



THE DEVELOPMENT OF BUSINESS READING INSTRUCTIONAL MODEL
THROUGH CONCEPT-ORIENTED READING INSTRUCTION (CORI) AND
PROJECT-BASED LEARNING TO ENHANCE READING ABILITIES AND
CREATIVE THINKING ABILITIES FOR UNDERGRADUATE STUDENTS



A Thesis Submitted in Partial Fulfillment of the Requirements
for Doctor of Philosophy (CURRICULUM AND INSTRUCTION)
Department of Curriculum and Instruction
Graduate School, Silpakorn University
Academic Year 2019
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ความคิดสร้างสรรค์สำหรับนักศึกษาระดับปริญญาตรี



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต
สาขาวิชาหลักสูตรและการสอน(การสอนภาษาอังกฤษ) แบบ 2.1 ปรัชญาดุษฎีบัณฑิต
ภาควิชาหลักสูตรและวิธีสอน
บัณฑิตวิทยาลัย มหาวิทยาลัยศิลปากร
ปีการศึกษา 2562
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Title The Development of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students

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MISS AMORN RAT AMMARALIKIT : THE DEVELOPMENT OF BUSINESS READING INSTRUCTIONAL MODEL THROUGH CONCEPT-ORIENTED READING INSTRUCTION (CORI) AND PROJECT-BASED LEARNING TO ENHANCE READING ABILITIES AND CREATIVE THINKING ABILITIES FOR UNDERGRADUATE STUDENTS THESIS ADVISOR : ASSOCIATE PROFESSOR WISA CHATTIWAT, Ph.D.

The objectives of this research were to: 1) develop a business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students; 2) investigate the efficiency of using the developed business reading instructional model set at 75/75; 3) compare the students' reading abilities between pre-test and post-test before and after employing the model; 4) study and evaluate the students' creative thinking abilities on mini-projects after employing the model; 5) investigate the students' multiple reading strategy usage after employing the model; and 6) verify the model.

The samples of this research were 35 of 3th-4th year English major and minor undergraduate students from the Faculty of Archaeology who enrolled in the course of business English in the 1st semester of 2018 at Silpakorn University, selected by simple random sampling technique. The experiment was carried out for 16 weeks or 48 hours in total. The research instruments employed in the study were: 1) AMARA Model with teacher's manual, 8 lesson plans and exercises; 2) Reading ability tests; 3) Reading log; 4) Peer-and Teacher-assessment rubric; and 5) Creative thinking questionnaire. The quantitative data were analyzed by mean (\bar{X}), standard deviation (S.D.), and t-test dependent. The qualitative data were analyzed by content analysis.

The research findings were as follows:

1) The business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning comprises 4 components - principles, objective, instruction procedure, and assessment named as AMARA model consisting of 4 steps; Activating students' interest, background knowledge and activity on reading engagement (A), Motivating the students and searching information (M), Action-taking and ability to use the strategies (A), Running the project and presentation (R), and Assessment (A). The AMARA Model verified by

five experts was at the highest level in theoretical rationality, probability and appropriateness;

2) The efficiency of the model was 75.10/77.79, meeting the set criteria at 75/75;

3) The students' reading ability scores gained in post-test were significantly higher than pre-test at .05 level of statistical significance;

4) The students' design and evaluation on mini-projects were rated by the peers and teacher as "High" level on planned operation and collaboration, meanwhile, creative thinking abilities were rated by the students as "Very High" level on four thinking layers and assessed by both peers and teachers as "Very High" level in terms of four thinking layers and product construction, design and evaluation;

5) The multiple reading strategies reflected through the reading log were rated as the most frequently used in the top three out of nine strategies with percentage of students' usage; find the main ideas (24.19%), predict the content (15.58%), and use the context clues (12.01%), respectively; however, reread to clarify a possible misunderstanding was the least frequently used strategy (4.79%);

6) The AMARA model was verified by five experts at the highest level of congruence with the rationality and probability of the theories.

ACKNOWLEDGEMENTS

Foremost, my thesis “The Development of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students” could never have accomplished without the assistance from the following persons. I would like to express my deep appreciation and sincere gratitude to Associate Professor Dr. Wisu Chattiwat (Advisor); Associate Professor Dr. Chaiyos Paiwithayasiritham, and Assistant Professor Dr. Suneeta Kositchaivat (Co advisor); Dr. Patteera Thienpermpool (Chairperson of Committee); and Associate Professor Dr. Wilairat Kirin (External Examiner) for their ongoing and extraordinary support, patience, constructive comments, and expertise along my Ph.D. research process. Their insightful recommendations and encouragement are really precious to me and bring my thesis into success.

Additionally, my appreciation goes to the following experts who are Dr. Pranee Seenak, Aj. Kittiya Khongtan, Aj. Nupong Phusri, Aj. Ruja Sukpat, and Aj. Ubonrat Treepongphan for their valuable information in focus group discussion, and research instrument verification. I also give my sincere thanks to the following panels of experts who are Assistant Professor Dr. Sutaporn Chayarathee, Dr. Kandanai Worajittiphol (Experts on English Language Teaching), Dr. Pranee Seenak (Expert on Measurement and Assessment), Dr. Chintana Sirithanyara, and Dr. Nannabhat Niyomsap (Experts on Instructional Design) for their comments on the model’s verification.

Also, I would like to extend my gratitude to the administrative team of Silpakorn University and the dean of Faculty of Archaeology for their permission on my data collection process and my study leave to complete the dissertation; my colleagues for their encouragement; including my English major and minor students as participants of the study for their fruitful data. All are valuable to me.

Last but not least, my heartfelt gratitude goes to my parents, my sister and my aunt for their unconditional love and consistent support together with positive encouragement from any other people involving the success of my doctoral dissertation.

Amornrat AMMARALIKIT

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CHAPTER ONE

INTRODUCTION

Statements and Significance of the Problems

Reading instruction has been conducted in every grade levels in all education so it can be seen as an essential skill in leading one's future life in the society. Normally, reading is done everywhere even at home because it is one of the various ways to communicate with one another. Basic reading skills have been taught in schools whereas reading proficiency needs more time to develop. Regarding L2 learners, the general reading instruction is emphasized on the ideas got from the reading texts which may cause some difficulties for L2 learners to comprehend what they have read. This is due to the lexical limitations which block readers from their comprehension. However, this difficulty may not occur with some strategic readers who have higher level of word recognition. The readers also use reading strategies to gain comprehension.

General content is found in reading. Meanwhile, content for English for a specific purpose (ESP) is also found in business reading, for example, reading business news, articles, business plans and business correspondence. The ESP readers need more strategies to enhance their comprehension during activities. Concept-Oriented Reading Instruction (CORI) is regarded as a content-based strategy that is focused on this research. CORI, a strategy to promote lifelong learning, is used along with project-based learning strategy to enhance readers' reading abilities. Besides, project approach encourages learners to use their creativity or creative thinking to innovate new things for their project. Innovation with creativity begins one important factor that promotes skills in the 21st century.

Reading is an activity that plays a vital role in everyone's life. Because of its importance, reading is emphasized on every level of education. In the curriculums for Thais as ESL learners, English reading becomes the subject that the L2 students have to learn and improve their literacy. The key purpose of reading should be to construct the meaning that affects readers' comprehension and response to what they have read. With its significance, Dr. Teerakiat Jareonsettasin, Deputy Minister of Education,

participated at the office of the Basic Education Commission to talk on the time adjustment in teaching English in primary school level 1-3, changing from 1 hour a week to 5 hours a week. In the adjustment, however, reading skill enhancement has also been included and emphasized so that the students have more time to practise their reading through effective textbooks as stated in the Office of the Minister Newsline (Ritmun & Rohitsatien, 2016).

It can be seen that English is very essential in teaching and learning in Thailand. Mr. Phanom Chongyuwattana, the Director of the Policy and Planning Unit to the Primary Education Area Office of Chainat, stated that Thai education regards English as important foreign language skills to compete with other non-native nations in the ASEAN Economic Community (Yamwagee, 2013a). According to Mr. Apitha Wallopsiri, the Director of communication and activity management from Enconcept E-Academy stating in NationTV (2014), the study conducted on TOEFL (Test of English as a Foreign Language) in year 2013 was found that Thais' average scores were at 76 which was higher than the scores found in 2009 at 74. When compared with other Asian countries, it was found that Thais' scores were ranked in the last three orders but higher than Cambodia and Laos which got the scores at 69 and 68 orderly. However, Thais got lower scores than other six countries which were Singapore, Malaysia, the Philippines, Indonesia, Burma and Vietnam. The lower scores showed that Thai students have been weak in all four skills and lack of communication abilities that have been considered necessary in their future careers with foreign organizations. Mr. Apitha Wallopsiri also pointed out that Thais have spent almost twenty years to study English but they still cannot use the language for communication appropriately and spontaneously. They have been taught to translate before giving the output so they need more time to think. This can cause some difficulties in communication. Additionally, the teaching and learning styles influence on Thai students' abilities in acquiring the language. Thais with poor language abilities are afraid of failure. They will give up the lessons easily when they grow up and face with the failure. He also emphasized that teaching students how to use the language in real situations makes the learners capable of communication in their real life.

National Institute of Educational Testing Service (Public Organization) or "NIETS" indicated that Thai students who took Ordinary National Education Test (O-

Net) got lower average scores in several subjects including English. The test was used to evaluate the high school students' English skills. One of the skills that they were evaluated was reading that the contents used in reading were general, not specific ones. However, the students' scores showed that most Thai students had the low competency in English skills especially reading that has been found in every test. According to Yamwagee (2013b), Mr. Phanom Chongyuwattana referred to the Programme for International Student Assessment (PISA) which showed the needed levels of quality improvement for Thai education. Mr. Phongthep Thepkanjana, the Minister of Education, also pointed out that people were still dissatisfied with the quality of Thai education (Yamwagee, 2013c). Additionally, Kuan (2014) stated that in the study on English skills, Thai students were ranked in the 5th nation out of 10 in Asian countries. The study showed that Thai students' language skills and proficiency were lower than Vietnamese students. This inferior ranking is because of the basic problems found in the educational system in foreign language teaching. The study found incompleteness in the system that needed to be improved. Regarding reading skills, Thai students were ranked 50th out of 65 countries by PISA (Yamwagee, 2013b). The low proficiency in reading was affirmed by Programme for International Student Assessment (PISA). According to mean results from PISA (2018), Thai students scored 409 points in reading below the OECD average of 493 points in 2015. Later in 2018, Thais scored 393 points from an average of 487 points in OECD countries. Based on the data from OECD (2019) showing about the results of PISA 2018, the performance trends in reading were shown and it was interestingly found that the mean reading performance of Thailand given by PISA 2018 was at 393 points which were decreased by 16, and 48 points compared to the assessment in 2015 and 2012 (409 and 441 points), respectively. In other words, the reading performance in PISA 2018 was lower than PISA 2015 and 2012. This showed the negative trend of Thai students' assessment which needed to be reconsidered the solution in reading development for Thai students. Nevertheless, this problem does not just belong to one organization, the school principals or the teachers, in contrast, it needs some cooperation from every relevant authority to systematize the education again.

When considering the literacy problems shown in many publications, they need to flash back to the country's teaching and learning system. Regarding the fundamental

problems in Thai educational system, it leads to the lack of abilities in English literacy including reading and writing abilities in many Thai students. Reading is considered the basic ability of all subjects. According to Intathep (Bangkok Post, 2013), the test conducted on Thai primary school students showed that reading problems were found on more than 200,000 students in grade 3 and grade 6. It was evident that the students in both grades faced with problems in four levels. The most critical problem was that the students could not read. Anyhow, some could read but development was needed. Some could read but understood a little. The worst case was the ability to read but lacks of understanding. Most students who had poor reading abilities were found in five provinces that were Yala, Narathiwat, Pattani, Nakhon Phanom and Chiang Mai. However, the high numbers of students with low reading abilities showed that Thai educational system faced with the failure. It needed an immediate solution; therefore, improvement and extra or intensive courses were suggested to this problem.

Problems in Thai fundamental educational system could lead to serious difficulties in Thai learners' reading development. As can be clearly seen that the students still had problems in reading abilities and development when they were in high school levels. This also affected the abilities of language use in many opportunities in their future career (Kuan, 2014). Nowadays, English test is not only conducted by high school students in O-Net to evaluate their English competency including reading before they further their study in the university but the standardized tests such as TOEIC, TOEFL or IELTS are also taken by many educational and professional organizations to select the students with high language proficiency to join those organizations. It can be seen that Language proficiency is needed in both education and career. That is why English skills: listening, speaking, writing and reading in particular, grammatical structures, and communication are included in Thai curriculum. Every Thai student has had to study English since they were in kindergarten level. However, most of them still have low competency in English reading comprehension (Intathep, 2013; Kuan, 2014).

Even in the university level, the undergraduate students cannot completely comprehend what they have read especially in the academic texts or English for Specific Purpose texts. In other words, they have the problem in reading comprehension and miss some concepts they should gain in their reading texts. In Business English Reading subject, the researcher gave the reading test to a group of 25 English minor

students in the Faculty of Archaeology. The results of reading scores in this subject could be used to consider and confirm that most Thai undergraduate students are still weak at getting the concepts in business reading texts. This is due to the low level of word recognition. The results showed that 56% of students (14 out of 25 students) got the lower scores which were less than 50%. The lowest score was calculated as 13.64%. According to the low reading scores, the main problems that led to the students' misconception were the low level of word recognition. The students did not know most of the vocabulary found in the reading text, for this reason, they misunderstood what ideas the writer wanted to convey and misinterpreted the concept. However, the students might face with the reading comprehension problem in the long run unless they improved and developed their level of word recognition and reading skills for their life-long learning.

Reading becomes the skill that should be considered because of its importance to be used and found in everyone's life. Anderson, Hiebert, Scott, and Wilkinson (1985) stated about the reading comprehension that the meaning could be gained from the process of reading in the written passages. Reading is considered as a complicated skill which requires the relevancy and interrelation of diverse information. However, Wixson, Peters, Weber, and Roeber (1987) additionally defined the reading as "the process of constructing meaning through the dynamic interaction" among: (1) each reader's background knowledge; (2) the content shown in the text; and (3) each situation in the reading context. After finishing their reading, the readers aim to get the meaning or correlate the ideas found in the text by themselves.

However, most L2 readers seem to face with the problem while reading. Students who have reading problems do not have the fundamental skill on components of reading. Reading is learned through a consecutive process. In other words, every new skill is constructed on the understanding of skills that are previously learned. The following three components taken orderly and continuously in each step-in reading process are 1) decoding, 2) comprehension and 3) retention. The components are the sequential steps in reading that make the readers change from sounds to words to sentences and paragraphs. Because of the progressive process, most Thai students who have low-level reading skills will not be able to reach the higher level.

"Strategies are not to be used singly good readers do not read a book and *only* make predictions. Rather, good readers use multiple strategies constantly." (Duke & Pearson, 2002: p.4). There are many multiple strategies to be used in reading instruction but the effective one needs to be taken into account. Concept-Oriented Reading Instruction (CORI) is considered as one of many multiple reading strategies that the instructors use to strengthen their students' weak points in reading.

One of the factors that leads to the students' reading problem is that lacking of motivation. According to Swan (2003), 'the power of engagement' becomes essential for the engaged readers to achieve their reading and lead them to read effectively and comprehensively. The readers' interest shows that they interactively engage in what they have read. While reading, the questions with their answers are posed and found out. With this motivation, those readers can gain more knowledge. In other words, the engaged readers have motivation in reading and Concept-Oriented Reading Instruction (CORI) integrates not only skills and knowledge but also strategies, motivation and social collaboration to cumulate and increase the readers' comprehension as well as their knowledge (Swan, 2003: 2). Importantly, the process of engagement is involved and emphasized. Concept-Oriented Reading Instruction (CORI) let the readers focus on the process more than the product. Most readers concern on what they have got more than what they have read without realizing the steps how to comprehend the texts. The components in the process of engagement in reading are motivations, conceptual knowledge, social interactions and the use of strategies for learning. The strategies, however, are employed during the active reading process to motivate the readers' needs which are competence, autonomy support and belonging. These needs increase the readers' motivation.

According to O'Hara (2007), CORI becomes important in classroom as an instructional approach that combines and develops teaching reading strategy with the content in science. Therefore, conceptual knowledge of science can be gained through reading by readers (Guthrie, 2004; Wigfield & Guthrie, 1997; Guthrie, Wigfield & Perencevich, 2004). CORI instruction relates to many components of reading, selectively searched content or interesting texts to fulfill their curiosities, and motivation; whereas students' reading engagement and collaboration with one another are involved through their group instruction to reach learning goals as new challenges.

They are motivated to read, work as a team, and use their individual learning experiences.

As noted by Corno and Kanfer (1993), motivation plays a vital role in terms of personal goals and intentions. There is a relationship between human behavior and motivation which affects decision making in various activities in which people can evaluate their capabilities and their task performances. Any experience that reflects a student's effectiveness showing the effort having been made on that task and feedback gained. Wigfield, Guthrie, Tonks, and Perencevich (2004) adds that the levels of students' self-efficacy influence correspond to the difficulty of tasks. Students with high levels of effectiveness tend to do more difficult tasks and keep doing them. Persons can have extrinsic or intrinsic motivation which can take place in different contexts. Extrinsic motivation derives from outside factor such as extrinsic rewards or accomplishments that students acquire for grades or prizes and recall for recognition. Besides, they try to follow and please their teacher to get those rewards. It can be said that they are motivated to get extrinsic prizes. However, students' intrinsic motivation comes from achievements that occur from their learning goals they set and desire to join an activity so as to achieve the goals. There was a study in which curiosity, involvement as well as challenge regarded as the dimensions of intrinsic motivation are investigated. In terms of curiosity, students are motivated to read what they are interested in. Challenge happens when more complicated ideas are found in more difficult texts and the students try to comprehend them. Moreover, the students get more involved when they concentrate on many books and enjoy reading those texts (Guthrie & Wigfield, 2000). Interestingly, Pintrich and de Groot (1990) points out that intrinsic motivation can enhance the students' strategy use in effective reading.

Reading comprehension was explained by Duffy (2003) as the process to get the most important idea from the text and promote readers' understanding. Readers' comprehension differentiates from their background knowledge, vocabulary, text levels and decoding problems. Alvermann and Eakle (2003) added that the process of reading involves the reader, text and reading activity. Additionally, reading comprehension is considered as the process to build meaning from the text, the message it contains, and the meaning gained. However, it becomes the most vital skill that school students need to study and be trained (Block, Gambrell & Pressley, 2002). According to Duffy (2003),

the following are the processes that readers use to comprehend texts. They are (1) enthusiastically thinking and consistently monitoring for meaning, (2) making and altering predictions, (3) employing prior knowledge to comprehend texts, (4) using the context clues, (5) making inference based on the information the author provides to gain meaning, (6) conceptual mind mapping during reading activity, and (7) giving feedback and assessing reading texts.

In terms of reading strategies, Pressley, Forrest-Pressley, Elliott-Faust and Miller (1985); Spring (1985); and Collins (1998) stated that readers can achieve a goal with the use of reading strategies which comprise a series of cognitive phases and consider them as the techniques to deal with texts. Duffy (1993) presented the idea that reading strategies are used by readers to plan, evaluate and manage their own reading messages before, during and after the process of reading. Reading strategies are also employed consciously to ease any reading difficulties and gain the meaning from the text. It can be said that readers' reading strategy use is taken place in some suitable situations to process, modify and gain the meaning during their reading activities (Borkowski, Chan, & Muthukrishna, 2000).

According to O'Reilly, Best and McNamara (2004), some difficulties on reading comprehension are found among many high school students who are assigned to comprehend their ESP textbooks (Bowen, 1999; & Snow, 2002). The difficulties found in reading comprehension come from many reasons. One of the main causes is found from one of text specific factors which is text cohesion, as an example (Beck, McKeown & Gromoll, 1989; McNamara, Kintsch, Songer, & Kintsch, 1996). Another one is the reader's aptitudes. As noted by Perfetti (1985), abilities in decoding are regarded as essential for the readers to comprehend the words or meaning in sentences. Even the ones who are able to comprehend the words, they will probably face with problems in reading comprehension. Additionally, readers can encounter some comprehension difficulties with the lack of ability to make inferences (Long, Oppy, & Seely, 1994) together with inability to implement meta-cognitive reading strategies which are considered as higher-level reading skills in their reading activities (Cornoldi & Oakhill, 1996).

According to the Framework for 21st Century Learning (P21, 2015), all students need to achieve not only in content knowledge and the skills but also in expertise and

literacy. They are required to be equipped with the abilities to communicate, collaborate and think creatively. English reading is one key subject that all the students in the 21st century need to have. Besides, learning, innovation skills, and collaboration are also important in that creativity and project-based learning are the factors that enhance the achievement of students in the 21st century. Therefore, Concept-Oriented Reading Instruction (CORI) becomes one of many multiple reading strategies whose aim is to create lifelong learners. (Swan, 2003: xi) The strategies help attract the students' attention and motivate them to read for concepts. Hence, the students are more interested in reading and have developed more reading skill as well as reading comprehension abilities by using the strategies. Moreover, project-based learning is also integrated because it encourages the students to have social interaction, cooperate in group and help create new things. The students may find it challenging to make use of their knowledge, abilities, and creativity in their project. Moreover, they learn how to work in team and interact with other people. All of these are essential skills to live in the 21st century society. Overall, the content knowledge, project-based learning, reading ability and creativity are emphasized for the students to be able to learn and combine the overall skills in their life and future career.

Significance of the Study

This study shows the development of business reading instructional model which is focused on content-based reading. The contents used in the study are English for Specific Purposes (ESP) which are quite difficult for L2 learners because they do not have much vocabulary to make them understand the whole text. Unless they understand the contents of the text they read, they face with some difficulties to produce their project and affect creativity.

According to WWC Intervention Report (2010), Concept-Oriented Reading Instruction (CORI) is mainly employed in enhancing the students' reading comprehension which integrates the subject with reading together with the activities. The subjects may be science, mathematics, or any other content areas which English for Specific Purposes can be taken into account. The purposes of CORI are to promote the learners' reading comprehension, their reading motivation as well as engagement. The stages of CORI have been created to foster both learners' reading comprehension together with reading engagement. In helping the learners' reading comprehension, the

followings are recommended: activating background knowledge, asking questions, finding out information, summarizing, explaining text structure including graphically organizing. The stages to increase the learners' reading engagement are the use of a conceptual theme as the aims of content area while teaching the students to read. This is beneficial for the students to be given choices and decision making on reading topics. Moreover, hand-on activities with interesting texts, and opportunities to cooperate with others in learning from reading texts are provided and employed in instructional processes.

Nowadays, teaching content and language in the higher education becomes more prioritized; therefore, it needs some changes on both content and instructional methods. One of many methods is project-based learning which is considered to be able to help develop the foreign language teaching in that it enhances learners' creative ideas and integrates their obtained knowledge from many areas to solve the tasks. As can be seen that project-based learning plays a vital role in foreign language teaching and learning especially other foreign languages for specific purposes (Bolsunovskaya, Phillips, Korotchenko, Matveenko, Strelnikova, & Ulyanova, 2015). English for Specific Purposes (ESP) differentiate from General English due to the fact that the teaching and learning methods are more focused on the learners' purposes in English learning and on language in context. For this reason, they need some good English and professional skills to do the activities and communicate in learning environment. This field covers many subjects such as business, hospitality service management, tourism and so on. To teach these subjects, language and subject matter are combined to achieve the learning goals (Rahman, 2015).

It can be expected that the development of instructional model can provide the learners some useful strategies in CORI and other multiple reading strategies that they can implement on their own in their further reading. This model is beneficial for the L2 learners to improve their reading proficiency including reading comprehension ability. After learners are familiar with using strategies in CORI and project-based learning, they are able to comprehend the concepts as well as ideas found in the reading text more and connect the ideas with their experiences including knowledge and raise their reading awareness of reading engagement. This means they can implement the strategies in CORI for other ESP contents including multiple reading strategies and

understand the whole content that enhances reading comprehension. Moreover, it is estimated that the instructional model developed from the study is useful for further study and curriculum development.

Conceptual Framework

In creation of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, the researcher has studied and determined the fundamental concepts and related theories as follows:

1. Fundamental Concepts on Research and Development: R&D together with Mixed Methodology

According to the study, the researcher investigated the innovation of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. The main procedure used in conducting the research was Research and Development (R&D) which played the vital role in creating the innovation to develop the students' ability and proficiency. In the study, the innovation was the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning.

According to Nillapun (2015), Research and Development (R&D) is a systematic and ongoing process used in conducting the research study or investigation for the purpose of developing, creating, initiating the ideas, products, models or other outcomes beneficial for problem solving or promoting better quality of tasks or products. The research is a process to study relevant information such as stakeholders' needs and use the information studies to create the innovation, and then implement the innovation, get feedback and develop to the better one.

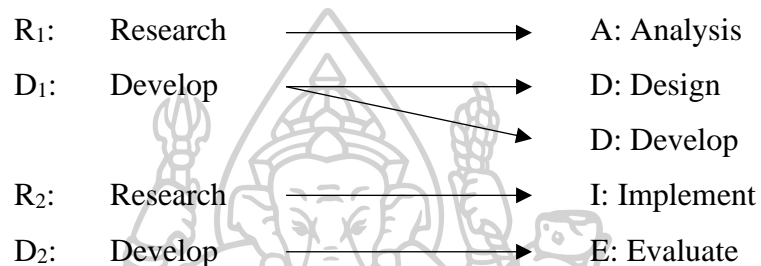
The procedures of Research and Development (R&D) are shown as follows:



The procedures begin with the research study (Research: R₁) and then the data gained from R₁ is used as the fundamental information to design and develop the model

or prototypes (Design and Development: D₁). Then the implementation is systematically done to obtain the results as the feedback (Research: R₂). The development for better standard quality is conducted in the final process as assessment (Development: D₂).

The Research and Development is consistent with ADDIE Model in terms of procedures. The following shows the comparison between R&D process and ADDIE Model (Nillapun, 2015).



As can be seen that ADDIE Model is the instructional method that in the first stage, researchers can analyze the fundamental concepts, principles and theories used in constructing the model or product which is later designed and developed as a draft or prototype. After it is implemented and the reflection gained, the researchers evaluate the draft and prototype and revise it to be a better version and quality.

In addition, the study is designed by using mixed methodology approaches which the data are collected in both qualitative and quantitative methods. The results are presented in both statistical and descriptive ways.

2. ADDIE Model and Instructional Systems Design by Dick and Carey

The study in this research emphasized on the instructional systems design in order to develop the undergraduate students' reading abilities and creative thinking abilities; therefore, ADDIE Model was used in the procedure. There were five phases which were taken into account as the following: Analysis (A), Design (D), Development (D), Implementation (I), and Evaluation (E). Besides, another model used in the study was the Dick & Carey ISD model. The model consisted of nine stages which were 1) instructional aims, 2) analysis on teaching, 3) learner's entry behaviors and characteristics, 4) performance goals, 5) criterion-referenced test items, 6) teaching strategy, 7) materials, 8) formative assessment, and 9) summative assessment (Kurt,

2015). The researcher used the following models to systematically plan, design, and evaluate the business reading instructional model by using Concept-Oriented Reading Instruction (CORI) and project-based learning to efficiently develop the students' reading abilities and creative thinking abilities.

3. Theories and Fundamental Concepts

3.1 Schema Theory

Rumelhart (1980) depicted schema theory as the readers' use of prior knowledge or background knowledge during their reading activities in order to comprehend the texts. The term "schema" was defined by many theorists as the abstract data or knowledge organization in memory that could be used for comprehension (Anderson & Pearson, 1984; Rumelhart, 1980). It can be said that schema theory plays the vital role in reading comprehension due to the use of readers' background knowledge. Hayes and Tierney (1982) also supplemented the idea that the readers can use their background knowledge involving in the topics to learn and facilitate their reading comprehension from the texts. Regarding the types, schema theory is categorized into two types which are content and formal schemata. Content schemata includes the knowledge of everyone and everything in the world and universe as well as culture. However, formal schemata represents the knowledge of structure found in the texts (Brown, 2001).

3.2 Constructivist Learning Theory

Doolittle (2014) stated that constructivism is defined as an approach used by learners to interpret and build their own knowledge from their own experiences. The concept called learner autonomy can be added to show the learners as active and responsible attendants in their own learning process. Additionally, an approach called holistic perspective is focused on context learning. When the learner autonomy and holistic perspective are combined, they affect constructivism in the learning of both science and education. Besides, they can place constructivism as the core of psychology and philosophy which plays the role as the nature of knowledge and the way to gain. This is called epistemology (Doolittle & Hicks, 2003; Ernest, 1995). However, Kapp (2009); Kolodner, Camp, Crismond, Fasse, Gray, Holbrook, Puntambekar, and Ryan (2003) as cited in Tamim & Grant (2013) regarded project-based learning as an instructional model used by a constructivist to promote learners' social learning

experience through group work activities together with enhancing the learners' ability to collaborate on a project which is the most challenging part in project-based learning. However, collaboration can also help to promote the learners' responsibilities as a classroom culture in which everyone feels they should give one another some help and learn from mistakes happening several times.

3.3 The Socio-cognitive: Theories of Language and Literary Development

The socio-cognitive theory has been investigated in the field of Second Language Acquisition as a perspective of human development to be analyzed in terms of cognitive, social, behavioral and emotional capabilities including the ways to manage, create and organize the systems of social structure in conducting real life (Harare, 2016). Bandura (1989) stated that human competencies originally have a difference on psychobiology and human development can be occurred with a lot of various kinds and patterns of alteration on social practices included.

3.4 Business Reading Instruction

Grabe and Stoller (as cited in Snow and Brinton, 1997: 5, 16) regarded business reading instruction as content-based instruction which has been conducted for twenty five years in a variety of language learning situations. As can be seen that this kind of instruction was widely applied and increasingly popularized in the past ten years. At the first stage, this version of content-based instruction (CBI) was applied in English for Specific Purposes (ESP) courses which emphasized on second language (L2) instruction in professional or occupational contexts. However, the instruction has been changed in that it has widely spread to other different contexts which are both L1 and L2 contexts. The contexts cover instruction on foreign language in university-level, in different bilingual education in European countries and in English for Academic Purposes (EAP) courses.

Instructional programs for advanced level include English for Specific Purposes (ESP) and English for Academic Purposes (EAP). Because of forty-year popularity, instruction on specific content and language skills have been designed for both students and professional employees who are in engineering and medical, law, business, airline industry, banking and hotel industry.

English, a universal language, has been used in business area and increasingly widespread. In university curriculum, teachers are being required to give an English

instruction to students. Business English instruction focuses not only on just conducting teaching but also on great amount of various activities happening in class (Frendo, 2007). According to Bojović (2016), vocabulary learning is considered as key part of second or foreign language communication and learning which also indicate how fluent L2 users are. In reading, readers can often learn vocabulary as ‘a product of reading’. However, a sentence with only one unknown word can cause the problem to the readers while reading so they choose an easy way to gain the meaning of that word by finding it in a dictionary in order to comprehend the text.

3.5 Concept-Oriented Reading Instruction

As noted by Guthrie and Wigfield (2017), Concept-Oriented Reading Instruction (CORI) is regarded as an instructional program which integrates reading strategy instruction, conceptual knowledge, and students’ motivation support enhancing students’ reading engagement. Reading engagement is considered as vital for reading development. It means the interaction during the activities promoting motivation, conceptual knowledge, and strategies which lead to the life-long readers. The CORI aims at promoting reading engagement and comprehension through reading strategy instruction, reading for concept, and intrinsic motivation development. Guthrie, Wigfield, Barbosa, Perencevich, Taboada, Davis, Scaffidi, and Tonks (2004) stated that CORI is designed as the use of multiple strategies which consist of activating background knowledge, asking questions, searching for information, making summaries, using graphic organizers and structuring texts. It is also employed by merging reading with contents such as science, business, social studies and so on through the use of books in those fields and interaction in reading instruction and activities. Anderson and Guthrie (1996) added that CORI needs these essential elements such as various trade books, imagination, a plan and a team or a teacher sharing the ideas with in order to complete the program and the teacher should implement in class by using the trade books which are regarded as the most important material to succeed the program (Guthrie, McRae, & Klauda, 2007). The books should be well chosen and correspond to the students’ levels. Additionally, the four essential components of CORI were given by Anderson and Guthrie (1996) and done concurrently to achieve the reading instruction. They were 1) observe and personalize: asking about the concepts learned by the students, 2) search and retrieve: finding the ideas and information by

reading various texts, 3) comprehend and integrate: using independent reading strategies to collaborate with one another to find, learn and group the relevant texts and 4) communicate to others: learn how to communicate what the students have found to others. In order to complete the CORI program, these components should be done at the same time (Anderson & Guthrie, 1996). It can be said that CORI can be additionally used in the classroom as a strategy to help promote learners' reading skills.

3.6 Project-based Learning

According to Beckett (2006), project-based learning was first introduced by David Snedden, the lecturer who taught science in a vocational agriculture classes in the United States of America, and later developed by many educators. However, it was introduced in the second language learning approximately three decades ago and became an approach to enhance student-centered teaching and learning (Fried-Booth, 2002). As noted by Jones, Rasmussen, and Moffitt (1997); Thomas, Mergendoller, and Michaelson (1999), project-based learning (PBL) is regarded as an instructional model that operates learning through projects. A lot of definitions on PBL given as complicated tasks and originated by challenges or problems are discovered in teachers' manuals. The projects deal with the students' abilities and opportunities to design, find solution for solving the problems, make a decision, explore activities, and autonomously get them continuously cooperated with one another in the tasks once in a while. The activities eventually result in product construction or presentation. Moreover, Moursund (1999) stated that other features found on PBL could be real and reliable content and assessment, teacher's facilitating assistance and clear instructional goals. Meanwhile cooperative learning, feedback and combination on adult skills all are found in PBL (Diehl, Grobe, Lopez, & Cabral, 1999). Additionally, more unique features of some specific PBL models are supplemented in project-based instruction including a group of making an authentic query, and using cognitive tools which technology is used as fundamental (Krajcik, Blumenfeld, Marx, & Soloway, 1994; Marx, Blumenfeld, Krajcik, Blunk, Crawford, Kelly, & Meyer, 1994). According to Expeditionary Learning Outward Bound (1999), the development on comprehensive school, multidisciplinary themes, and community service are added as the features of instruction.

4. Fundamental Concept of Creative Thinking Abilities

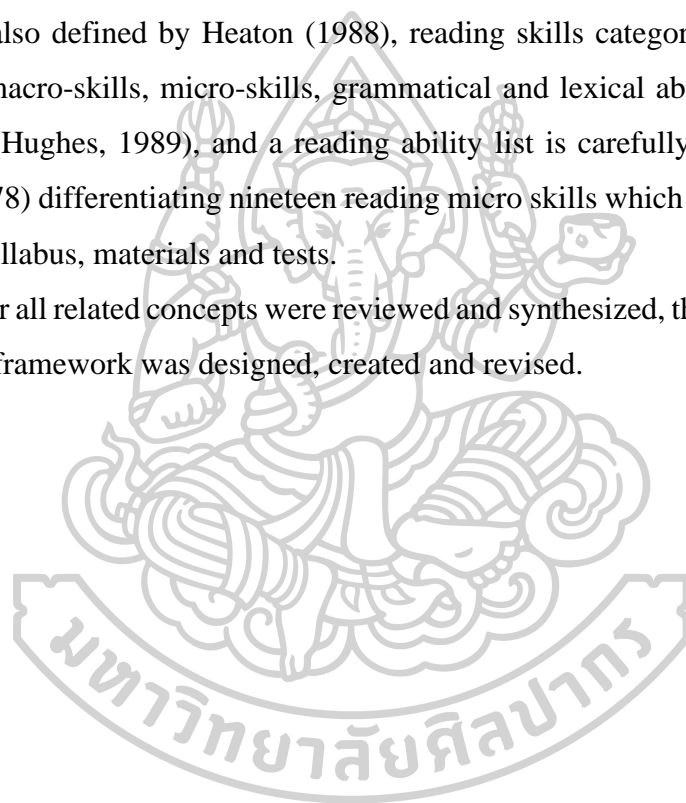
As noted by Anderson et al. (2001) and Pohl (2000), thinking skills can be developed and categorized into two types which are 1) lower order thinking skills, and 2) higher order thinking skills. In lower order thinking skills, high level of thinking is excluded. L2 learners are responsible for only receptive tasks in which their skills to be used are to memorize, understand and analyze the texts. With regard to higher order thinking skills, the learners are required to use high level of thinking comprising the synthesis, evaluation, and creation. Margana and Widyanoro (2017) added that these three high order thinking skills are all relevant to managing in the productive tasks. Therefore, L2 learners can develop their thinking skills while doing some learning activities, given examples by King, Goodson, and Rohani (2007) who states that the activities the L2 learners develop their thinking skills are to break down complicated material into parts, detect relationships, integrate new data into familiar information creatively under limitation of the context, and integrate by using every previous level in assessment or decision making processes. Doppelt (2004) also suggests that creative thinking abilities can be enhanced and assessed in the project-based learning approach (PBL) which helps the students to research, plan, design and feedback their projects in creative activities. Creative thinking is divided into two different types which were lateral and vertical thinking. Both are essential due to the fact that lateral thinking encourages the discovery of new methods, ideas or imaginations that are different whereas vertical thinking emphasizes the development of the ideas based on the evidence and objectives. In other words, the students use lateral thinking in their learning process because they have to find out the alternatives and investigate various solutions. Vertical thinking is employed in the process of making a decision on the best solution and implement it (De Bono, 1986; Waks, 1997 as cited in Doppelt, 2004). It can be said that both forms of thinking are the necessary components in creative thinking skill and support with one another in project-based learning.

