texts in English I.

Statements	Rating Scales				
	5	4	3	2	1
1. Lack of subtechnical vocabulary in each subject.
2. Lack of prior knowledge about the text.
3. Inability to understand long and complex sentences.
4. Lack of appropriate reading strategies.
5. Inability to find the main idea of the text.

Statements	Rating Scales				
	5	4	3	2	1
6. Inability to understand different meanings of some general vocabulary in science and technology texts.
7. Lack of knowledge about text types and their organization, e.g. description, problem-solution, comparison-contrast, etc.
8. Inability to relate their prior knowledge to the text being read.
9. Lack of problem-solving strategies when faced with reading problems.
10. Lack of motivation to read.
11. Other (Please identify)					
.....
.....
.....

**Part 2: Students' Opinion about Learning and Teaching Strategies for Reading
English Science and Technology Texts in English I.**

A. Students' Opinions about Their Learning Strategies

Statements	Rating Scales				
	5	4	3	2	1
1. Prepare for reading class, e.g. memorizing the vocabulary or reading the text in advance.
2. Spend more time to read various English science and technology texts from different sources, e.g. books, magazines, journals in the library and the Internet.
3. Read the texts relevant to their interests and English ability.
4. Create self- motivation to read.
5. Self-study of English grammar, vocabulary and idioms.
6. Gain more knowledge of science and technology.
7. Other (Please identify)					
.....
.....
.....

B. Students' Opinions about Teaching Strategies

Statements	Rating Scales				
	5	4	3	2	1
1. Prepare students for the text by providing pre-reading activities concerned with the text vocabulary, grammar or content.
2. Teach content and subtechnical vocabulary for science and technology in the field of study available at the university, e.g. tools and equipment used, etc.
3. Teach students text types and their organization e.g. description, comparison-contrast, problem-solution, etc.
4. Teach students reading strategies for each text type.
5. Teach problem-solving strategies to solve reading problems.
6. Use quizzes to stimulate students to memorize the vocabulary.
7. Use science and technology texts in class.
8. Select authentic materials from daily life, e.g. passages, reports or articles from various sources appropriate to the students' needs and English ability.

Statements	Rating Scales				
	5	4	3	2	1
9. Motivate students with low English proficiency to learn more about English grammar and vocabulary.
10. Use both Thai and English for class instruction.
11. Use various kinds of technology for instruction such as computer or video.
12. Use a variety of instructional approaches and content which are relevant to the students' ability and needs.
13. Use fun activities in class.
14. Other (Please identify)					
.....
.....
.....

Thank you very much for your cooperation

Student Questionnaire Round 3

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Instruction

The third questionnaire, the last round, is for you to reconsider your responses from the second questionnaire. This questionnaire illustrates the correspondence of each statement in medians and interquartile ranges, and indicates your opinions marked with the following symbols:-

* refers to a median of opinions of all students who responded to each statement in the second questionnaire.

L J refers to an interquartile range which illustrates the rating range of all students' opinions for each statement in the second questionnaire.

X refers to your response for each statement in the second questionnaire.

You can **confirm your response** by making a check mark (✓) in front of the previous answer (e.g. ✓ x). If you want to **give a new response**, make a check mark (✓) in a rating space; and if your rating response is not within the range of interquartile, please give your reason.

For the validity of the study, please respond honestly to all questions in the questionnaire. The information you have provided in the questionnaire will not be disclosed to anyone, but only used for this research.

Thank you very much for your kind cooperation.

Benjamart Thanasoontornrerk

The researcher

Student Questionnaire Round 3

Research: The Development of English Reading Lessons in Science and Technology for English I Students at Suranaree University of Technology

Instruction

If you want to confirm your response, make a check mark (✓) in front of the previous answer (e.g. ✓x). If you want to give a new response, make a check mark (✓) in a new rating space; and if your rating response is not within the range of interquartile, please give your reason. If you have any additional comments, please write them down in the ‘Other’ section at the end of each part.

Rating scales: 5 = very strongly agree, 4 = strongly agree, 3 = agree, 2 = slightly agree, 1 = least agree.

Part 1: An Example of a Student's Opinion about Reading Problems for English Science and Technology Texts in English I.

Statements	Rating Scales					Reasons
	5	4	3	2	1	
1. Lack of subtechnical vocabulary in each subject.*	..X..	.....	.....	.....
2. Lack of prior knowledge about the text.*X.	.....	.....	.....
3. Inability to understand long and complex sentences.*	..X..	.....	.....	.....
4. Lack of appropriate reading strategies.*	..X..	.....	.....	.....
5. Inability to find the main idea of the text.*..	..X.	.....	.....

Statements	Rating Scales					Reasons
	5	4	3	2	1	
6. Inability to understand diverse meanings of some general vocabulary in science and technology texts.	..*..X.	.....	....	....
7. Lack of knowledge about text types and their organization, e.g. description, problem-solution, comparison-contrast, etc.*X.	....	....
8. Inability to relate their prior knowledge to the text being read.*X	.....	....	....
9. Lack of problem-solving strategies when faced with reading problems.*X	.....	....	....
10. Lack of motivation to read.*..	..X.	....	....
11. Other (Please identify)						
.....
.....
.....

Part 2: An Example of a Student's Opinions about the Learning and Teaching Strategies for Reading English Texts in Science and Technology Found in the English I Course.

A. An example of Students' Opinions about Their Learning Strategies

Statements	Rating Scales					Reasons
	5	4	3	2	1	
1. Prepare for reading class e.g. memorizing the vocabulary or reading the text in advance.*..	..X.	.....	....	....
2. Spend more time to read various English science and technology texts from different sources, e.g. books, magazines, journals in the library and the Internet.*..	..X.	.....	....	....
3. Read the texts relevant to their interests and English ability.X.	..*..	.....	....	....
4. Create self- motivation to read.*..	..X.	.....	....	....
5. Self-study of English grammar, vocabulary and idioms.*..	..X.	.....	....	....
6. Gain more knowledge of science and technology.*X	.....	....	....
7. Other (Please identify)						
.....
.....
.....

B. An Example of a Student's Opinions about Teaching Strategies

Statements	Rating Scales					Reasons
	5	4	3	2	1	
1. Prepare students for the text by providing pre-reading activities concerned with the text vocabulary, grammar or content.*X	....	....	....	....
2. Teach content and subtechnical vocabulary for science and technology in the field of study available at the university, e.g. tools and equipment used, etc.	..*..X.	....	....	....
3. Teach students text types and their organization, e.g. description, comparison-contrast, problem-solution, etc.*	..X.	....	....	....
4. Teach students reading strategies for each text type.*X.	....	....
5. Teach problem-solving strategies to solve reading problems.	..*..X.	....	....	....
6. Use quizzes to stimulate students to memorize the vocabulary.*..X.	....	....
7. Use science and technology texts in class.*..X.	....	....
8. Select authentic materials from daily life, e.g. passages, reports or articles from various sources appropriate to the students' needs and English ability.	..*..X.	....	....

Statements	Rating Scales					Reasons
	5	4	3	2	1	
9. Motivate students with low English proficiency to learn more about English grammar and vocabulary.	..*..X.	.....	....	....
10. Use both Thai and English for class instruction.*X.	....	....
11. Use various kinds of technology for the instruction such as computer or video.*..X.	....	....
12. Use a variety of instructional approaches and contents which are relevant to the students' ability and needs.*X.	....	....
13. Use fun activities in class.	..*..X.	.....	....	....
14. Other (Please identify)						
.....
.....
.....