5. Reading Abilities or Reading Comprehension Abilities

Vellutino, Tunmer, Jaccard and Chen (2007) coins the model that explains the relationships between reading ability herein defined as reading sub-skills and cognitive abilities. There are three main components of reading ability given and defined as follows: Reading Comprehension defined as the ability to comprehend texts through

written language; Context-Free Word Identification means the ability to identify written words by not using the context clue; and Language Comprehension herein as the ability to comprehend colloquial language. Urquhart and Weir (1998) define more on a reading skill as a cognitive ability to be used while reading texts. The outcome that is expected to gain is reading comprehension as a product after reading a text. During reading processes, skills are used as parts of them. Many experts have developed reading skills until now in various forms such as in lists, taxonomies, as well as hierarchies. For example, eight skills are defined by Davis (1968), fourteen skills in terms of reading ability are also defined by Heaton (1988), reading skills categorized into four levels consist of macro-skills, micro-skills, grammatical and lexical abilities, and low-level operations (Hughes, 1989), and a reading ability list is carefully written in detail by Munby (1978) differentiating nineteen reading micro skills which are beneficial for the design of syllabus, materials and tests.

After all related concepts were reviewed and synthesized, the following research conceptual framework was designed, created and revised.



Research Conceptual Framework

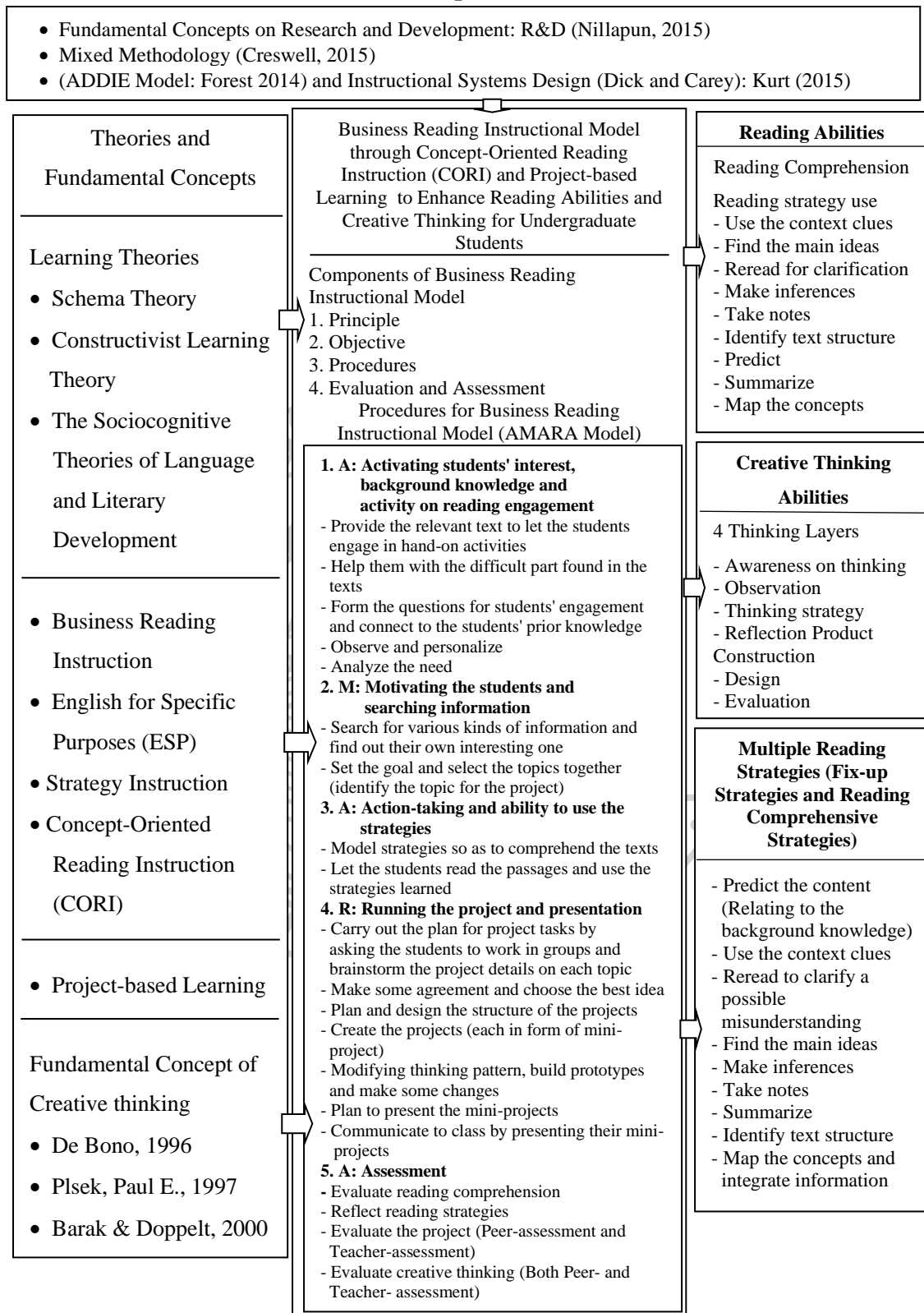
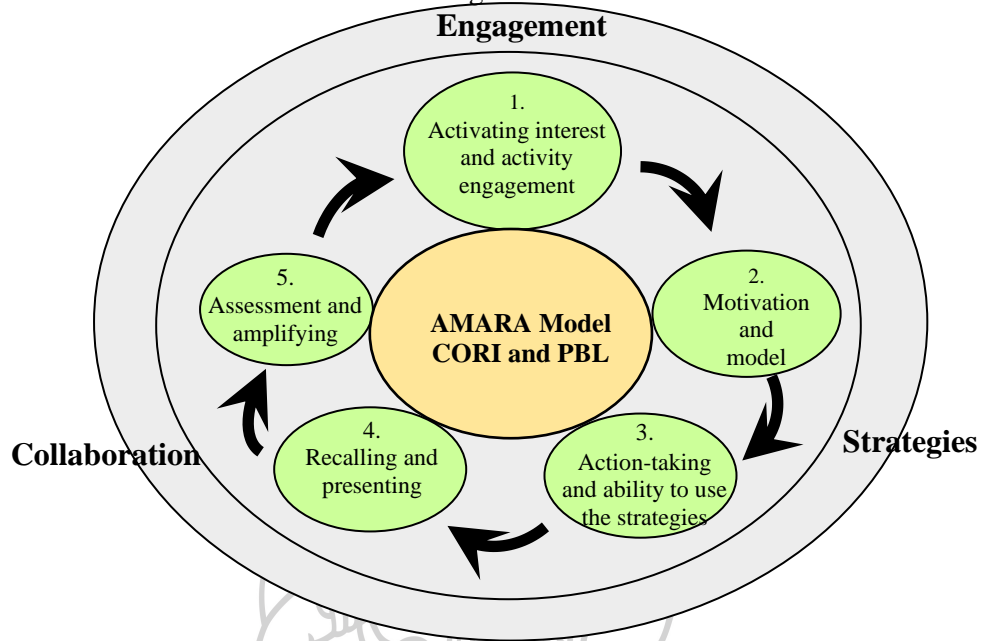


Figure 1 Research Conceptual Framework

AMARA Model (Draft)
 Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI)
 and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities
 for Undergraduate Students



<p>Principles</p> <ol style="list-style-type: none"> 1. Strategies: Strategy instruction 2. Collaboration 3. Engagement 	<p>Procedures</p> <p>1. A: Activating interest and activity engagement</p> <ul style="list-style-type: none"> - Provide the texts and sample to let the students engage in hand-on activities - Observe and personalize - Analyze the problem and need - Form the questions to engage and connect to the students' prior knowledge - Search text for information - Set the goal and select the topics for the texts <p>2. M: Motivation and model</p> <ul style="list-style-type: none"> - Provide the relevant texts - Help them with the difficult vocabulary found in the texts - Model strategies <p>3. A: Action-taking and ability to use the strategies</p> <ul style="list-style-type: none"> - Let the students read the passages and find the main ideas, paraphrase, make inference, predict, summarize and take note - Synthesize by mapping the concept and integrate information - Carry out the project tasks by asking the students to work in groups and brainstorm on the topics - Choose the best ideas - Plan and design the structure of the projects - Create the projects <p>4. R: Recalling and presenting</p> <ul style="list-style-type: none"> - Modifying thinking pattern, build prototypes and make some changes - Plan to present the projects - Communicate by sharing their projects and present to the class <p>5. A: Assessment and amplifying</p> <ul style="list-style-type: none"> - Evaluate the project - Evaluate creative thinking - Extend their knowledge for further reading 	<p>Reading Abilities</p> <ul style="list-style-type: none"> - Use the context clues - Find the main ideas - Reread for clarification - Make inferences - Take notes - Identify text structure - Predict - Summarize - Map the concepts
<p>Objective</p> <p>To develop and enhance reading abilities and creative thinking abilities for the undergraduate students by using business reading instructional model (AMARA Model) comprising Concept-Oriented Reading Instruction (CORI) and project-based learning.</p>		<p>Creative Thinking Abilities</p> <p>4 Thinking Layers</p> <ul style="list-style-type: none"> - Awareness on thinking - Observation - Thinking strategy - Reflection <p>Product Construction</p> <ul style="list-style-type: none"> - Design - Evaluation

Figure 2 AMARA Model (Draft)

Research Questions

The study was conducted and investigated according to the following research questions:

1. What were the components and teaching procedures of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning?
2. Was there the efficiency on the criteria 75/75 of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning?
3. Were the students' reading abilities after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning more developed and the post-test scores got higher?
4. Did the students develop creative thinking abilities on mini-projects after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning and to what extent its effect was?
5. Did the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning enhance the students' usage of multiple reading strategies and to what extent its effect was?
6. Was the business reading instructional model verified by the experts?

Objectives of Research

The objectives of this study were as follows:

Main Objectives

1. To develop a business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.
2. To investigate the efficiency of using the developed business reading instructional model.
3. To compare the students' reading abilities between pre-test and post-test before and after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning.

4. To study and evaluate the students' creative thinking abilities on mini-projects after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning.

5. To investigate the students' multiple reading strategy usage after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

6. To verify the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

Research Hypotheses

The following were research hypotheses of the study:

1. The efficiency of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning reached the set criteria as 75/75.

2. The students' scores in reading abilities getting from post-test were higher than pre-test after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning at the .05 level.

Scope and Limitation of the Study

The scope and limitation of the study on the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for the undergraduate students were as follows:

Population

In the first semester of 2018, there were more than 100 English major and minor students who were studying in the third- and fourth-year at the Faculty of Archaeology, Silpakorn University. The third-year English major students were about 40 students and the fourth-year English major students were about 40. Meanwhile, the third-year English minor students were about 50 students and the fourth-year English minor students were about 45. However, they all could select Business English Communication Skills as their elective subject.

Samples

The samples were from one class which had 35 students who registered in the first semester of 2018 and taught by the researcher. They were both English major and minor, third- and fourth-year students. Simple random sampling was used for a sampling unit.

The variables in the study were presented as follows:

1. Independent variable was the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning.
2. Dependent variables were the following:
 - 2.1 Reading abilities
 - 2.2 Creative thinking abilities
 - 2.3 Reading comprehension strategies

Duration

The study was conducted for a four-month semester from August 2018 to November 2018 which spent three hours a week in a class time. In the duration to conduct the research, the introduction of the experiment, a pre-test, and a post-test were given and included.

Material

The study emphasized on using Concept-Oriented Reading Instruction (CORI) and project-based learning that were instructed by using texts with most business reading contents such as business news and articles. Based on students' needs analysis, most types of reading texts given to the students were selected from the Internet or taken from various commercial books and other sources that were in the students' interest.

Definitions of Terms

1. Business reading instructional model: AMARA Model is a business reading instructional model created from the synthesis of the strategy combination between Concept-Oriented Reading Instruction (CORI) and project-based learning. The AMARA Model is named from the acronym of the following steps: Activating the students' interest, background knowledge and activity on reading engagement, hand-on activities such as finding difficult vocabulary, forming the questions, observing and personalizing of the content areas and problem and need discussed in class are run for students' engagement and prior knowledge connection; Motivating the students and

searching texts for information they are interested, the goal is set and the topics for the texts are selected by the discussion in class; Action-taking and ability to use the strategies modeled by the teacher and let the students use all by themselves; Running the mini-project and presentation by asking the students to work in groups, brainstorm the mini-project details and plan the presentation; and Assessing each mini-project with creative thinking and the students' reading comprehension.

2. Concept-Oriented Reading Instruction (CORI) refers to a framework that shows an integration of literacy processes and content knowledge to encourage students' motivation including collaboration and to implement conceptual knowledge with five phases integrated in Concept-Oriented Reading Instruction: observing and personalizing; searching and retrieving; comprehending and integrating; communicating to others; and interacting with peers. All these are the sub-steps found in CORI. The whole instructional procedures, however, comprise 3 main stages: Preparation and Motivational Stage by providing the relevant texts, sample projects and hands-on activities to activate the students' background knowledge, to form questions and to search texts for information in information books; Cognitive Stage by modeling and scaffolding strategy, guided practicing on reading strategies, as well as concept-mapping through graphic organizers; and Action Stage by carrying out the project tasks.

3. Project-based learning refers to a method of students' learning that emphasizes on using their experience and knowledge to create the outcomes. With project-based learning, the students can develop their knowledge and encourage their autonomous lifelong learning. In this study, project-based learning is made with four stages: 1. Preparation Stage - Cooperation is the way that the teacher teaches the students to choose the project, make some agreement on theme, brainstorm on the topics, plan and design the structure of the project, gather information and materials necessary for creating the project, analyze the data obtained and share with class; 2. Creation Stage - Project creation, in the study, is a form of mini-projects which have been done before finishing each topic or theme; 3. Presentation or Publish Stage - Preparation for the language used in presentation and then plan to present the outcome from each mini-project; and 4. Evaluation Stage - Assessment on each mini-project is needed.

4. Reading abilities are found to be used in the research in the terms as both reading abilities and reading comprehension abilities. In this study, reading abilities are focused on reading strategy instruction which is use the context clues, find the main ideas, reread for clarification, make inferences, take notes, identify text structure, predict, summarize, and map the concepts. They are evaluated by using the reading comprehension test.

5. Multiple reading strategies comes from the use of two main strategies which are fix-up strategies and reading comprehension strategies in business reading. Regarding fix-up strategies, the students are asked to practice predicting the content, using the context clues and rereading to clarify a possible misunderstanding. In terms of reading comprehensive strategies, they involve finding the main ideas, making inference, taking note, summarizing, identifying text structures, and mapping the concept. All these strategies are reflected through the reading log by the students in the assessment stage. It can be said that the students' strategy use is measured by readers' content analysis.

6. Creative thinking abilities refers to a novelty or innovative building on the mini-projects gained from students' thinking and creativity. In the study, criteria for creative thinking abilities are analyzed, synthesized and adapted from Creative Thinking Scale created by Doppelt (2004) and carried out into two main domains which are: 1) Four thinking layers and 2) Product construction. The first domain, four thinking layers, consists of four criteria which are awareness on thinking, observation, thinking strategy and reflection. Awareness on thinking involves the recognition on thinking skill development and the logical opinion sharing with good reasons. Thinking strategy relates to the development of thinking process on project which is about designing goal, using prior knowledge, generating and analyzing idea, recording concept, selecting the best model, modifying thinking pattern, building prototypes and making changes. Observation involves the teammates' observation and consideration on consequences of choices. Regarding reflection, the students' reflective thinking within and between group(s) together with consideration on methods to implement the designed tasks. The second domain, product construction, comprises design and evaluation. Design comprises well-planned product's features and specifications, well-designed and detailed drawing of the model and systematically constructed product. In terms of

evaluation, best consideration, comparison, selection of various models, creative development on product and interesting presentation are investigated.

7. Undergraduate students refers to the ones who study in the third and fourth years in the Faculty of Archaeology, Silpakorn University and enroll business English course that mini-projects are assigned to be parts of the course.

Expected Outcomes of the Study

It was estimated that the findings of the study were beneficial for students, lecturers, universities, other related organizations, and researchers.

The study could bring about the following satisfactory outcomes for students, teachers, and the university:

1. In terms of students, the study could

1.1 increase students' business English reading proficiency.

1.2 enhance students' lifelong learning.

1.3 scaffold and stimulate students' creative thinking abilities.

2. In terms of teachers, the study could

2.1 provide the new method of teaching which was suitable for enhancing students' abilities in business reading.

2.2 encourage the teacher to create the interesting activities for their teaching and let students work in a team and construct the creative product.

3. In terms of the university, the study could

3.1 improve students' reading abilities and lead to their future achievements.

3.2 give students the best practice to prepare them for being creative graduates from the best university of creativity.

CHAPTER TWO

REVIEW OF THE LITERATURE

In this chapter, many literature reviews have been discovered and included. They relate to the study on the development of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. The related theories and researches are synthesized and presented as follows:

1. Concepts on Research Approaches
 - 1.1 Research and Development: R&D
 - 1.2 Mixed Methodology
2. Concepts on Instructional Model
 - 2.1 ADDIE Model
 - 2.2 Dick and Carey's Instructional Systems Design
3. Learning Theories
 - 3.1 Schema Theory
 - 3.2 Constructivist Learning Theory
 - 3.3 The Socio-cognitive Theories of Language and Literary Development
4. Theories of Concept-Oriented Reading Instruction (CORI)
 - 4.1 Definition of Concept-Oriented Reading Instruction (CORI)
 - 4.2 Principles of Concept-Oriented Reading Instruction (CORI)
 - 4.3 Business Reading and English for Specific Purpose (ESP) Concepts
 - 4.4 Strategy Instruction
 - 4.5 Reading Strategy Assessment Tools
5. Project-based Learning
 - 5.1 Definition of Project-based Learning
 - 5.2 Principles of Project-based Learning
 - 5.3 Strategies of Project-based Learning
6. Reading Abilities
 - 6.1 Definition of Reading

6.2 Readability of Content Area Textbooks

6.3 Multiple Reading Strategies

6.4 Reading Ability Assessment Tools

7. Creative Thinking

7.1 Definition of Creative Thinking

7.2 Strategies of Creative Thinking

7.3 Creative Thinking Assessment Tools

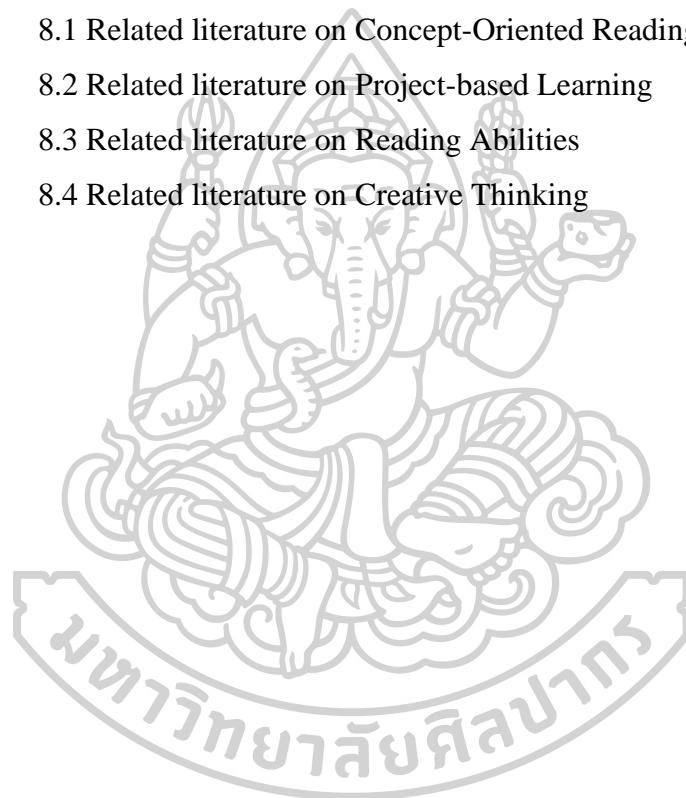
8. Related literature

8.1 Related literature on Concept-Oriented Reading Instruction (CORI)

8.2 Related literature on Project-based Learning

8.3 Related literature on Reading Abilities

8.4 Related literature on Creative Thinking



1. Concepts on Research Approaches

1.1 Research and Development: R&D

R&D is known as the creation of new body of knowledge about existing products or processes, or the creation of an entirely new product is called R&D. This is systematic creative work, and the resulting new knowledge is then used to formulate new materials or entire new products as well as to alter and improve existing ones (Martin, 2014).

Types of Research and Development

According to a US government agency, the National Science Foundation (2018), types of Research & Development is categorized into three types as follows:

1) Basic Research – This type of research aims at the construction on body of knowledge on the subject matter that needs the complete comprehension. Implementation is found less in this type in terms of commercial and practical aspects. The results found in this research type may possibly attract any organization.

2) Applied Research – The purposes of research are more directed and particular in that it aims at defining the means to meet the customers' needs. The studies emphasize the products or processes according to the particular purposes in business.

3) Development – This type focuses on the processes on further use of results derived from the research to manufacture some particular products. This is different from only manufacturing. In development, designing and producing prototypes, and developing processes including materials and methods are also considered and systematically studied. The developmental research is the investigation of knowledge and design essential for the manufacturing process and then the making use of the research plans to create prototypes and manufacture the products.

1.2 Mixed Methodology

Creswell (2015) stated that the mixed methodology involves the researcher's gathering between quantitative (closed-ended) and qualitative (open-ended) data, combines the two together and interprets them according to research problems.

According to Creswell & Clark (2007), some people say that mixed methods research is a new way but actually it is not. In many years, researchers have conducted the researches by gathering data in both quantitative and qualitative ways. However, both forms of data are combined as a form of new research design or research

methodology. Therefore, it is the idea of data integration in a form of research design, notation system, terminology, diagrams of procedures, challenges and events that use different designs. The design of mixed method research is in the form of experimental, exploratory, national, case study and various designs that can be applied to researchers in the social sciences, humanities and so on.

Research design is a process of data collection, data analysis, discussion, and research findings. Different models can be shown in doing the research and these models have different names with consistent processes. However, the correct research form is considered important because it will be an indication of the decision making methods that the researchers choose during the research procedures and determine the reasons for the research discussion. Regarding the researchers choosing the mixed methodology in the research, the next stage is to make a decision on which method provides the best answer for the difficulty. The researcher will decide the most suitable method for the study. Mixed methods researchers are familiar with the types of research and the common variables of mixed methods research. In order to select an appropriate method for the research, the important thing is the purpose, the process, the strengths and obstacles in each type of research.

Classification of Mixed Methods Research: Design

The benefits that the researchers will gain are derived from the appropriate beginning of mixed methods classified and found in the relevant literature. This classification is shown in different subject areas and used in specialized fields. The researcher should be aware of the differences in the types of mixed methods research according to the disciplines.

Researchers who conduct and write mixed methods research give different opinions about the different categorization of mixed methods as follows: In the last chapter of the Handbook of Mixed Methods in Social and Behavioral Research, presented by Tashakkori and Teddlie (2003), approximately 40 different types of mixed methods have been discovered. According to Creswell, Clark, Gutmann, and Hanson (2003), the summary of the classification was made and updated. This classification shows the diversity of social sciences including assessments, health research, and educational research. The mixed methods researchers spent 15 years on conducting different types of mixed methods, and this assortment shows the development of mixed

methods. Since the classification is compiled from many disciplines focusing on different perspectives, there is the lack of consistency in terms of the name of the form. The researchers have different important characteristics and different names of the forms; however, most are very similar and categorized less according to their functions. Therefore, the forms of mixed methods were concluded and categorized regarding the design into 4 main different types.

Four Types of Design in Mixed Methods Research

Creswell & Clark (2007) mentioned four types of mixed methods study which are as follows:

1. The Triangulation Design is an integrated research methodology. The well-known design is a type of plan that aims to obtain different information but support one another under the same topic in order to completely understand the research problems. The design has both strengths in using quantitative methods (large sample groups, trends, general conclusions) and weaknesses supplemented with qualitative methods (small sample groups, in details and in-depth information). The researcher uses this design so as to compare the similarities and differences of statistically quantitative outcomes with qualitative ones or to complete or additionally describe quantitative findings with qualitative data.

2. The Embedded Design is a format in which data of one type of method is supported and inferior to another type of method. The evidence of this type shows that a single set of data is not enough to answer different questions. Each query needs various categories of data to answer with. Researchers utilize the format to combine quantitative or qualitative data in order to answer research questions. Under quantitative or qualitative research, the design is gainful when researchers want to embed qualitative elements in quantitative designs, for instance, in the experimental model and the correlation model. Qualitative data are integrated into the design for many reasons, for example, to develop methods for checking the additional processes or procedures in relation to variables, or to monitor experimental results.

3. The Explanatory Design, a descriptive research, is an integrated approach conducted into explanatory sequential design and divided into two phases. Firstly, it is started with the quantitative data collected and analyzed by the researcher, followed by the collection and analysis of qualitative data. In the next phase, qualitative designs are

designed from quantitative results in the early stages. Since it is a quantitative model, researchers focus on quantitative methods rather than qualitative. The overall objective of this type is to use qualitative data in explanation as a main approach rather than the quantitative results. For example, this type of research is suitable for studies in which researchers need to use qualitative data to describe whether the results are significant or still uncertain according to Morse (1991). Moreover, the design is used when researchers need to group the data based on quantitative results following the group throughout subsequent qualitative study (e.g. Morgan, 1998; Tashakkori & Teddlie, 1998) or employ the features of the research participants in a purposeful sampling for the phases using qualitative research methods in the study (Creswell, Clark, Gutmann, & Hanson, 2003).

4. Exploratory Design is a survey pattern which researchers start with collecting qualitative data to investigate the phenomenon before analyzing and using the results. The design is carried on the follow-up phase and contributes to collect quantitative data. There are sampling for both phases and are related in the exploratory design. Some are conducted in a 3-phase model, with the exploration phase followed by the instrument design phase, and then testing the phase and managing the tool. The second phase is developed as a model. Finding the right tool or tool improvement is a priority and variables should be specified as well. The considerations in exploratory design are different. In the initial data collection, decision of the exploratory design is to determine the sample in each phase. The decision on the effect of use is derived from the first phase. As further explanatory patterns are explained, the two-step objective of survey patterns is focused. It can be explained that the findings of the qualitative method as the first one can enhance the development or prep an idea for the second method or quantitative one according to Greene, Caracelli, & Graham (1989). The fundamental of design is founded upon the proposed exploratory hypothesis. The design is necessary to consider for many reasons. One of them is that measurements or tools cannot be used with unknown variables or no framework/theory is supportive. However, it can be said that this design best starts with qualitative method for observing the phenomena (Creswell, Plano Clark, et al., 2003). The design can be beneficial when the researchers want to improve and assess the tools when they cannot be used to identify important variables in quantitative studies (Creswell, 1999; Creswell et al., 2004). When the

variable is not known, it is suitable for researchers who need to see the results in different groups (Morse, 1991), classification or theory test (Morgan, 1998), or deeply learn about incidents.

DATA COLLECTION IN MIXED METHODS

Researchers need to know the general procedures of data collection in both quantitative and qualitative research. Various approaches for data collection in mixed methods research are presented as the following.

- Data collection proposed in mixed methods research is developed to answer research questions (Teddlie & Yu, 2007). Researchers using mixed methods do not overlook the objective and consider whether the information can give an answer for research questions or not.

- Mixed methods researches consist of data collection in both quantitative and qualitative ways. Researchers should be familiar with both methods of data collection such as the collection of creative qualitative data as pictures for data clarity and the careful selection of quantitative tools so as not to get out of the desired answers.

- Sampling is possible to be used in both quantitative and qualitative methods. For example, researchers need to divide the group of participants according to certain dimensions by using procedures that correspond to the probabilistic sampling.

- The importance of procedures in data collection is emphasized in terms of mixed studies reporting methods for readers and inspectors to understand the steps to help evaluate quality. In addition, the report helps others to understand the effort to gather complex quantitative and quality data.

- The design of mixed research methods increases the way of decision making and the problems of the data collection processing. Strategic decisions are made on sampling and the types of questions during the data collection.

In many studies, both qualitative and quantitative data are collected and analyzed to address research questions with regard to the main points of study. The design of mixed methodology is used and data mixed and framed with a theory. In designing a mixed methods research, many aspects were considered as follows: the draft title, the research problem, the theory, the purpose of study, the research questions, the rationale for using mixed methodology, the definition of mixed methods research, the qualitative and quantitative data collection and the mixed methods design. In other

words, a research conducted by using mixed methods research as a methodology deals with collecting, analyzing, and integrating (or mixing) quantitative and qualitative research (or data) in a single or longitudinal study. The form of research aims at combining both qualitative and quantitative research and providing not only a research approach but also a better understanding of a research problem. All in all, the main concepts of mixed methodology are to gather both quantitative and qualitative data, integrating the data in either single or multiple-phase project (Bulsara, 2015).

2. Concepts of Teaching and Learning Styles

2.1 ADDIE Model

Forest (2014) states that many educators who have been teaching have often used the "ADDIE" Method as a way to design and effectively monitor the progress of the project for many years.

The acronym "ADDIE" stands for the following: A = Analyze; D = Design; D = Develop; I = Implement; and E = Evaluate.

However, this series of instruction do not specify strict linear progress between each step because it is completed with a clear instruction within the process. Therefore, it is clearly seen that even if the person uses ADDIE model during the project, the value and also the structure of the entire program are still maintained completely. The studies conducted by many educational researchers indicate that this method is very useful, with clearly defined steps that make effective use of instructions. ADDIE model is considered as an outstanding Instructional Design (ID) so the model has been discovered wide use and approval. It can be shown in the following diagram.

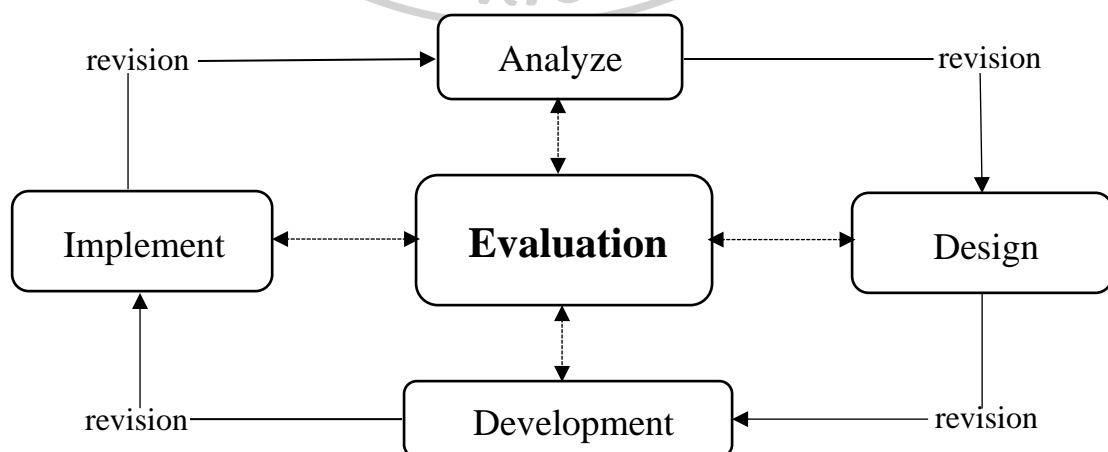


Figure 3 ADDIE Model

Source: <http://www.jaturapad.com/archives/829>

Interestingly, Kurt (2018) gives the details of five components of the ADDIE model which can be explained as follows:

A = Analysis

The first phase is the analysis process which can be called a "goal setting process". The design stage is found important in the procedure of analysis with respect to the consideration on the target audience. In addition, there should be programs that match the student's ability and intelligence levels to ensure that what they know will not be repeated and the topic and lesson are also investigated and focused. In this process, the teachers will differentiate between students' prior knowledge and expected learning outcomes or required knowledge after the end of course. Many important components will be used to ensure that the analysis is carefully and completely made by employing important documents such as textbooks, course materials, syllabus and the internet platforms. However, the online media such as web courses are found useful in that the structure can be considered as the main guidelines for designing the course syllabus. After that the topics used in instruction are analyzed and chosen. In general, the analysis process answers the following questions:

- Investigation is made on all personal and educational information of the students who participate in the program. They might be nationality, age, interests, and previous experiences. Who is considered as the target audience? What are the academic goals of the program, students' previous knowledge levels, learning experiences, ages, interests, and their cultural background?

- The students' needs to achieve are explored. What are the students' needs?

- Which of the following is needed: skills; intelligence; expectations; and physical/mental reactions? Which of the following is the expected learning outcome: knowledge; skills; attitudes; and behaviors?

- The well-known methods needed to be used for the topics should be considered and improved. Additionally, existing teaching strategies need to be reviewed. Is that enough? What areas are need to be supplemented and more developed?

- The objectives and goals of the project are defined. What are the teaching goals that the program needs to achieve?

- A variety of alternatives used in the program are considered. Can learning environment support the instruction? Regarding the integration between live and online

chat, what are the advantages and disadvantages between online and offline learning as in the classroom based instruction? Which option should be selected to deliver to students? What kind of learning environment do students need? Which one is chosen between online teaching platforms or face-to-face instruction and a blended learning? If the instruction via online platform is needed, what difference would learning outcomes be in terms of classroom-based instruction and web-based instruction?

- The limitation factors to achieve the goal of the program need to be considered. Will they be in the aspects of resources which are technical skills, financial support, human resources, time, and many more?

D = Design

This phase will set all goals and tools that will be used to measure performance and a variety of tests, analyze subject matters, plan, and find appropriate resources. All methods should be done according to their plans and follow the specific set rules. This systematic method ensures that everything is in realistic strategies with logical plans or a set of strategies with the goal of program to be achieved. Being insistent to the details in each step essentially results in the success of the design process. The learning objectives, content analysis, exercises, lesson planning, evaluation tools and media selection are all emphasized in the design process which must be specific. The components of the instructional design plan must be carried out carefully in the details. There should be a system that has a logical identification with systematic process, development and assessment of the planned strategies that determines the goals as the achievement of the program.

While conducting the design phase, the following are needed in consideration:

- Various media types to be made use, for example, audio, video and graphics
Will third-party resources be used or will the instructors create them by themselves? Will the instructional materials be prepared beforehand?

- Many kinds of resources needed to complete the program

What resources are provided for completing the program?

- Levels and categories of activities to be created

Will it be interactive, collaborative or individual study among participants?