Thank you very much for your cooperation

Appendix E

Results of Teacher Questionnaire Round 3

After the two round questionnaires, the tables below present the findings of the third rounds.

(Rating scales: 5 = very strongly agree, 4 = strongly agree, 3 = agree, 2 = slightly agree, 1 = least agree)

1. Teachers' Opinions about Reading Problems of English 1 Students

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
1	• Inability to understand long and complex sentences	5	5	0.00
1	• Lack of self-study after class	5	5	0.00
1	• Limited knowledge of general and subtechnical vocabulary	5	5	0.00
1	• Inability to relate their prior knowledge to the text	4	4	0.00
2	• Inability to find the main idea of the text	5	5	0.50
2	• Use of excessive time for reading each passage	4	4	0.50
2	• Lack of prior knowledge about the text	5	4	0.50

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
3	• Lack of accurate and appropriate reading strategies	5	5	1.00
3	• Read and translate the English text based on Thai patterns and structures	5	5	1.00
3	• Lack of critical thinking skills while reading	5	5	1.00
3	• Lack of reading habits	5	4.5	1.00
3	• Inability to understand diverse meanings for some general vocabulary in science and technology text	4	4	1.00
3	• Read and translate every word in the English text	4	4	1.00
3	• Lack of motivation to read	4	4	1.00
4	• Lack of knowledge about text types and their organization, e.g. comparison/contrast problem/solution, description,	4	4	1.50

2. Teachers' Opinions about English 1 Students' Learning Strategies

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
1	<ul style="list-style-type: none"> • Spend more time reading various English science and technology texts from different sources, e.g. books, magazines, journals in the library and the Internet 	5	5	0.00
2	<ul style="list-style-type: none"> • Read texts relevant to their interests and English ability 	5	5	0.50
2	<ul style="list-style-type: none"> • Develop reading habits, e.g. set reading times and daily 	5	5	0.50
3	<ul style="list-style-type: none"> • Self-study for English grammar, vocabulary and idioms 	5	5	1.00
3	<ul style="list-style-type: none"> • Create self-motivation to read more 	5	5	1.00
3	<ul style="list-style-type: none"> • Conduct regularly self-testing using tests from various sources 	4	4	1.00
3	<ul style="list-style-type: none"> • Prepare for the class, e.g. memorizing the vocabulary or reading the text in advance. 	4	4	1.00

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
4	<ul style="list-style-type: none"> • Collect database sources, e.g. from web sites as additional data concerning science and technology. 	5	5	1.50
4	<ul style="list-style-type: none"> • Set goals and strategies to develop their own reading skills and implement them to achieve goals. 	4	4	1.50
4	<ul style="list-style-type: none"> • Study and select reading strategies based on their needs. 	4	4	1.50

3. Teachers' Opinions about English 1 Students' Teaching Strategies

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
1	<ul style="list-style-type: none"> Use a variety of teaching methods and select various contents relevant to students' English ability and needs 	5	5	0.00
1	<ul style="list-style-type: none"> Use authentic reading materials (e.g. passages or articles from various sources) appropriate to students' needs and abilities. 	5	5	0.00
1	<ul style="list-style-type: none"> Have students learn reading skills along with listening, speaking and writing skills 	4	4	0.00
1	<ul style="list-style-type: none"> Teach text types and their organization for science and technology, e.g. descriptive, comparison/contrast, problem/solution etc. 	4	4	0.00
2	<ul style="list-style-type: none"> Teach continually, both general and subtechnical vocabulary, in each field of science and technology according to level of difficulty 	5	5	0.50

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
2	<ul style="list-style-type: none"> Have students read more science and technology text to increase vocabulary knowledge. 	5	5	0.50
2	<ul style="list-style-type: none"> Teach accurate reading strategies and vocabulary guessing techniques. 	5	5	0.50
2	<ul style="list-style-type: none"> Use fun activities in class. 	5	5	0.50
2	<ul style="list-style-type: none"> Use both Thai and English for class instruction. 	5	5	0.50
2	<ul style="list-style-type: none"> Assign students supplementary reading tasks from diverse sources e.g. magazines or the Internet and have them submit a summary report. 	4	4	0.50
3	<ul style="list-style-type: none"> Prepare students for the text by providing pre-reading activities concerning text vocabulary, grammar or content. 	5	5	1.00
3	<ul style="list-style-type: none"> Have students spend more time practicing reading skills 	5	5	1.00

3	<ul style="list-style-type: none"> • Motivate students to read more, for example, by posing a question or problem for students to find answers/solutions, or by using recent topics 	5	5	1.00
3	<ul style="list-style-type: none"> • Emphasize English structures most frequently found in science and technology text. 	4	4	1.00
3	<ul style="list-style-type: none"> • Use modern teaching materials, e.g. CAI for students' independent learning. 	4	4	1.00
3	<ul style="list-style-type: none"> • Have students with fast and accurate reading abilities share their reading strategies with the other students. 	4	4	1.00
3	<ul style="list-style-type: none"> • Assess students reading comprehension regularly. 	4	4	1.00
3	<ul style="list-style-type: none"> • Use quizzes to stimulate students to memorize the vocabulary. 	4	4	1.00
4	<ul style="list-style-type: none"> • Teach students and demonstrate speed reading techniques. 	4	4	1.50

Ranks	Priority Statements	Rating Scales	Medians	Interquartiles
4	• Use only English for class instruction.	4	4	1.50
5	• Have students read science fiction or cartoons.	--	--	--

Appendix F

Results of Student Questionnaire Round 3

After the two round questionnaires, the tables below present the findings of the third rounds.

(**Rating scales:** 5 = very strongly agree, 4 = strongly agree, 3 = agree, 2 = slightly agree, 1 = least agree)

1. Students' Opinions about their Reading Problems

Ranks	Priority Statements	Rating scales	Medians	Interquartiles
1	• Inability to understand diverse meanings of some general vocabulary in science and technology texts.	4	4.50	0.50
2	• Lack of appropriate reading strategies.	4	4.00	0.00
3	• Inability to understand long and complex sentences.	4	4.00	0.25
4	• Lack of subtechnical vocabulary in each subject.	4	4.00	0.50
5	• Lack of problem-solving strategies when facing with the reading problems.	3	3.50	1.00
5	• Lack of motivation to read.	3	3.50	1.00

Ranks	Priority Statements	Rating scales	Medians	Interquartiles
6	<ul style="list-style-type: none"> • Lack of knowledge about text types and their organization, e.g. description, problem-solution, comparison-contrast, etc. 	3	3.50	1.25
7	<ul style="list-style-type: none"> • Lack of prior knowledge about the text. 	3	3.00	0.25
8	<ul style="list-style-type: none"> • Inability to understand the main idea of the text. 	3	3.00	1.00
9	<ul style="list-style-type: none"> • Inability to relate their prior knowledge to the text being read. 	3	3.00	1.25

2. Students' Opinions about Their Learning Strategies

Ranks	Priority Statements	Rating scales	Medians	Interquartiles
1	• Develop self-motivation to read.	4	4.00	0.00
2	• Spend more time reading various English science and technology texts from different sources, e.g. books, magazines, journals in the library and the Internet.	4	4.00	1.00
2	• Self-study of English grammar, vocabulary and idioms.	4	4.00	1.00
3	• Prepare for the reading class, e.g. memorizing the vocabulary or reading the text in advance.	4	4.00	1.25
4	• Read texts relevant to their interests and English ability.	3	3.00	1.00
5	• Gain more knowledge of science and technology.	3	3.00	1.25

3. Students' Opinions about Teaching Strategies

Ranks	Priority Statements	Rating scales	Medians	Interquartiles
1	• Use fun activities in class.	5	5.00	0.75
2	• Teach students reading strategies for each text type.	4	4.00	0.00
3	• Use both Thai and English for class instruction.	4	4.00	0.25
4	• Use various kinds of technology for instruction such as computer or video.	4	4.00	0.50
4	• Teach students text types and their organization, e.g. description, comparison-contrast, problem-solution, etc.	4	4.00	0.50
4	• Use a variety of instructional approaches and contents which are relevant to students' ability and needs.	4	4.00	0.50
5	• Prepare students for the text by providing pre-reading activities concerned with the text vocabulary, grammar or content.	4	4.00	1.00

Ranks	Priority Statements	Rating scales	Medians	Interquartiles
5	<ul style="list-style-type: none"> • Teach content and subtechnical vocabulary for science and technology in the field of study available at the university, e.g. tools and equipment used, etc. 	4	4.00	1.00
5	<ul style="list-style-type: none"> • Teach problem-solving strategies to solve reading problems. 	4	4.00	1.00
5	<ul style="list-style-type: none"> • Use quizzes to stimulate students to memorize the vocabulary. 	4	4.00	1.00
6	<ul style="list-style-type: none"> • Motivate students with low English proficiency to learn more English grammar and vocabulary. 	4	4.00	1.25
7	<ul style="list-style-type: none"> • Select authentic materials from daily life, e.g. passages, reports or articles from various sources appropriate to students' needs and English ability. 	4	4.00	1.75
8	<ul style="list-style-type: none"> • Use more science and technology texts in class. 	3	3.50	1.25

Appendix G

The Evaluation of the Efficiency of Computer Assisted Instruction

The individual trial for effectiveness evaluation of Computer Assisted Instruction for reading lessons

Student	Pre-test score	Exercise score	Post-test score		
Number	(20 points)	(20 points)	(20 points)	E ₁	E ₂
1	5	12	12		
2	9	17	15		
3	10	15	14		
Total score	24	44	41		
Mean score	8.00	14.66	13.66		
Percentages	40.00	73.30	68.30	73.30	68.30

$$\bar{X} = \frac{44}{3}$$

$$\bar{x} = 14.66$$

$$E_1 = \frac{14.66}{20} \times 100$$

$$E_1 = 73.30$$

$$X = \frac{41}{3}$$

$$\bar{x} = 13.66$$

$$E_2 = \frac{13.66}{20} \times 100$$

$$E_2 = 68.30$$

The small group trial for effectiveness evaluation of Computer Assisted Instruction for reading lessons

Student	Pre-test score	Exercise score	Post-test score		
Number	(20 points)	(20 points)	(20 points)	E₁	E₂
1	7	15	14		
2	7	14	14		
3	10	15	13		
4	14	17	17		
5	8	18	17		
6	9	16	15		
7	8	18	15		
8	3	16	14		
9	8	17	15		
Total score	74	146	134		
Mean score	8.22	16.22	14.88		
Percentages	41.10	81.10	74.40	81.10	74.40

$$X = \frac{146}{9}$$

$$\bar{x} = 16.22$$

$$E_1 = \frac{16.22}{20} \times 100$$

$$E_1 = 81.10$$

$$X = \frac{134}{9}$$

$$\bar{x} = 14.88$$

$$E_2 = \frac{14.88}{20} \times 100$$

$$E_2 = 74.40$$

The field trial for effectiveness evaluation of Computer Assisted Instruction for reading lessons

Student Number	Pre-test score (20 points)	Exercise score (20 points)	Post-test score (20 points)	E₁	E₂
1	7	18	14		
2	3	17	16		
3	8	18	16		
4	9	17	18		
5	10	15	13		
6	7	19	17		
7	8	17	19		
8	5	15	14		
9	3	16	15		
10	4	19	18		
11	13	16	18		
12	13	18	16		
13	5	17	18		
14	11	19	18		
15	8	15	13		
16	13	17	15		
17	7	16	17		
18	7	16	15		
19	8	16	14		
20	10	17	16		

Student	Pre-test score	Exercise score	Post-test score	E₁	E₂
Number	(20 points)	(20 points)	(20 points)		
21	9	17	18		
22	8	15	16		
23	16	18	19		
24	8	15	16		
25	4	16	18		
26	7	18	16		
27	8	19	18		
28	10	15	16		
29	14	17	15		
30	10	17	19		
Total score	253	505	490		
Mean score	8.43	16.83	16.33		
Percentages	42.15	84.15	81.65	84.15	81.65

$$\bar{X} = \frac{505}{30}$$

$$\bar{x} = 16.83$$

$$E_1 = \frac{16.83}{20} \times 100$$

$$E_1 = 84.15$$

$$\bar{X} = \frac{490}{30}$$

$$\bar{x} = 16.33$$

$$E_2 = \frac{16.33}{20} \times 100$$

$$E_2 = 81.65$$

Appendix H

Lesson Plan for the Control Group

Title:	Reading lessons
Class size:	45 English 1 students
Subject:	Reading Lessons
Periods:	10
Instructor:	Ms. Benjamart Thanasoontornrerk

Period	Content	Activities	Teaching Aids	Evaluation
1 st	1. Lesson orientation 2. Learning objectives 3. Content in the reading lessons 4. Learning methods	1. The teacher introduces the reading lessons, objectives and content. 2. The topics and learning methods are introduced. 3. Students are allowed to ask questions about the lessons.	Handouts	
2 nd	Guessing word meanings from clues I	1. The teacher distributes the lesson sheets to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the techniques of how to guess the meaning of vocabulary from different clues one at a time, i.e. definition, punctuations, context, exemplification, antonym and synonyms, with sample sentences. 4. The teacher checks comprehension by asking questions both to the group and individually. 5. Students ask questions. 6. Students practice guessing word meanings from exercises and games. 7. After that they take a post-test to see how well they do. 8. Students check for answers.	Handouts and worksheets	Results from doing the exercises and a post-test

3 rd	Guessing word meanings from word formation II	<ol style="list-style-type: none"> 1. The lesson sheets are given to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the techniques of how to guess the meaning of vocabulary from word formation: roots, prefixes and suffixes. 4. The teacher checks comprehension by asking questions both to the group and individually. 5. Students practice guessing word meanings from exercises. 6. The class check answers together 7. After that they take a post-test. 9. Students check for answers. 	Handouts and worksheets	Results from doing the exercises and a post-test
4 ^h	Skimming technique	<ol style="list-style-type: none"> 1. The teacher distributes the lesson sheets to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the skimming technique with examples. 4. Then students practice the skimming technique from the exercises. 5. The class shares answers. 6. The teacher concludes the skimming tips. 7. Students take a post-test after the lesson. 	Handouts and worksheet	Results from doing the exercises and a post-test