- Teaching style as an instructional method

What approach will you make use in each session of the program? (For example, behaviourist, constructivist, and so on)

- Time frame for every single activity

This means the amount of time that each task will be taken and learning methods will possibly be applied through various forms of practice such as a lesson, a chapter, a module, and so on). Are the themes/topics arranged and directed with respect to the progress, from easy to difficult matters?

- Distinguished mental processes that participants need to achieve the program goals

What are the cognitive thinking or skills that are set for students to achieve the learning objectives of the program?

- Development of knowledge and skills after each assignment

Is there a method to consider the values that the students intend to achieve? What methods do you implement to consider the students' acquisition of required competencies?

- Study plans of the program that are written and shown

In instructional design, will it be useful to design and build a plan of various tasks to view whether or not they are consistent with the aim of program?

- Consideration on web-based instruction

It would be interesting in case the program is designed and conducted in online or web-based teaching. What type of 'user interface' will be used? How is the site designed, created and implemented?

- The tools to reflect the participants' feedback toward the lessons

What tools are designed to get students' opinions about the content they've learned?

- Students' needs on their preferences and learning styles

What is the approach used to ensure that the program meets their demand? How are program activities designed to attract a variety of learning styles and students' interests? What delivery options and media categories are variously chosen to suit the program?

- Identification on the key concepts of the program.

D = Development

The development phase begins with the creation and tests on the methodology employed in the program. Regarding the steps in this phase, the designers take advantage of the information gathered from the previous two steps and employ these data to build a program which conveys the methods required to be instructed to the learners. In the two previous steps, planning and brainstorming are required and conducted; however, the development phase involves actual implementation including the following three tasks which are drafting, creating and assessment. Therefore, it can be said that the phase of development relates to the creation and testing of learning outcomes. The aim of this phase is to answer the following questions which are:

- Is the time frame aligned with the number of content that materials offer? Are the material created as scheduled?
- Is teamwork among various learners focused? Do members effectively work in teams?
- Is every participant engaged in the task according to their maximum potentiality?
- Are materials created and going to be used according to the task?

I = Implementation

In the implementation phase, the ongoing modifications of the program is given to ensure that the highest efficiency and positive results are gained. This is the good opportunity to revise the instructional design, modify, and develop the courses for the highest efficiency on delivery. Processes are very crucial in this phase. Most "actual" work is carried out here because of the instructional design. The students work together to practice using the innovative tools and ensure that the design is continually assessed for development. It should be noted that the program should not be conducted on its own and the assessment done appropriately following the instructional design. It would be beneficial for the revision of design if a number of feedbacks or opinions are obtained from both design and participants so as to learn more and revise in an appropriate way.

The implementation phase gives the feedback on the design assessment and the designers are considered as an important part to influence the program achievement. To develop the program, the ongoing processes of analysis, redesign and enhancement on

performance are carried out so as to ensure that the delivery is effective through the program. However, conscientious and appropriate assessment on the outcome, program or course is required within proper period of time for revisions. During the implementation, instructors and learners actively participate and the program can be modified immediately through the program which is expected to run effectively and successfully in this phase.

The following examples show the statements and questions that need considering:

- Give some advice on how to save the information you need, including the actual data you need from the learners' experience involving in the program.
- What emotional opinions are reflected by both instructors and learners while initially conducting the program? Do they feel interested in, critical, active, passive or even resistant to the program?
- When the program is implemented, do the instructional designs help the learners to comprehend the topics immediately or more assistance is needed?
- Indicate how possible difficulties occurring during the test are solved. How will you react when activities are presented to students and unexpected things emerge?
- Do you prepare back-up instruments for the case that the program initially fails? If unexpected circumstances such as technical and other difficulties emerge, will the backup strategy be prepared to deal with them?
- Will you conduct the processes with a small or large scale?
- Whenever a group of learners receive and use the materials provided, do they use them independently or need some constant assistance?

E = Evaluation

Evaluation is regarded as the final phase conducted in the ADDIE model. This part emphasizes the program carefully assessed and meticulously finalized for what, how, why and when success is achieved (or unsuccessful) through the whole program. This process is divided into two parts which are formative and summative assessment. The preliminary assessment will be realized during the development phase. This formative assessment is carried out while instructional designs are implemented by both learners and instructors; however, summative assessment is conducted before completing the program. The primary purpose of the assessment process is to ascertain

whether or not it can be achieved and realize what is needed for further improvement on efficiency and achievement of the program.

With respect to the first assessment, formative assessment, every phase in ADDIE model is involved with the multi-dimensional and important components in the procedure. The formative assessment is considered during development stage. In the implementation phase, assessment is conducted throughout the process with the help of both instructors and learners. Then it comes to summative assessment which is conducted after the course or program is completed. It can be said that the final assessment will be done to improve the course. The designers who implement the assessment processes throughout the program should ensure that any problems related to the training program are resolved and the expected goals are achieved.

It can be possible that some factors are ignored due to the limitation of time and financial reasons. The following are necessary steps of all ADDIE procedures that aim to answer the questions below:

1. Define the types of learning that can create the effectiveness of the program such as learning improvement, motivation enhancement, and so on. What factors or criteria will be used to promote the effectiveness of the program?
2. Consider how you will conduct the data collection, including the most effective timing to be spent. When and how will the data relating to the overall efficiency of the program be collected?
3. Consider a system used for analyzing the opinions taken from participants.
4. Consider how you will have to make some changes in some parts of the program before implementing the full version if needed. You will possibly make the decision to edit some key issues of the program before it is fully implemented.
5. Consider the ways in which content and reliability can be verified.
6. Consider how you know whether the instructions are clear or not. What ways can you use to evaluate the clarity of instructions?
7. Consider the ways how the participants' responses in the program can be analyzed and rated.
8. Consider who will receive your final results gained from the program. In other words, who will be responsible for preparing the assessment report gained from the results?

However, instructional theories also play an important role in the design of instructional materials. Theories such as behaviorism, constructivism, social learning and cognitivism help shape and define the outcome of instructional materials. (Wikipedia.org)

2.2 Dick and Carey's Instructional Systems Design

There can be a wide variety of instructional models. In the instructional process, the ways how to create an effective lesson plan are considered as well as the content delivery emphasized. The Dick and Carey's model is one of many instructional models previously and initially designed and created as instructional systematic procedure. In the model, diagram is complex but the steps can help to support the instructional designers on what and how to instruct the learners. Therefore, all these stages are linked; some may both directly and indirectly affect others (Forest, 2015). The following shows the diagram of Dick and Carey's instructional model.

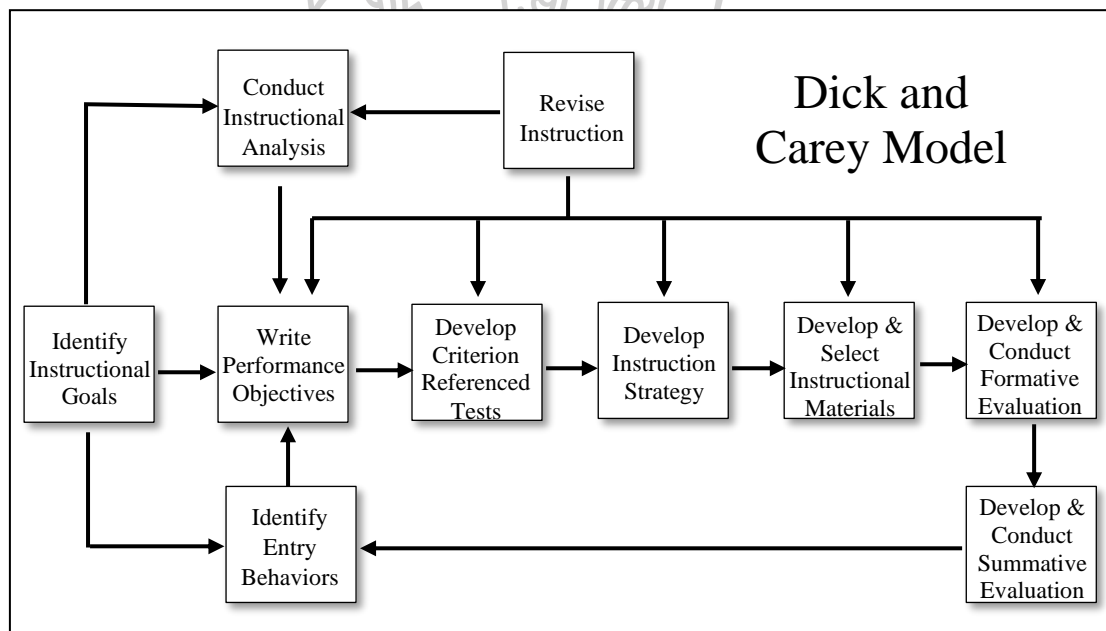


Figure 4 Dick and Carey Model

Source: <https://educationaltechnology.net/dick-and-carey-instructional-model/>

According to Forest (2015), the diagram shown above can be described in nine stages which are the followings:

Stage 1. Instructional Goals

The instructional goals are firstly decided and set by the instructors in order to be capable of indicating what is required for the students to learn.

Stage 2. Instructional Analysis

The next stage is the instructional analysis which the instructors have to determine the teaching plan and skills that their students will need to learn.

Stage 3. Entry Behaviors and Learner Characteristics

Then assessment on skills that the students have is previously considered by the instructors and required for the lesson.

Stage 4. Performance Objectives

After that, specific goals and objectives must be considered by the instructors for the lessons. It is similar to the SWBAT, Student Will Be Able To, that is needed in many instructions. The objectives need more details so that the instructors can confirm their teaching most of which come from the lesson their students should be taught.

Stage 5. Criterion-Referenced Test Items

Creating a test is the fifth thing that the instructors have to do. The test must correspond to the performance objectives reflecting on what the students are expected to teach. The instructors should make a plan so as to help them to consider what performance is expected to be tested. Additionally, these are intended to assist the students on comprehending their expertise or weakness and become the parents or administrators' checkpoint for investigation.

Stage 6. Instructional Strategy

In the sixth stage, lesson plans are drafted. It can be interpreted that the instructors' demonstration on learning objectives, and instructional activities is done in this stage. Moreover, time management and materials used and appropriately covered all the activities are considered.

Stage 7. Instructional Materials

In this stage, all needed for the lesson are well prepared. The instructors can use the things they ensure its quality. This does not mean specifically the materials used in the program, however, it includes the test which should be ready for implementation.

Stage 8. Formative Evaluation

Then the instructors are required to assess how the lessons are conducted. Are there any students that are not too excited about working as a group? Does their group perform poorly? Are there any students being inactive while others do all the work with the expectation of getting a good grade? The suggestions are made for the instructors

who can take this chance organizing a field trip or asking the students to work in small groups. They can conduct a face-to-face assessment if they have a small class size.

Stage 9. Summative Evaluation

In this last stage, the instructors will have a chance to make some revisions if they teach only one class and a topic is simply used. With regard to the activity, the decision is made on whether it is worth keeping, cutting out, or finding the better one instead according to the feedback from the students. This stage, however, makes sure after the instructional processes are revised, they will lead to the maximum improvement of the program (Kurt, 2018).

It should be reminded that it would be more beneficial for the instructors who comprehend thoroughly the processes and this can prevent them from overspending time on specific area. If they know it well, it would be easier for them to complete the rest of the processes no matter what they are directly or indirectly linked. This is the reason why this model is considered as one of good models of learning employed in the instructional design.

3. Learning Theories

3.1 Schema Theory

Schema theory has been studied by many theorists. An (2013) conducted an interesting study and many interesting ideas were given on this theory. She stated that according to Rumelhart (1980), schema theory is explained as a way showing how readers employ their prior knowledge to comprehend and learn things from text. The initiation of term "schema" emerged in psychological field employed by Bartlett as an active reconstruction of memories and reactions in past experiences (Bartlett, 1932: 201). Then schema was suggested and explained in reading by Rumelhart (1980), Carrell (1981) and Hudson (1982) so as to give the ideas on the essential role of prior knowledge in reading comprehension. As noted by Rumelhart (1980: 34), schema is defined as a construction of data showing as principle in genes kept in memory, corresponding to what Anderson and Pearson (1984: 42) defined as "an abstract knowledge structure". Additionally, Medin and Russ (1992: 246) as cited in Alhaisoni (2017) give a definition on this term as a structure of general knowledge employed in comprehension.

The basic theory of schema theory indicates that meanings or messages cannot be delivered through the written form of text by themselves but the texts only prepare some guidelines for readers who should draw or create meaning from their previous knowledge known as background knowledge or prior knowledge. The knowledge structures previously acquired are called schemata (Bartlett, 1932; Adams and Collins, 1979; Rumelhart, 1980). A reader's schemata is arranged in the hierarchy way that the most general one is found at the top whereas the bottom indicates the most specific. In schema theory, it is believed that it is an interactive process between readers' prior knowledge and the written text that coins text comprehension. The one who gets effective comprehension shows that the ability to connect the text content with their own background knowledge is needed and used. The outcome gained for comprehending a text relates to the use of a person's knowledge (Anderson, 1977: 369). With regard to reading comprehension, the hierarchy is shown and operated in two directions which are the bottom up and the top down processes. The bottom-up process is enabled by using the data only from the text, whereas the top-down process begins with general ideas and works down to the specific ones. These two types of processes are run in concurrent and interactive way, representing the ideas or concepts of interacting and comprehending the texts between bottom-up and top-down processes (Carrel & Eisterhold, 1983, as cited in An, 2013).

An (2013) also indicated the ideas taken from Urquhart and Weir (1998: 71) who stated that the nature of contents recommends schemata in various categories which are formal schemata, content schemata, cultural schemata, and linguistic schemata. The last one was added by Carrell (1988).

3.2 Constructivist Learning Theory

Kapp (2009) and Kolodner et al. (2003) cited in Tamim & Grant (2013) regard project-based learning as a constructivist instructional model which entails a social learning experience involving group work. The ability of students to work together is considered the most difficult aspect of project-based learning. On the other hand, there is a creation on a classroom culture of collaboration where students feel responsible for helping each other and of iteration where they expect to make mistakes in order to learn from them.

Benson (2005) states that in the theory of constructivism, knowledge cannot be instructed but learners themselves must create it. The constructive fundamental of learning process is highlighted and cognitive development is considered as a process to show learners' maturation. Also, mind is developed considering from the balance of things learners know and experiences learners are currently encountering. Meanwhile Ke (2010) adds that constructivism is regarded as a problem-oriented learning method that the creation of facts is anticipated and founded on learners' own comprehension derived from their learning materials. According to constructivists, learning is truly created on meaning and students' engagement in learning with energetic, deliberate, real, including social interaction is accentuated. Constructivism is a philosophy of learning that supports the idea that knowledge is constructed by the learners as a result of the experiences they live. Learning is making meaning from the interactions with the world, especially when the present experience conflicts with existing knowledge and creates a challenge or a puzzle (Wilson, as cited in Hartescu, 2014).

Constructivist educators have drawn inspiration and ideas about the processes of teaching and learning from the work of Piaget (1954, 1967, 1970) and Vygotsky (1962). As a result, constructivist environments engage learners in acquiring knowledge through active participation in learning events, including experiential hands-on activities, concrete, manipulative and guided discovery. Such environments also include opportunities for partnerships and collaboration and time for reflection and reassessment (Grennon Brooks, 1990; Kamii, 1985; Kaufman & Grennon Brooks, 1996; Sigel, Brozinsky, & Golinkoff, 1981; Tobin, Tippins, & Gallard, 1994).

Constructivist-based learning environments also take into account the readiness levels and multiple experiences, interests, and backgrounds which learners bring to the classroom. Because the construction of knowledge is peculiar to individuals and evolves from prior experiences and beliefs, learners' perceptions of external events are influenced by their prior experiences in affective, academic, and social domains. Newly acquired knowledge often conflicts with existing knowledge, and it is the resolution of such conflicts that contributes to new learning, the internalization of new approaches, and professional growth.

Constructivist teachers offer their students opportunities to acquire concepts and understand real phenomena through discovery learning. The teacher's role is not to

teach from textbooks, to lecture, or to explain phenomena; rather, it is to engage students in open-ended tasks that enhance observation and problem solving and engage them in a journey of inquiry. In their classroom settings, constructivist teachers carefully balance between enhancing learners' acquisition of new skills, encouraging information gathering, and promoting independent thinking and guided discovery. Constructivist teachers are both researchers and learners as they observe and reflect on their own experiences and the phenomena they encounter. Input from their students offers them insight into how their students construct new knowledge and generate new understandings (Duckworth, 1987; Grennon Brooks & Brooks, 1993). Such insight guides teachers in designing new learning activities for their students.

The benefits of constructivist educational environments for students' academic, social, and affective growth have been widely documented (Driver, 1983; Forman & Kushner, 1977; Russel, 1993; Sigel, Brozinsky, & Golinkoff, 1981). These approaches have been most prevalent in science, mathematics and early education programs (DeVries & Kohlberg, 1987; Fosnot, 1993; Kamii, 1981, 1985; Resnick, 1987; Tobin, Tippins, & Gallard, 1994) but relatively infrequent in secondary, higher education, and teacher education programs. For constructivist contexts to proliferate at all levels of education, pre-service teacher education programs must actively engage teacher candidates from all disciplines in creating inquiry-based learning environments for example environments where peer interaction and reflection outlets overflow and where the construction of new knowledge occurs through hands-on activities, fieldwork opportunities, problem solving, and discovery.

If constructivist paradigms are to emerge, teacher educators ought to be willing to reach out across disciplines, to form new partnerships, and to reorganize their curricula. There is a discussion on a collaborative endeavor among TESOL, science, and social studies teacher candidates that has generated multiple collaborations across disciplines and created richly diverse educational settings for teacher candidates' professional growth. The following sections elaborate on the constructivist perspectives that focus on the collaborative endeavor and highlight a sample of collaborative events that this endeavor generated with peers across disciplines and in fieldwork opportunities with children.

Metacognition

The definitions of metacognition and the details were given by O'Hara (2007) who interestingly provided the ideas gained from many theorists. For instance, Baker and Brown (1984), and Spring (1985) indicate the meaning of metacognition which represents one's awareness on thinking showing the feedback on what he or she knows when the strategies on problem-solving skills, ideas, and behaviors to achieve their goals are regulated. Brown (1980) adds that metacognition occurs when the learners are able to make a plan, monitor and control their learning behavior. Additionally, the learners' self-awareness on performance is assessed (Brown, 1980). It is also added by Jacobs & Paris (1987) that metacognition emphasizes on the readers' self-monitoring on their thinking while they recognize, and properly make use of their knowledge essential for task accomplishment. As noted by Flavell (1979), one's cognitive procedure involves their knowledge and motivation of which the effects are all connected to metacognition. Interestingly, the categories of cognitive knowledge are given and related to metacognition. They are 1) declarative knowledge, 2) procedural knowledge, and 3) conditional knowledge. Declarative knowledge is the awareness on strategies used to complete a task. With regard to procedural knowledge, the awareness on the way how to conduct cognitive activities is suggested while the last category, conditional knowledge, involves the awareness on the time when and the reason why the particular strategies are employed (Paris & Jacobs, 1984).

Metacognitive Awareness Training

The term "metacognitive awareness" represents one's perception of their cognitive abilities and awareness on the way how to control the cognitive procedure to achieve the determined goals, as stated previously by Flavell (1979). According to Stewart and Tei (1983), metacognition is also used as a term to represent the individuals' perception in monitoring knowledge including skills to complete cognitive work. With respect to cognition, one's knowledge or skills are involved. Brown (1980) gives the ideas on learners who have cognition but no metacognitive awareness possibly recognize things unconsciously. This is compared to the ones who have metacognition and conscious awareness on things they need to know including awareness on the strategies they actively employed.

Development of metacognitive awareness

The persons' metacognitive processes are gradually improved due to that fact that children at the age of three have started to acquire their self-awareness, recognition on others' knowledge, and their own knowledge on surroundings. They are able to recognize and talk about things they know by the use of communicative verbs, for example, think, know and so on to convey the content they know as stated by Flavell (1999). When children are at four, they will realize that various desires and beliefs can conduct other people's behaviors. However, this is known as false belief which is considered as a milestone in their development when children become aware that there are the differences on their thinking and that of other people (Kuhn, 2000). In the time of children's preschool, experiences with metacognition which are regarded as the foundations for their higher order thinking leads to the development of awareness on their own knowledge. When they operate the task which both declarative and procedural knowledge is needed, they know what and how to perform the task. Confirmed by Zelazo and Frye (1998), three year-old children could categorize blocks by considering their colors and shapes; however, the problems they encountered were to choose what is called "rule" as an exact way to categorize the blocks. Additionally, they also suggest that children's cognitive functions with necessary operating control have been improved and gradually changed through various developmental processes since their childhood. However, there are difference on the levels of requirement on cognition in both declarative and procedural knowledge which are essential for task performance. As noted by Kuhn (2000), the implementation of meta-level awareness greatly affects children's procedural knowledge or know-how knowledge. For clearer picture, an example on the meta-level awareness on strategies is given. The students' recognition on the meta-level of strategies for knowledge and procedures shows that they know how to do things. For instance, after the students read a chapter, they know how to write a summary and this affects their attempt to comprehend it rather than awareness on their knowledge.

The idea is added and confirmed by Kuhn (2000: 179) that the way and reason to develop cognition can emerge and also fail to emerge. There are some explanations about changing performance level into higher-order or meta-level that the choice of strategy use can be made and defined in particular situations. This meta-level is

regarded as the learners' monitoring center in cognition that conducts the strategy implementation and gives the reflection on the development indicating that the expected goal is reached. When the strategies are used, reflections on meta-level are given so as to show the analysis of what strategies contribute to their achievement. The learners employ their meta-cognitive awareness to assess the efficiency and limitations of strategies used and then adjustment is done. It is considered as an ongoing cycle that leads to the change and control in meta-level according to performance level. Kuhn also adds that this might give some explanation on the reason why the attempt to encourage changes in students' performance level tends to be limited on their achievement. This might be because the students lack of metacognitive abilities in transferring what they have learned in one point to another point. Schunk (1991) gives an idea on the lack of young children' competency awareness on monitoring their cognitive processes in order to complete their different tasks. Young children always face with the problems in considering or making decision on the difficulty level. Therefore, they equally make the attempt on both difficult and easy levels of the problems. Besides, children act first on their higher psychological process on a social or an inter-mental level while interacting with other people in their circumstance. However, their psychological process works on a personal level or in an intra-psychological level, as stated by Vygotsky (1978). Then Kontos (1983) asserted that preschoolers during three- five year old can develop their metacognitive skills due to the fact that they interact socially with adults who support and help them in their surroundings as well as individually deal with tasks that the problem-solving skills are required.

Flavell and Wellman (1977) mention that children's metacognitive awareness can be improved by initially monitoring things they learn by the use of strategies. They might write and mark on a paper with a message in an attempt to convey their ideas to other people, regardless of whether or not they return to read the message. This indicates that they start gaining more metacognitive awareness on the meaning found in the written form of language they use in daily life as well as recognizing the way how to convey the message to others. The beginning of metacognitive awareness shows the development of children's comprehension on written form of language or literacy work when the meaning is conveyed and others understand it (Goodman, 1986).

Children's awareness on language use has emerged since they were five years old. It starts with writing and reading forms when children are curious about the meaning of written words. The children's exploration on literacy circumstances in class starts with the development on metacognitive awareness in terms of written language. However, children employ both metacognitive and metalinguistic awareness as foundation to develop their reading and writing abilities (Goodman, 1986). Clay (1993) initiates an assessment tool, the Observational Survey, used to assess metacognitive awareness and early created in children's reading. Clay thought young readers' interview could be conducted to investigate their knowledge on fundamental concepts of printed content, reading directionality, and the meaning on using punctuation marks. The observation on students' awareness had been made on print. The students discovered the incongruity between the text and images including the recognition on letters, words and sentences. Flavell (1985) asserts that children's cognitive strategy awareness increases as they get the improvement in their study. Children themselves start their metacognitive experiences resulting in development on metacognitive awareness when awareness is raised on their competency to manage their own thinking and problem solving strategies so as to follow up their performance. Metacognitive awareness herein is involved in children's ability in recognition and evaluation on cognitive tasks. Additionally, their performance is monitored during the completion of a specific task. Flavell (1979) points out metacognitive knowledge which is divided into two levels which metacognitive knowledge is considered as the first level and then students are able to create and monitor their metacognitive knowledge little by little. According to Paris & Lindauer (1982), children's development on metacognitive awareness and cognitive strategies concurs at their young age. They are aware of the process of thought which basically involves in comprehending themselves by using their own knowledge, concept, behaviors, including self-awareness (Piaget, 1976; Vygotsky, 1978). Young students are different from older ones in terms of their abilities to decode, understand and use strategies. It can be seen that the older students' metacognitive awareness shows the greater level in higher proficiency. However, young readers with poor reading ability reach their achievement by being capable of decoding words so the aim to read for meaning is disregarded, as stated by Golinkoff (1975). They pay more attention to decoding process and ignore the use of self-

monitoring strategies that helps to promote their reading comprehension. Young readers are often lack of accuracy and consistency in indicating their cognitive abilities. They usually claim they have got enough abilities to handle tasks that are beyond their capabilities (Paris & Lindauer, 1982). Poor readers or beginners assess neither their self-comprehension and regulation nor self-correction on reading. They also lack of self-comprehension monitoring while they are listening. However, they think that they can comprehend even ambiguous reading text, as noted by Markman (1977). They still keep on behaving the same when they read so awareness on problems and self-assessment on comprehension are found less. In addition to this, Paris and Myers (1981) also states that young children do not understand that they have to extend their time for the study and achievement on bigger tasks.

Baker (2005) asserts that there is a research showing about older readers who have more proficiency on metacognitive knowledge than that found in poor ones. Interestingly, problems of comprehension and use of strategic reading behaviors are found in students of all ages. Baker (2005: 63) confirms that metacognition is different in levels and types, and relations to success having been converted over time. A clear evidence is provided to insist that trained simple strategies are employed at the early stage by primary school students but their text comprehension on the complex ones will later be developed when they are in high school. Clearly, teaching strategy is regarded as an essential factor in teaching how to read; however, most students who have more time to practice the reading strategies can implement their newly instructed strategies to enhance their comprehension and recognize the value of metacognitive awareness (Pintrich & Zusho, 2002).

As noted by Paris and Jacobs (1984), the elementary students keep on developing both cognitive and metacognitive abilities. There are two developmental cycles or factors involved the gap between proficient readers and poor readers. They are the maturity concern, and the personal experience related to the task (Baker, 2005; Pintrich & Zusho, 2002). Baker (2005) explains that metacognitive awareness and reading skills among students with the same age can be evidently differentiated according to their individual proficiency and experience. This is owing to the fact that metacognition is hardly focused in the school curriculum level. Therefore, proficient readers with successful reading abilities naturally gain and monitor their metacognitive

knowledge. Strategy instruction is useful for most students in that the explicit reading strategies and awareness on mental processes acquired are essential for being independent and strategic readers. The statements given by Baker (2005: 74) indicate that instructors ought to teach their students how to use metacognitive skills in the context that literacy is truly engaged and practice should be sufficiently done by students so that they continuously use them in the right and appropriate time, reason and method with no attempt. Brown (1978) and Baker & Brown (1984) state that students with metacognitive awareness can monitor their learning and thinking. With respect to their learning, students choose the right thinking processes to promote their achievement on comprehending texts. Teaching metacognition aims to assist students to realize the ability in monitoring their reading behaviors. The students also learn to evaluate themselves on what they know and do not know including the way how their reading processes can be monitored (Spring, 1985). A model with the best practice and reason to use it is shown and explained to the students by proficient instructors about the way how to effectively read a text and employ a particular strategy including the right time when to employ the strategy. The instructor's responsibilities are to describe, show and visualize the thinking procedure used in the activity in order that students can conduct an observation, drill as well as implementation and raise their awareness on selecting the appropriate strategies while reading. As stated by Spring (1985), instructors raise students' metacognitive awareness by giving them a guided practice and a reflection. Dewey (1910) emphasizes that reflective thinking is significant in the learning process. The students with metacognitive awareness realize on their thinking process as various strategies are chosen. The important part in strategy instruction is to explicitly present students on declarative knowledge or the meaning of strategy, procedural knowledge or the strategy use, and conditional knowledge or the appropriate time and reason to employ the strategies (Paris, Lipson, & Wixson, 1983; Spring, 1985).

Locke (1975: 126) and Paris & Myers (1981) point out that the readers' ability to monitor their reading comprehension during their reading activity is considered a main reading component to achieve reading goals. The readers can check whether or not they understand texts by relating their knowledge gained from reading to their conceptual comprehension. Additionally the readers' comprehension monitoring needs the skills to assess, plan and control their reading. These are considered as the processes

in the cognitive skills. The evaluation is done to look into the students' present condition on comprehension by posing the questions. The strategy use is planned so as to get the meaning from a text or deal with any comprehension difficulties. The readers monitor their reading with flexible use on comprehension strategies and consider the right strategies required for problem solving in the reading task. According to Myers and Paris (1978: 680), the definition of reading is given as a complicated behavior involved in interactions of various factors which are perceptual processes, cognitive skills, as well as metacognitive knowledge. Reading awareness is regarded as a significant cognitive accomplishment that identifies who the skilled and unskilled readers are (Paris & Jacobs, 1984). The proficient reading results from the readers' abilities on getting to know more on the facts or ideas; however, giving feedback while their ideas have been critically assessed, relationship found and comprehension clarified (Gray, 1936, as cited in Stauffer, 1969). However, all of these details were stated by O' Hara (2007).

3.3 The Sociocognitive Theories of Language and Literary Development

According to Atkinson, Churchill, Nishino, and Okada (2007), second language acquisition was known in the past as a field highly influenced by the cognitivism. As noted by Davis (1995), Ellis (1997), Gass (1996), Long (1997), and Mitchell & Myles (2004), the second language learners incorporate and restructure their language learning and develop their cognitive process. Most of researchers conducting second language acquisition believe that the matter gained from investigation is derived from the learners' mental and internal process as the process to acquire new linguistic knowledge (Long, 1997: 319). This aspect indicates the fundamental dividing between mental and real world recognition; however, the latter one is concurrently ignored as frequently cited in the model of second language learning (Gass, 1996). It is expected on internalization of separable linguistic functions such as lexicogrammar. As can be seen that the process of internalization occurs in the means of speaking while developing the second language. The means are firstly conducted in a different place and direct in distinct ways.

Atkinson (2002) states that the mind–body–world principle is fundamentally integrated together with the occurrence of behavior, learning and cognition. That is the implementation of “sociocognitive” as a term to explain the method used in second

language acquisition (SLA). It is assumed that the processes in which comprise the physical, social, and cognitive parts form the base for second language development. To explain in a controversial way, it can be acceptable that the original function of language leads to action and later the incorrect view on the cognitive and individualistic aspect is given and seen that the language acquisition or linguistic knowledge is coherently and internally formed in a systematical way. Therefore, it seems that the acquisition is still held in terms of rhetorical query about language and use made by Schegloff, Ochs, and Thompson (1997).

The researchers believe that learning is an ongoing process which correspond oneself with their socio-cognitive environment. It is actually more complicated in that experience is included in adjustable models, networking, strategies, and attitudes. It is interestingly concerned that all these actually should not be so serious with due to the unfairness of the deep and complicated condition regarding mind–body–world arrangements (Atkinson, Churchill, Nishino & Okada, 2007).

4. Theories related to Concept-Oriented Reading Instruction (CORI)

It can be said that nowadays integration between content and language learning objectives comes to teachers' attention in that it is a way to enhance students' reading comprehension and improve their skills with one of the specific frameworks which is Concept-Oriented Reading Instruction (CORI) (Grabe & Stoller, 2011: 156).

McNamara (2010: 248) indicated that the goals of practical using the theme through the Concept-Oriented Reading Instruction (CORI) to gain knowledge motivated learners. Strategies were used and seen as motivational and encouraged to develop internal motivations for reading activities.

As can be seen that motivation is an important factor to enhance students' reading abilities that lead to creative thinking. Guthrie, Bennett and McGough (1994) defined that motivations for reading were internalized reasons for reading activating cognitive operations that enabled the individual to perform such acts as acquiring knowledge, enjoying aesthetic experiences, performing tasks, and participating in social contexts.

4.1 Definition of Concept-Oriented Reading Instruction (CORI)

Many theorists gave the definition of Concept-Oriented Reading Instruction (CORI) which was shown as follows:

McNamara (2010: 248) stated that Concept-Oriented Reading Instruction (CORI) is an instruction combining conceptual themes with reading instruction that lead to both teacher's and students' goals for reading. Additionally, the goals of knowledge drill in a conceptual theme motivate students.

According to Grabe and Stoller (2011: 155), Concept-Oriented Reading Instruction (CORI) or a Content-based Instruction (CBI) is considered as an “umbrella term” to reflect both of these instructions conducting together in class, not essentially engaging for the purpose of content and language learning. The term “content” here means the subject matter in which non-language subjects involved with conventional or vocational school subjects and topics of learners’ interest are employed.

There is an emblematic relationship between language and content of which learning leads to learning language including a good command of language. As can be seen that the learners with language expertise can easily comprehend the content.

As cited in O’ Hara (2007), Concept-Oriented Reading Instruction, or CORI, is considered as a teaching methodology having been presented the reading engagement which has been increased in reading activities (Guthrie & Cox, 2001; Guthrie, Cox et al., 1998); reading motivation enhanced by instructors (Baker & Wigfield, 1999; Guthrie & Alao, 1997; Ng, Guthrie et al., 1998); and reading strategy use promoted to drill in class (Guthrie, Van Meter et al., 1998; Guthrie, Wigfield, Metsala, & Cox, 1999; Guthrie, Wigfield, & VonSecker, 2000). Additionally, knowledge of concepts and social interactions are included. Both intrinsic and extrinsic motivation is concerned while reading strategies are used to obtain conceptual knowledge by conducting text exploration and then interacting with friends. As noted by Guthrie, Wigfield, and Perencevich (2004), reading engagement is the major goal of CORI. It is found in the study on many students’ reading that there is high correlation with their reading proficiency, academic accomplishment and their world knowledge (Allington, 1977; Allington, 2001; Cunningham & Stanovich, 1997). The achievement on the students’ reading engagement emerges from time extension in terms of daily engagement on both reading and writing regardless of their independence on reading and writing, guidance on reading, instructions for small group of reading and writing, reading with peers, information search, literature circles, exploring on integrated science, or reading for pleasure. It is estimated that students in grade three, five, eight, and ten have strong

reading quantity although background knowledge and past reading accomplishment are monitored (Guthrie, Wigfield, Metsala, & Cox, 1999). When conducting CORI in the classroom, there are four phases involved (Guthrie & Alao, 1997). They are described in detail as follows:

Phase 1: Observe and Personalize

In this phase, students observe what really happens in the world and then personalize what they have learned with the use of their prior knowledge so as to consider the amount of knowledge they have on that subject including the ideas they are questioning.

Phase 2: Search and Retrieve Information

In this phase, finding the answers for questions is involved in completing students' conceptual comprehension when they extensively read different texts over a period of time.

Phase 3: Comprehend and Integrate

Related information is relocated for comprehension confirmation in order to answer the questions and meet the students' curiosity. Later, what they have learned from texts is integrated with hand-on activities and experiences.

Phase 4: Communicate to Others

The final phase involves the communication that students bring together on their learning during reading activities and investigations. The development on tasks such as reports, posters, displays, or expository pieces is conducted and these are the way to communicate what they comprehend to others.

Guthrie and Alao (1997) state that thematic concepts are instructed in CORI classroom so as to enhance their comprehension and develop deeper insights on a particular contents by employing both informative and literary texts. CORI uses the conceptual theme to intrinsically motivate students' learning. The motivations in learning comprise curiosities, engagement, demands for challenge, capability, and interactions with others. Besides, this approach met the students' internal motivation in that they can make enquiry to fulfil their curiosity through the connection and interactions between text and real-world experiences which motivate the students to read a lot of information for the answers of what they question and gain more knowledge. With the approach, the students take the chance to learn how to reach the

information they are curious about and motivate themselves on their learning through reading strategy instruction combined with themes. CORI encourages students to study the scientific concepts which subsequent procedures are used to show the reflection of real scientific methodology. The concepts of observation, design, investigation, data collection, data representation, organization of investigations and communication with others are improved. The students' motivation is promoted with their exploration of interest by selecting topics and queries they examine, expansion on their investigation to personal areas of interest, exploration on texts in their own interest, collaboration with others such as class/teammates, and instructor to talk about and learn concepts, and fulfillment on their curiosities to answer their questions and gain more knowledge.