			8. Students check for answers.		
5 ^h	Finding main ideas	1. The teacher distributes the lesson sheets to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the finding main ideas technique with examples. 4. Then students practice the reading technique from the exercises. 5. The class shares answers. 6. The teacher concludes the tips of finding main ideas. 7. Students take a post-test after the lesson. 8. Students check for answers.	Handouts and worksheets	Results from doing the exercises and a post-test	
6 ^h	Scanning technique	1. The teacher distributes the lesson sheets to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the scanning technique with examples. 4. Then students practice the reading technique from the exercises. 5. The class shares answers. 6. The teacher concludes scanning tips. 7. Students take a post-test after the lesson. 8. Students check for answers.	Handouts and worksheets	Results from doing the exercises and a post-test	

7 ^h	Economics words	<ol style="list-style-type: none"> 1. The teacher distributes the lesson sheets to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. Twelve economics words are presented one at a time with sample sentences. 4. The teacher checks comprehension by asking questions both to the group and individually. 5. Students are assigned to practice using the words in the exercises. 6. Students can ask questions. 7. Students take a post-test after the lesson. 8. Students check for answers. 	Handouts and worksheets	Results from doing the exercises and a post-test
8 th	Relative clauses	<ol style="list-style-type: none"> 1. The lesson sheets are given to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the concept, types of relative clauses. 4. Relative pronouns: who, which, whom, that are presented with examples. 5. The formation of relative clauses is demonstrated. 6. After that, they practice the exercises. 7. Students take a post-test after the lesson. 8. Students check for answers. 	Handouts and worksheets	Results from doing the exercises and a post-test

9 th	If-clauses	<ol style="list-style-type: none"> 1. The lesson sheets are given to the class. 2. The objectives are introduced and students are assigned to take a pretest before studying the lesson. 3. The teacher presents the concept, types of if clauses. 4. If-clauses: Type 1: Future possible are presented with examples. 5. The formation of if-clauses is demonstrated. 6. After that, they practice the exercises. 7. Students take a post-test after the lesson. 8. Students check for answers. 	Handouts and worksheets	Results from doing the exercises and a post-test
10 th	Review	<ol style="list-style-type: none"> 1. The teacher introduces the learning objectives and distributes handouts to students. 2. Then the learning tips of the previous eight lessons are reviewed. 3. Students in groups practice each exercise and share answers afterwards. 4. Each group corrects each other. 	Handouts and worksheets	Results from doing the exercises and a post-test

Appendix I

Lesson Plan for the Experimental Group

Title: Reading lessons

Class size: 38 English 1 students

Subject: Reading Lessons

Periods: 10

Instructor: Ms. Benjamart Thanasoontornrerk

Period	Content	Activities	Teaching Aids	Evaluation
1 st	1. CAI introduction 2. Learning objectives 3. Content in the reading lessons 4. Learning methods 5. Student Journal	1. The teacher introduces the CAI program, including the objectives, learning guides, lesson features and student journals. 2. Students study the program individually to ensure that they understand what they will learn for the next period. 3. The teacher asks the students some questions about the program. 4. The students are introduced to the student journal sheet and how to document their journals. 5. Students practice writing their journals.	1. Computers connected to the Internet 2. Student journal sheets	1. Questions and answers done orally. 2. Results from the Student Journal sheets
2 nd	Guessing word meanings from clues I	1. Each student studies the objectives and takes a pretest before studying the lesson. 2. After that the students study how to guess the meaning of vocabulary words from various clues: exemplification, definition, antonyms and synonyms, context and punctuations. If they have any problem, they can ask the teacher. 3. Students practice guessing word meanings from exercises and games. 4. After that they take a post-test to see how well they do.	1. Computers connected to the Internet 2. Student journal sheets	1. Results from doing the exercises 2. Student journals

		5. The students write in their journals.		
3 rd	Guessing word meanings from word formation II	<ol style="list-style-type: none"> 1. Students study the objectives and take a pretest. 2. Then they study how to guess the meaning of vocabulary from roots, prefixes and suffixes. 3. Students practice guessing word meanings from exercises. 4. Students can ask the teacher if they have any problems. 5. After that they take a post-test. 6. Students write in their journals. 	<ol style="list-style-type: none"> 1. Computers connected to the Internet 2. Student journal sheets 	<ol style="list-style-type: none"> 1. Results from doing the exercises 2. Student journals
4 th	Skimming technique	<ol style="list-style-type: none"> 1. Students study the objectives and take a pretest. 2. Then they study the skimming technique. 3. After that, they practice the reading technique from the exercises. 4. Students can ask the teacher if they have any questions. 5. Students take a post-test after the lesson. 6. Students write in their journals. 	<ol style="list-style-type: none"> 1. Computers connected to the Internet 2. Student journal sheets 	<ol style="list-style-type: none"> 1. Results from doing the exercises and games 2. Student journals
5 th	Finding main ideas	<ol style="list-style-type: none"> 1. Students study the objectives and take a pretest. 2. Then they study the finding main ideas technique. 3. After that, they practice the reading technique 	<ol style="list-style-type: none"> 1. Computers connected to the Internet 2. Student journal sheets 	<ol style="list-style-type: none"> 1. Results from doing the exercises and games 2. Student journals

		from the exercises.		
		4. Students can ask the teacher if they have any questions.		
		5. Students take a post-test after the lesson.		
		6. Students write their opinions about the lesson in student journals.		
6 th	Scanning technique	1. Students study the objectives and take a pretest. 2. Then they study the scanning technique. 3. After that, they practice the reading technique from the exercises. 4. Students can ask the teacher if they have any questions. 5. Students take a post-test after the lesson. 6. Students write their opinions about the lesson in student journals.	1. Computers connected to the Internet 2. Student journal sheets	1. Results from doing the exercises and games 2. Student journals
7 th	Economics words	1. Students study the objectives and take a pretest. 2. Then they study 12 Economics words. 3. After that they practice guessing word meanings from exercises. 4. Students can ask the teacher if they have any questions. 5. Students take a post-test after the lesson. 6. Students write their opinions about the lesson in their journals.	1. Computers connected to the Internet 2. Student journal sheets	1. Results from doing the exercises and games 2. Student journals
8 th	Relative clauses	1. Students study the objectives and take a	1. Computers connected to the	1. Results from

		pretest. 2. Then they study the grammar: relative clauses. 3. After that, they practice the exercises. 4. Students can ask the teacher if they have any questions. 5. Students take a post-test after the lesson. 6. Students write their opinions about the lesson in student journals.	Internet 2. Student journal sheets	doing the exercises and games 2. Student journals
9 th	If-clauses	1. Students study the objectives and take a pretest. 2. Then they study the grammar: If- clauses. 3. After that, they practice the exercises. 4. Students can ask the teacher if they have any questions. 5. Students take a post-test after the lesson. 6. Students write their opinions about the lesson in student journals.	1. Computers connected to the Internet 2. Student journal sheets	1. Results from doing the exercises and games 2. Student journals
10 th	Review	1. Students study the objectives. 2. In the last lesson they review and practice reading skills taught in previous 8 lessons. 3. The teacher monitors students' learning. 4. Students can ask the teacher if they have any questions.	1. Computers connected to the Internet 2. Student journal sheets	1. Results from doing the exercises 2. Student journals

Appendix J

Student Journal Form

Directions:

Please note down your opinions about the lessons, such as what you understand or learn the most or least from the lessons, what you like most or least (e.g. about the contents, vocabulary, lesson presentation, the use of computer-assisted learning, etc.). Moreover, your suggestions for improving lessons are also welcomed. Writing in **Thai** or **English** is acceptable. Your opinions will be very useful for improving lessons.