Grant, Guthrie, Bennett, Rice, and McGough (1993) pointed out that in theory, CORI model aims to investigate the students' performance or outcomes that academic achievement, reading drills, and knowledge are emphasized on the framework of the model. With its use, the students' achievement on reading outcomes is reached when their conceptual knowledge, motivation, strategy use and social collaboration are developed. Because of reading strategies and reading processes emphasized on content and inquiry-based context, the students are encouraged to motivate, set objectives to gain knowledge in teaching reading, combine hands-on tasks with reading, provide them with authentic alternatives, employ texts in their interest in teaching, and promote social interaction in effective learning environment. All of these activities are essential for enhancing the development on students' reading comprehension and reading engagement, as stated by Guthrie, Wigfield, & Perencevich (2004).

According to Guthrie and Wigfield (1997), the terms "reading engagement" can be defined as a coincident occurrence of motivation and reading strategies while reading texts. Wigfield (1997) also adds that fulfillment on curiosity, cooperation and learning challenge influence on engaged readers' intrinsic motivation on which more time is spent and their reading improved (Wigfield & Guthrie, 1997). With respect to assessment, the Motivation for Reading Questionnaire (MRQ) is employed as a tool for evaluating reading motivation. In the questionnaire, the following eleven aspects are investigated: interaction, performance, challenge, participation, curiosity, grades, perception, competition, significance, cooperation, and task avoidance. The conclusion is made and revealed that there is a difference between students with highest intrinsic

motivation and those with low intrinsic motivation in that the high ones read almost three times while low ones spend many minutes. Additionally, the comparison is made on students who have both high and low extrinsic motivation and their reading is not variously broad (Wigfield & Guthrie, 1997).

The use of CORI aims to establish the classroom environment promoting the improvement on students' reading engagement. Guthrie, Van Meter et al. (1998) conducted the study focusing on reading engagement of the 172 participants who were in third and fifth grades and taught by using either CORI or traditional instruction in the field of science. The aim of the study was to examine whether there was the effect after using two teaching methods on students' conceptual knowledge and reading strategy use. The instructional framework was conducted in two sessions with total four-four and a half months. The topics or themes were about the adaptations and habitats of birds and insects in the autumn, as well as the formations of Earth in the spring including weather and seasons. Hands-on scientific activities based on CORI instruction were used both inside and outside class working on the students' exploration and learning challenge on finding answers for queries they made by selecting their subtopics, reading texts in their interest and collaborating with their friends through interest-based learning activities. During the activities, the students had a chance to communicate what they had learnt with others and their knowledge was constructed. According to the students, their curiosity was enhanced after finding answers for their questions through various explanatory texts. Both third and fifth-grade students were taught in the traditional style through the contents and the McGraw-Hill activity-based program. With the traditional style of instruction, the contents were not different from what CORI aimed to give in scientific concepts of which topics involve life cycles, adaptation, solar systems, and weather including seasons. It was interestingly found that the teachers who taught in traditional classroom often came over CORI classrooms and this might have an influence on determination on dissimilarities on the effect of each teaching method.

According to Guthrie, Van Meter, et al. (1998), CORI can encourage students to learn and employ the strategies more than traditional instruction. The strategy use was considered a significant impact because students use strategies such as search information from texts, read various texts, map the concepts through diagrams and

illustrations, and take notes to find concepts for answering their questions. In terms of the analysis of the effect on both levels, it could be clearly seen that CORI was the effective approach which led to higher advantages such as literacy engagement, and learning for concepts mostly found in grade three compared to the traditional instruction. Guthrie, Van Meter, et al. (1998) adds that students' abilities on the implementation of various strategies are positively developed by CORI in order to gain the conceptual knowledge.

Later Guthrie, Anderson, Alao, and Rinehart (1999) conducted a comparison study between CORI and traditional instruction throughout the year with 133 students in grade three and fifth-grade students in a total of 106 to investigate the effect on their strategy use, learning for concepts, and comprehension. The result revealed that the use of strategy to motivate students to read was found higher in CORI teaching for third-grade students, nevertheless, fifth-grade students were found less in motivating their strategy use, compared to conventional teaching. Although the motivated strategy use was not frequent, the students could do higher scores on performance evaluation in terms of conceptual knowledge. When both third- and fifth grade students came to the year-end assessment, it was discovered that their reading engagement and conceptual knowledge levels were enhanced and highly developed on the biological science themes regarding deserts and ponds. Accordingly, besides the instructed topics, the students could make use of their reading engagement and conceptual knowledge learning taught in CORI to other themes, for example, rivers and volcanoes.

The study was conducted in five classes of which third- and fifth- grade students were given some practices on activities designed and instructed to promote their motivation. The intrinsic motivation comprised autonomy and competency support, leaning goals, collaboration, and authentic interactions. Unlike traditional instruction, CORI promoted the students' strategy use with higher self-reflection and strong curiosity to read (Guthrie, Wigfield, & VonSecker, 2000).

The framework of CORI motivates the students to study by allowing them to opt what they want to know more and themes they are satisfied with. The concepts are also entailed with the chances for managing any challenge. In CORI classroom instruction, six reading strategies were instructed and practiced by the students. According to National Institute of Child Health and Human Development (2000), the

strategies such as activating prior knowledge, making queries, looking for information, using graphic organization, making a summary, and literary text structure were outlined in the National Reading Panel Report and considered as essential strategies to improve the students' reading comprehension (O'Hara, 2007).

One approach that creates a coherent and effective reading is the specific integration of content learning and language learning. Additionally, integrated content and language learning encourage learners with a lot of chances to extend their reading, motivate their learning experiences, use the strategy to respond to increasingly complicated tasks, variously select reading materials, and encourage challenges to suit increasing skills. This can lead to opportunities for project-based learning.

The definition of Concept-Oriented Reading Instruction (CORI) and the synthesis of definition are presented in the following table.

Table 1 Synthesis of Definitions for Concept-Oriented Reading Instruction (CORI)

Guthrie et al. (1998)	Emily A. Swan, (2003)	Danielle S. McNamara (2010: 248)	William Grabe and Fredricka L. Stoller (2011: 155)	Synthesis of Definitions on Concept-Oriented Reading Instruction (CORI)
An instructional approach that has been shown to increase reading strategy use, reading engagement and motivation in reading	CORI is a framework, a structure for integrating curriculum with instruction. It is a life-long process which combines skills and strategies, knowledge, motivation, and social collaboration to gain more knowledge.	Instruction combines conceptual themes with reading instruction that lead to both teacher's and students' goals for reading. The practice of using knowledge goals in a conceptual theme is motivating.	Concept-Oriented Reading Instruction (CORI) or a Content-based Instruction (CBI) is considered as an "umbrella term" to reflect both of these instructions conducting together in class, not essentially engaging for the purpose of content and language learning. The term "content" here means the subject matter in which non-language subjects involved with conventional or vocational school subjects and topics of learners' interest are employed. There is an emblematic relationship between language and content of which learning leads to learning language including a good command of language. As can be seen that the learners with language expertise can easily comprehend the content. One approach that creates a coherent and effective reading is the specific integration of content learning and language learning. Additionally, integrated content and language learning encourage learners with a lot of chances to extend their reading, motivate their learning experiences, use the strategy to respond to increasingly complicated tasks, variously select reading materials, and encourage challenges to suit increasing skills. This can lead to opportunities for project-based learning.	Concept-Oriented Reading Instruction (CORI) is an instructional approach that integrates language learning and content learning focused on concept, knowledge and motivation to reach the goals through Project-based Learning.

4.2 Principles of Concept-Oriented Reading Instruction (CORI)

Many principles have been found in many books that describe the concepts of Concept-Oriented Reading Instruction (CORI).

According to McNamara (2010: 264), five principles have been revealed. They are: 1) use knowledge goals, by placing each text in a broader theme and culminating the instruction with the task of making an across-text concept map; 2) provide real-world interaction with the topic, as nearly as possible; 3) permit students to choose the texts they read, to identify key words they perceived as highly important; 4) use interesting texts with vivid details and visual appeal; and 5) arrange for student collaboration with feedback on its effectiveness.

However, O'Hara (2007: 136, 167) and Swan (2003:12-34) shared the same 9 principles which are as follows: 1) the integration between learning with scientific concepts and themes and knowledge aims in reading instruction; 2) student collaboration / collaboration support; 3) student autonomy / autonomy support; 4) interaction in real world; 5) teacher engagement / teacher involvement; 6) text engagement / interesting text; 7) prizes and praise; 8) instruction to use strategies and; 9) assessment for engagement.

Swan (2003: 4-5) stated that the first step of the components in the process of reading engagement is motivations for reading. Students who have motivations to read tend to gain knowledge taken from what they have read. Therefore, reading is important here for their learning which they see as a goal. Guthrie, Taboada, and Coddington (2007) as cited in McNamara (2010: 247) suggested five instructional practices which are 1) knowledge aims for reading instruction in concepts and themes, 2) real-world interactions involved in the knowledge aims, 3) students' selection and self-direction in hands-on reading activities, 4) interesting informational reading texts for instruction, and 5) students' collaboration in reading and writing tasks.

As can be seen that motivations are essential in reading, Grabe and Stoller (2011: 154) presented the following 12 steps:

1. Teachers can share their love of reading with their students.
2. Teachers encourage and praise their students for sharing what they are reading.
3. Teachers should find out what interests students have.

4. Teachers should work toward promoting the development of group cohesiveness.
5. Teachers should increase students' expectancy of success.
6. Teachers should devise good lead-ins for major texts and associated reading tasks to build initial interest.
7. Student skills are matched with appropriate challenge.
8. Teacher build relevance into the curriculum, and by extension the assigned readings.
9. Teachers encourage active participation among students.
10. Teachers should give students some degree of choice in reading materials whenever possible.
11. Teacher should help students discover what they have actually learned from reading.
12. Teachers should guide students in building real levels of expertise in reading topics.

4.3 Business Reading and English for Specific Purpose (ESP) Concepts

Grabe and Stoller (1997) as cited in Snow and Brinton (1997: 5, 16) depicted that Content-based Instruction (CBI) has been used in various language learning contexts for the last twenty-five years. As can be seen that this kind of instruction was widely applied and increasingly popularized in the past ten years. At the first stage, this version of Content-based Instruction (CBI) was applied in English for Specific Purposes (ESP) programs which emphasized on instruction for second language (L2) vocational and workplace contexts. However, the instruction has been changed in that it has widely spread to other different contexts which are both L1 and L2 contexts. The contexts cover instruction on foreign language in university-level, in different bilingual education in Europe and in English for Academic Purposes (EAP) programs.

Instructional programs for advanced level include English for Specific Purposes (ESP) and English for Academic Purposes (EAP) contexts. Because forty-year popularity, instruction on specific content and language skills have been designed for both students and professional employees who are in engineering and medical, law, business, airline industry, banking and hotel industry.

However, Content-based Instruction (CBI) is dissimilar to English for Specific Purposes (ESP) in that Content-based Instruction (CBI) is considered in EFL curriculum designers and teachers' views as a multi-skill approach which combines four skills to language learning development with various learning styles and strategies. Unlike Content-based Instruction (CBI), English for Specific Purposes (ESP) has been restricted only one skill which is reading. This is due to the fact that L2 learners find it difficult to read texts in science and technology. However, various English for Specific Purposes (ESP) reading courses in English as a Foreign Language (EFL) settings emerge with the reading in Content-based Instruction (CBI) (Johns, as cited in Snow & Brinton, 1997: 365).

4.4 Strategy Instruction

O'Hara (2007: 136, 167), McNamara (2010: 264), and Grabe and Stoller (2011: 156) have the similar strategies in Concept-Oriented Reading Instruction (CORI). The strategies that they presented are activating background knowledge and questioning, searching texts for information. O'Hara (2007: 136, 167) added two more strategies which are graphically organizing information/ integrating information through graphic organisers and summarizing texts. Meanwhile, Grabe and Stoller (2011: 156) added nine additional strategies which are forming questions, noting text structure and text characteristics, answer questions, taking notes, determining main ideas, synthesising information, paraphrasing, monitoring and repairing comprehension, and carrying out a range of project tasks.

The synthesis of strategies on Concept-Oriented Reading Instruction (CORI) is presented in the following table.

Table 2 Synthesis of Procedures for Concept-Oriented Reading Instruction (CORI)

Scholars' Names	Procedures for Concept-Oriented Reading Instruction (CORI)	Synthesis of Strategies on Concept-Oriented Reading Instruction (CORI)
Janice Dotterer O'Hara (2007: 136, 167)	<ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning, searching texts for information 3. Graphically organizing information 4. Summarizing texts. 	<p>Preparation and Motivational Stage</p> <p>1. Observe and Personalize:</p> <ul style="list-style-type: none"> - The teacher provides the relevant texts and sample projects to let the students engage in hand-on activities that build interest - Collect and analyze data - Conduct experiments
John T. Guthrie, Angela McRae, and Susan Lutz Klauda (2007)	<ol style="list-style-type: none"> 1. Modeling 2. Scaffolding 3. Guided practice 4. Extended engaged reading <p>Motivational practices</p> <ol style="list-style-type: none"> 1. Relevance (hands-on activities, relevant texts and self-referencing during inferencing) 2. Choice (student selection of subtopics for reading, specific texts on a topic, passages for inferencing, partners for oral reading fluency, book composition topics) 3. Success/self-efficacy support (helping students set realistic goals for book selection, reading passages orally, writing questions, and identifying texts at the appropriate level of difficulty for optimal comprehension development) 4. Collaboration (partner oral reading, team poster making, summary exchanges and peer editing) 5. Thematic units (fostered mastery goals by placing knowledge goals prominently, and assuring conceptual coherence across texts and time) <p>Cognitive practices</p> <p>Explicit reading strategy instruction</p> <ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning 3. Summarizing 4. Organizing graphically 5. Learning story structures 	<p>Cognitive Stage</p> <p>2. Search and Retrieve:</p> <ul style="list-style-type: none"> - Scaffolded lessons - Form questions; Teach strategies - Search text for information - With the teacher's help, let the students set their goals for text selection, select their own interesting texts, topics for reading and passages for inferencing - Guided practice - Let the students read the passages, identify the text structure and text characteristics, analyze the words in the texts and make inference on the content of the story - Find the main ideas - Paraphrase - Summarize - Take note - Develop discourse awareness <p>3. Comprehend and Integrate:</p> <ul style="list-style-type: none"> - Learn story structures - Summarize and synthesize information - Read for additional information

Scholars' Names	Procedures for Concept-Oriented Reading Instruction (CORI)	Synthesis of Strategies on Concept-Oriented Reading Instruction (CORI)
Emily A. Swan, (2003: 34) and William Grabe (2009: 344)	<ol style="list-style-type: none"> 1. Observe and personalize 2. Search and retrieve 3. Comprehend and integrate 4. Communicate to others 	<ul style="list-style-type: none"> - Activate background knowledge and make connections with the text - Strengthen the students' vocabulary development
Danielle S. McNamara (2010: 264)	<ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning, searching for information 	<ul style="list-style-type: none"> - Concept- mapping - Synthesize - Recall all the specific information about the text by mapping the concept and making inferences
William Grabe and Fredricka L. Stoller (2011: 156)	<ol style="list-style-type: none"> 1. Forming questions 2. Noting text structure and text characteristics 3. Activate background knowledge 4. Answer questions 5. Taking notes 6. Determining main ideas 7. Synthesising information 8. Paraphrasing 9. Summarising 10. Monitoring and repairing comprehension 11. Integrating information through graphic organisers 12. Carrying out a range of project tasks 	<ul style="list-style-type: none"> - Integrate information through graphic organizers - Extended engaged reading <p>Action Stage</p> <p>4. Communicate to others:</p> <ul style="list-style-type: none"> - Carry out the project tasks / collaborate on group tasks - Write reports - Make a class book on the topic - Write about a story - Share team or class projects
Guthrie et al., 2004(Cited by Kaminsia Mercedes Fannin, 2011)	<ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning 3. Observe and personalize 4. Searching and summarizing 5. Communication to others 	<ul style="list-style-type: none"> - Make a video presentation
Abdullah Azis (2015)	<ol style="list-style-type: none"> 1. Perceiving text structures: identify the text structure of narrative texts 2. Inferencing: analyze the words in the texts and make inference on the content of the story 3. Concept-mapping: recall all the specific information about the text by mapping the concept according to the feature of the texts 	

4.5 Reading Strategy Assessment Tools

Guthrie, McRae, and Klauda (2007) stated that Concept-Oriented Reading Instruction becomes an approach to promote the students' reading comprehension and reading engagement. From many studies, reading strategies used in the instruction are explicitly taught; therefore, it is necessary to use the tools to both quantitatively and qualitatively evaluate if the strategies employed in teaching and learning process can enhance the students' reading comprehension including their motivation.

Reading strategy assessment tools need to be reviewed. Many researchers not only used CORI to teach the reading strategies to students but also multiple reading strategies. Schake (2009) studied the impact on students' comprehension after having employed multiple reading strategies and evaluated them by using tools which were documentation of student comments, journaling entries, scores for multiple choice questions, student-completed learner questionnaires, work samples, and pre-and post-reading scores.

According to Baron (2013), the study on 'Building ESP Content-Based Materials to Promote Strategic Reading' was conducted. The aim of the study was to improve the undergraduate students' reading skills and vocabulary in English for Specific Purposes including their strategy use. In this study, the qualitative data was collected by using needs assessment form, observation field notes, progress reviews, surveys or questionnaires with open-ended questions and photographs.

Azis (2015) conducted the study and employed CORI strategies to increase the effectiveness in teaching and learning as well as the investigation of students' reading comprehension. From investigation of the study, the data were quantitatively collected by using the scores from the reading comprehension tests to see the improvement of students' reading comprehension. In terms of qualitative data, observation sheets, field notes and interview were also used and analyzed.

According to Nisbet and Huang (2015), the study on EFL university students' reading strategy use and reading proficiency was investigated. In the data collection process, scores were collected by using two research instruments. The students' reading strategy use was analyzed by using the Survey of Reading Strategies (SORS containing 30 likert-scale items of overall reading strategy use) with the information sheet requiring demographic data and reading proficiency using reading comprehension

section with five reading passages and 50 questions extracted from the Test of English as a Foreign Language (TOEFL) as cited in ETS (2003).

Strauss (1998) studied the effect of participation in a daily reading log on the reading attitude and achievement in low to high achievers. A reading log is considered as a folder with a recording sheet noted down the time they spent on reading. The aim of study was to investigate the influence of using reading log every day on sixth grade students' attitude and comprehension. The comparison between the treatment and control group was made and found out that the high achievers' attitude and comprehension were developed but not in the low ones. Therefore, reading log was recommended for the daily use among the readers with average and high skills. The advantages of reading logs have been studied. Ochoa Delarriva and Basabe (2015) conducted a study on reading logs and literature teaching models in English language teacher education. The qualitative data were collected and analyzed on reading logs written by advanced students in a literature course. The findings showed reading logs were very useful when being used with a complex reading text. As noted by Ekstam (2018), reading logs were regarded as advantageous tools in teaching so as to serve teachers and let them explore and analyze the students' envisionment, the viewpoint having been made on the world view in a particular point of time affecting readers' comprehension. The researcher found a process to enhance one's metacognitive thinking.

As can be seen from many scholars, reading strategy assessment tools were employed differently to collect both quantitative and qualitative data. It depends on the researchers to select the appropriate tools for their own study to assess their strategy use in teaching and learning process.

5. Project-based Learning

According to Stoller (1997), project-based learning should be viewed as a natural extension of fully integrated language and content learning, making it a viable option in a variety of instructional settings including general English, English for academic purposes, English for specific purposes, and English for occupational/vocational/professional purposes. However, Dewey (1938) and Kilpatrick (1918) as cited in Zafirov (2013: 299) clarified that Project-based Learning or PBL is a constructivist-based approach. It was originated more than one hundred years ago by

John Dewey and his disciples. The theory “Learning by Doing” is well-known as supported by John Dewey. As noted by Perkins; Harel and Papert (1991); and Vygotsky (1978), constructivism is explained that individuals’ construction on knowledge is made through interactions with their surroundings, and each knowledge building is dissimilar. Therefore, an individual learns to make use of current knowledge to construct the new one through discussions, investigations or activities.

5.1 Definition of Project- based Learning

Project-based learning has been given various definitions by many theorists who are interested in its performance on learning process. Its meanings are indicated as the following:

Fried-booth (1997) defined the function of project-based learning (PBL) as the teaching method that focuses on learners working in team and sharing their learning topics. In the latest century, project-based learning (PBL) becomes popular with its collaboration, communication in groups. Project-based learning (PBL) is a means to implement 12 both in class and outside.

Lawrence (1997) stated that project-based learning (PBL) is encouraging the learners to work, plan, organise, negotiate, share their responsibilities and reach for the consensus in group. Project-based learning (PBL) is essential as scaffolding approach even for the person with low language proficiency to make some development and effect the effective work as the whole.

Atkinson (2001) demonstrated that project-based learning (PBL) is an approach that creates the success through the people gathering into groups for sharing mutual responsibility. Zafirov (2013) supplemented that this type of instructional approach is such a teaching/learning model that engages learners in problem-solving tasks, allows them to actively build and manage their own learning, and leads to students -built realistic deliverables. In short, PBL is an instructional model that involves students in investigations of compelling problems that culminate in authentic products. However, Duffy & Cunningham (1996) as cited in Tamim & Grant (2013) explained the definition of project-based learning as an instructional model that is based in the constructivist approach to learning, which creates the construction of knowledge with multiple perspectives, within a social activity, and allows for self-awareness of learning and knowing while being context dependent.

The definition of project-based learning (PBL) and the synthesis of definition are presented in the following table.

Table 3 Synthesis of Definitions for Project-based Learning (PBL)

Atkinson, Jean (2001)	Ch. Zafirov (2013)	Duffy & Cunningham, 1996 cited in Tamim & Grant, 2013	Synthesis of Definition of Project-based Learning (PBL)
An approach that leads to the achievement through the formation of people into group for sharing mutual responsibility.	A teaching and learning model that engages learners in problem-solving activities, promotes them to construct actively and deal with their own learning, and brings about the students' constructed realistic work pieces. In short it is a teaching model engaging students in investigations of interesting difficulties lead to real products.	Project-based learning is an instructional model that is based in the constructivist approach to learning, which entails the construction of knowledge with multiple perspectives, within a social activity, and allows for self-awareness of learning and knowing while being context dependent.	Project-based learning (PBL) is a model used in teaching and learning that help students solve their problems, manage their learning and construct their own knowledge with the constructivist approach.

5.2 Principles of Project-based Learning

Krauss and Boss (2013: 88-89) explained that there were three principles found in project-based learning. The first one is aligning student work to the values embodying in the social studies. The second principle is designing for personal meaning and the third principle is working in the manner of professionals and active citizens.

However, many theorists conducted various procedures in project-based learning as shown later.

5.3 Strategies of Project-based Learning

Krauss and Boss (2013: 88-89) also described the strategies to expand literacy skills used in project-based learning. The strategies are instructed in language arts as follows: a process for project success; the power of good questions; encourage good talk during projects; literacy-building environment; accurate content, building information literacy; and learning scaffolds for reading, writing, and speaking skills.

According to Shu-jing and Li-hua (2010), the strategies for project-based learning are as follows: choosing a project, making a plan for the project, implementing the plan, working on the product, presenting the product and assessing the project.

Later, Van Lam (2011) explained that in project-based learning, students and teacher agree on a theme for the project, determine the final outcome of the project, and structure the project. Then the teacher prepares students for the demands of information gathering and let the students gather information. The teacher prepares students to compile and analyze data. After that the teacher prepares students for the language demands of the final activity that the students make a presentation of the final product. Then the students evaluate the project. Meanwhile Bas (2011) proposed project-based learning by stating the subject and sub-subjects, organising the groups, creating projects including application of the project, planning of the presentation, making the presentation and evaluation.

Zafirov (2013) stated that project-based learning was the process that the teacher-coach sets the stage for the students with real-life samples of the projects they will be doing. The students take on the role of project designers, possibly establishing a forum for display or competition. Then students discuss and accumulate the background information needed for their designs. After that the teacher-coach and students negotiate the criteria for evaluating the projects. However, the students accumulate the materials necessary for the project and create them. The students prepare to present their projects. After their presentation, the students reflect on the process and evaluate the projects based on the criteria established.

According to Shiraz and Larsari (2014), project-based learning was considered as introducing and brain storming on the topics, sharing what the students had found and agreed to work with their peers, coming to class with a designed blueprint of the

layout, choosing an appropriate one among the presented designs, as well as publishing the work in the course of the project.

Regarding synthesis of procedures for project-based learning, there are four stages which are Preparation Stage: Cooperation, Creation Stage, Presentation or Publish Stage, and Evaluation Stage. In the first stage, Preparation Stage deals with Cooperation. The teacher lets the students choose the project, make some agreement on theme, brainstorm on the topics, plan and design the structure of the project, gather information and materials necessary for creating the project, analyze the data obtained and share with class. Then in Creation Stage, the students create the project. After that it comes to Presentation or Publish Stage. The teacher prepares the language used in presentation and plan to present the project and then let the students present the product. The last stage is Evaluation Stage which the teacher evaluates the students' project.

Thomas (as cited in Zafirov, 2013: 301) demonstrated the outcomes gained from project-based learning and presented as follows: leadership skills; critical thinking skills; problem-solving skills; performance ability; ability to find and use appropriate resources; self-directed learning skills; measurable knowledge base; social and ethical skills; ability to work on a team; congruence with workplace skills; communication skills; self-sufficient and self-motivated; facility with computer; and proactive thinking.

The synthesis of strategies on project-based learning is presented in the following table.

Table 4 Synthesis of Procedures for Project-based Learning

WU Shu-jing, MENG Li-hua (2010)	Nguyen Thi Van Lam (2011)	Gokhan Bas (2011)	Ch. Zafirov (2013)	Shiraz and Larsari (2014)	Synthesis of Procedures for Project- based Learning
<ol style="list-style-type: none"> 1. Choosing a project 2. Making a plan for the project 3. Implementing the plan 4. Working on the product 5. Presenting the product 6. Assessing the project 	<ol style="list-style-type: none"> 1. Students and teacher agree on a theme for the project 2. Students and teacher determine the final outcome of the project 3. Students and teacher structure the project 4. Teacher prepares students for the demands of information gathering 5. Students gather information 6. Teacher prepares students to compile and analyze data 7. Students compile and analyze information 8. Teacher prepares students for the language demands of the final activity 	<ol style="list-style-type: none"> 1. Stating the subject and sub-subjects, organising the groups 2. Groups create projects 3. Application of the project 4. Planning of the presentation 5. Making the presentation 6. Evaluation 	<ol style="list-style-type: none"> 1. The teacher-coach sets the stage for students with real-life samples of the projects they will be doing 2. Students take on the role of project designers, possibly establishing a forum for display or competition 3. Students discuss and accumulate the background information needed for their designs 4. The teacher-coach and students negotiate the criteria for evaluating the projects 5. Students accumulate the materials 	<ol style="list-style-type: none"> 1. Introducing and brainstorming on the topics 2. Share what the students had found and agreed to work with their peers 3. Coming to class with a designed blueprint of the layout 4. Among the presented designs, choosing an appropriate one 5. Publish the work in the course of the project 	<p>Preparation Stage:</p> <p>Cooperation</p> <ol style="list-style-type: none"> 1. Choose the project, make some agreement on theme and brainstorm on the topics 2. Plan and design the structure of the project 3. Gather information and materials necessary for creating the project and analyze the data obtained 4. Share with class <p>Creation Stage</p> <ol style="list-style-type: none"> 5. Create the project <p>Presentation or Publish Stage</p> <ol style="list-style-type: none"> 6. Prepare the language used in presentation and plan to present the project 7. Present the product

WU Shu-jing, MENG Li-hua (2010)	Nguyen Thi Van Lam (2011)	Gokhan Bas (2011)	Ch. Zafirov (2013)	Shiraz and Larsari (2014)	Synthesis of Procedures for Project- based Learning
	9. Students present the final product 10. Students evaluate the project		necessary for the project 6. Students create their projects 7. Students prepare to present their projects 8. Students present their projects 9. Students reflect on the process and evaluate the projects based on the criteria established		Evaluation Stage 8. Evaluate the project



6. Reading Abilities

6.1 Definition of Reading

Yimwilai (2008: 135) defined that English reading abilities refer to the ability to understand what one reads. They include seven skills: topics, main ideas, details, references, vocabulary (guessing meaning from context), purposes and meaning of the sentence (understanding relations within the sentence). Ritchie, Luciano, Hansell, Wright and Bates (2013) added that reading is a skill connected positively together with creativity. As suggested in the findings, it is hypothesized that there is a positive linkage facilitated on reading and creativity through allocated biological procedure, or the results expressed on the increase in vocabulary or engagement in alternative stimulation.

The reading ability is considered in business area as “a self-selection theory” to explain the results of increased “prevalence of dyslexia” among ‘entrepreneurs’ whose adaptability and creativity are needed when ‘corporate managers’ employed in regulation and structures of traditional organization are compared (Logan, 2009, as cited in Ritchie, Luciano, Hansell, Wright, & Bates, 2013). Besides, Guthrie and Wigfield (2000) and Guthrie et al. (2006) as cited in Jeffrey K. Smith, Lisa F. Smith, Gilmore, and Jameson (2012) regard reading ability as a model of engagement to develop reading comprehension. The argument is made on the improvement of reading ability that extensive engaged reading is intimately connected with the reader’s purposive requirement and motivation on reading. Motivation herein is a versatile model or concept which comprises self-efficacy and enjoyment, two perspectives of readers’ interest. These are viewed as relatively stable characteristics of readers, although the idea of reading enjoyment would also pertain to enjoyment of a particular text or genre of reading.

According to many theorists, reading abilities are defined as the result of using skills with increasing vocabulary and motivational engagement in reading and relating to creativity especially in ESP content-based learning.

The following table shows the definition of reading abilities and the synthesis of definition. They are presented as follows:

Table 5 Synthesis of Definitions for Reading Abilities

Supaporn Yimwilai (2008)	Guthrie and Wigfield (2000) and Guthrie et al. (2006) as cited in Jeffrey K. Smith, Lisa F. Smith, Alison Gilmore, Madgerie Jameson (2012)	Stuart J. Ritchie, Michelle Luciano, Narelle K. Hansell, Margaret J. Wright, Timothy C. Bates (2013)	Logan (2009) cited in Stuart J. Ritchie, Michelle Luciano, Narelle K. Hansell, Margaret J. Wright, Timothy C. Bates (2013)	Synthesis of Definition of Reading Abilities
<p>The ability to understand what one reads. They include seven skills: topics, main ideas, details, references, vocabulary (guessing meaning from context), purposes and meaning of the sentence (understanding relations within the sentence).</p>	<p>A model of engagement to develop reading comprehension. The argument is made on the improvement of reading ability that extensive engaged reading is intimately connected with the reader's purposive requirement and motivation on reading. Motivation herein is a versatile model or concept which comprises self-efficacy and enjoyment, two perspectives of readers' interest. These are viewed as relatively stable characteristics of readers, although the idea of reading enjoyment would also pertain to enjoyment of a particular text or genre of reading.</p>	<p>Reading is a skill connected positively together with creativity. As suggested in the findings, it is hypothesized that there is a positive linkage facilitated on reading and creativity through allocated biological procedure, or the results expressed on the increase in vocabulary or engagement in alternative stimulation.</p>	<p>"A self-selection theory" to explain the results of increased "prevalence of dyslexia" among 'entrepreneurs' whose adaptability and creativity are needed when 'corporate managers' employed in regulation and structures of traditional organization are compared.</p>	<p>Reading abilities are the result of using skills with increasing vocabulary and motivational engagement in reading and relating to creativity especially in ESP content-based learning.</p>

6.2 Readability of Content Area Textbooks

The content that is conveyed in English as a foreign language can affect the readers' readability and understanding. In particular, the difficult content with more advanced concepts of English for Specific Purposes such as science, social studies, mathematics and so on. This causes difficulty in reading abilities. According to Longman readability pilot study, many aspects were examined. They were vocabulary, idiomatic expressions, and homonyms. However, the important factor that influences on readability of content area textbooks is vocabulary difficulties. The difficulties prevent the students from acquiring the knowledge that helps them pass their important examinations (Williams and Dallas as cited in Alderson & Urquhart, 1984: 199-210).

Reading abilities also known as reading comprehension abilities are discussed by many theorists. According to Luke and Freebody (1999), the procedures in enhancing reading abilities were given as follows: 1. coding practice (decoding); 2. text meaning practices (comprehension and reader-response) involving the sub-steps which are on the lines, between the lines and outwards based on the lines; 3. Pragmatic practices by using texts functionally; and 4. critical practices which let the readers critically analyze and transform texts by acting on knowledge. Vellutino, Tunmer, Jaccard and Chen (2007) stated that the procedures should enhance the students' reading comprehension: the ability to comprehend written language, context-free word identification: the ability to identify printed words without the aid of context, semantic knowledge (vocabulary knowledge and verbal concept development) and language comprehension: the ability to comprehend spoken language. Besides, reading abilities should develop the students' knowledge in terms of semantic knowledge (vocabulary knowledge and verbal concept development) and syntactic knowledge (implicit knowledge of grammatical rules for ordering, coreferencing, and inflecting the words in sentences).

Grabe and Stoller (2011) mentioned the reading abilities were the abilities to establish purposes for reading, combine reading strategies as needed, make inferences of many types, draw extensively on background knowledge, monitor comprehension, form attitudes about the text and author, adjust goals as appropriate and critically evaluate the information being read. According to Hall (2012), the steps to enhance reading abilities were as follows:

1. Students received instruction from their teacher on a comprehension strategy.
2. Students read a piece of text on their own and documented their strategy use.
3. Students engaged in a small group discussion about the text and their strategy use.
4. Students read a second text on the same topic as the first, documented their strategy use, and engaged in a second discussion.
5. Students reflected on what they had learned from reading the texts and about comprehension strategies and discussed their understandings with their group.

Yimwilai (2008) suggested that the reading abilities used in the study were 1. topics, 2. main ideas, 3. details, 4. references, 5. vocabulary (guessing meaning from context), 6. purposes and 7. meaning of the sentence (understanding relations within the sentence). Later Echeverri and Ferri (2010) did the research on foreign language reading comprehension and strategies used to enhance the students' reading abilities were 1. activating students' background knowledge, 2. having them make predictions, 3. completing graphic organizers, and 4. answering questions. Additionally these two researchers investigated on teaching reading strategies to develop the students' reading comprehension ability. They were Kucukoglu; Soleimani and Hajghani (2013). According to Kucukoglu (2013), reading strategy instruction was an essential factor to enhance the students' reading comprehension. The following reading strategies were employed: 1. predicting; 2. making connections; 3. visualizing; 4. inferring; 5. questioning and 6. summarizing. Besides, Soleimani and Hajghani (2013) conducted the study on the use of reading strategies to improve students' reading comprehension ability and awareness. The reading strategies were as follows: 1. reading text once; 2. reading text twice; 3. reading the first line of paragraphs; 4. using titles to predict text content; 5. using illustrations to understand content; 6. reading questions first; 7. using teacher's introduction to understand content; 8. guessing meanings based on cognates in English; 9. guessing meaning based on similarity to other words; 10. guessing meanings from context; 11. using dictionaries; and 12. writing main points in one's own words. However, Stoller, Anderson, Grabe, and Komiyama (2013) conducted the study using the following procedures to promote their students' reading abilities.

1. Drill on reading and engagement on prints: read what is in readers' interest; create the texts or print materials suitable for the readers' ages and available for students to read.

2. Enhancement on students' engagement and motivation: strive to make needed reading passages remarkable; provide students some degrees of choices; promote collaboration among students; impose students' success - share their answer to class, ask and answer, teach rather than test, and record their progress.

3. Concentration on reading fluency: frequent verbal reading; oral rereading in pair; repeated silent reading with a new purpose; echo reading: read aloud; buddy reading; instructor read-aloud; one-minute reading; and radio reading.

4. Vocabulary formation: encourage readers to become word collectors; ask them to classify words; give students a guideline in analyzing words; as well as encourage students to employ newly learned words.

5. Drill and discussion on reading comprehension skills: ask students to anticipate, predict, confirm, or modify their predictions, and summarize; ask how, when and why questions about reading-strategy use; model strategy use; ask students to follow up initial post-reading question responses with further elaboration; assign summary tasks; use graphic organizers; and give students a list of transition words and phrases that they have encountered and ask them to cluster them into similar groups.

After the strategies for reading (comprehension) abilities were found and reviewed, the synthesis of reading abilities was made. In AMARA Model, the students should have the following reading abilities: use the context clues; find the main ideas; reread for clarification; make inferences; take notes; identify text structure; predict; summarize; and use graphic organizers.

The table shows the synthesis of reading abilities. They are presented as follows:

Table 6 Synthesis of Reading Abilities

Scholars' Names	Reading Abilities	Synthesis of Reading Abilities for AMARA Model
Yimwilai (2008)	1. Topics 2. Main ideas 3. Details 4. References 5. Vocabulary (guessing meaning from context) 6. Purposes 7. Meaning of the sentence (understanding relations within the sentence)	- Use the context clues - Find the main ideas - Reread for clarification - Make
Echeverri and Ferri (2010)	1. Activating students' background knowledge 2. Having them make predictions 3. Completing graphic organizers 4. Answering questions	inferences - Take notes - Identify text structure
Kucukoglu (2013)	1. Predicting 2. Making connections 3. Visualizing 4. Inferring 5. Questioning 6. Summarizing	- Predict - Summarize - Map the concepts
Soleimani and Hajghani (2013)	1. Reading text once 2. Reading text twice 3. Reading the first line of paragraphs 4. Using titles to predict text content 5. Using illustrations to understand content 6. Reading questions first 7. Using teacher's introduction to understand content 8. Guessing meanings based on cognates in English 9. Guessing meaning based on similarity to other words 10. Guessing meanings from context 11. Using dictionaries 12. Writing main points in one's own words	
Stoller F. et al (2013)	1. Drill on reading and engagement on prints - Read what is in readers' interest. - Create the texts or print materials suitable for the readers' ages and available for students to read. 2. Enhancement on students' engagement and motivation - Strive to make needed reading passages remarkable. - Provide students some degrees of choices. - Promote collaboration among students. - Impose students' success: share their answer to class. - Ask and answer; teach rather than test; and record their progress. 3. Concentration on reading fluency - Frequent verbal reading: oral rereading in pair; repeated silent reading with a new purpose	

Scholars' Names	Reading Abilities	Synthesis of Reading Abilities for AMARA Model
	<ul style="list-style-type: none"> - Echo reading: read aloud; buddy reading; instructor read-aloud; one-minute reading; and radio reading. 4. Vocabulary formation <ul style="list-style-type: none"> - Encourage readers to become word collectors. - Ask them to classify words. - Give students a guideline in analyzing words - Encourage students to employ newly learned words. 5. Drill and discussion on reading comprehension skills <ul style="list-style-type: none"> - Ask students to anticipate, predict, confirm, or modify their predictions, and summarize - Ask how, when and why questions about reading-strategy use <ul style="list-style-type: none"> ➤ Preview and form questions about the text, Answer questions while reading, Identify difficulties encountered in the text, Take steps, such as rereading, to repair faulty comprehension, Judge how well goals are met, Take notes, underline, or highlight main ideas and summarize using notes. - Model strategy use <ul style="list-style-type: none"> ➤ Reading goals, Make predictions, Point out contextual clues that help clarify the meaning of key vocabulary, Connect textual information to background knowledge or a previously read text, Make inferences, and/or Reread to clarify a possible misunderstanding. - Ask students to follow up initial post-reading question responses with further elaboration - Assign summary tasks - Use graphic organizers <ul style="list-style-type: none"> ➤ Indicate the discourse organization of a text paragraph or section - Give students a list of transition words and phrases that they have encountered and ask them to cluster them into similar groups 	

6.3 Multiple Reading Strategies

The students' reading comprehension abilities can be developed when the strategies are used in reading instruction. Many theorists have employed and done their researches on language instruction by using many approaches with various strategies. The recent ones were investigated, collected, analyzed and synthesized. According to Grabe and Stoller (2013), multiple strategies employed in their experiment are the followings: before reading, make a plan and set goals; make predictions; selectively read as the goals set; reread suitably; monitor reading constantly; specify significant information; complete the blanks in the text using inference making with background knowledge; guess unknown vocabulary and go on reading; employ text structure as a guideline for comprehension; try to integrate ideas gained from various parts of the text; interpret the text while reading; get main ideas and summarize; assess the text and its writer including feelings toward the text; try to deal with problems; and get the feedback on information from the text. Later Manoli, Papadopoulou and Metallidou (2016) did the investigation by using the reading strategies such as predicting text content, using semantic mapping, getting the gist (skimming), identifying specific information (scanning), guessing the meaning of unfamiliar words from context. Then Nasri and Biria (2016) developed the strategies which were divided into the following four main strategies: simple fix-up strategies, reread difficult segments, guess the meaning of unknown words from the context; comprehensive strategies, summarize, relate what is being read to the readers' background knowledge; essential strategies for focused strategy instruction, questioning, inferencing; and multiple strategy instruction, making connection, predicting, questioning, inferencing, monitoring, visualizing and summarizing. However, Suhermanto (2019) implemented the following several steps as fix-up strategies to enhance students' reading comprehension. They were 1) previewing, 2) predicting, 3) reading, 4) making connection, 5) visualizing, 6) making inference and 7) asking new question and retelling the story. However, it could be concluded that multiple reading strategies were implemented variously according to each researcher's interpretation. One researcher used various reading strategies. Another integrated fix-up strategies with comprehensive strategies, essential strategies for focused strategy instruction and multiple strategy instruction.

The multiple reading strategies were involved in teaching or guiding the students how to enhance their reading abilities. In order to increase the students' reading comprehension, many researchers have done the studies which presented the following multiple reading strategies and were explained in the following table.

Table 7 Synthesis of Multiple Reading Strategies used in AMARA Model

Grabe and Stoller (2013)	Manoli, Papadopoulou and Metallidou (2016)	Nasri and Biria (2016)	Synthesis of Multiple Reading Strategies used in AMARA Model
<p>Multiple strategies</p> <ul style="list-style-type: none"> - Before reading, make a plan and set goals - Make predictions - Selectively read as the goals set - Reread suitably - Monitor reading constantly - Specify significant information - Complete the blanks in the text using inference making with background knowledge - Guess unknown vocabulary and go on reading - Employ text structure as a guideline for comprehension - Try to integrate ideas gained from various parts of the text - Interpret the text while reading - Get main ideas and summarize - Assess the text and its writer including feelings toward the text - Try to deal with problems - Get the feedback on information from the text. 	<p>Reading Strategies</p> <ul style="list-style-type: none"> - Predicting text content - Using semantic mapping - Getting the gist (skimming) - Identifying specific information (scanning) - Guessing the meaning of unfamiliar words from context 	<p>Simple fix-up strategies</p> <ul style="list-style-type: none"> - Reread difficult segments - Guess the meaning of unknown words from the context <p>Comprehensive strategies</p> <ul style="list-style-type: none"> - Summarize - Relate what is being read to the readers' background knowledge <p>Essential strategies for Focused Strategy instruction</p> <ul style="list-style-type: none"> - Questioning - Inferencing <p>Multiple Strategy instruction</p> <ul style="list-style-type: none"> - Making connection - Predicting - Questioning - Inferencing - Monitoring - Visualizing - Summarizing 	<ul style="list-style-type: none"> - Predict the content (Relating to the readers' background knowledge) - Use the context clues - Reread to clarify a possible misunderstanding - Find the main ideas - Make inferences - Take notes - Summarize - Identify text structure - Map the concepts and integrate information

After having studied many reading strategies done by these three researchers, synthesis of Multiple Reading Strategies used in AMARA Model was made by selecting from the similarly used strategies in these four researches and could be applied in business reading instruction model. They were designed and divided into fix-up strategies and reading comprehensive strategies which were presented as follows:

Fix-up Strategies comprised 1) predict the content and relate to the readers' background knowledge, 2) use the context clues and 3) reread as appropriate to clarify a possible misunderstanding;

Reading Comprehensive Strategies consisted of 4) find the main ideas, 5) make inferences, 6) take notes, 7) summarize, 8) identify text structures, and 9) map the concepts and integrate information.

The procedures for each strategy were given in detail as follows:

1. Predicting the content (Relating to the background knowledge)

- Look at the title and the picture found in the text provided.
- Skim the whole text to find the clues or key words that help the students guess the content.
- Think of what the whole content might be and involve the prior knowledge in the general information found in the context.
- Make a connection with the personal experience.

2. Using the context clues

- Read the text roughly and underline the unknown or difficult words.
- Read the sentences surrounding the difficult words to make a guess on meaning of words and help ease the comprehension.

3. Rereading to clarify a possible misunderstanding

- Reread the confusing part in the paragraph.
- Find the important points that are used to ease the students' understanding.

4. Finding the main ideas

- Find out the topic or repeated words in a paragraph.
- Find out the most important information or the general statement.
- Find out the supporting detail.

5. Making inferences

- Read the whole paragraph or text and draw the conclusion.
- Inference can be made by considering from the evidence found in the text and think beyond, based on the story.

6. Taking notes

- Read the text and note down the important details needed for comprehension.

7. Summarizing the paragraph/text

- Find the main points.
- Correlate the main points found in the text to write the summary in brief in the writer's own words.

8. Identifying text structure

- Read the paragraphs and identify the organizational structure of the text.
- Recall how many patterns of text structure there are.
- Find the transitional words
- The patterns of idea can be found and recognized in the text.

9. Mapping the concepts and integrate information

- Use the main points that have been found, noted down and identified the text structure
- Rearrange and reorganize in the graphic organizer.

However, both fix-up strategies and reading comprehensive strategies could be used effectively to enhance students' reading abilities.

6.4 Reading Ability Assessment Tools

As can be seen in many researches, reading ability is considered, investigated and divided into two components which are word recognition (word meaning) and reading comprehension (Alderson, 2000, as cited in Liu, 2010). Reading abilities can be assessed and reflected readers' skills, processes and knowledge resources by employing different assessment practices, reading theories and reading development (Grabe, 2009).

As noted by Grabe (2009), reading assessment is categorized into five purposes which are:

1) Reading –proficiency assessment (standardized testing);

In order to assess students' overall reading abilities, standardized test is recommended as formal assessment. The abilities are evaluated according to the assumed construct of reading to see whether students are well equipped with progress for further learning. Standardized testing can be partly related to reading proficiency assessment in classroom-based learning.

2) Assessment of classroom learning;

Readers' reading improvement in classroom learning can be assessed to see their skills and knowledge that they have developed. This can be considered as summative or achievement test to measure students' proficiency development based on what was instructed in class. Tasks are employed to assess classroom learning because they can show what material is taught and skills practiced in class. Teachers can assess students' learning by using end-of-unit tests, post-reading comprehension questions, student observations, self-reporting measures, and engagement and group work). The last three options are considered as informal and alternative assessment.

Classroom-based assessment

Assessment in classroom involves with various tasks given to students who are also observed and given tests as assessment measures with different formats such as multiple-choice, sentence completion, classification into groups, summary, information transfer in the form of graphs, charts, tables, outlines, maps, and project performance. Besides, other types of informal assessment can be employed in classroom setting. They may be observations, self-reporting measures, and portfolios. Each type of assessment is conducted with different tasks. To investigate students' reading abilities, task outcomes are evaluated fairly by teachers who are responsible for selecting appropriate tasks with assessment options as means of data collection and interpretations.

In terms of observations and self-reporting measures in the form of journal and think-aloud, teachers have students list strategies they have used while reading, list words they need to know after reading, write reading journals and let them do think-alouds while reading. Assessment can be done while students are in class reading, discussing, doing a project, writing or reporting what they have read. Moreover, it

should be done in multiple steps in every performance in each activity. These forms of informal assessment can be used to effectively evaluate students' reading performances with fair and reliable measures.

Regarding self-assessment as a component of informal assessment, various aspects are investigated by teachers. Students can do the following: Seeing their progress on different skills; writing down what they are reading with the reasons; informing their goals of reading; listing reading strategies they have used; and evaluating their own portfolios based on criteria. Self-assessment can enhance students' self-awareness in terms of their learning development after their review, discussion and reflection.

Many reading strategies are used to teach the students to understand the text they have read. Liu (2010) stated that reading comprehension has different levels which are literal (understanding of meaning in the text), referential (interpretative or understanding of implied meaning beyond the text and thinking process involved), and critical understanding (evaluation of ideas and information).

3) Assessment for student learning;

Assessment for learning practices involve with these two types which are recognizable classroom assessment activities used to give students' useful feedback for learning and specific assessment for learning used to directly support students' daily learning.

4) Assessment of curricular effectiveness;

This is a program evaluation that involves with developing reading curricula. The following can be used to evaluate learning outcomes. They are standardized testing, interviews with teachers and students on summative test performance, and innovative assessments that emphasize on specific goals of the program. The latter one might be project work, motivation, extensive reading, collaboration and group work.

5) Assessment for research purposes

In research studies, standardized assessment tools are sometimes employed to measure the levels and outcomes after teaching students. However, they need to be valid, reliable and used in appropriate and fair practice. It can be said that tests as tools or assessment of tasks used in researches should be well developed and appropriately used according to purposes.

It can be concluded that Grabe (2009) presented the options of assessment in many categories and use based on purposes, tasks and formats of assessment.

To illustrate the formats of assessment, many researches were investigated and explained. Lim, Eng, and Mohamed (2014) conducted the study to investigate the primary school students' reading abilities by using a set of standardised written reading comprehension test with 50 multiple-choice questions for 3 levels: elementary, intermediate and advanced including three levels of higher order thinking skills questions developed from the revised Bloom's Taxonomy which comprises analysis, application and evaluation. (Anderson et al. 2001)

Regarding Anuyahong (2012), the research was investigated on employing EFL supplementary reading materials on Thai democratic topic to enhance reading ability for business and technical students. In the data collection, the following research instruments were used to evaluate the students' reading ability. They were eight lessons on the democratic content used in reading instruction, an English proficiency test with 30 items, and a satisfaction questionnaire with both closed-end and opened-end likert-scale questions. The answers were presented into five rating scales which were:

5	means	strongly agree
4	means	agree
3	means	moderate
2	means	disagree
1	means	strongly disagree

The satisfaction questionnaire was based on four components as follows: content, instructional design, teaching and learning activities and evaluation.

7. Creative Thinking

7.1 Definition of Creative Thinking

Many definitions are given by various theorists on creative thinking. However, some are presented as follows:

Moeran, and Christensen (2013, xiv) stated that creative thinking is like an innovation and creativity which are not things but rather processes.

Sternberg and Lubart (as cited in Sternberg, 1999: 3) also defined creative thinking as an ability to produce work that is both novel and appropriate. A topic of

wide scope that is important at both the individual and societal levels for a wide range of task domains.

Sternberg and O' Hara (as cited in Sternberg, 1999: 251) gave the similar definition. They regarded creative thinking as the process of bringing into being something novel and useful.

Nickerson (as cited in Sternberg, 1999: 392, 397) focused on the results of activity and elaborated that Creative thinking is expansive, innovative, inventive, unconstrained thinking. It is associated with exploration and idea generation. It is daring, uninhibited, fanciful, imaginative, free-spirited, unpredictable, and revolutionary.

Vogel (2014: 14) believed that creative thinking comes together with a complex topic that involves many different elements and factors, from originality to destruction to combining existing elements in a way that makes something new.

The following table shows the definition of Creative Thinking and the synthesis of definition. They are presented as follows:

Table 8 Synthesis of Definitions for Creative Thinking

Robert J. Sternberg and Todd I. Lubart (cited in Robert J. Sternberg, 1999: 3)	Robert J. Sternberg and Linda A. O' Hara (cited in Robert J. Sternberg, 1999: 251)	Raymond S. Nickerson (cited in Robert J. Sternberg, 1999: 392, 397)	Brian Moeran, & Bo T. Christensen (2013, xiv)	Thomas Vogel (2014: 14)	Synthesis of Definition of Creative Thinking
Ability to produce work that is both novel and appropriate. A topic of wide scope that is important at both the individual and societal levels for a wide range of task domains.	The process of bringing into being something novel and useful.	The results of activity Creative thinking is expansive, innovative, inventive, unconstrained thinking. It is associated with exploration and idea generation. It is daring, uninhibited, fanciful, imaginative, free-spirited, unpredictable, and revolutionary.	Innovation and creativity are not things but rather processes.	A complex topic that involves many different elements and factors, from originality to destruction to combining existing elements in a way that makes something new.	Creative Thinking is the process to be able to create the new and useful things or ideas beneficial for both person and society.

7.2 Strategies of Creative Thinking

Wallas (1926) presented the phases to promote the students' creative thinking. They were 1) preparation (information gathered), 2) incubation (unconscious mental work goes on), 3) illumination (solution emerges) and 4) verification (solution tested and elaborated).

According to De Bono (1996), strategies to help create new things were discovered. They were awareness of one's own thinking, observation of one's own thinking, thinking strategy, and reflection upon thinking. The first phase was to design purpose. The problem, the need, the target clientele, restrictions, and the design goals were also considered. Secondly, inquiry fields such as information sources, research aspect and organizing the information and its assessment were also kept in mind. Thirdly, solutions: alternatives, ideas and factors were emphasized on idea documentation, consider all factors and other people view. Choosing the preferred solution was the fourth phase. The next was operation steps and evaluation was the last step to enhance the creativity.

Plsek (1997) showed four phases which are as follows:

1. Preparation

- Prepare for a notebook in which concepts derived from discussions, observations, and readings were noted down.
- Make a list in which assumptions, feelings, sources of information, and comparisons involving in the topic were included.
- Expand on information questions such as what, who, why, where, when and how.

2. Imagination

- Manage an appropriate time to brainstorming and sharing the initial ideas made in this phase and make a plan on sessions for further ideas creation to form complete ones.
- Divide the ideas into two aspects which were for the whole existing product or service and its part. The whole product was fundamentally differentiated whereas the latter represented some change made on each part.

3 Development

- Integrate the ideas in both whole product and its part.

- Think about relevant customers in order that ideas were collected, developed, prototypes tested and newly creative ideas evaluated.
- Employ the enhancement checklist and quality designed instruments for further development on the ideas.
- Build a prototype.
- Organize and conduct a development on business situation. Ideas should be evidently presented, openly discussed and criteria for decision clearly made.
- Think about and combine each best point gained from various ideas to develop a stronger idea for the product/service.

4. Action

- Carry out an action.
- Think about the organizational processes to launch the innovative product or service.

The procedures to enhance creativity were presented by Hsieh, Lou and Shih (2013). They were preparation, situation observation and raising questions, guiding discussion and confirming questions, generating creative proposal, implementing creative proposal, outcome presentation and evaluation. However, Vogel (2014) thought that the steps for creative thinking were to determine the task/situation analysis (preparation), research the topic and gather as much information as possible (incubation), generate as many ideas as possible (interpretation), choose the best ideas out of the ideas that were generated (experimentation) and test the idea, build prototypes, and make changes as needed (application). According to Sriwongchai, Jantharajit, and Chookhampaeng (2015), the following phases were given. They were engaging and connecting to prior knowledge, encountering problems and thoughtful incubation, analyzing alternative and investigating solutions, applying and modifying thinking pattern and concluding and evaluating creative thinking.

From the phases mentioned earlier, they can be analyzed as follows:

1. Preparation Phase

- Design purpose/goals
- Analyze the problem and need
- Observe the situation
- Engage and connect to prior knowledge

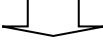
- Record concepts
- 2. Incubation Phase
 - Research the topic
 - Gather information
- 3. Interpretation Phase
 - Generate the ideas as much as possible
 - Analyze alternatives
- 4. Solution Phase
 - Consider the ideas/ Investigate solutions
 - Choose the preferred solution
 - Organize the information
- 5. Experimentation Phase
 - Choose the best ideas
 - Test and elaborate the solution
- 6. Application and Development Phase
 - Modify thinking pattern
 - Test the ideas
 - Build prototypes
 - Make changes as needed
- 7. Evaluation Phase
 - Conclude and evaluate creative thinking

However, these 7 phases of creative thinking can be later synthesized and presented in the following 12 sub-steps: design purpose/goals; engage and connect to prior knowledge; record concepts; generate the ideas as much as possible; analyze alternatives; consider the ideas; organize the information; choose the best ideas; modify thinking pattern; build prototypes; make changes as needed; and conclude and evaluate.

The following table shows the synthesis of procedures for creative thinking.

Table 9 Synthesis of Procedures for Creative Thinking

Scholars' Names	Procedures for Creative Thinking	Synthesis of Procedures for Creative thinking
Wallas (1926)	1. Preparation (Information gathered) 2. Incubation (unconscious mental work goes on) 3. Illumination (Solution emerges) 4. Verification (Solution tested and elaborated)	Analysis of Procedures 1. Preparation Phase - Design purpose/goals - Analyze the problem and need
De Bono (1996)	1. Design Purpose -The problem and the need - The target clientele and restrictions - The design goals 2. Inquiry Field -Information sources -Research aspect - Organize the information and its assessment 3. Solutions: Alternatives, Ideas and Factors - Idea Documentation - Consider all factors - Other people view 4. Choosing the preferred solution 5. Operation Steps 6. Evaluation De Bono (1986) Five thinking steps 1. Purpose 2. Input 3. Solutions 4. Choice 5. Operations	- Observe the situation - Engage and connect to prior knowledge - Record concepts 2. Incubation Phase - Research the topic - Gather information 3. Interpretation Phase - Generate the ideas as much as possible - Analyze alternatives 4. Solution Phase - Consider the ideas/ Investigate solutions - Choose the preferred solution - Organize the information 5. Experimentation Phase
Plsek, Paul E. (1997)	1. Preparation - Prepare a notebook in which concepts derived from discussions, observations, and readings were noted down. - Make a list in which assumptions, feelings, sources of information, and comparisons involving in the topic were included. - Expand on information questions such as what, who, why, where, when and how. 2. Imagination - Manage an appropriate time to brainstorming and sharing the initial ideas made in this phase and make a plan on sessions for further ideas creation to form complete ones. - Divide the ideas into two aspects which were for the whole existing product or service and its part. The whole product was fundamentally differentiated whereas the latter represented some change made on each part. 3. Development	- Choose the best ideas - Test and elaborate the solution 6. Application and Development Phase - Modify thinking pattern - Test the ideas - Build prototypes - Make changes as needed 7. Evaluation Phase - Conclude and evaluate creative thinking

Scholars' Names	Procedures for Creative Thinking	Synthesis of Procedures for Creative thinking
	<ul style="list-style-type: none"> - Integrate the ideas in both whole product and its part. - Think about relevant customers in order that ideas were collected, developed, prototypes tested and newly creative ideas evaluated. - Employ the enhancement checklist and quality designed instruments for further development on the ideas. - Build a prototype. - Organize and conduct a development on business situation. Ideas should be evidently presented, openly discussed and criteria for decision clearly made. - Think about and combine each best point gained from various ideas to develop a stronger idea for the product/service. 4. Action <ul style="list-style-type: none"> - Carry out an action. - Think about the organizational processes to launch the innovative product or service. 	<div style="text-align: center;">  </div> <p>Synthesis of Creative Thinking Procedures</p> <ul style="list-style-type: none"> - Design purpose/goals - Engage and connect to prior knowledge - Record concepts - Generate the ideas as much as possible - Analyze alternatives - Consider the ideas - Organize the information - Choose the best ideas - Modify thinking pattern - Build prototypes - Make changes as needed - Conclude and evaluate
Hsieh, Lou and Shih (2013)	<ol style="list-style-type: none"> 1. Preparation 2. Situation Observation and raising questions 3. Guiding discussion and confirming questions 4. Generating creative proposal 5. Implementing creative proposal 6. Outcome Presentation 7. Evaluation 	
Thomas Vogel (2014)	<ol style="list-style-type: none"> 1. Determine the task/Situation analysis (Preparation) 2. Research the topic and gather as much information as possible (Incubation) 3. Generate as many ideas as possible (Interpretation) 4. Choose the best ideas out of the ideas that were generated (Experimentation) 5. Test the idea, build prototypes, and make changes as needed (Application) 	
Sriwongchai, Jantharajit, and Chookhamp aeng (2015)	<ol style="list-style-type: none"> 1. Engagement and connection to prior knowledge 2. Encounter of problem and thoughtful incubation 3. Analyzing alternative and investigating solutions 4. Applying and modifying thinking pattern 5. Concluding and evaluating creative thinking 	

7.3 Creative Thinking Assessment Tools

Many researchers conducted their study involving learners' cognitive competencies. One of them was creativity. Creativity can be generated in various conditions of learning environment that cause a variety of experiences in learning, designing and experimenting (Barak & Doppelt (2000)).

Project-based learning helped the students work in team and increase their higher order thinking skills. However, there were new methods as tools to assess the students' achievements and their cognitive competencies (thinking and understanding). The alternative evaluation tools which were performance assessment, interviews, journal, oral examination, and peer evaluations were focused on the teaching and learning process more than the product.

Barak and Doppelt (2000) also suggested that portfolio assessment was the essential component to record the students' process and reflect their success in learning. In other words, portfolios were employed to evaluate both students' thinking and learning processes and their creative thinking. In addition to thinking and learning process, teamwork and cooperation in class were also emphasized. When portfolios were designed and constructed, the students' procedures were investigated again. With regard to creative thinking, portfolios were employed to develop process of the product and indicate higher order levels of thinking. The portfolio here might be computer files, written materials, drawings, video items, pictures, models and many more. The teacher could follow the progress of what the students learned, how they interacted and cooperatively create new things and also how they queried, critically analyzed, synthesized, solved the problems together, helped to design, created innovative ideas and launch beneficial products (Doppelt, 2004). In portfolio assessment, the Creative Thinking Scale (CTS) was employed both as an instrument to evaluate the students' portfolios, and the students' guideline during creating their project. The application of CTS was considered based on these two components which were 1) system or product design, construction and evaluation and 2) processes of learning, thinking, problem solving and teamwork. As noted by Doppelt (2004), CTS was constructed to evaluate these four thinking layers which were 1) awareness 2) observation 3) strategy or tools and 4) reflection.

Doppelt (2004) also suggested that creative thinking could be enhanced and assessed in the project-based learning approach (PBL) which helped the students to research, plan, design and feedback their projects in creative activities. Creative thinking was divided into two different types which were lateral and vertical thinking. Both were essential due to the fact that lateral thinking encourages the discovery of new methods, ideas or imaginations that were different whereas vertical thinking emphasized the development of the ideas based on the evidence and objectives. In other words, the students used lateral thinking in their learning process because they had to find out the alternatives and investigate various solutions. Vertical thinking was employed in the process of making a decision on the best solution and implement it (De Bono, 1986 and Waks, 1997, as cited in Doppelt, 2004). It can be said that both forms of thinking were the necessary components in creative thinking skill and supported with one another in project-based learning.

Creative thinking can be integrated with project-based learning. Hsieh, Lou and Shih (2013) carried out the study on “Applying Blended Learning with Creative Project-based Learning: A Case Study of Wrapping Design Course for Vocational High School Students”. The purpose of the study was to investigate learning effects and satisfaction on the wrapping design course that blended learning with creative project-based learning were focused and integrated. The samples were totally 44 students from the advertising and design course and then divided into 11 teams with a group of 4 people to do a gift wrapping design activity with the blended learning combining between the conventional instruction and online learning as a platform for the students’ self-design, discussion and idea including other related information sharing together. Also, teamwork, project-based learning, the inquiring-thinking-doing-evaluating, and the 12 creativity tactics were emphasized during the study. Data collection and analysis are focused in terms of the research instruments used in the study. The tools to be used were the satisfaction survey questionnaire, the online learning platform, the classroom observation, the portfolio, and the completed products which were all employed to gather the data. The results revealed that seven stages were regarded as ideal teaching model for integrating blended learning with creative project-based learning with the supplement of teacher’s guidance, the practice of creativity teaching methods, teamwork, and online resources which influence the students’ performance together

with learning effects. Additionally, blended learning could help to promote self-learning skills, problem solving and communication.

Creative thinking was fostered to the various backgrounds of students and altered the instructional methods and learning settings by using portfolio assessment as a new assessment method. A creative thinking scale (CTS) was created, developed and used as a tool to assess the students' portfolios. As noted by De Bono (1996), it comprised four thinking layers which were: 1) awareness of one's own thinking; 2) observation of one's own thinking; 3) thinking strategy; and 4) reflection upon thinking.

Under each layer of thinking, the following statements were created:

Awareness of one's own thinking

1. Everyone in the group is aware that thinking is a skill that can be developed.
2. Everyone in the group listens to other people's opinions and prepares to give reasons when being inquired.

Thinking Strategy

3. Everyone in the group helps design goals connecting to prior knowledge, generate and analyze the ideas, record concepts and choose the best one.
4. Everyone in the group helps modify thinking pattern, build prototypes and make changes as needed.

Observation

5. Everyone in the group observes and considers the consequences of choices having been made.

Reflection

6. Everyone in the group is aware of reflective thinking of the friends within and between group(s).
7. Everyone in the group considers methods to implement these designed thinking tasks.

All these statements could reflect the students' layers of thinking; therefore, they were used in the creative thinking questionnaire.

Besides, the creative thinking scale (CTS) was created and applied in two aspects of portfolios which were 1) system or product design, construction and evaluation which both lateral and vertical thinking was used and 2) processes of learning, thinking, problem-solving and teamwork (Barak & Doppelt, 2000).

In terms of product construction including design and evaluation, the following statements were used to enquire the students' ideas on creative thinking.

Design

1. The product's features and specifications are considered and well planned.
2. The product is well designed, constructed step by step and achieved the set goals.
3. The detailed drawing of the model is planned and made.

Evaluation

4. The different models have been considered, compared and chose the best one.
5. The product is creatively developed and presented interestingly.

To sum up, the creative thinking assessment could be done in two areas which were 1) thinking layers and 2) product construction.

8. Related Literature

8.1 Related Literature on Concept-Oriented Reading Instruction (CORI)

Guthrie, Bennett, and McGough (1994) investigated on Concept-Oriented Reading Instruction: An Integrated Curriculum to Develop Motivations and Strategies for Reading. They stated that the students' motivation, curiosity, enjoyment and challenge let them be more active and interested readers. The aims of study were to design and implement a CORI framework with five stages: 1) observing and personalizing; 2) searching and retrieving; 3) comprehending and integrating; 4) communicating to others; and 5) interacting with peers to construct meaning. These were to enhance students' extensive reading, motivations and strategy use for searching and understanding in content area. It took one year-long curriculum to implement Instruction with a multicultural population of fifth-grade students in a Chapter 1 school. The results revealed that students who had been taught by using Concept-Oriented Reading Instruction (CORI) for four months could excel a comparison classroom in amount and breadth of reading and intrinsic motivations for reading. The students with CORI treatment acquired significantly in the cognitive strategies of searching and comprehension during the time period of four months. The dissimilarities between CORI instruction and experience-based teaching and strategies instruction were their support for motivational and cognitive development.

Later in 1998, Guthrie, Meter, Hancock, Alao, Anderson, and McCann (1998) studied on Concept-Oriented Reading Instruction (CORI). Reading engagement was

focused and regarded as the enhancement of conceptual knowledge, motivations, strategy use while reading. The team collaboratively designed one-year combination of reading in languages and science instruction. In the study, the comparison between the treatment group and the group with traditional instruction was made. It was found that CORI enhanced the text comprehension of students at Grade 3 and 5 and also their strategy use when using prior knowledge. Moreover, the strategy use could help them gain conceptual knowledge from the texts they read.

Fannin (2011) conducted the study that investigated the strategy of Concept-Oriented Reading Instruction (CORI) on improving reading levels of elementary students with disabilities. The specific practice of CORI implemented was the use of science goals in reading instruction to improve overall reading skills. In this study, science goals and standards in place by the state of Georgia were integrated in a conceptual theme for reading instruction. The use of science textbooks, trade books on the subject and hands on activities were used to direct and facilitate the reading instruction. The students reading scores before receiving the CORI strategy in the classroom were compared to post test scores after the strategy-based instruction. Observational and descriptive analysis showed improvements in both students reading fluency and comprehension.

Azis (2015) carried out the research which aimed at explaining to what extent Concept-Oriented Reading Instruction (CORI) promoted the effectiveness of teaching and learning procedure which then increased the students reading comprehension of narrative texts as well as to explaining the factors that influenced the changes of their reading comprehension during using the strategy. The research was carried out in the design of classroom action research, which was a cyclical process that involved planning, action, observation, and reflection, for two cycles. To collect qualitative data, observation sheets, field notes and interview were employed whereas reading comprehension tests were used to gather quantitative data of which the results of improvement in each cycle were presented in the form of mean. Quantitative data were used to support the qualitative ones in terms of the factors that lead to improvement. However, CORI was found to effectively develop instructional process during two cycles.

Regarding all studies investigated by many researchers, Concept-Oriented Reading Instruction were used in teaching and learning process to increase the students' motivation, comprehension and facilitation of finding conceptual theme and knowledge in reading instruction. In the process, the cooperation and strategies were needed and instructed in order to develop the students' reading comprehension abilities. Besides, the students also employed the strategies instructed in class to enhance their cognitive progress. After they were motivated with the challenge, the curiosity together with enjoyment led them to work together in engaging their reading and became interested readers. The CORI strategies helped develop the effectiveness in language instruction as well as learners.

8.2 Related Literature on Project-based Learning

Many researchers studied on project-based learning which was integrated with language instruction. They investigated many interesting factors and presented various steps in combining project-based learning with language learning. The following studies are reviewed.

Van Lam (2011) conducted a research on project-based learning in teaching English as a foreign language. The researcher stated that project-based learning (PBL) played an essential role in both education in general and specific English teaching and also indicated that projects were assigned as authentic tasks that motivate students to participate and engage in the tasks, attract their attention and promote their learning ability. It can be said that project-based learning (PBL) was more meaningful to students in that it could enhance their enjoyment and motivation in language class. The researcher of this article recommended the steps for implementing a PBL project which were: Step 1 - Students and teacher agree on a theme for the project; Step 2 - Students and teacher determine the final outcome of the project; Step 3 - Students and teacher structure the project; Step 4 - Teacher prepares students for the demands of information gathering; Step 5 - Students gather information; Step 6 - Teacher prepares students to compile and analyze data; Step 7 - Students compile and analyze information; Step 8 - Teacher prepares students for the language demands of the final activity; Step 9 - Students present the final product; and Step 10 - Students evaluate the project. The researcher developed these steps with project-based learning (PBL) implementation so as to motivate the students not only inside class but also in the real world classroom.

Project-based learning (PBL) was useful to assist the students well gain authentic knowledge, cooperation, and prepare for their future career and life in terms of both English communication and social skills.

Baş (2011) investigated the effects of project-based learning on students' academic achievement and attitudes towards English lesson. The study was conducted in academic year 2010–2011 in a high school in Nigde, Turkey. The participants of the study were the 60 students in the 9th grade from two different classes. The research used the model of which the pre- and post-test was given to the participants in a control group. The analysis of all data gained from the study was statistically made and calculated by using the computer program SPSS 17.0 and presented in means and standard deviations of each group. A t-test was a statistic used to test the significance in the independent samples with the significance level at .05. The findings revealed that there was a significant difference between the scores taken from the experimental group and the ones from the control group. However, it could be discovered that PBL could help to construct more effectiveness in terms of the students' ongoing development on their levels of academic success. It was also found at the end of the study that students instructed by using PBL had higher achievement and levels of viewpoints on the lesson than the ones instructed by using students' textbooks.