กรุณารับบันทึกความคิดเห็นของท่านเกี่ยวกับบทเรียนนี้ เช่น ท่านเข้าใจหรือเรียนรู้สิ่งใดมากที่สุดหรือน้อยที่สุดในบทเรียนนี้ ท่านชอบสิ่งใดมากที่สุดหรือน้อยที่สุด (เกี่ยวกับเนื้อหา คำศัพท์ การนำเสนอบทเรียน แบบฝึกหัด แบบทดสอบ เป็นต้น) นอกจากนี้ ยินดีรับคำแนะนำในการปรับปรุงบทเรียนของท่านด้วยเช่นกัน ท่านสามารถบันทึกเป็นภาษาไทยหรือภาษาอังกฤษก็ได้ ความคิดเห็นของท่านจะเป็นประโยชน์อย่างยิ่งในการพัฒนาบทเรียนต่อไป

บันทึก

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Thank you for your cooperation.

Appendix K

Pretest On Reading Comprehension For English I Students

Direction: Read the following passages and answer the questions that follow.

PASSAGE 1

International Trade

Some countries import goods that they do not have or cannot produce. Some countries export goods that they have more than enough and can produce well. This exchange of goods and services in the world market, or known as international trade, has three major benefits.

- 5 First of all, international trade allows some countries to get the materials *that* they need. For example, when Thailand does not have enough gas, it may import gas from another country. Next, international trade allows a country to be skillful in production of the goods it has. This depends on the natural, human and technical resources that each country has. That is, Saudi Arabia is very skillful at petroleum
- 10 because it has this natural resource (petroleum). Mexico *specializes* in wood furniture because its people are very skillful at wood work. The United States specializes in the computer industry because its people have the technical skills. Finally, international trade allows the countries to trade together and cooperate even though they are different. For example, Thailand can trade with China, Pakistan or even Russia.
- 15 European Union (EU) and APEC are also examples of economic cooperation of many countries.

Adapted from Business Concepts for English Practice (2nd Ed.) by Marianne McDougal Arden & Barbara Tolley Dowling, (1993), p. 48.

Direction: Choose the best answers.

1. What is the main idea of this passage?
 - a. Some countries import goods they do not have or produce well.
 - b. The exchange of goods and services is done carefully.
 - c. There are three major benefits from international trade.
 - d. International trade allows some countries to get the materials they want.

2. What **IS NOT** a benefit of the international trade?
 - a. Thailand has exported a lot of rice to many countries.
 - b. European countries join together to work as a group.
 - c. Saudi Arabia orders a lot of food from Asian countries
 - d. Australia uses a lot of petroleum on transportation services.

3. What does '*that*' (line 5) refer to?
 - a. countries
 - b. materials
 - c. gas
 - d. international trade

4. What is the international trade?
 - a. The exchange of goods and services among different countries.
 - b. The selling of goods and services that are only of good quality.
 - c. The production of goods and services in large quantity for export.
 - d. The transportation system of goods and services to another country.

5. What does '*specializes*' (line 10) mean?
 - a. uses high technology
 - b. has a very special thing
 - c. is very skillful at something
 - d. produces something

PASSAGE 2

OTOP

One of the country's problems is many people in rural areas are very poor. So, the government set up OTOP project to create or make incomes (money) for villagers in each community and to improve their life standard. OTOP stands for "One Tambon One Product". It is a project to promote hand-made goods and folk

5 handicrafts of each Tambon, or a cluster of villages in English. The OTOP logo is a *Pla Taphian Bai Lan* (a fish, made from palm leaves, with a small Thai flag on its body). Tambon is the target area because the government wants to promote a small industry in each Tambon where most people are poor. The other reason is that the rural people are very skillful in handicrafts, and they can make use of the resources or

10 materials in their villages by producing specialty goods.

OTOP products are food; **beverages** (which are both alcoholic and non-alcoholic drinks); clothes and garments; ornamental products e.g. hats, bags and necklaces; decorative products and furniture e.g. household furniture, handicrafts and

15 artificial flowers (such as, flowers made from silk, Sah paper, glass, or rubber); arts and souvenirs; and herbal products **which** are made into cosmetics, herbal shampoo, aroma oil, etc.

Adapted from OTOP available at http://www.thaiwaysmagazine.com/thai_article/2014_one_tambon_one_product/one_tambon_one_product.html

Direction: Choose the best answers.

6. What is the main idea of the *first* paragraph?
- OTOP is the project that rural people set up.
 - OTOP stands for ‘One Tambon One product’.
 - OTOP is the name of a village that produces goods.
 - OTOP is the project used to improve the rural people’s life.
7. What is the OTOP logo?
- a flag in a fish
 - a fish on a flag
 - a flag on a fish
 - a flag on palm leaves
8. Why is “Tambon” the target area for the OTOP project?
- Because the people are all farmers.
 - Because the people are skillful but poor.
 - Because the people do not have any job.
 - Because the people want to produce goods.
9. What does ‘*beverage*’ (line 11) mean?
- vegetables
 - fruits
 - drinks
 - food
10. What does ‘*which*’ (line 15) refer to?
- products
 - cosmetics
 - shampoo
 - aroma oil

PASSAGE 3**The Best of the Bunch**

Most of the housewives in Rajchasarn district of Chachoengsao are poor farmers. In their free time they join together to make preserved bananas. Presently, their preserved bananas are very well-known. In last September their *kluay ob* (baked banana) was served on Thai Airways International. Also, a Thai export company
 5 ordered their preserved bananas and exported to Hong Kong and Singapore.

Their business started in May 1998, when the governor of Chachoengsao suggested each family to grow 10 banana trees. So they could make money from selling bananas. Soon after that, each family had too many bananas to eat or sell.

Then the housewives tried to solve the problem. They were looking for ways
 10 to **preserve** bananas so they can keep them for a long time. But how? If they fried or grilled bananas, they could keep them for only a day or two. And drying bananas like *kluay tak* and coating them with sugar (*kluay chab*) are not popular. The housewives needed something more *innovative*. Then, the governor and the Provincial Community Development Office came to help them. The governor gave them two

- 15 ovens to bake bananas. He also asked the Chulabhorn Research Institute to give the housewives training on banana preservation. Today, the housewives can run a very good business on their preserved bananas. Their product has been a good buy for both locals and foreigners.

Adapted from Reading Feature Stories from Bangkokpost.com/education/index.htm

Direction: Choose the best answers.

11. What is the main idea of this passage?

- a. The best quality bananas are in Chachoengsao.
- b. There are many kinds of bananas in Chachoengsao.
- c. A group of housewives in Chachoengsao run a successful business.
- d. Preserved bananas in Chachoengsao are the best export goods.

12. What was their problem at the beginning?

- a. They made too many bananas.
- b. Their bananas did not have good taste.
- c. They had too many preserved bananas.
- d. They did not know how to grow banana trees.

13. Why did the housewives NOT fry or grill bananas?

- a. Because the housewives did not have an oven.
- b. Because people did not like fried or grilled bananas.
- b. Because the bananas would not last long.
- c. Because the governor asked them to bake bananas.