Project-based learning has been well-known for most researchers in the 21st century. As stated by Zafirov (2013), new challenges have been studied on the project-based learning in the digital age. A study was conducted to investigate the advantages of methodology and instruments used in the project-based learning which the main characteristics were explained in detail. The idea of implementing projects in the education, particularly in curriculum is not new in that it has been formally identified and gradually changed into more practical and better instructional strategy for a decade. Many researchers have been using PBL in classroom as a greater base to evidence what instructors have comprehended. They believe that PBL promote their students' engagement in learning as complicated, and challenging difficulties related to the students' real life allow the students to get involved. The project-based learning methodology used in both educational and professional aspects is the same due to the fact that projects and tasks are found in real-life use as part of both students and employees' assigned work.

Antić and Spasić (2012) integrate project-based learning with English for Specific Purpose on the title 'Project-based Learning in English for Medicine'. PBL helps to support students' direct learning for more investigations through challenging and well-designed activities. Based on the students' needs, interests and queries, projects allow them to actively engage in the activities. Also, it is mentioned that PBL helps to develop the learners' problem-solving skills considered as the main use of critical thinking, communication and collaboration which are all the 21st century skills. In medicine, problem-solving is employed and integrated in the form of projects which become a vital instructional approach in English for Medical Purposes. PBL encourages students to work in groups, communicate to others on what they have found and help to push the final outcomes together, nevertheless, it depends on their personal competencies and interests. The problems found in the students' real life enable them to thoroughly consider about the contents meaningfully gained, work in teams and enhance their motivation. All these practices are extremely beneficial for both students themselves and their future careers.

According to many researchers, project-based learning was integrated in English language teaching because it was regarded as the students' task that could motivate and attract their attention. Task engagement in project-based learning was useful and enjoyable in that the students get more knowledge and cooperation. They were encouraged to engage in the challenging tasks or activities and try to work or find the solution together. Project-based learning is an important approach that enhances the students' 21st century skills which are collaboration, communication and creative thinking. It can be said that project-based learning can prepare the students for their future careers and life.

8.3 Related Literature on Reading Abilities

Learners' reading abilities can be developed by using various instructional approaches. In this part of research, studies on reading abilities were investigated and revealed. Chu, Tse a, Loh and Chow (2011) conducted a study on Collaborative inquiry Project-based Learning: Effects on reading ability and interests. The students' reading ability was part of their academic performance with the use of inquiry project-based learning considered to effectively improve the students' reading abilities and interests. The samples of the study were fourth-grade primary school students in Hong Kong who

were instructed by using a case study with an inquiry approach and its effects on their reading ability were also investigated in the form of group projects. To enhance the students' reading abilities and interests, three teachers, a librarian and parents worked together. The research instruments were used to 1) investigate the students' reading abilities through Progress in International Reading Literacy Study (PIRLS) tests, 2) examine the opinions toward the inquiry PBL approach through a survey questionnaire and interviews, and 3) evaluate the students' attitudes and self-perceptions through the PIRLS survey. The findings were presented in both quantitative and qualitative data positively showing the students' improvement on reading abilities, comprehension, speed, vocabulary and their perceptions toward the instructional approach which all affected their development on reading abilities.

Soleimani and Hajghani (2013) conducted the study on "The Effect of Teaching Reading Comprehension Strategies on Iranian EFL Pre-University Students' Reading Comprehension Ability". They investigated whether teaching reading strategies could significantly enhance the students' reading comprehension ability, raise their awareness on reading strategy use and find the students' mostly used reading strategies to facilitate their reading comprehension. A reading comprehension test, a questionnaire and interview were employed in the study as research instruments. The samples of the study were 90 female students who were divided into two groups: One experimental group with 53 students given the reading strategy instruction and one 37 control group with 37 students given the traditional reading instruction. They all experienced the English study in school for six years. The study took totally 15 sessions with three hours a week. The results indicated that instructing reading strategies could enhance the students' use of more reading strategies in their reading comprehension process and raise their awareness on strategy use which guessing meaning based on similarity to other words in TL was found to be frequently employed in the students' reading comprehension process. However, the reading strategy instruction could not be found to have a significant effect on the students' reading comprehension ability.

Many researchers did the study to investigate whether the reading strategy instruction could affect the EFL students' improvement on reading comprehension abilities. Nasri and Biria (2016) was one of them who conducted the study on combining multiple and focused strategies in the instruction to develop Iranian

intermediate EFL learners' reading comprehension and L2 lexical abilities. In the study, reading strategy instruction was focused to promote the learners' metacognitive and reading comprehension abilities. The purposes of the study were: to investigate the effects of using the two methods of comprehension strategies: focused and multiple strategies explicitly taught to EFL learners on their lexical and reading comprehension development; and to explore the effect of combining fixed and multiple instructional strategies on the learners' lexical development and reading comprehension ability. The samples of the study were 69 Iranian intermediate EFL learners and divided into four groups: one control with conventional reading instruction and three experimental groups with focused, multiple, and integrated strategy instructions. The findings indicated that multiple strategy instruction had a significant effect on the development of learners' reading comprehension ability. With regard to integrated strategy instruction, the learners' development was found on both reading comprehension ability and lexical knowledge. Nevertheless, the results gained from focused strategy instruction showed that the instruction did not produce a significantly positive effect over typical reading instruction in terms of learners' improvement on reading comprehension ability and lexical knowledge.

8.4 Related Literature on Creative Thinking

Many reviewed researches were conducted on creative thinking as a variable that the researchers wanted to study. The procedures and findings are presented in the following details.

Doppelt (2004) studied a methodology for infusing creative thinking into a project-based learning and its assessment process which was targeted at enhancing the students' creative thinking. In the process, different teaching method, learning environment and selection of assessment methods such as portfolio were all needed to be used. The samples of the study were 128 high school pupils at the age between 16 and 18 who were in Grade 10-12 and had studied Mechatronics. Before they finished grade 12, the pupils were assigned to create 57 projects with the use of a creative design process (CDP) for recording the design process and a creative thinking scale (CTS) for being used by teachers and pupils as a guideline while doing a project. Therefore, project-based learning and assessment tools were employed in the study so as to investigate the pupils' performance while mutually and cooperatively doing the

assigned project. Besides, many other tools such as a diary, interview, observation in class activities and portfolio assessment were all the researcher's equipment for data collection. The finding received from the study indicated that the pupils' design process was highly documented in CDP and their creative thinking discovered in the project was reflected and shown by using CTS. However, the researcher gave an interesting viewpoint that documentation on teamwork and pupils' reflection needed to be studied.

Yaqoob (2007) investigated the same title which is the development on creative thinking: A cognitive approach to the teaching of English literature. The purpose of the study was to examine the use of cognitive teaching model with its tools, techniques, and strategies to enhance creative thinking including other high-order thinking skills. The participants were the literature students at Master's level including the teachers and the chairpersons of English department. The research was conducted in two phases which were survey phase and experimental phase. In the first phase, survey, each participant was asked to do a questionnaire which was used as a tool to gather the data about existing instructional methods on literature currently taught in colleges and universities in Pakistan. With respect to data analysis, tables with mean score were calculated and presented with the measure of central tendency. In phase two, it took two months in experimental phase to implement the cognitive teaching model. The participants were 136 students of M.A. English who studied Romantic Poetry and Fiction II (Modern Fiction) from International Islamic University, Islamabad. The 136 samples were divided into two main groups: 68 for Romantic Poetry; and another 68 for Fiction II. Then each main group (Romantic Poetry group and Fiction II group) was randomly subdivided into two subgroups with 34 samples as the control group and another 34 as the experimental group. In the experiment, the assessment tools were pre-tests and post-tests given to all four groups before and after the treatment. In statistical analysis, z test was used to analyze the data gained from achievement tests. The findings in phase one revealed that the students' creative thinking and other high-order thinking skills were not developed after being instructed with the existing methods on literature which was considered as conventional style. The conclusion made in phase two showed that cognitive teaching strategies and techniques enabled the participants to improve their creative thinking together with other high-order thinking skills through the use of cognitive teaching model.

Creative thinking can be integrated with project-based learning. According to Hsieh, Lou and Shih (2013), the study on applying Blended Learning with Creative Project-Based Learning: A case study of wrapping design course for Vocational High School students was conducted. This study was distinguished from other work in that it investigated and focused on the integration of project-based learning, creativity, and professions. The study aimed at examining the learning effects and satisfaction on the wrapping design course that blended learning with creative project-based learning were included. The samples were totally 44 students from the Advertising and Design Course and then divided into 11 teams with a group of 4 people in each to do a gift wrapping design activity with the blended learning combining between the conventional instruction and online learning as a platform for the students' self-design, discussion and idea together with other related information sharing with each other. In the study, teamwork, project-based learning, the inquiring-thinking-doing-evaluating, and the 12 creativity tactics were emphasized during the study. In the process of data collection and analysis, the researcher employed the satisfaction survey questionnaire, online learning platform, classroom observation, portfolio, and completed products to collect all the data. The findings pointed out that seven stages were considered as ideal teaching model for combining blended learning with creative project-based learning with the supplement of teacher's guidance, the practice of creativity teaching methods, teamwork, and online resources which had the effect on the students' performance as well as learning effects. Furthermore, blended learning could help to increase self-learning skills, problem solving skills and communication.

In terms of creative thinking development among students, many researchers investigated and integrated creative thinking with project-based learning to see whether these learning approaches could enhance the students' skills and performances in their learning. The results mostly indicated that this integrated approach could develop both students' knowledge and other essential skills in the 21st century such as communicative, problem-solving and cooperatively learning skills which the students needed practising and preparing for conducting their life in the society.

After the findings were reviewed and many theories, principles and procedures synthesized, the business reading instructional model was created and named as AMARA Model which was presented in the following table:

Table 10 Synthesis of Procedures for AMARA Model

Synthesis of Strategies on Concept-Oriented Reading Instruction (CORI)	Synthesis of Procedures for Project-based Learning	Synthesis of Procedures for Reading Abilities	Synthesis of Procedures for Creative thinking	Synthesis of Procedures for Business Reading Model (AMARA Model)
<p>Preparation and Motivational Stage</p> <p>1. Observe and Personalize:</p> <ul style="list-style-type: none"> - The teacher provides the relevant texts and sample projects to let the students engage in hand-on activities that build interest - Collect and analyze data - Conduct experiments <p>Cognitive Stage</p> <p>2. Search and Retrieve:</p> <ul style="list-style-type: none"> - Scaffolded lessons - Form questions; Teach strategies - Search text for information - With the teacher's help, let the students set their goals for text selection, select their own interesting texts, topics for reading and passages for inferencing - Guided practice - Let the students read the passages, identify the text structure and text characteristics, analyze the words in the texts and make inference on the content of the story - Find the main ideas - Paraphrase - Summarize - Take note - Develop discourse awareness <p>3. Comprehend and Integrate:</p> <ul style="list-style-type: none"> - Learn story structures 	<p>Preparation Stage: Cooperation</p> <ol style="list-style-type: none"> 1. Choose the project, make some agreement on theme and brainstorm on the topics 2. Plan and design the structure of the project 3. Gather information and materials necessary for creating the project and analyze the data obtained 4. Share with class <p>Creation Stage</p> <ol style="list-style-type: none"> 5. Create the project <p>Presentation or Publish Stage</p> <ol style="list-style-type: none"> 6. Prepare the language used in presentation and plan to present the project 7. Present the product <p>Evaluation Stage</p> <ol style="list-style-type: none"> 8. Evaluate the project 	<p>Reading comprehension ability</p> <ul style="list-style-type: none"> - Decoding - On the lines - Between the Lines - Beyond the Lines - Context-free word - Reading strategy use - Graphic Organizer - Read aloud <p>Knowledge and Language</p> <ul style="list-style-type: none"> - Pragmatic - Semantic (Vocabulary) - Verbal concept development - Syntactic (Grammar) <p>High-order thinking</p> <ul style="list-style-type: none"> - Predict and Summarize - Further elaboration - Critical analysis and evaluation on reading texts <p>Extensive reading</p>	<p>Preparation Phase</p> <ul style="list-style-type: none"> - Design purpose/goals - Analyze the problem and need - Observe the situation - Engage and connect to prior knowledge - Record concepts <p>Incubation Phase</p> <ul style="list-style-type: none"> - Research the topic - Gather information <p>Interpretation Phase</p> <ul style="list-style-type: none"> - Generate the ideas as much as possible - Analyze alternatives <p>Solution Phase</p> <ul style="list-style-type: none"> - Consider the ideas/ Investigate solutions - Choose the preferred solution - Organize the information <p>Experimentation Phase</p> <ul style="list-style-type: none"> - Choose the best ideas - Test and elaborate the solution <p>Application and Development Phase</p> <ul style="list-style-type: none"> - Modify thinking pattern 	<p>1. Activating students' interest, background knowledge and activity on reading engagement</p> <ul style="list-style-type: none"> - Provide the relevant texts to let the students engage in hand-on activities - Help them with the difficult vocabulary found in the texts - Observe and personalize - Analyze the problem and need - Form the questions for students' engagement and connect to the students' prior knowledge <p>2. Motivating the students and searching texts</p> <ul style="list-style-type: none"> - Search many texts for various kinds of information and find out their own interesting texts - Set the goal and select the topics for the texts together <p>3. Action-taking and ability to use the strategies</p> <ul style="list-style-type: none"> - Model strategies so as to comprehend the texts - Let the students read the passages and find the main ideas, paraphrase, make inference, predict, summarize and take note - Read and search for data using the strategies learned

Synthesis of Strategies on Concept-Oriented Reading Instruction (CORI)	Synthesis of Procedures for Project-based Learning	Synthesis of Procedures for Reading Abilities	Synthesis of Procedures for Creative thinking	Synthesis of Procedures for Business Reading Model (AMARA Model)
<ul style="list-style-type: none"> - Summarize and synthesize information - Read for additional information - Activate background knowledge and make connections with the text - Strengthen the students' vocabulary development - Concept- mapping <ul style="list-style-type: none"> - Synthesize - Recall all the specific information about the text by mapping the concept and making inferences <ul style="list-style-type: none"> - Integrate information through graphic organizers - Extended engaged reading <p>Action Stage</p> <p>4. Communicate to others:</p> <ul style="list-style-type: none"> - Carry out the project tasks / collaborate on group tasks <ul style="list-style-type: none"> - Write reports - Make a class book on the topic - Write about a story - Share team or class projects - Make a video presentation 			<ul style="list-style-type: none"> - Test the ideas - Build prototypes - Make changes as needed <p>Evaluation Phase</p> <ul style="list-style-type: none"> - Conclude and evaluate creative thinking 	<ul style="list-style-type: none"> - Synthesize by mapping the concept and integrate information <p>4. Running the project and presentation</p> <ul style="list-style-type: none"> - Carry out the plan for project tasks by asking the students to work in groups and brainstorm the project details on each topic - Make some agreement and choose the best idea - Plan and design the structure of the projects - Create the projects (each in form of mini-project) - Modifying thinking pattern, build prototypes and make some changes - Plan to present the mini-projects - Communicate by sharing their mini-projects and present to the class <p>5. Assessment</p> <ul style="list-style-type: none"> - Evaluate the students' reading comprehension - Evaluate the project (Peer-assessment) - Evaluate creative thinking (Both Self- and Peer-assessment)

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter aims at investigating the methodology used in the study. It was conducted in Research and Development procedures of which the data collection was carried out in the process of mixed methods research. Therefore, both quantitative and qualitative methods were integrated in the study. The data collection comprises research population and participants, research design, construction of research instrument and its effectiveness including research procedures.

The main objective of the study is to develop business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. The Research and Development procedures were presented as follows:

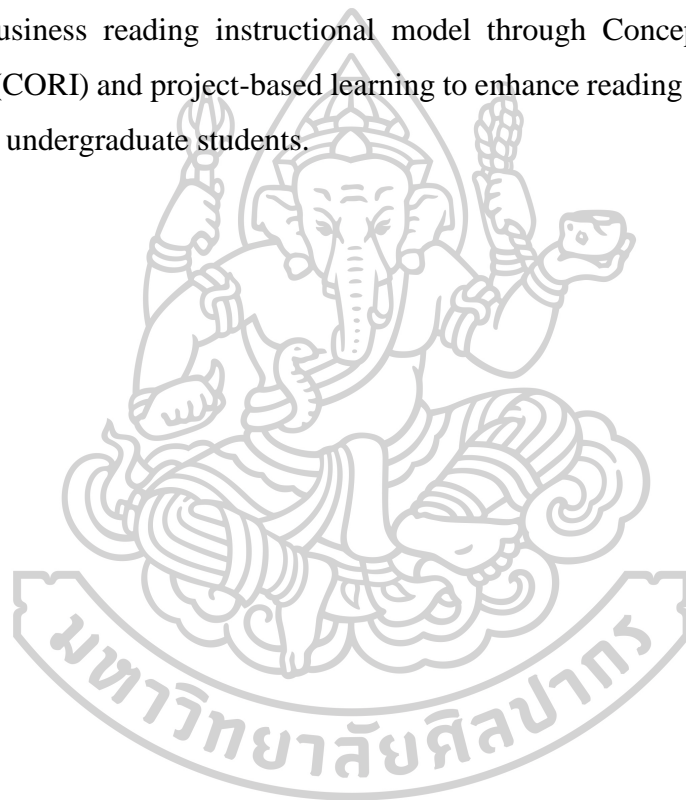
Phase 1: Research 1 (R₁: Analysis) The study of general background information, documentary research, analysis and synthesis on theories, principles and concepts concerning a model design and construction were done. A focus group with highly experienced business English lecturers was also conducted so as to study the problems they had found in their teaching and interview on the possibility of business reading instructional model construction. Besides, needs analysis was designed, approved and distributed in order to investigate the students' reading motivation, strategy usage and needs in conceptual teaching and learning in English business reading in the tertiary level. All of these were required to develop business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.

Phase 2: Develop 1 (D₁: Design and Development) The design and development based on the informational synthesis, details gained in focus group and needs analysis in phase 1 were carried out on business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students and then evaluated, developed and validated the draft model. The instrument used in data collection which were lesson plan, pre-test and post-test, materials for 8 units and exercises after each

unit, instruction manual of model, table of content specification, reading log (reflection form) and other assessment forms were designed and also developed in this phase.

Phase 3: Research 2 (R₂: Implementation) The experimental research was conducted on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students by employing the One-group Pretest-posttest Design.

Phase 4: Develop 2 (D₂: Evaluation) The evaluation and verification were taken on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.



According to the Research and Development procedures mentioned earlier, the details in each phase were described thoroughly as follows:

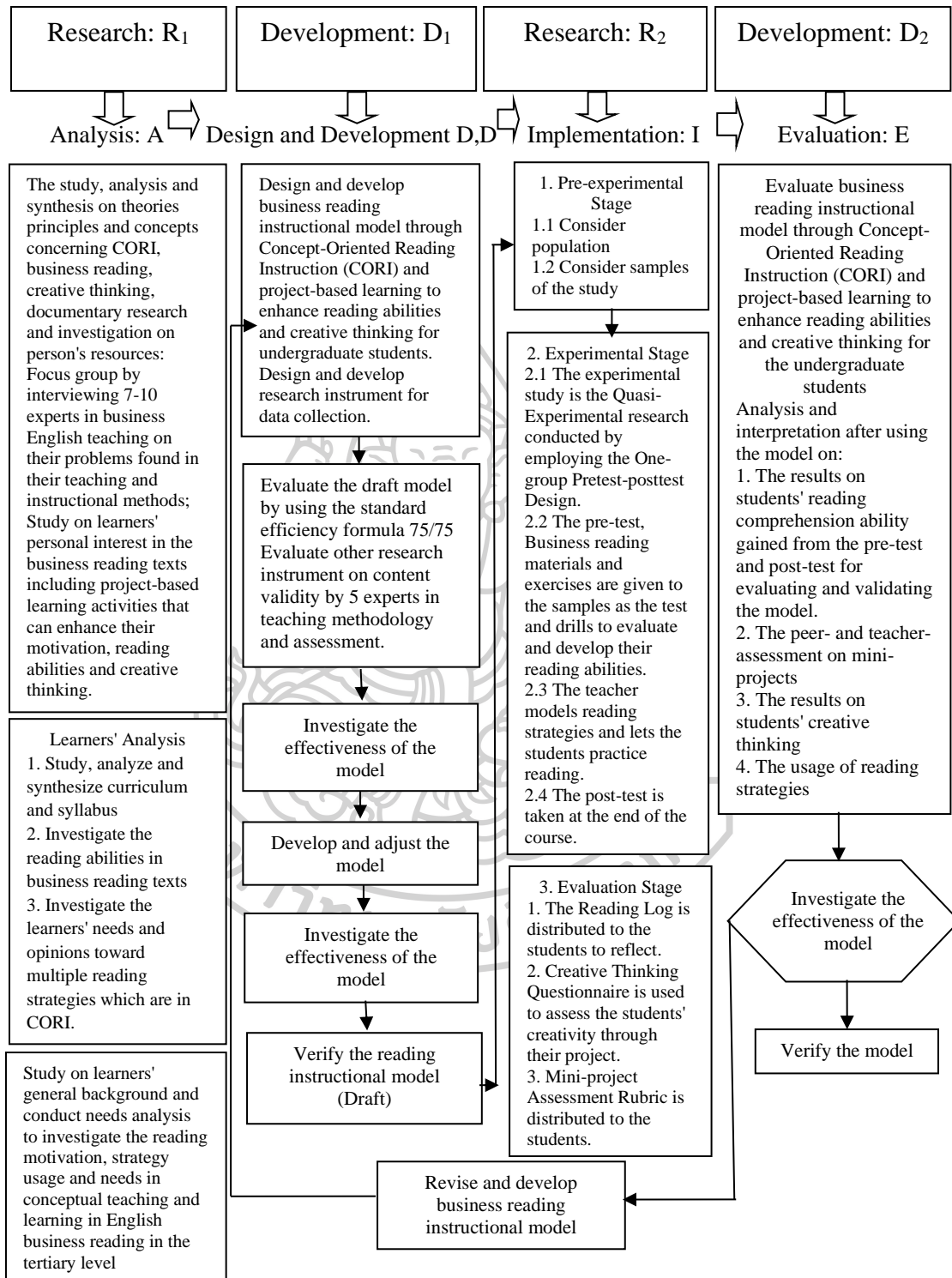


Figure 5 Details of Research and Development Procedures

The figure shown above describes all processes conducted in business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. The procedures in each phase were carried on and explained in the following details.

The study in phase 1 consisted of 3 sub-steps which were shown as follows:

Phase 1: Research 1 (R₁: Analysis)

Sub-step 1.1

The step was about documentary research involving the exploration and study on general background information and related documents including the problems found on current business English teaching and learning contexts. Principles, theories, researches, national policies on education, curriculum, and course syllabus were also explored. Design and distribute needs analysis form to investigate the students' reading motivation, strategy usage, needs in conceptual teaching and learning, and difficulties found in English business reading in the tertiary level. All of these involved the analysis of essential information used to further design business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.

Objectives

The study aimed at exploring fundamental concepts, principles, theories, researches, learners' general background information including reading motivation, strategy usage, opinions and needs in conceptual teaching and learning found in business reading instruction, and conducting needs analysis that were essentially used to design and develop the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.

Research Methodology

In the phase of Analysis, the following were the processes to conduct the research.

1. Study, analyze and synthesize related documents, concepts, theories, researches, policies on Thai education, learning objectives in tertiary level including curriculum and syllabus.

2. Explore theories, principles, and related literature for developing the business English reading instruction model, Concept-Oriented Reading Instruction, multiple reading strategies, project-based learning, reading abilities and creative thinking.

3. Explore the students' needs, conditions and problems found in their reading process by designing and conducting needs analysis. The approved form was distributed to the students who tended to study business English reading in order to investigate their general background, level of reading proficiency, frequency and types of business texts they had read, their difficulties found during their reading, as well as their opinions and needs on business English reading instruction.

Participants

The undergraduate students who tended to study business English reading in their curriculum. Simple Random Sampling was used to select the students for doing needs analysis. There were 66 participants in tertiary level who enrolled in Business course and tended to make use of their knowledge and reading skill in their business communication and future career. They were asked to do the needs analysis form of which contents were used to design and create the draft of business reading instructional model.

Data Sources

The data were found out from related documents and policies on Thai Education System to develop students' English reading abilities and essential skills in 21st century. Besides, information on curriculum and course syllabus were investigated. Data, concepts and learning theories, and other related literature reviews on instructional design were also learned.

Process of Research Instrument Development

The research instruments used in this study were as follows:

1. Document Analysis Form was used in collecting and analyzing the content of theories, principles and procedures relating to design and create the business English reading instructional model. They might be Public Records or Personal Documents. Public Records were the official records such as policy manuals, student handbooks, strategic plans, and syllabi. Personal Documents included journals, and newspapers.

2. Needs Analysis Questionnaire was used in surveying and investigating the students' general background, specific strengths, weaknesses, challenges of business

English reading instruction, and needs of the development on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. It was created with 4-point Likert-scale items and two open-ended questions designed to measure the students' implementation of the reading abilities and motivation on business reading materials, their needs to use the reading strategies and their further use of concept gained in their reading texts on creating the project.

Before the Needs Analysis Questionnaire was used to distribute to the students, it was needed to be approved on validity and reliability by 5 experts. The questionnaire was firstly verified by the advisor for their effectiveness and clarity. The recommendations from both experts and advisor were reviewed and considered to create the complete Needs Analysis Questionnaire. The revised Needs Analysis Questionnaire was employed to collect data.

The processes to develop both Document Analysis Form and Needs Analysis Questionnaire were described in detail as the following:

1. Document Analysis Form

Document Analysis Form was constructed and developed as the following procedures:

1.1 Find out the documents, theories and related literature on constructing the content of document.

1.2 Consider the main aspects and topics used in constructing the forms, analyze and create the form.

1.3 Submit the designed Document Analysis Form to the advisor for verification in terms of validity and appropriateness and then revise it.

1.4 Verify the revised Document Analysis Form by 5 experts who assessed the form in terms of the content validity. The Index of Item Objective Congruence: IOC was used to assess the list of items according to the contents and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

$$\text{IOC} = \frac{\Sigma R}{N}$$

IOC represented the congruence between the objectives to construct questionnaire or form and statements in the questionnaire.

ΣR represented the total scores of experts’ agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of Document Analysis Form, the Item Objective Congruence was between 0.6 and 1.00 indicating that the items were valid and congruent with the objectives of assessment.

1.5 Revise the Document Analysis Form in accordance with the experts’ recommendations for appropriateness, quality and accuracy.

2. Needs Analysis Questionnaire

The following were the process of which Needs Analysis Questionnaire was constructed and developed:

2.1 Find out the documents, theories and related literature on constructing the content of needs analysis questionnaire.

2.2 Consider the main aspects and topics used in constructing, analyzing and creating the questionnaires. In the study, there were 3 parts found in the questionnaire.

They were: Part I – Learners’ general information and attitude in learning business English including their opinions on levels of reading proficiency
Part 2 – Learners’ opinions and needs in reading business English
Texts with 2 columns of items/questions enquired about both opinions and needs in a table

Part3 - Learners' recommendations that were useful for the development of business reading instructional model

When the questionnaire was developed, the series of individual questions were created with Likert response options for the informants to answer. In the questionnaire, Likert Scale was provided with four response alternatives or four-point scale which was employed in Part 2 to rate the needs levels of business English reading instruction and strategy use. Therefore, the needs for business reading instruction and project were focused. 4-point Likert Scale was created for another column with 4 choices which were **Strongly needed, Needed, Less needed and No needs** (Boone, Harry N., Jr.; Boone, Deborah A. 2012). Moreover, open-ended questions were also included in the questionnaire.

2.3 Submit the designed Needs Analysis Questionnaire to the advisor for verification in terms of validity and appropriateness and then revise it.

2.4 Verify the revised Needs Analysis Questionnaire by 5 experts who assessed the form in terms of the content validity. The Index of Item Objective Congruence: IOC was used to assess the items of the questionnaire or the list of questions according to the contents and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

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

IOC represented the congruence between the objectives to construct questionnaire or form and statements in the questionnaire.

$\sum R$ represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of Needs Analysis Questionnaire, the Item Objective Congruence was between 0.6 and 1.00 indicating that the items were valid and congruent with the objectives of assessment.

2.5 Revise the Needs Analysis Questionnaire in accordance with the experts' recommendations for appropriateness, quality and accuracy

2.6 Distribute to undergraduate students who are likely to enroll in business English courses.

Data Collection

1. Collect data from the synthesized Document Analysis Form which were explored and analyzed from theories, principles and researches used to design the business English reading instructional model and create the Needs Analysis Questionnaire.

2. Distribute the well-revised questionnaire to undergraduate students who had the similar characteristics as the samples of the study to investigate their needs in developing their reading abilities including enhance their motivation through multiple reading strategies (CORI) and project-based learning. They tended to or were required to study in business English classes and use business English reading in their future career.

3. Collect all data and get ready for further analysis

Data Analysis

The data gained in this study were analyzed by using Content Analysis, and Statistical analysis: Percentage, Mean and Standard Deviation.

Sub-step 1.2

This step focused on the study, analysis and synthesis on principles, theories, definitions, concepts, procedures and literature concerning CORI, business reading instruction, multiple reading strategies, project-based learning, reading abilities and creative thinking.

Objectives

In this step, the objectives were to explore, define, analyze and synthesize the procedures of CORI, multiple reading strategies, project-based learning, reading abilities and creative thinking so as to develop the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.

Research Methodology

The methodology of the study in this step based on synthesis research was presented as follows:

1. Study, analyze and synthesize the principles, theories, definitions, concepts and researches relating to CORI, multiple reading strategies, business reading instruction, project-based learning, reading abilities and creative thinking.
2. Study, analyze and synthesize the procedures or strategies used in CORI, project-based learning, multiple reading strategies, reading abilities and creative thinking.
3. Employ the general background information, theories and researches that had been explored and studied as well as learners' needs analysis to synthesize, determine and define the components of conceptual framework for business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking.

Data Sources

The sources of data came from related researches on theories, principles and concepts relating to CORI, multiple reading strategies, business reading instruction, project-based learning, reading abilities and creative thinking. Moreover, related researches on theories and concepts relating to develop the business reading model were also considered.

Research Instrument

In this phase, synthesis research was mostly conducted so the research instrument was Document Synthesis Form used in collecting, analyzing, and synthesizing the content of theories, principles and procedures relating to CORI, multiple reading strategies, business reading instruction, project-based learning, reading abilities and creative thinking.

Data Analysis

The data were descriptively analyzed by using Content Analysis. The documents were analyzed by incorporating coding content into themes.

Sub-step 1.3

In this step, the study was the investigation and affirmation on the teaching and learning methods for business reading by using Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. The focus group discussion or semi-structured interview with highly experienced business English lecturers was conducted in order to investigate experts or experienced business English lecturers' problems found in teaching, opinions on reading strategies used in business English instruction and the role of CORI together with project-based learning in business English reading instruction. All these data were used in model construction.

Objectives

In this step, the study was to investigate and affirm the teaching and learning components, problems and methods for business reading instruction by using Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.

Research Methodology

The following research methodology was conducted.

1. Conduct the focus group discussion with at least 5 highly experienced business English lecturers who gave the ideas on business reading instruction and shared their problems found in their teaching, other English lecturers or any other experts in teaching business English reading to investigate and affirm the teaching and learning components and methods for business reading by using Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking.
2. Analyze the data retrieved from the focus group discussion by content analysis and present in descriptive composition.

Data Sources

7-10 Lecturers or experts in teaching business English reading were interviewed in group.

Research Instrument

In this step, the research instrument was Focus Group Discussion Form with questions in a note-taking form on three topics that were business reading, Concept-Oriented Reading Instruction (CORI) and project-based learning. Open-ended questions were also created and given to the interviewees. Record the information by using a note-taking form and a quality play-back equipment or voice-recorder.

Process of Research Instrument Development

The research instrument used in this study was as follows:

1. Focus Group Discussion Form with Note-taking Form was used in the semi-structured interview investigating English lecturers and experts' problems found in teaching, opinions on reading strategies used in business English instruction and the role of CORI together with project-based learning in business English reading instruction.

The processes to develop Focus Group Discussion Form were described in details as the following:

1. Focus Group Discussion Form with Note-taking Form

Focus Group Discussion Form with Note-taking Form was constructed and developed as the following procedures:

- 1.1 Find out the related documents according to theories, principles, concepts, processes, points of interview and related literature on constructing the content of Focus Group Form.

- 1.2 Consider the interviewees' qualifications.

- 1.3 Consider the main aspects, topics and sub-topics used in constructing a form, analyze and create the form with table of questions.

- 1.4 Submit the designed Focus Group Discussion Form to the advisor for verification in terms of validity and appropriateness and then revise it.

- 1.5 Verify the revised Focus Group Discussion Form by 5 experts who assessed the forms in terms of the content validity. The Index of Item Objective Congruence: IOC was used to assess the items of the questionnaire or the list of questions according to the contents and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

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

IOC represented the congruence between the objectives to construct questionnaire or form and statements in the questionnaire.

ΣR represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of Focus Group Discussion Form, the Item Objective Congruence was between 0.6 and 1.00 indicating that the items were valid and congruent with the objectives of assessment.

1.6 Revise the Focus Group Discussion Form in accordance with the experts' recommendations for appropriateness, quality and accuracy.

1.7 Use the well-revised Focus Group Discussion Form in the semi-structured interview with a group of 7-10 Lecturers or experts in teaching business English reading.

Participants

The participants in this phase were as follows: the 5 highly experienced business English lecturers who have been teaching business English reading for more than ten years.

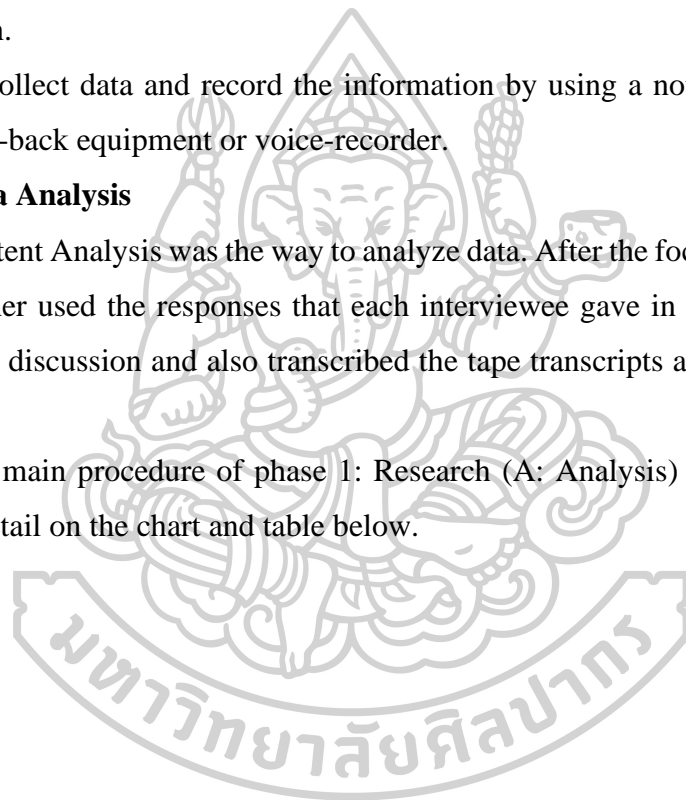
Data Collection

1. Contact and ask for the Lecturers or business English teaching experts' permission for making an appointment.
2. Inform and send the interview form to the experts before the appointment date.
3. Run the semi-structured interview with the experts. Focus Group Discussion Form was employed in focus group discussion with the highly professional experts in business English reading teaching to collect the qualitative data for model design and construction.
4. Collect data and record the information by using a note-taking form and a quality play-back equipment or voice-recorder.

Data Analysis

Content Analysis was the way to analyze data. After the focus group discussion, the researcher used the responses that each interviewee gave in note-taking form for focus group discussion and also transcribed the tape transcripts and then prepared the report.

The main procedure of phase 1: Research (A: Analysis) and every step were shown in detail on the chart and table below.



The main procedure of phase 1: Research (A: Analysis) was concluded and demonstrated in the chart below.

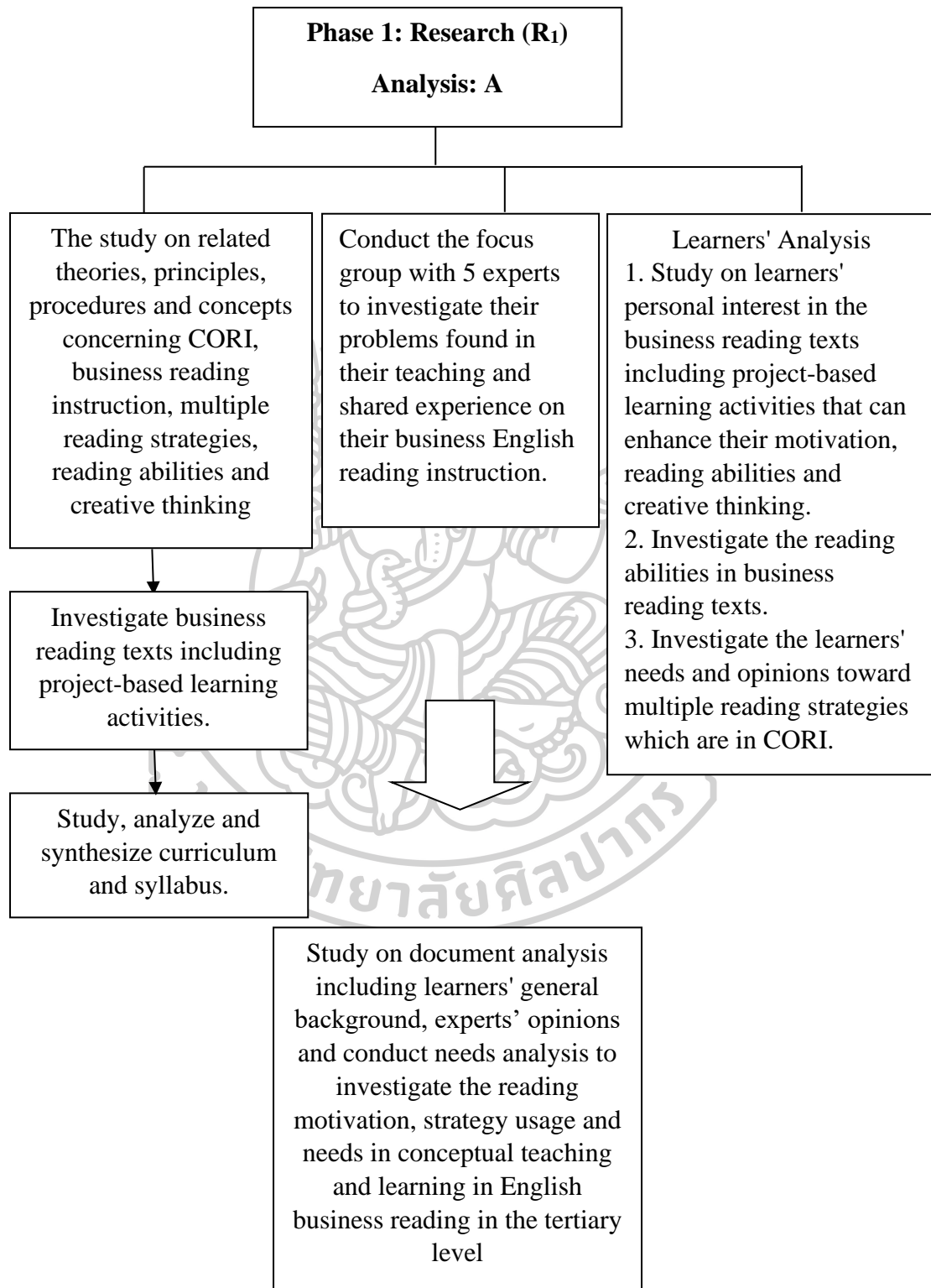


Figure 6 Procedure of Phase 1: Research (A: Analysis)

Table 11 Summary of Sub-steps in Research: R₁

Sub-steps of Research: R ₁	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>Phase 1 Sub-step 1.1 Documentary research involving the exploration and study on general background information and related documents including the problems found on current business English teaching and learning contexts, principles, theories, researches, national policies on education, curriculum, and course syllabus; conduct learners' needs analysis to investigate the reading motivation, strategy usage and needs in conceptual teaching and learning in English business reading in the tertiary level</p>	<p>To explore fundamental concepts, principles, theories, researches, learners' general background information including reading motivation, strategy usage, opinions and needs in conceptual teaching and learning found in business reading instruction and to conduct needs analysis that is used to design and develop the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.</p>	<p>1. Study, analyze and synthesize related document, concepts, theories, researches, policies on Thai education, learning objectives in tertiary level including curriculum and syllabus. 2. Explore theories, principles, and related literature for developing the business English reading instruction model, Concept-oriented Reading Instruction, multiple reading strategies, project-based learning, reading abilities and creative thinking. 3. Explore the students' needs, conditions and problems found in their reading process.</p>	<p>1. Related information and policies on Thai Education System to develop students' English reading abilities and essential skills in 21st century 2. Information on curriculum and course syllabus 3. Data, concepts and learning theories, and other related literature reviews on instructional design</p>	<p>1. A Document Analysis Form 2. A Needs Analysis Questionnaire</p>	<p>1. Content analysis 2. Statistical analysis: Percentage, mean and standard deviation</p>

Sub-steps of Research: R ₁	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>Sub-step 1.2 The study, analysis and synthesis on principles, theories, definitions, concepts, procedures and literature concerning CORI, business reading instruction, multiple reading strategies, project-based learning, reading abilities and creative thinking</p>	<p>To explore, define, analyze and synthesize the procedures of CORI, multiple reading strategies, project-based learning, reading abilities and creative thinking so as to develop the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.</p>	<p>1. Study, analyze and synthesize the principles, theories, definitions, concepts and researches relating to CORI, multiple reading strategies, business reading instruction, project-based learning, reading abilities and creative thinking. 2. Study, analyze and synthesize the procedures or strategies used in CORI, project-based learning, multiple reading strategies, reading abilities and creative thinking. 3. Employ the general background information, theories and researches that have been explored and studied as well as learners' needs analysis to synthesize, determine and define the components of conceptual framework for business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking.</p>	<p>1. Related research on theories, principles and concepts relating to CORI, multiple reading strategies, business reading instruction, project-based learning, reading abilities and creative thinking 2. Related research on theories and concepts relating to develop the business reading instructional model through CORI, project-based learning, reading abilities and creative thinking</p>	<p>Document Synthesis Form</p>	<p>Content analysis</p>

Sub-steps of Research: R ₁	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>Sub-step 1.3 The investigation and affirmation on the teaching and learning methods for business reading by using Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. The focus group discussion or semi-structured interview is conducted in order to investigate experts or experienced business English lecturers' problems found in teaching, opinions on reading strategies used in business English instruction and the role of CORI together with project-based learning in business English reading instruction.</p>	<p>To investigate and affirm the teaching and learning components, problems, and methods for business reading instruction by using Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.</p>	<p>1. Conduct the focus group discussion with at least 5 highly experienced business English lecturers who gave the ideas on business reading instruction and shared their problems found in their teaching, other English lecturers or any other experts in teaching business English reading to investigate and affirm the teaching and learning components and methods for business reading by using Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking. 2. Analyze the data retrieved from the focus group by content analysis and present in descriptive composition.</p>	<p>7-10 Lecturers or experts in teaching business English reading</p>	<p>Focus Group Discussion Form with questions in a note-taking form on three topics: Business reading, Concept-Oriented Reading Instruction (CORI), and project-based learning</p>	<p>Content analysis</p>

Phase 2: Develop 1 (D1: Design and Development)

Based on the information of needs analysis, related documentary research analysis and focus group discussion form gained in Phase 1, the researcher designed a draft of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students and then submitted to the 5 experts to evaluate and validate the draft model which had been revised, developed and approved. Then other research instruments for data collection were created, developed and submitted to the experts for validation and appropriateness. The revision and improvement of both draft model and research instruments were made for further implementation. The pilot study was conducted with a group of 3, 16 and 27 students who had similar characteristics to samples of the study in order to investigate the validity of draft model and then revised it.

Objectives

In this phase, the study aimed to:

1. design and develop business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.
2. create and develop research instruments for collecting data.
3. validate the business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking as well as research instruments.

Procedures

The following were the procedures to design, develop and verify the quality and efficiency of business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking:

1. Design and develop business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. Related theories, principles and steps which were all information in Phase 1 were discovered and synthesized to create the conceptual framework of the model.

2. Design and develop research instruments used in data collection. Research instruments were created as follows:

- 2.1 Business reading draft model and instruction manual
- 2.2 Business reading materials for 8 units and exercises after each unit
- 2.3 Pre-test and post-test
- 2.4 Lesson plans with 8 units for business reading instruction through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking
- 2.5 Reading log
- 2.6 Peer- and Teacher-assessment rubric (mini-project)
- 2.7 Creative thinking questionnaire (mini-project), (Adapted from Barak & Doppelt, 2000)

3. Verify the quality of the model and research instruments. After the model was designed, constructed and used, it was evaluated by using the efficiency formula $75/75$. Meanwhile, other research instruments were evaluated on content validity by 5 experts in teaching methodology and assessment.

Process of Research Instrument Development

The research instruments used in this study were as follows:

2.1 Business Reading draft model and Instruction Manual

Business reading draft model and instruction manual were designed and created according to the following processes:

2.1.1 Study, analyze and synthesize the theories, principles, teaching procedures, and related literature on constructing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking and also instruction manual.

2.1.2 Determine the components of the model and the learning outcomes after using the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning. The components of the model were presented in the following five steps:

Step 1. Activating students' interest, background knowledge and activity on reading engagement

1. The teacher provided the relevant texts and some sample pictures to let the students engage in hand-on activities.
2. The teacher helped the students with the difficult vocabulary or the students noted down important vocabulary found in the texts.
3. The teacher formed the questions to let the students engage and connect to their prior knowledge by asking them to observe the things they could see or experience. They might be the pictures, the graphic use, the model, the color selection that encouraged them to try to find more information on that topic later.
4. The needs were analyzed.

Step 2. Motivating the students and searching information

1. Let the students search many kinds of text for information and find out their own interesting one.
2. The goal was set and the topics for the texts were selected. The teacher asked the students to use the information they had found and read to prepare for their project.

Step 3. Action-taking and ability to use the reading strategies

1. Reading strategies were modeled to the students.
2. The teacher let the students read the passages and practice using the multiple reading strategies which were predicting the content (relate to the readers' background knowledge), using the context clues, rereading to clarify a possible misunderstanding, finding the main ideas, making inferences, taking notes, summarizing, identifying text structure, and mapping the concepts to integrate information.

Step 4. Running the project and presentation

1. The project tasks were carried out and planned by asking the students to work in groups and brainstorm the project details on each topic to choose the best ideas after making some agreement.
2. The students planned and designed the structure of the projects and then created the projects which were all in the form of mini-projects.

3. The students helped modify thinking pattern, built prototypes and made some changes.

4. The students planned the project presentation.

5. The students had a chance to communicate by sharing their ideas about mini-projects and presenting to the class.

Step 5. Assessment

1. The teacher evaluated the students' reading comprehension abilities by using the post-test.

2. The teacher evaluated the students' strategy use which was reflected on reading log.

3. The students' mini-projects were evaluated by using both peer-assessment and teacher-assessment.

4. The teacher evaluated the students' creative thinking by using Creative Thinking Questionnaire. The students used self- and peer-assessment to evaluate their creativity.

2.1.3 Create the instruction manual of the model.

2.1.4 Submit the business reading draft model and the instruction manual to the advisor for verification in terms of validity and appropriateness as well as recommendations and then revised it.

2.1.5 Verify the revised business reading draft model and the instruction manual by 5 experts who assessed the quality and appropriateness in terms of the content validity. The business reading draft model together with the instruction manual were submitted to the experts to evaluate the congruence of the model with other instruments such as the instruction manual, and lesson plans with 8 units. The Quality Assessment Forms were created in 5-point rating scale of which mean (\bar{x}) and standard deviation (SD) were used in congruence evaluation by the experts to validate the content based on the following criteria:

Score rated 5	=	the highest congruence
Score rated 4	=	high congruence
Score rated 3	=	average congruence
Score rated 2	=	low congruence
Score rated 1	=	the lowest congruence

According to Nillapun (2015: 196) Mean scores used in interpreting the content validity of business reading draft model and instruction manual were interpreted according to the following criteria:

Mean scores from 4.50 to 5.00	=	the highest congruence/level
Mean scores from 3.50 to 4.49	=	high congruence/level
Mean scores from 2.50 to 3.49	=	average congruence/level
Mean scores from 1.50 to 2.49	=	low congruence/level
Mean scores from 1.00 to 1.49	=	the lowest congruence/level

The criteria were used to interpret the mean scores indicating the valid congruence should reach at 3.50 or more and the standard deviation (SD) less than 1.00 (Nillapun, 2015: 179).

Regarding the findings on congruence of content validity in terms of probability and appropriateness on principles, objectives, procedures and assessment of the draft model, the mean score was between 4.00 and 4.80 and the standard deviation (SD) was between 0.00 and 0.55 indicating that the draft model had the high and highest congruence and was valid for further implementation.

2.1.6 Revise the business reading draft model in accordance with the experts' recommendations for appropriateness, quality and accuracy before using it in the tryout.

Brahmawong (2013) gave the recommendation on developmental testing. To investigate the effectiveness of the model, two stages of developmental testing which were Tryout and Trial Run (Implementation) were conducted. The tryout was conducted by using the formula of E_1/E_2 required for trying out of efficiency of the process (E_1) and the product (E_2). The tryout was operated in three stages: Individual Testing (1:1); Group Testing (1:10); and Field Testing (1:100) with a group of 3, 16, and 27 students to investigate the quality and efficiency of the draft model. The participants of the pilot study had to have similar characteristics with the samples and enroll in Business English course in the first semester of 2017. They might be both English major and minor students who had the variety of reading skills. The students used the model to develop their reading abilities and creative thinking. The model was evaluated on its efficiency by employing the standard efficiency formula $75/75$ (Brahmawong, 2013). In the study, the standard criteria of $75/75$ was used and measured from the tests of each unit in lesson plans.

Evaluation of the Model Efficiency

Objectives

To evaluate the efficiency of the business reading draft instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, revised according to both advisor's and experts' recommendations and conducted a tryout with a group of students who had the similar characteristics to the samples before implementation in the experiment.

Participants

The participants of the tryout study were operated in three stages: Individual Testing (1:1); Group Testing (1:10); and Field Testing (1:100) with a group of 3, 16, and 27 students to investigate the quality and efficiency of the draft model. All of them were third- and fourth-year students of the Archaeology Faculty who were studying Business English course in the first and second semester of 2017. They were both English major and minor students.

Methodology

The tryout study was conducted to evaluate the efficiency of draft model of which process (E_1) and product (E_2) were taken into account using the standard efficiency formula 75/75 (Brahmawong, 2013). The procedures were as follows:

1. The ethical clearance was sent earlier to the approval of university.
2. The tryout was carried out in Business Reading course with 3, 16 and 27 students as participants in the first and second semester of 2017. The experimental study took 10 weeks with three periods a week. The study lasted totally 30 hours.
3. The teacher oriented the students to the tryout study which consisted of objectives, teaching and learning methods with reading activities for each session including the role of teacher as a researcher and students as participants of the study, the data collection with research instruments and assessment.
4. The students took the pre-test which consisted of total 40 items with 4 multiple choices for each. The test lasted one hour.
5. The consent form was distributed to the participants to sign.

6. Lesson plans for Concept-Oriented Reading Instruction (CORI) together with project-based learning with learning activities to create the project were employed and administered.

7. Business reading exercises were given to the participants as drills to practise and develop their reading abilities.

8. During each session, the teacher as a researcher observed and recorded the students' performance and motivation while working in groups.

9. The post-test was also taken and a reading log or self-reflection form was distributed to the students to fill in at the end of each session.

10. The teacher distributed peer- and teacher-assessment rubric (mini-project) to the students to assess their group performance through mini-projects. At the same time, the teacher also evaluated each group's mini-project.

11. At the end of course, creative thinking questionnaire was used to assess the students' creativity through their mini-projects.

Data Collection

Regarding further development on the instructional model and research instrument, the data was collected from the following instrument:

1. Business reading draft instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for the undergraduate students and instruction manual.

2. Business reading materials for 8 units and exercises after each unit

3. Lesson plans for business reading instruction through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities

4. Pre-test and post-test

5. Reading log

6. Peer- and Teacher-assessment rubric (mini-project)

7. Creative thinking questionnaire (mini-project), (Adapted from Barak & Doppelt, 2000)

Data Analysis

The data gained from data collection was analyzed as follows:

1. The evaluation on the efficiency of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities by using the standard efficiency formula 75/75 (Brahmawong, 2013).

In finding the efficiency of model, there are 2 formulas used to evaluate the values of E1/E2 which were presented as follows:

To evaluate the efficiency of the process (E₁), use Formula 1.

$$\text{Formula 1} \quad E_1 = \left[\frac{\sum x}{\frac{N}{A}} \right] \times 100$$

E₁ represents Efficiency of the process

∑x represents Accumulated scores of formative evaluation gained from 8 exercises after 8 units

N represents Number of 10 students

A represents Full scores of formative evaluation such as total scores from 8 exercises after 8 units

To evaluate the efficiency of the process (E₂), use Formula 2.

$$\text{Formula 2} \quad E_2 = \left[\frac{\sum y}{\frac{N}{B}} \right] \times 100$$

E₂ represents Efficiency of the products

∑y represents Accumulated scores of summative evaluation or post-test

N represents Number of 10 students

B represents Full scores of summative evaluation or scores from post-test

2. The mean scores of pre-test and post-test of business reading abilities were measured and compared by using paired sample t-test before and after using the model in the tryout. The findings were shown on reliability, difficulty index and item discrimination.

3. The mean scores from each exercise and the use of multiple reading strategies using reading log were evaluated and measured for the model's content validity and reliability.

4. The mean scores of creative thinking questionnaire (mini-project) were evaluated by both teammates and teacher to measure the students' lateral thinking and vertical thinking. The students assessed their peers' thinking layers and product whereas the teacher evaluated only creativity shown through the students' product.

5. The information in reading logs used to investigate the students' strategy use were evaluated as both quantitative and qualitative data and also analyzed in the form of content analysis.

Findings on Developmental Testing of draft model efficiency

According to Brahmawong (2009), the tryout with three stages were conducted and the findings on draft model efficiency were presented as follows:

In Individual Testing (1:1), 3 students who had the similar characteristics to the samples were employed in this stage. The following is the table of findings on efficiency of the draft model in individual testing stage.

Table 12 Findings on Efficiency of Draft Model in Individual Testing Stage (1:1)

Efficiency	Number of Students	Total scores	\bar{X}	S.D.	Efficiency Value
Process (E ₁)	3	120	83.33	10.50	69.44
Product (E ₂)	3	40	28.67	6.51	71.67

In the first stage of tryout, the findings on efficiency (E₁/E₂) of business reading draft model were at 69.44/71.67 which meant that the draft model needed some revision.

In Group Testing (1:10), 16 students who had the similar characteristics to the samples were employed in this stage. The following is the table of findings on efficiency of the draft model in Group Testing stage.

Table 13 Findings on Efficiency of Draft Model in Group Testing Stage (1:10)

Efficiency	Number of Students	Total scores	\bar{X}	S.D.	Efficiency Value
Process (E ₁)	16	120	85.56	5.96	70.88
Product (E ₂)	16	40	28.93	6.85	72.34

In the second stage of tryout, the findings on efficiency (E_1/E_2) of business reading draft model were at 70.88/72.34 which meant that the draft model still needed some revision.

In Field Testing (1:100), 27 students who had the similar characteristics to the samples were employed in this stage. The following is the table of findings on efficiency of the draft model in Field Testing stage.

Table 14 Findings on Efficiency of Draft Model in Field Testing Stage (1:100)

Efficiency	Number of Students	Total scores	\bar{X}	S.D.	Efficiency Value
Process (E_1)	27	120	89.07	3.68	74.23
Product (E_2)	27	40	30.04	3.07	75.09

In the final stage of tryout, the findings on efficiency (E_1/E_2) of business reading draft model were at 74.23/75.09 which meant that the draft model needed a little revision before the implementation.

4. Revise the draft model and research instruments for further implementation.

2.2 Business reading materials for 8 units and exercises after each unit

Business reading materials for 8 units and exercises after each unit were designed to enhance the students' reading abilities and let them drill the reading strategy use. The materials were categorized into themes based on the survey on needs and topics the students liked to read so each reading text was carefully chosen and prepared for the instruction. The following were the processes to develop the materials and exercises:

2.2.1 Study the course description of business English subject, the theories, principles and procedures of business English reading instructional model and analyzed the contents, learning objectives and students' needs on topics to learn that led to the development of business reading materials for 8 units and exercises after each unit used in business reading instruction through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities.

2.2.2 Design and construct the business reading materials for 8 units and the test specification of exercises after each unit corresponding to the learners' needs analysis data on themes gained from Phase 1 and made use of these data to create contents, reading strategy instruction and teaching and learning activities in business reading

materials for 8 units and exercises after each unit. Then construct the test with 15 items in each reflecting the students' reading abilities.

The needs analysis questionnaire was created in 4-point rating scale of which mean (\bar{x}) and standard deviation (SD) were used to select the themes the students were interested in based on the following criteria:

Score rated 4	=	Strongly needed
Score rated 3	=	Needed
Score rated 2	=	Less needed
Score rated 1	=	No needs

Mean scores used in selecting themes based on students' needs were interpreted according to the following criteria:

Mean scores from 3.50 to 4.00	=	highest level of needs
Mean scores from 2.50 to 3.49	=	high level of needs
Mean scores from 1.50 to 2.49	=	average level of needs
Mean scores from 1.00 to 1.49	=	low level of needs

The topics which got the high and highest needs were chosen to be part of creating business reading materials and their exercises.

2.2.3 Submit the business reading materials for 8 units and exercises after each unit to the advisor for verification in terms of content validity and appropriateness as well as recommendations and then revised them.

2.2.4 Verify the revised business reading materials for 8 units and exercises after each unit by 5 experts who assessed the content validity and appropriateness. The Index of Item Objective Congruence: IOC was used to assess the contents of materials and items in exercises according to the contents and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for "Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed"

0 stands for "Questionable OR Not Sure."

-1 stands for "Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed"

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

$$\text{IOC} = \frac{\Sigma R}{N}$$

IOC represented the congruence between the objectives to construct questionnaire or form and statements in the questionnaire.

ΣR represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of business reading materials for 8 units and exercises after each unit, the Item Objective Congruence was between 0.8 and 1.00 indicating that the items were valid and congruent with the objectives of assessment.

2.2.5 Revise and rewrite the contents, reading strategy instruction and teaching and learning activities in business reading materials for 8 units and exercises after each unit in accordance with the experts' recommendations for appropriateness, quality and accuracy.

The themes mostly needed and used in the study are divided into four main themes comprising products or services, marketing, advertising, and customers. Besides, each main theme is subdivided into four subtopics which are brands, market research, selling, and customer service.

The testing instrument which was an exercise after each unit used in the study were also created in the form of multiple choices and gap filling based on these eight topics and reading strategies instructed in class. All of which have fifteen items in total and the number of items for each topic can be counted according to the students' needs. The time spent for doing the exercise in each unit was also determined and given to the students to complete all the items in the exercise. However, all of these were the criteria

that the researcher used in considering and forming the test specification of exercise after unit.

The following show the test specification of exercises after units.

Table 15 Test Specification of Exercises after Units

Tests	Reading Abilities	No. of Items	Time allowed	Technique /Task Type
Exercise after each unit		15 items each	30 minutes each	Multiple-Choice items
Unit 1 Products / Services	- Predict the content (Relating to the background knowledge)	1		Gap filling
Unit 2 Brands				
Unit 3 Marketing	- Use the context clues	3		
Unit 4 Market Research / Survey	- Reread to clarify a possible Misunderstanding	1		
Unit 5 Advertising	- Find the main ideas	3		
Unit 6 Selling	- Make inferences	1		
Unit 7 Customers	- Summarize	1		
Unit 8 Customer Service	- Identify text structure	1		
	- Take notes and	1		
	- Map the concepts	3		

2.3 Pre-test/Post-test

Pre-test/Post-test were created and used to evaluate the students' reading abilities. Before using the instructional model, pre-test was distributed to the students for assessing their reading abilities. During the drill, the students practiced to use the reading strategies to enhance their reading abilities. Once again, post-test which had the same contents as pre-test was given to the students for assessing their development on reading proficiency. Both pre-test and post-test were developed as follows:

2.3.1 Study the principles, theories, methods, lesson plans and related documents relating to the development of English test and assessment.

2.3.2 Design and construct pre-test/post-test with the table of test specification corresponding to the contents in lesson plans and learning objectives of the business English reading instructional model. The test was created with 50 items and 4 multiple choices for each. There was only one right answer in each item.

2.3.3 Submit the pre-test/post-test with the table of test specification to the advisor for verification in terms of content validity and appropriateness as well as recommendations and then revised them.

2.3.4 Verify the revised pre-test/post-test with the table of test specification by 5 experts who assessed the content validity and appropriateness. The Index of Item Objective Congruence: IOC was used to assess the items of the test and its specification according to the contents and strategies that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the test item **can** test the reading strategy”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the test item **cannot** test the reading strategy”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

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

IOC represented the congruence between the reading strategy used to construct the test.

$\sum R$ represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of pre-test/post-test, the Item Objective Congruence was between 0.4 and 1.00 indicating that some items less than 0.5 were cut out and remained the items which were higher than or equal to 0.5.

After the test was submitted to the 5 experts for content validity and appropriateness, findings on reliability, difficulty index (p) and item discrimination of the test were investigated and shown. (See Appendix C)

2.3.5 Revise the pre-test and post-test with the table of test specification in accordance with the experts' recommendations for appropriateness, quality and accuracy.

2.3.6 The revised pre-test and post-test were used in a tryout with a group of 16 students who had similar characteristics to the samples of the study.

2.3.7 After the tryout, the results were used to assess the item difficulty and item discrimination of test items. The appropriate item difficulty should be selected from 0.20-0.80 (Nillapun, 2012).

The Difficulty Index (p) were ranged from 0.63-0.75 and Item Discrimination (r) from 0.25-0.50. (See appendix D)

2.3.8 Analyze the test items for reliability by using the KR-20 formula of Kuder and Richardson (Nillapun, 2012). The reliability (KR20) was at 0.962. (See appendix D) Then further use the revised tests in the processes of instructional model.

However, the revised test with details of test specification was shown below.

Table 16 Test Specification on Reading Strategies (Pre-test/Post-test)

Reading Abilities	No. of Items (40 items)	Test Type/ Technique	Weight %	Scoring
Reading Abilities - Predict the content (Relating to the background knowledge) - Use the context clues - Find the main ideas - Reread to clarify a possible misunderstanding - Make inferences - Take notes - Summarize the text - Identify text structure - Map the concepts and integrate information	Item No.1, 24, 31, 32 Item No.4, 5, 7, 18, 20, 23 Item No.3, 19, 21, 34, 35 Item No.2, 10, 16, 33 Item No.8, 17, 36, 38 Item No.27, 28, 29, 30, 40 Item No.6, 9, 22, 25 Item No.11, 26, 37 Item No.12, 13, 14, 15, 39	Passage/ Multiple- Choice items	10 15 12.5 10 10 12.5 10 7.5 12.5	0-1
Tests	Reading Abilities	No. of Items	Time allowed	Technique /Task Type
Pre-test/Post-test - Passage 1 and Passage 2	- Predict the content (Relating to the background knowledge) - Use the context clues - Find the main ideas - Reread to clarify a possible misunderstanding	40 items 30 items (15 items each) 2 6 3 3	90 minutes	Multiple -Choice items Matching items

Tests	Reading Abilities	No. of Items	Time allowed	Technique /Task Type	
- Passage 3	- Make inferences	2			
	- Take notes	4			
	- Summarize	4			
	- Identify text structure	2			
	- Map the concepts and integrate information	4			
			10 items		
	- Predict the content (Relating to the background knowledge)	2			
	- Find the main ideas	2			
	- Reread to clarify a possible misunderstanding	1			
	- Make inferences	2			
- Identify text structure	1				
- Map the concepts and integrate information	2				

The test emphasizes on contents based on the following business topics:

- Products / Services - Advertising - Brands - Customer Service
- Marketing - Customers - Market Research / Survey - Selling

Below is the number of items in pre- and post-tests. The reading strategies in each passage reflecting on reading abilities were also shown.

The following reading abilities have been taught and evaluated:

1. Predict the content (Relating to the background knowledge)
2. Use the context clues
3. Find the main ideas
4. Reread to clarify a possible misunderstanding
5. Make inferences
6. Take notes
7. Summarize
8. Identify text structure
9. Map the concepts and integrate information

2.4 Lesson plans with 8 units for business reading instruction through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities

Lesson plans were used for teaching 8 units of business English reading. They were developed in themes, each of which lasted 3 hours a week. A lesson plan comprised conceptual theme, duration, linguistic content, reading comprehension strategy use, goals and learning objectives, teaching and learning materials and activities, as well as evaluation. The processes to develop lesson plans were presented in detail as follows:

2.4.1 Study the course description of business English subject and analyze the contents, learning objectives that led to the development of business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities.

2.4.2 Design and construct the table of content specification corresponding to the learners' needs analysis data gained from Phase 1 and principles of business English reading through Concept-Oriented Reading Instruction (CORI) and project-based learning and made use of these data to create teaching and learning activities in lesson plans for every unit.

2.4.3 Submit the lesson plans with the table of content specification to the advisor for verification in terms of content validity and appropriateness as well as recommendations and then revised them.

2.4.4 Verify the revised lesson plans with the table of content specification by 5 experts who assessed the content validity and appropriateness. The Index of Item Objective Congruence: IOC was used to assess the contents of materials and items in lesson plans according to the contents, reading strategies and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for "Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed"

0 stands for "Questionable OR Not Sure."

-1 stands for "Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed"

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

$$\text{IOC} = \frac{\Sigma R}{N}$$

IOC represented the congruence between the objectives to construct questionnaire or form and statements in the questionnaire.

ΣR represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of the lesson plans with the table of content specification of 8 units, the Item Objective Congruence was between 0.8 and 1.00 indicating that the contents were valid and congruent with the objectives of assessment.

2.4.5 Revise and rewrite the themes, contents and teaching and learning activities in lesson plans in accordance with the experts' recommendations for appropriateness, quality and accuracy.

2.5 Reading Log (Reflection form)

Reading log was used as a reflection form for the students to record the processes of their reading comprehension strategy use in the assessment stage. The teacher could track and understand the reading volume through the use of students' reading strategies and the students also tracked and learned their reading level. The following were the processes to design and construct a reading log:

2.5.1 Study a method to construct a reading log from related documents.

2.5.2 Determine the components of topics and reading strategies used in the business reading instructional model.

2.5.3 Design and create a reading log used during and after the instruction.

2.5.4 Submit the reading log to the advisor for verification in terms of content validity and appropriateness as well as recommendations and then revised it.

2.5.5 Verify the revised reading log by 5 experts who assessed the content validity and appropriateness. The Index of Item Objective Congruence: IOC was used to assess the contents of the reading log and items according to the contents, reading strategies and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

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

IOC represented the congruence between the objectives to construct the form and statements of the log.

$\sum R$ represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of the reading log, the Item Objective Congruence was between 0.8 and 1.00 indicating that the contents were valid and congruent with the objectives of assessment.

2.5.6 Revise the reading log according to the experts' recommendations for appropriateness, quality and accuracy.

2.6 Peer- and Teacher-assessment rubric (mini-project)

In the study, every mini-project was compiled in a portfolio. Portfolio's components were also created and employed to collect data in terms of mini-projects. Portfolios were in the form of writing materials, videos, drawings and many more.

Using portfolio becomes a new teaching method to assess the students' achievements in project-based learning. The portfolio can be employed and recorded in the activities so as to assess both the teacher's teaching and students' learning process rather than the ending product. Moreover, understanding, thinking and teamwork can be reflected through the students' portfolio. Every learning process is recorded and shown about the students' thinking, analyzing, synthesizing, cooperating, interacting, producing, designing and creating the product (Barak and Doppelt, 2000). The processes to construct a peer- and teacher-assessment rubric for mini-projects were presented as follows:

2.6.1 Study the stages in creating a project and related documents on constructing peer- and teacher-assessment rubric.

2.6.2 Analyze and synthesize the components of procedures in project-based learning together with cooperative learning.

2.6.3 Design and create a peer- and teacher-assessment rubric for mini-projects.

2.6.4 Submit the peer- and teacher-assessment rubric for mini-projects to the advisor for verification in terms of content validity and appropriateness as well as recommendations and then revised them.

2.6.5 Verify the revised peer- and teacher-assessment rubric for mini-projects by 5 experts who assessed the content validity and appropriateness. The Index of Item Objective Congruence: IOC was used to assess the contents of the peer- and teacher-assessment rubric for mini-projects and items according to the contents, reading strategies and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

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

IOC represented the congruence between the objectives to construct the form and statements of the rubric.

$\sum R$ represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

In terms of the findings on content validity of the peer- and teacher-assessment rubric for mini-projects, the Item Objective Congruence was between 0.8 and 1.00 indicating that the contents were valid and congruent with the objectives of assessment.

2.6.6 Revise the peer- and teacher-assessment rubric for mini-projects according to the experts' recommendations for appropriateness, quality and accuracy.

2.7 Creative thinking questionnaire (mini-project), (Adapted from Barak & Doppelt, 2000)

In creative thinking assessment, a creative thinking questionnaire was adapted and created according to Creative Thinking Scale (CTS) which is a tool constructed by Barak & Doppelt. It was employed in the study to evaluate the students' creative thinking abilities. According to Doppelt (2000), a creative thinking scale was created, developed in order to evaluate the students' portfolios. The ideas and design shown in the students' products were collected in their portfolio which development of thinking skills was taken into account. In terms of types of thinking, lateral thinking and vertical thinking are essential and support each other. (De Bono, 1986) Lateral thinking occurs during working on the project which is on the learning process. The students think about various solutions for lots of considered alternatives. Then vertical thinking involves the decision making to select the best solution and then develop it. Therefore, it can be seen that both lateral and vertical thinking are very important process in creative thinking. According to Doppelt (2004), however, in Creative Thinking Scale, thinking layers are divided into four layers which are:

(1) Awareness of one's own thinking: the first layer represents the students' awareness on thinking as a skill that can be prepared and developed through the logical thinking, inquiry and opinion sharing;

(2) Observation of one's own thinking: the second layer of thinking involves with observation on the consequences after the action taking and choice making. The consideration is made and alternatives compared;

(3) Thinking strategy: the third layer prepares the use of thinking tools to organize things and set the goals; and

(4) Reflection upon thinking: the fourth layer encourages the students to use the thinking tools to design and organize tasks systematically to be ready for implementation. At this layer, the students' reflective thinking is considered and their own thinking evaluated.

The questionnaire as a rubric was developed according to the following processes:

2.7.1 Study a method to construct a rubric and study theories on creative thinking and how to assess it from many related documents.

2.7.2 Analyze and synthesize the criteria that were used to assess the students' creative thinking from documents, and other literature.

2.7.3 Design and create a creative thinking questionnaire (mini-project) which was adapted from Creative Thinking Scale (CTS), a tool constructed by Barak & Doppelt, and integrated with product construction. However, the rubric was created into 2 parts which were 1) thinking layers in creating the project and 2) product construction: design and evaluation. The students used both parts to assess their peers' performance on creativity with regard to process and outcome: thinking layers; and product construction whereas the teacher employed only part 2 to evaluate the students' creative outcome which was the product they had created.

2.7.4 Submit a creative thinking questionnaire (mini-project) to the advisor for verification in terms of content validity and appropriateness as well as recommendations and then revised it.