14. We *preserve* (line 10) food so that

- a. we can export it.
- b. we can keep it longer.
- c. the food will look good.
- d. the food can be safe.

15. What does '*innovative*' (line 13) mean?

- a. dry and safe
- b. cheaper and fast
- c. fresh and soft
- d. new and different

PASSAGE 4

INET Expects B100m Net Profit This Year

Internet Thailand (INET), which is a leading Internet service provider (ISP), believes that the company will get 100 million baht profit from both Internet access service and non-access services this year.

- 5 The company gives customers two major services which are Internet access service and non-access services. The Internet access service is the service that allows customers to **access** to, or get into the Internet. On the other hand, non-access services are online shopping services at Thai.com, and online marketing and advertising services.

- 10 The major income that the company gets is from Internet access service. This year the company plans to widen the bandwidth of Internet access, which will allow quick and high-volume transmission. If the Internet access service is improved, the number of users will increase. As a result, the company expects to get 82.7 % of the total income from this service. Altogether, they will **obtain** profit of 100 million baht by the end of this year.

Adapted from Bangkok Post dated May 21, 2003, p. 12.

Direction: Choose the best answers.

16. What is the main idea of this passage?

- a. INET gives only two services to customers.
- b. INET is the biggest Internet service provider in Thailand.
- c. INET thinks they will get income of 100 million baht this year.
- d. INET will have broader bandwidth of the Internet access.

17. What can you get from the **non-access** services?

- a. You can access to the Internet.
- b. You can search for information for your reports.
- c. You can send your e-mails very quickly.
- d. You can have your company advertised online.

18. If the Internet Thailand increases the bandwidth of Internet access,

- a. it will get more sponsors in its web site.
- b. it will let more people access the Internet faster.
- c. it will change some services to the modern ones.
- d. it will report correct information to customers.

Posttest On Reading Comprehension For English I Students

Direction: Read the following passages and answer the questions that follow.

PASSAGE 1

OTOP

One of the country's problems is many people in rural areas are very poor. So, the government set up OTOP project to create or make incomes (money) for villagers in each community and to improve their life standard. OTOP stands for "One Tambon One Product". It is a project to promote hand-made goods and folk handicrafts of each Tambon, or a cluster of villages in English. The OTOP logo is a *Pla Taphian Bai Lan* (a fish, made from palm leaves, with a small Thai flag on its body). Tambon is the target area because the government wants to promote a small industry in each Tambon where most people are poor. The other reason is that the rural people are very skillful in handicrafts, and they can make use of the resources or materials in their villages by producing specialty goods.

OTOP products are food; *beverages* (which are both alcoholic and non-alcoholic drinks); clothes and garments; ornamental products e.g. hats, bags and necklaces; decorative products and furniture e.g. household furniture, handicrafts and artificial flowers (such as, flowers made from silk, Sah paper, glass, or rubber); arts and souvenirs; and herbal products *which* are made into cosmetics, herbal shampoo, aroma oil, etc.

Adapted from OTOP available at http://www.thaiwaysmagazine.com/thai_article/2014_one_tambon_one_product/one_tambon_one_product.html

Direction: Choose the best answers.

1. What is the main idea of the *first* paragraph?

- a. OTOP is the project that rural people set up.
- b. OTOP stands for 'One Tambon One product'.
- c. OTOP is the name of a village that produces goods.
- d. OTOP is the project used to improve the rural people's life.

2. What is the OTOP logo?

- a. a flag in a fish
- b. a fish on a flag
- c. a flag on a fish
- d. a flag on palm leaves

3. Why is "Tambon" the target area for the OTOP project?

- a. Because the people are all farmers.
- b. Because the people are skillful but poor.
- c. Because the people do not have any job.
- d. Because the people want to produce goods.

4. What does '*beverage*' (line 11) mean?

- a. vegetables b. fruits c. drinks d. food

5. What does '*which*' (line 15) refer to?

- a. products b. cosmetics c. shampoo d. aroma oil

PASSAGE 2

The Best of the Bunch

Most of the housewives in Rajchasarn district of Chachoengsao are poor farmers. In their free time they join together to make preserved bananas. Presently, their preserved bananas are very well-known. In last September their *kluay ob* (baked banana) was served on Thai Airways International. Also, a Thai export company
5 ordered their preserved bananas and exported to Hong Kong and Singapore.

Their business started in May 1998, when the governor of Chachoengsao suggested each family to grow 10 banana trees. So they could make money from selling bananas. Soon after that, each family had too many bananas to eat or sell.

10 Then the housewives tried to solve the problem. They were looking for ways to **preserve** bananas so they can keep them for a long time. But how? If they fried or grilled bananas, they could keep them for only a day or two. And drying bananas like *kluay tak* and coating them with sugar (*kluay chab*) are not popular. The housewives needed something more **innovative**. Then, the governor and the Provincial Community Development Office came to help them. The governor gave them two
15 ovens to bake bananas. He also asked the Chulabhorn Research Institute to give the housewives training on banana preservation. Today, the housewives can run a very good business on their preserved bananas. Their product has been a good buy for both locals and foreigners.

Adapted from Reading Feature Stories from Bangkokpost.com/education/index.htm

Direction: Choose the best answers.

6. What is the main idea of this passage?

- a. The best quality bananas are in Chachoengsao.
b. There are many kinds of bananas in Chachoengsao.
c. A group of housewives in Chachoengsao run a successful business.
d. Preserved bananas in Chachoengsao are the best export goods.

7. What was their problem at the beginning?
- a. They made too many bananas.
 - b. Their bananas did not have good taste.
 - c. They had too many preserved bananas.
 - d. They did not know how to grow banana trees.
8. Why did the housewives **NOT** fry or grill bananas?
- a. Because the housewives did not have an oven.
 - b. Because people did not like fried or grilled bananas.
 - c. Because the bananas would not last long.
 - d. Because the governor asked them to bake bananas.
9. We *preserve* (line 10) food so that
- a. we can export it.
 - b. we can keep it longer.
 - c. the food will look good.
 - d. the food can be safe.
10. What does '*innovative*' (line 13) mean?
- a. dry and safe
 - b. cheaper and fast
 - c. fresh and soft
 - d. new and different

PASSAGE 3

INET Expects B100m Net Profit This Year

Internet Thailand (INET), which is a leading Internet service provider (ISP), believes that the company will get 100 million baht profit from both Internet access service and non-access services this year.

5 The company gives customers two major services which are Internet access service and non-access services. The Internet access service is the service that allows customers to **access** to, or get into the Internet. On the other hand, non-access services are online shopping services at Thai.com, and online marketing and advertising services.

10 The major income that the company gets is from Internet access service. This year the company plans to widen the bandwidth of Internet access, which will allow quick and high-volume transmission. If the Internet access service is improved, the number of users will increase. As a result, the company expects to get 82.7 % of the total income from this service. Altogether, they will **obtain** profit of 100 million baht by the end of this year.

Adapted from Bangkok Post dated May 21, 2003, p. 12.

Direction: Choose the best answers.

11. What is the main idea of this passage?

- a. INET gives only two services to customers.
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- c. INET thinks they will get income of 100 million baht this year.
- d. INET will have broader bandwidth of the Internet access.

12. What can you get from the **non-access** services?

- a. You can access to the Internet.
- b. You can search for information for your reports.
- c. You can send your e-mails very quickly.
- d. You can have your company advertised online.

13. If the Internet Thailand increases the bandwidth of Internet access,

- a. it will get more sponsors in its web site.
- b. it will let more people access the Internet faster.
- c. it will change some services to the modern ones.
- d. it will report correct information to customers.

14. What does '*access*' (line 6) simply mean?

- a. get into b. put on c. set up d. keep on

15. What does '*obtain*' (line 13) mean?

- a. plan b. get c. agree d. change

PASSAGE 4

International Trade

Some countries import goods that they do not have or cannot produce. Some countries export goods that they have more than enough and can produce well. This exchange of goods and services in the world market, or known as international trade, has three major benefits.

- 5 First of all, international trade allows some countries to get the materials *which* they need. For example, when Thailand does not have enough gas, it may import gas from another country. Next, international trade allows a country to be skillful in production of the goods it has. This depends on the natural, human and technical resources that each country has. That is, Saudi Arabia is very skillful at
10 petroleum because it has this natural resource (petroleum). Mexico *specializes* in wood furniture because its people are very skillful at wood work. The United States specializes in the computer industry because its people have the technical skills. Finally, international trade allows the countries to trade together and cooperate even though they are different. For example, Thailand can trade with China, Pakistan or
15 even Russia. European Union (EU) and APEC are also examples of economic cooperation of many countries.

Adapted from Business Concepts for English Practice (2nd Ed.) by Marianne McDougal Arden & Barbara Tolley Dowling, (1993), p. 48.

Direction: Choose the best answers.

16. What is the main idea of this passage?

- a. Some countries import goods they do not have or produce well.
b. The exchange of goods and services is done carefully.
c. There are three major benefits from international trade.
d. International trade allows some countries to get the materials they want.

17. What is the international trade?

- a. The exchange of goods and services among different countries.
- b. The production of goods and services in large quantity for export.
- c. The transportation system of goods and services to another country.
- d. The selling of goods and services that are only of good quality.

18. What **IS NOT** a benefit of the international trade?

- a. European countries join together to work as a group.
- b. Thailand has exported a lot of rice to many countries.
- c. Saudi Arabia orders a lot of food from Asian countries
- d. Australia uses a lot of petroleum on transportation services.

19. What does '***which***' (line 5) refer to?

- a. gas
- b. materials
- c. countries
- d. international trade

20. What does '***specializes***' (line 10) mean?

- a. produces something
- b. uses high technology
- c. is very skillful at something
- d. has a very special thing

Appendix L

Item Analysis

The item analysis results showing the level of difficulty (p), the discrimination index (r), and the reliability (KR-20) of the pre-test of reading lessons.

Item	P	R
1	.474	.604
2	.567	.384
3	.628	.561
4	.505	.474
5	.536	.342
6	.659	.622
7	.474	.724
8	.536	.504
9	.567	.384
10	.659	.735
11	.536	.491
12	.598	.429
13	.474	.724
14	.505	.694
15	.474	.712
16	.659	.340
17	.598	.416
18	.628	.358
19	.505	.328
20	.443	.590

CKR20 = .812

Appendix M

The Results of the Students' Pre-test and Post-test Scores in the Experimental and Control Groups

The Results of the Students' Pre-test, Exercise, and Post-test Scores in Experimental Group.

Student Number	Pre-test Score (20 points)	Exercise Score (20 points)	Post-test Score (20 points)
1	12	16	18
2	6	16	11
3	9	15	17
4	6	16	12
5	10	18	16
6	5	17	12
7	8	16	11
8	13	19	17
9	8	16	13
10	13	18	17
11	9	17	13
12	8	13	8
13	12	18	16
14	11	17	16
15	8	17	14

Student	Pre-test Score	Exercise Score	Post-test Score
Number	(20 points)	(20 points)	(20 points)
16	11	17	16
17	7	14	13
18	14	18	19
19	11	15	12
20	6	17	17
21	8	14	12
22	8	12	9
23	10	18	16
24	6	18	15
25	9	13	9
26	5	19	18
27	9	13	14
28	9	17	12
29	8	12	14
30	14	17	16
31	12	16	15
32	7	15	10
33	6	16	13
34	14	18	15
35	15	18	18
36	7	16	15
37	8	16	11

Student	Pre-test Score	Exercise Score	Post-test Score
Number	(20 points)	(20 points)	(20 points)
38	12	17	14
Total score	354	615	534
Mean score	9.32	16.18	14.05
Std. Deviation	2.78	1.86	2.80

The Results of the Students' Pre-test, Exercise, and Post-test Score in Control Group.

Student Number	Pre-test Score (20 points)	Exercise Score (20 points)	Post-test Score (20 points)
1	5	15	11
2	16	18	18
3	15	15	12
4	10	16	13
5	12	17	13
6	11	15	14
7	12	18	14
8	9	17	14
9	14	17	17
10	9	14	11
11	9	15	11
12	10	15	12
13	5	12	10
14	16	19	18
15	10	18	18
16	7	13	11
17	8	17	15
18	12	16	14
19	12	15	11
20	11	17	13

Student	Pre-test Score	Exercise Score	Post-test Score
Number	(20 points)	(20 points)	(20 points)
21	13	15	9
22	18	17	15
23	13	17	17
24	11	19	9
25	11	19	15
26	6	11	9
27	15	18	17
28	11	18	17
29	12	17	14
30	11	13	9
31	13	13	13
32	13	16	15
33	9	16	13
34	8	13	10
35	12	16	15
36	13	19	17
37	16	17	16
38	15	18	15
39	17	19	16
40	11	17	12
41	10	15	12
42	12	17	15

Student	Pre-test Score	Exercise Score	Post-test Score
Number	(20 points)	(20 points)	(20 points)
43	13	19	18
44	14	17	14
45	9	18	15
Total score	519	733	617
Mean score	11.53	16.29	13.71
Std. Deviation	3.01	2.02	2.69

Appendix N

Examples of Student Quotations from Student Journals

Codes used for student quotation from each lesson:

GA = Guessing word meanings 1 (from context clues)	GB = Guessing word meanings 2 (from word formation)
SK = Skimming	SC = Scanning
F = Finding main ideas	E = Economics words
RC = Relative clauses	IC = If- clauses

1. Benefits of CAI Reading Lessons

1.1 CAI improves students' reading skills.

- GA 4 • I have learned techniques of guessing word meanings, which make it easy for me to guess the meaning of an unknown word.
- GB 4 • (From this lesson I) can guess meanings of words. Even though I do not know the meaning of a word (in a sentence), I can understand the sentence (by using the technique of guessing word meanings).
- RC 31 • I can understand the lesson well. I can identify the main and subordinate (modifying) clauses (in the relative clause). The exercises enhanced my understanding.
- IC 31 • Previously, I did not understand If-clauses. But after I studied this lesson, I can understand a lot more about if-clauses.
- SK 1 • The lesson is very useful for reading articles, newspapers, etc. ...
- SK 12 • ... The content is very interesting. The lesson helped improve my reading skill of English texts. ...

1.2 Students read more efficiently.

- SC 4 • Learning the scanning technique enabled me to find particular details of the text in order to answer the comprehension questions faster. As I see it, I can learn and do exercises more quickly.
- SC 27 • The lesson taught me a lot about how to scan a text. I can read faster, I do not need to read slowly as before.”
- SK 35 • I have learned how to read quickly and easily.
- SK 38 • The lesson is very useful. ... I can use this technique to read texts more efficiently.
- F 8 • I have learned how to find the main ideas of texts. I like learning by CAI because

1.3 CAI increases their comprehension of English texts.

- F 12 • Main ideas are very important. If we know where the main ideas are, we will understand the whole idea of a text. It is not necessary to understand every word (in a text), but the topic sentence, to understand what the text is all about.
- E 1 • In this lesson, I have learned plenty of new vocabulary words and I can use the words in sentences. Knowing word meanings helps me better understand sentences. The exercises are good.
- SK 34 • In this lesson, I can understand how to find the main idea without reading every word in a sentence. I just look briefly across the passage because there are key words frequently found in the text which are related to the main idea.

- SK 36 • I have learned to find the main idea of a text, what the text is all about.

1.4 CAI enhances independent learning

- SC 31 • I have learned a reading technique and new vocabulary meanings.
Learning by CAI is modern. Students can learn on their own.
- E 7 • I have learned many new vocabulary words because I can learn on my own. Thus, I can understand the lesson clearly. Most of the vocabulary words are those used in our daily life. The lesson presentation was very attractive and easy to understand.
- E 9 • The content was easy to understand. The explanation was done clearly in English as well as with a Thai translation, which enhanced comprehension. Exercises were used to practice the lesson. The games are enjoyable.
- E 14 • ... I like to take a pre-test first to see how much I know about the vocabulary. The exercises are comprehensible. The lesson is useful for those who want to study on their own. ...
- F 3 • ... I like exercises the most because they help me understand the lesson because when I made mistakes, there were explanations (feedback and answers).
- RC 23 • Pictures used to present the lesson made it easy to understand because we can guess from the pictures. The exercises varied.

1.5 CAI is useful for their exams and studies

- SK 4 • The lesson is very useful, which can be used for reading texts on exam.

- SK 33 • The reading technique facilitated comprehension of long sentences even though I did not know the meanings of every word. I could understand the content of texts because there were effective reading techniques, which I can use for my exam. ...
- SC 21 • I have learned how to scan texts or newspapers, which we use to read English texts everyday. ...
- E 36 • Vocabulary words in this lesson are very useful. I can use them in my regular (tutorial) classes. ...

2. Enjoyment, Attraction and Easy Learning of CAI Reading Lessons

- GA 30 • I have learned the meanings of numerous words. In fact, I do not like to read long texts and find the meanings of unknown words. But after I have studied this lesson, I am eager to learn more. The presentation is interesting and stimulates learning.
- GB 26 • The lesson is easy to understand. It is well organized, colourful and interesting.
- F 21 • The content is interesting. The lesson contains tips on finding the main ideas or topic sentences, which make it easy for me to find them in texts without reading every word.
- E 8 • The pictures are appealing, and facilitate comprehension and the use of new vocabulary.
- SC 5 • The lesson is well-presented with an appropriate approach. The presentation is interesting, looks different from previous lessons.
- SK 4 • The lesson is easy to understand. There are several tips of skimming. Examples and pictures facilitate comprehension. The presentation is well organized.
- RC 38 • The display is beautiful, which makes learning enjoyable. The presentation with nice pictures also promotes comprehension of sentences. I like the summary of the lesson. The exercises also vary.
- IC 19 • It is useful, entertaining, not serious.
-

3. Limitations and Suggestions for CAI Reading Lessons

3.1 Students could not understand the language used in the lessons .

- GB 16 • Pictures would facilitate understanding partly, but I think there should be a translation for lesson presentation in every lesson so that students could better understand.
- F 30 • The presentation was very interesting, but I did not understand much. It may be because the explanation was done in English. I think it would be better if there is also a translation.
- RC 24 • I want a dictionary program so that I can look up the meanings of some difficult words.
- SC 7 • ... Translation for tips of scanning is needed.
- SK26 • ... I was confused about the directions for exercises. I need a dictionary to look up word meanings. Otherwise, a translation should be added. ...

3.2 Students need more learning materials and activities.

- E 13 • ... It would be better if students could choose to learn vocabulary in other topics, not only in economics.
- E 19 • The lesson was easy to understand and well-organized. But there should be more pictures, details and exercises.
- GB 31 • I want to listen to the lesson presentation on tape while studying the lesson.
- RC 33 • ... Listening functions should be included so I can improve my listening skill.

- SK 5 • ... The exercises were good. However, there should be more.
- I could only understand some parts. I think the language used in the lesson presentation should be simple and easy.

3.3 The level of difficulty of tests are not appropriate to the abilities of some students.

- RC 21 • I have learned more about relative clauses. The presentation was easy to understand, but I found the exercises and tests difficult.
- GA 16 • ... Exercises were useful, but some exercises were either too easy or too difficult. ...
- GA 28 • I found this lesson very difficult. I could not guess word meanings. The lesson had all levels of difficulty. After doing many exercises, I could understand more.
- F2 • ...I could not do well in the exercises because there were many difficult words. ...
- RC 3 • ... The exercises were too difficult. It may be because I did not understand completely.

3.4 Students need a teacher's monitor and supplementary instruction.

- GB 16 • The content was comprehensible. The lesson was not too difficult. But I need the teacher's instruction before studying by CAI.
- GA 31 • Though self-study (learning by CAI) is useful, I prefer a teacher's lecture.

- IC 21
- I found the lesson was hard to understand because I could not understand some of the vocabulary. It would be better if you (teacher) would give me some explanation (help).
- IC 18
- The lesson was interesting and enjoyable. But I would like the teacher to re-teach the lesson to reinforce students' understanding.

Appendix O

List of Specialists

Names	Position	Instrument Examined
1. Assoc. Prof. Dr. Kanit Khaimook	Head of School Information Technology at Suranaree University of Technology, Nakhon Ratchasima	- Questionnaire - Interview Guides
2. Dr. Maneepen Apibalsri	Lecturer at Suranaree University of Technology, Nakhon Ratchasima	- Questionnaire - Interview Guides - Tests - Journal form - Lesson planning
3. Dr. Dhirawit Pinyonattthagarn	Lecturer at Suranaree University of Technology, Nakhon Ratchasima	- Questionnaire - Interview Guides - Tests
4. Dr. Sirintorn Sripho	Lecturer at Suranaree University of Technology, Nakhon Ratchasima	- Tests
5. Asst. Prof. Dr. Somsak Apibalsri	Department Head of Educational Technology and Communications and Director of the Academic Resources and Information Technology Center, Nakhon Ratchasima Rajabhat University	- Computer-assisted instruction
6. Archarn Tadthep Wutthikanokkarn	Lecturer at Rajamangala University of Technology, Nakhon Ratchasima	- Computer-assisted instruction

Curriculum Vitae

Mrs. Benjamart Thanasoontornrerk was born on February 14th, 1961 in Lopburi, Thailand. In 1981 she received a Bachelor of Arts in English language from the Faculty of Arts, Thammasat University, Bangkok. From 1983 to 1993, she had worked as an ESL teacher and teacher supervisor with the Consortium, an American organization, which provided language and cultural classes for the Indochinese refugees who would be sent for settlement in the United States of America. She had provided training on ESL teaching activities and materials at TESL conference, Bangkok, in 1991. She studied in the School of English, Institute of Social Technology, Suranaree University of Technology for a Master's Degree (English Language Studies).