2.7.5 Verify the revised a creative thinking questionnaire (mini-project) by 5 experts who assessed the content validity and appropriateness. The Index of Item Objective Congruence: IOC was used to assess the contents of the creative thinking

assessment rubric (mini-project) and items according to the contents, reading strategies and objectives that needed to be assessed. The assessment on content validity was based on the score ranged from -1 to +1 as shown below:

+1 stands for “Absolutely Sure that the item **can** reflect on the congruence of the objectives or variables that need to be assessed”

0 stands for “Questionable OR Not Sure.”

-1 stands for “Absolutely Sure that the item **cannot** reflect on the congruence of the objectives or variables that need to be assessed”

The following was the formula used to calculate the Index of Item Objective Congruence (IOC):

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

IOC represented the congruence between the objectives to construct the form and statements of the questionnaire.

$\sum R$ represented the total scores of experts' agreement

N represented the total number of experts

The items indicating the valid congruence should be higher than or equal to 0.5, whereas the items that were lower than 0.5 were cut out or revised (Nillapun, 2015: 176-177).

Regarding the findings on content validity of the creative thinking questionnaire (mini-project), the Item Objective Congruence was between 0.8 and 1.00 indicating that the contents were valid and congruent with the objectives of assessment.

2.7.6 Revise a creative thinking questionnaire (mini-project) according to the experts' recommendations for appropriateness, quality and accuracy.

After all research tools were designed, created, validated, and revised, they were used in tryout stage. Then the efficiency of the model was investigated and evaluated. After the evaluation of model efficiency, some revisions were made until its values met the set criteria at 75/75 (E_1/E_2). This showed that the model was ready for the next phase (Implementation Stage).

The following chart describes all steps of Phase 2:

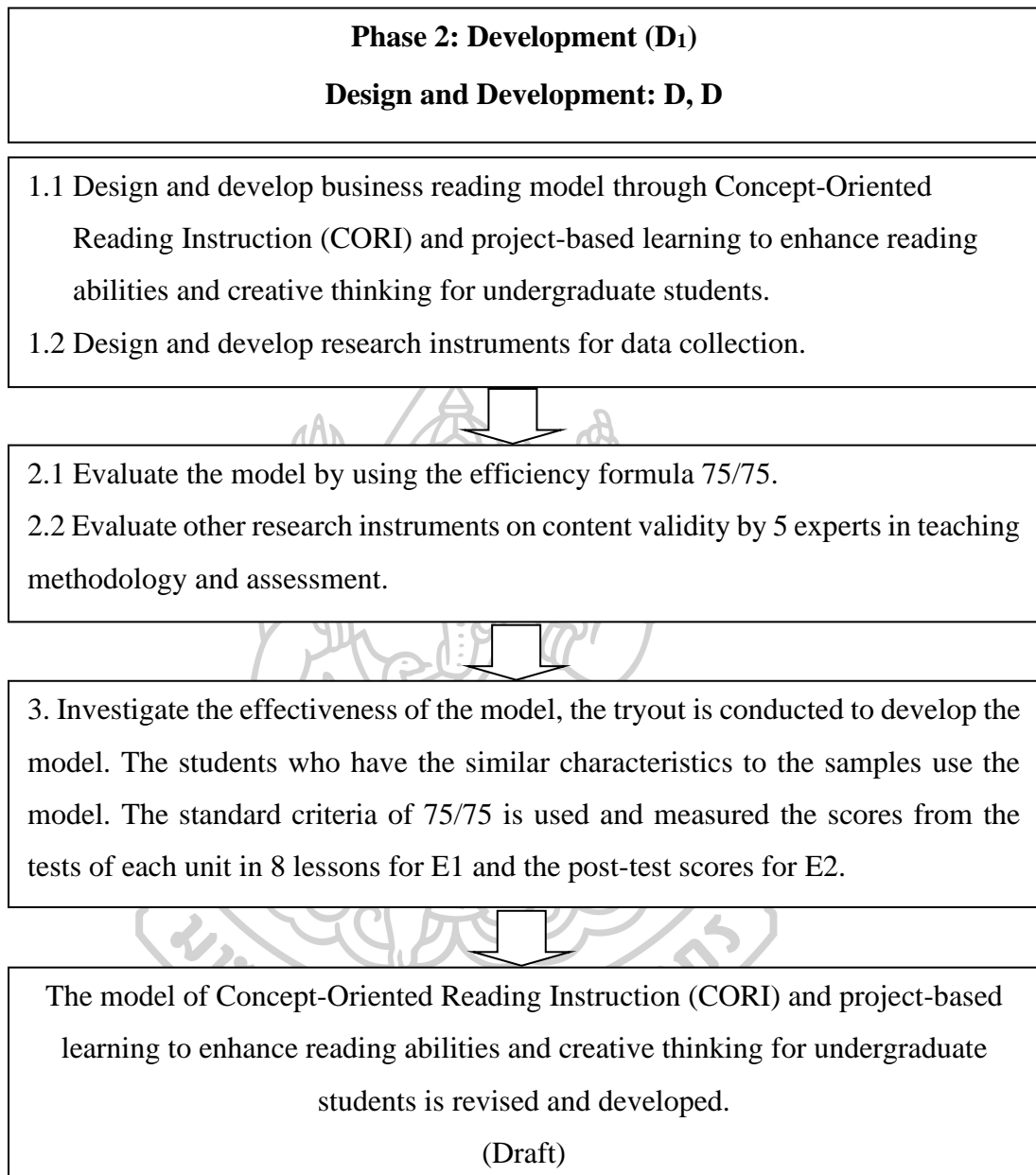


Figure 7 Procedure of Phase 2: Development (D: Design and Development)

Every detail in Phase 2 was presented in the table as follows:

Table 17 Summary of Sub-steps in Development: D₁

Sub-steps of Development: D₁	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>Phase 2 Based on the information of needs analysis, related documentary research analysis and focus group discussion form gained in Phase 1, the researcher designs a draft of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. Then submit to the 5 experts to evaluate and validate the draft model which has been revised, developed and approved. Other research instruments for data collection are created, developed and submitted to</p>	<p>1. Design and develop business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. 2. Create and develop research instruments for collecting data. 3. Validate business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking as well as research instruments. To evaluate the efficiency</p>	<p>1. Design and develop Business Reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. Related documents, theories, principles and steps which are all information in Phase 1 are discovered and synthesized to create the conceptual framework of the model. 2. Design and develop research instruments used in data collection. 3. Verify the quality of the model and research instruments. After the</p>	<p>1. Information of needs analysis, document analysis and focus group discussion form gained in Phase 1 2. Related research on theories, concepts, principles and steps relating to CORI, business reading instruction, multiple reading strategies, project-based learning, reading abilities and creative thinking 3. Related researches concerning CORI, business reading instruction, multiple reading strategies, project-based learning, reading abilities and creative thinking</p>	<p>1. Business reading draft model and instruction manual 2. Business reading materials for 8 units and exercises after each unit 3. Lesson plans with 8 units for business reading instruction through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking 4. Pre-test and post-test 5. Reading log (Reflection form)</p>	<p>1. Statistical analysis: Percentage, mean and standard deviation 2. t-test (Paired-sample t-test) 3. Content analysis</p>

Sub-steps of Development: D ₁	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>the experts for validation and appropriateness . The revision and improvement of both draft model and research instruments are made for further implementation. The pilot study is conducted with a group of 3, 16 and 27 students who have similar characteristics to samples of the study in order to investigate the validity of draft model. Then revised the draft model.</p>	<p>of the business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative Thinking for undergraduate students, revise according to both advisor's and experts' recommendations and conduct a tryout with a group of students who have the similar characteristics to the samples before implementation in the experiment.</p>	<p>model is designed, constructed and used, it is evaluated by using the efficiency formula $75/75$ (Brahmawong , 2013). Meanwhile, other research instruments are evaluated on content validity by 5 experts in teaching methodology and assessment. 4. Revise the draft model and research instruments for further implementation .</p>	<p>4. 5 Experts in business English reading instruction 5. The 3, 16 and 27 undergraduate students who are both English minor and major studying in the third year at the Faculty of Archaeology, Silpakorn University.</p>	<p>6. Peer- and Teacher-assessment rubric (mini-project) 7. Creative thinking question (mini-project), (Adapted from Barak & Doppelt, 2000)</p>	

Phase 3: Research 2 (R2: Implementation)

Conduct the experimental research on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students by employing the One-group Pretest-posttest Design.

Objective

In this phase, the study was to experiment business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students.

Methodology of the Experiment

The experiment was conducted on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. It was presented as follows:

Populations and Samples

Populations

In the first semester of 2018, there were more than 100 English major and minor students who were studying in the third- and fourth-year at the Faculty of Archaeology, Silpakorn University. The third-year English major students were about 40 students and the fourth-year English major students were about 40. Meanwhile, the third-year English minor students were about 50 students and the fourth-year English minor students were about 45. However, they all could select a Business English course as their elective subject.

Samples

The samples were one class which had approximately 35 students who registered in the Business English course as an elective subject in the first semester of 2018 and were taught by the researcher. Simple Random Sampling was used for a sampling unit. The class comprised both English major and minor undergraduate students who were studying in the third- and fourth-year at the Faculty of Archaeology, Silpakorn University and enrolled in the course.

Variables in the study

The variables in the study were presented as follows:

1. Independent variables were the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning.
2. Dependent variables were the effects after the model was implemented. They were the following:
 - 2.1 Reading abilities
 - 2.2 Creative thinking abilities
 - 2.3 Use of multiple reading strategies
3. Moderate variable was English reading proficiency which was rated as high and average.

Research Instrument

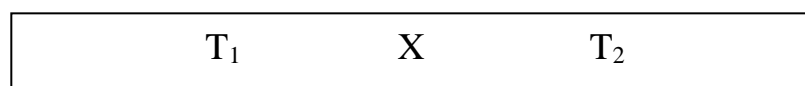
The following were the research instruments used in the experiment:

1. Business reading instructional model including instruction manual with a table of content specification
2. Business reading materials for 8 units and exercises after each unit
3. Pre-test and post-test
4. Lesson plans with 8 units for business reading instruction
5. Reading log
6. Peer- and Teacher-assessment rubric (mini-project)
7. Creative thinking questionnaire (mini-project), (Adapted from Barak & Doppelt, 2000)

Data Collection

Research Design

The experimental study was the Quasi-Experimental research conducted by employing the One-group Pretest-posttest Design which was shown as follows:



T₁ was the pre-test which was used to evaluate the students' reading abilities on business reading through Concept-Oriented Reading Instruction (CORI) and multiple reading strategies before employing the business reading instructional model.

X was the treatment which learning activities developed in the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities were conducted.

T₂ was the post-test which was used as the achievement test to evaluate the students' reading abilities on business reading through Concept-Oriented Reading Instruction (CORI) and multiple reading strategies after employing the business reading instructional model.

Procedures

1. The ethical clearance was sent for approval earlier to the university.
2. The implementation was carried out in Business Reading course with 35 students as samples in the first semester of 2018. The experimental study took 16 weeks with three periods a week. The study lasted totally 48 hours.
3. The consent form was distributed to the samples to sign.
4. The samples were introduced the learning activities for each session including the role of teacher as a researcher and students as samples of the study.
5. Pre-test was taken to evaluate the samples' business reading abilities before using the model.
6. Lesson plans for Concept-Oriented Reading Instruction (CORI) together with project-based learning with learning activities to create the mini-projects were employed and administered.
7. Business reading exercises were given to the samples as drills to practise and develop their reading abilities.
8. During each session, the teacher as a researcher modeled the reading strategies and then let the students practice reading strategy use.
9. In the assessment stage, the reading log was distributed to the students to reflect their reading strategy use.
10. The post-test was also taken and the teacher distributed peer- and teacher-assessment rubric (mini-project) to the students to assess their group performance through mini-projects. At the same time, the teacher also evaluated each group's mini-project.

11. At the end of course, creative thinking questionnaire was used to assess the students' creativity through their mini-projects by both teammates and teachers.

Data Analysis

The data in this phase were analyzed as follows:

1. The scores from pre-test and post-test including the scores gained from each exercise in each lesson were assessed and compared quantitatively by using t-test.

2. The data gained from the reading log, peer- and teacher-assessment rubric (mini-project), and creative thinking questionnaire were analyzed in both quantitatively and qualitatively in the means of statistical analysis and content analysis.

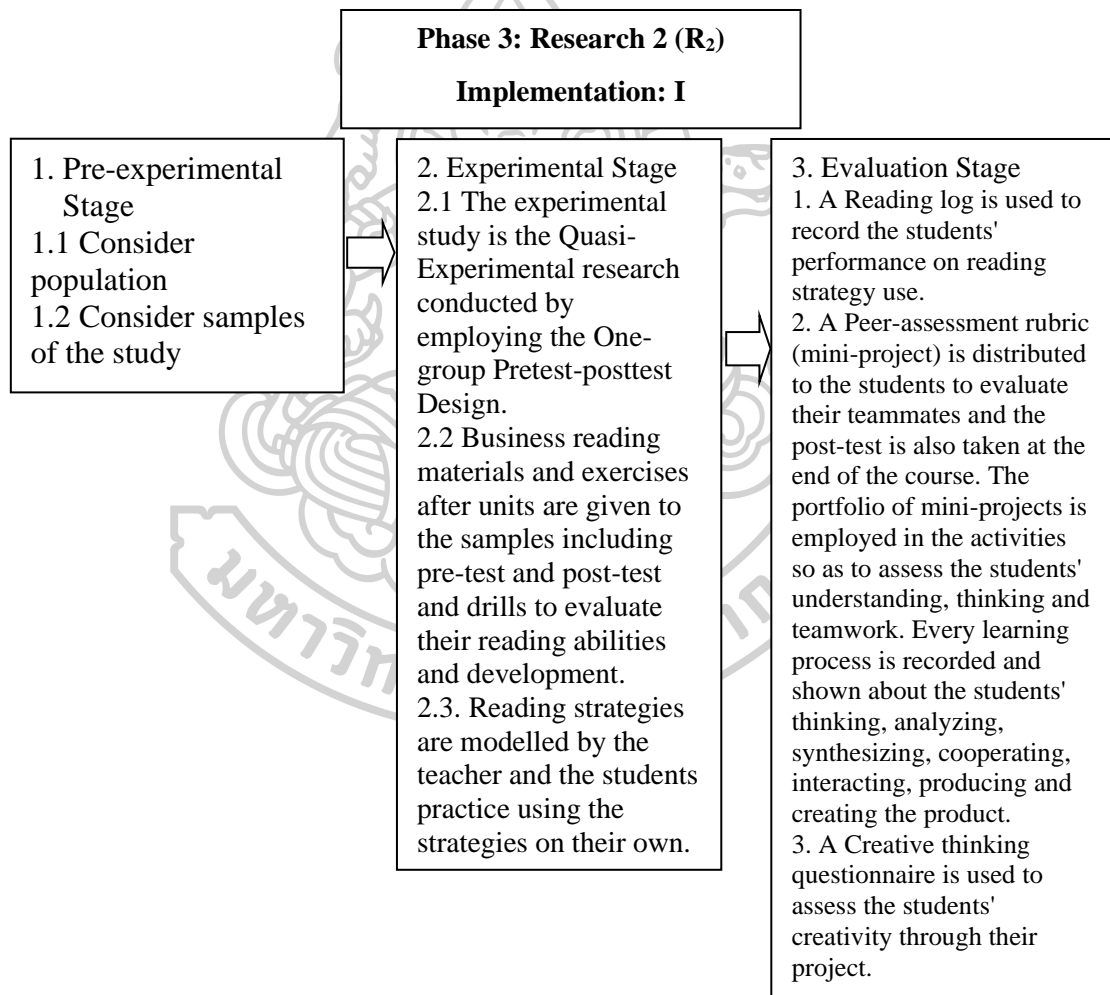


Figure 8 Procedure of Phase 3: Research (I: Implementation)

The following figure shows the details of Implementing AMARA Model in this phase.

Table 18 Summary of Sub-steps in Research: R₂ (Implementation)

Sub-steps of Research: R₂	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>Phase 3 The experimental research on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students by employing the One-group Pretest-posttest Design</p>	<p>To experiment business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.</p>	<ol style="list-style-type: none"> 1. The ethical clearance was sent for approval earlier to the university. 2. The implementation is carried out in Business Reading course with 35 students as samples in the first semester of 2018. The experimental study takes 16 weeks with three periods a week. The study lasts totally 48 hours. 3. The consent form is distributed to the samples to sign. 4. The samples are introduced the learning activities for each session including the role of teacher as a researcher and students as samples of the study. 5. Pre-test is taken to evaluate the samples' business reading abilities before using the model. 6. Lesson plans for Concept-Oriented Reading Instruction (CORI) together with project-based learning with learning activities to create the mini-projects are employed and administered. 7. Business reading exercises are given to the samples as drills to practise and develop their reading abilities. 8. During each session, the teacher as a researcher modeled the reading strategies and then let the 	<p>35 students are all English major and minor and studying in the third- and fourth-year at the Faculty of Archaeology, Silpakorn University and enroll in a Business English course as an elective subject in the first semester of 2018</p>	<ol style="list-style-type: none"> 1. Business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. 2. Business reading materials for 8 units and exercises after each unit 3. Lesson plans for business reading instruction 4. Pre-test and post-test 5. Instruction manual of model with a table of content specification 6. Reading log (Reflection form) 7. Peer- and Teacher-assessment rubric (mini-project) 	<ol style="list-style-type: none"> 1. Statistical analysis: Percentage, mean and standard deviation 2. t-test (Paired-sample t-test) 3. Content analysis

Sub-steps of Research: R ₂	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
		<p>students practice reading strategy use.</p> <p>9. In the assessment stage, the reading log was distributed to the students to reflect their reading strategy use</p> <p>10. The post-test is also taken and the teacher distributes peer- and teacher-assessment rubric (mini-project) to the students to assess their group performance through mini-projects. At the same time, the teacher also evaluates each group's mini-project.</p> <p>11. At the end of course, creative thinking questionnaire is used to assess the students' creativity through their mini-projects.</p>		8. Creative thinking questionnaire (mini-project), (Adapted from Barak & Doppelt, 2000)	



Phase 4: Develop 2 (D2: Evaluation)

Evaluate business reading draft instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

Objective

To evaluate and verify the draft model, the researcher presented the experts with business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

Subjects

In this phase, the subjects who had knowledge, competency and long experience in English instruction were 5 selected experts considered and appointed from their high profile with academic achievement and suitable qualifications.

Procedures

Business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students together with the results gained from the tryout were submitted to 5 experts for evaluating and validating the model. The following were the steps:

1. The permission letter was sent to the 5 experts for assessing and validating Business reading instructional model, business reading materials for 8 units and exercises after each unit, lesson plans together with instruction manual.
2. The draft model, exercises and lesson plans together with instruction manual were presented to the experts in order to investigate, assess and validate.
3. By using the evaluation forms, the quality of model was evaluated and validated by 5 experts.
4. The draft model, exercises and lesson plans together with instruction manual were revised and developed by considering from the experts' recommendations before they were presented to Dissertation Committee.

Research Instruments

The following were the instrument used in this phase:

1. Business reading draft model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students
2. Business reading materials for 8 units and exercises after each unit, lesson plans together with instruction manual
3. Quality evaluation forms for business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students

Data Collection

1. The researcher sent the permission letter to the experts for assessing and validating business reading instructional model, business reading materials for 8 units and exercises after each unit, lesson plans together with instruction manual.
2. The researcher used the experts' recommendations to revise and develop the business reading instructional model.

Data Analysis

The data gained in this phase was analyzed in the quantitative method using statistical analysis: mean and standard deviation in order to verify and develop business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

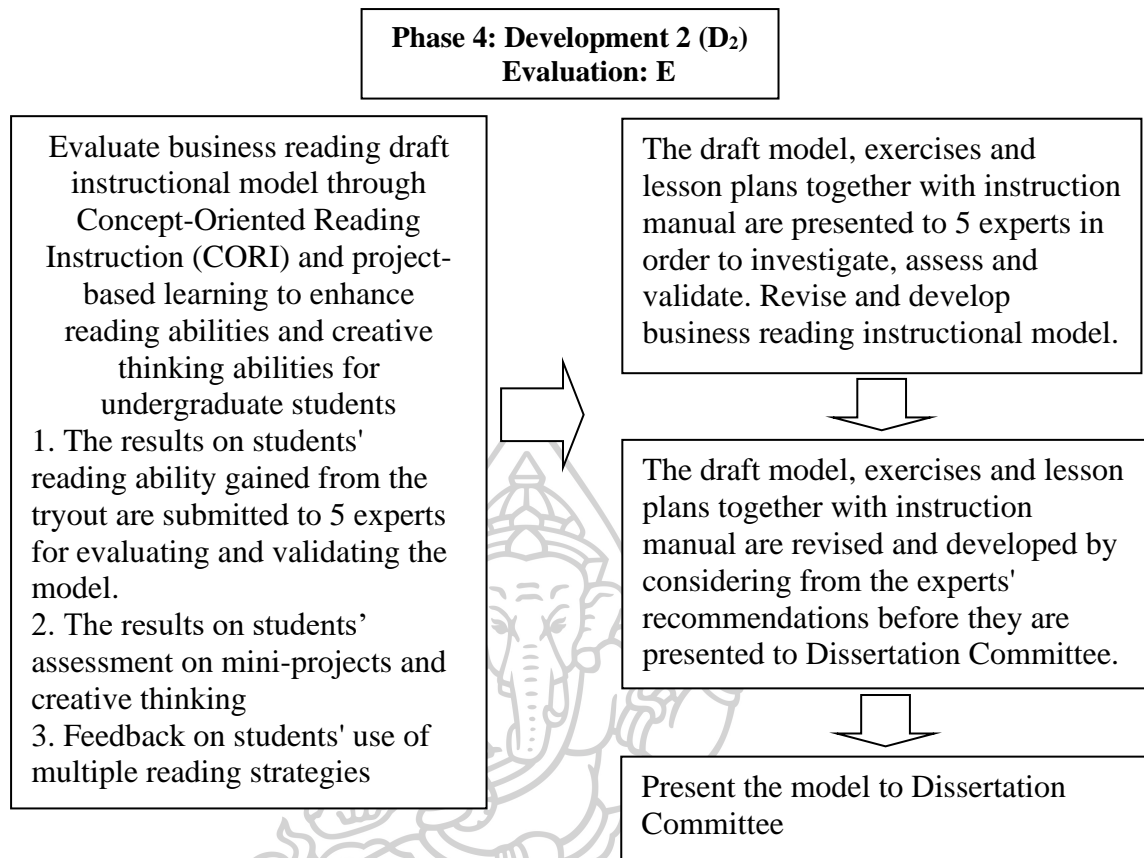


Figure 9 Procedure of Phase 4: Development (E: Evaluation)

The table of phase 4 is shown in detail below.

Table 19 Summary of Sub-steps in Development: D₂ (Evaluation)

Sub-steps of Development : D ₂	Objectives	Research Methodology	Data Sources	Research Instrument	Data Analysis
<p>Phase 4 Evaluation on business reading draft instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.</p>	<p>Evaluate and verify the draft model and the researcher presents the experts business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.</p>	<p>1. The permission letter is sent to the 5 experts for assessing and validating business reading instructional model, business reading materials for 8 units and exercises after each unit, lesson plans together with instruction manual. 2. The draft model, exercises and lesson plans together with instruction manual are presented to the experts in order to investigate, assess and validate. 3. By using the evaluation forms, the quality of model is evaluated and validated by 5 experts. 4. The draft model, exercises and lesson plans together with instruction manual are revised and developed by considering from the experts' recommendations before they are presented to Dissertation Committee.</p>	<p>5 experts who have long experience in business English reading instruction, curriculum and instruction</p>	<p>1. Business reading draft instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students 2. Business reading materials for 8 units and exercises after each unit, lesson plans together with instruction manual 3. Quality evaluation forms for business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students</p>	<p>Statistical analysis: Percentage, mean and standard deviation</p>

From all phases mentioned above, the draft model was created and carefully revised as shown in the following chart:

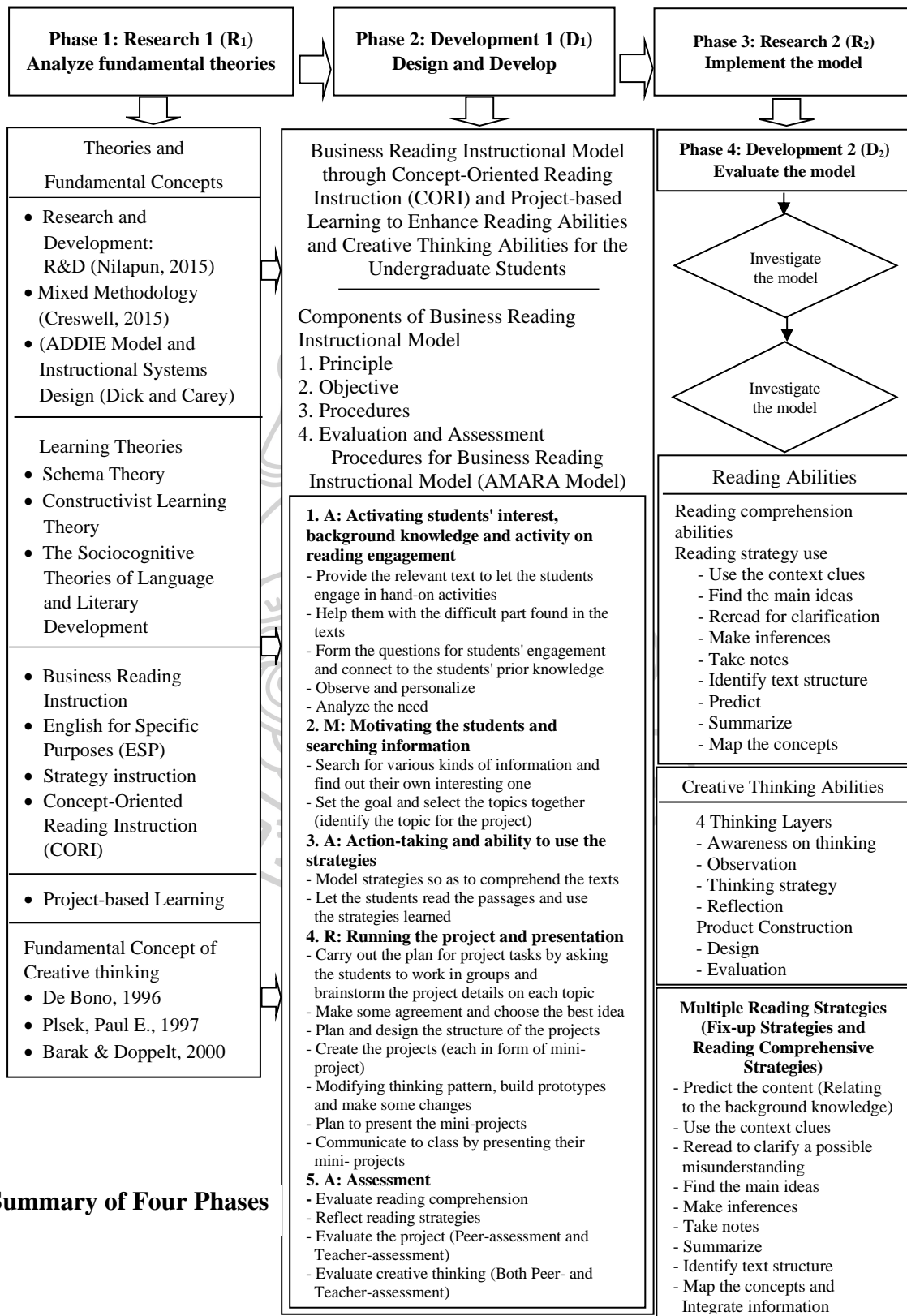


Figure 10 Summary of Four Phases

CHAPTER FOUR

RESEARCH FINDINGS

This chapter aims at presenting the findings of the study which was conducted in the process of Research and Development. The approach employed in collecting data is considered as a mixed-method approach combining the methods of both qualitative and quantitative data collection. The findings will be shown and explained in the form of quantitative results and then supported by the qualitative data.

In Chapter one, the research questions were mentioned as follows:

1. What were the components and teaching procedures of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning?
2. Was there the efficiency on the criteria 75/75 of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning?
3. Were the students' reading abilities after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning more developed and the post-test scores got higher?
4. Did the students develop creative thinking abilities on mini-projects after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning and to what extent its effect was?
5. Did the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning enhance the students' usage of multiple reading strategies and to what extent its effect was?
6. Was the business reading instructional model verified by the experts?

According to the research questions mentioned above, the research results will be reported and divided into the following six sections which are:

Section I: Findings on the components, the design of teaching procedures and the development of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students

- Findings on content analysis and syntheses of related theories and principles of the business reading instructional model
- Findings on a course description analysis in the subject “Business English Communication Skills, academic year 2017”, the necessity of business English reading and problems on ESL students’ reading ability
- Findings on the syntheses of theories, principles and procedures of Concept-Oriented Reading Instruction (CORI), multiple reading strategies, project-based learning and business reading instruction
- Findings on the syntheses of theories, principles and procedures for reading abilities, and creative thinking abilities
- Findings on the study of general background for the business reading instructional model
- Details of the business reading model (Draft model)
- Findings on the model approval process of experts

Section II: Findings on the effectiveness of process undertaken in the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, as the set criteria at 75/75

Section III: Findings on the students’ reading abilities and comparison between their pre-test and post-test scores after using the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning

Section IV: Findings on the students’ creative thinking abilities on mini-projects after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning

Section V: Findings on the students' usage of multiple reading strategies after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students

Section VI: Findings on the experts’ verification of the business reading instructional model (Final model)

The details of each part are presented as follows:

Section I: Findings on the components, the design of teaching procedures and the development of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students

This part indicates the findings after investigating the background information which reflects the current condition of teaching business English reading in the university context as well as the problems found, synthesizing the related theories and principles, and conducting the focus group interview with the lecturers who teach business English reading and the university learners' needs analysis in order to use the information gained to design, construct and develop the business reading model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

The study of general background information, focus group interviews with the experts and needs analysis for the design procedures and development of the business reading model are all done and explained in detail.

The background information in this part indicates the current condition of teaching English reading in the university curriculum, the necessity of English reading in terms of English for Specific Purposes or English business reading, and the problems found in English as a Second Language (ESL) students' reading ability. Additionally, the researcher synthesizes theories and principles of Concept-Oriented Reading Instruction (CORI) and project-based learning, including the procedures for reading abilities, multiple reading strategies, and creative thinking abilities. The focus group interviews with the experts and the students' needs to develop the reading skills to foster their reading comprehension are also conducted. The following are the findings of the study:

Findings on content analysis and syntheses of related theories and principles of the business reading instructional model

The researcher investigated the innovation of business reading model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. The research was conducted by employing the Research and Development procedures which played the vital role in creating the innovation to develop the students' ability and proficiency.

The study in this research emphasized on the instructional systems design in order to develop the undergraduate students' reading abilities and creative thinking abilities; therefore, ADDIE Model was used in the procedures. There were five phases which were taken into account as the followings: Analysis, Design, Development, Implementation, and Evaluation. Therefore, the Research and Development (R&D) procedures were divided into 4 phases and presented as follows: Phase 1: Research 1 (R₁: Analysis) - The study of general background information which was the current condition of teaching English reading in the university curriculum, the necessity of English reading in terms of English for Specific Purposes: English business reading, the problems found in English as a Second Language (ESL) students' reading ability, the focus group interviews and needs analysis. They were all conducted in order to investigate the reading motivation, strategy usage and needs in conceptual teaching and learning in English business reading in the tertiary level which was required to develop business reading model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. Phase 2: Develop 1 (D₁: Design and Development) - The design and development of instruction based on the informational and needs analysis in phase 1 were carried out on the business reading model and then created the research instrument, evaluated the efficiency of the instrument and model. Phase 3: Research 2 (R₂: Implementation) - After the experts' approval, the business reading model was experimented and implemented by employing the One-group Pretest-posttest Design. Phase 4: Develop 2 (D₂: Evaluation) - The evaluation on effectiveness and verification were taken on business reading model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

In the study, the innovation was the business reading model through Concept-Oriented Reading Instruction (CORI) and project-based learning. In addition, the study was designed by using mixed methodology approaches which the data were collected in both qualitative and quantitative methods.

Findings on a course description analysis in the subject “Business English Communication Skills, academic year 2017”, the necessity of business English reading and problems on ESL students’ reading ability

Reading is an activity that plays a vital role in our lives. Because of its importance, reading is emphasized on every level of education. In the curriculums for ESL learners, reading becomes the subject that the L2 students have to learn and improve their literacy. The major purpose of reading should be the construction of meaning that affects readers' comprehension and response to what they have read.

After investigating the content found in the course syllabus of the subject “Business English Communication Skills, academic year 2017”, this course was designed as an elective course for both English major and minor students to develop their communication skills and practise in business English communication. The course is offered to the 30-35 students in every semester and its duration is 16 weeks with three hours for one lesson. It focuses on business management techniques from various kinds of texts, for example, articles, news, reports, and business cases. Reading skills matter in order to get the main ideas and understand the concept, share of ideas about the selected readings which is required and presented in the students' projects. In addition, creative thinking was shown through the projects that the students presented in class. The course aims to enhance the students' proficiency in business English communication skills and make use of their knowledge. The students were also encouraged to use their critical thinking and creative thinking. Discussing together with thinking systematically and extensively becomes the very important skills that most Thai students should be prepared for their future careers. Additionally, the students needed collaboration in their groups to complete their projects. As can be seen from the course description presented earlier, four English language skills which are listening, speaking, reading and writing are emphasized in this course; however, creative thinking as one of a higher-order thinking skills is also focused.

According to the course description analysis, most contents are presented in business areas. The students need to read many business texts in order to get the concepts and ideas to create their projects. N. Anderson (1999) states that reading is considered as a necessary skill, active procedure to be developed for English as a second language learners so as to gain more comprehension in academics. It relates to both

readers themselves with their background knowledge and reading materials in comprehending the meaning the texts convey. The teacher should consider using the students' skills and knowledge and improving vocabulary skills, reading comprehension, reading rate including the strategy use.

O'Reilly, Best and McNamara (2004) indicated that many high school students encountered difficulties comprehending their textbooks, particularly those covering scientific material (Bowen, 1999; Snow, 2002). Problems with comprehension could occur for a variety of reasons. One source of difficulty occurred from text specific factors, such as text cohesion (Beck, McKeown & Gromoll, 1989; McNamara, Kintsch, Songer, & Kintsch, 1996). Another source of problems originated from the reader's aptitudes. Of course, efficient decoding abilities were necessary for the reader to understand the words in the sentences (e.g., Perfetti, 1985). However, comprehension difficulties also occurred even for readers who understood the words. These comprehension problems could emerge from the inability to draw inferences (e.g., Long, Oppy, & Seely, 1994) and the failure to apply other higher-level reading skills. (Cornoldi & Oakhill, 1996).

Findings on the syntheses of theories, principles and procedures of Concept-Oriented Reading Instruction (CORI), multiple reading strategies, project-based learning and business reading instruction

Concept-Oriented Reading Instruction (CORI)

The findings on the syntheses of theories and principles of Concept-Oriented Reading Instruction (CORI) were investigated and reported in this part. Concept-Oriented Reading Instruction (CORI) was created and developed by Dr. John T. Guthrie and his teams in 1993 with the purpose of lifelong learning instruction. According to Guthrie and Wigfield (2017), Concept-Oriented Reading Instruction (CORI) was considered as an instructional program that integrated the following principles: reading strategy instruction; conceptual knowledge in science; and support for student motivation. Reading engagement is extremely essential in the students' interaction during the activities. Reading engagement involves the students' use of reading strategies, conceptual knowledge, motivation as well as social interaction. With CORI instruction, the students can develop themselves in literacy as lifelong learners. For these reasons, Concept-Oriented Reading Instruction (CORI) can be used in the

classroom to enhance both of the students' comprehension and reading engagement. The comprehension can be fostered by the instruction of reading strategies, finding the concepts and the intrinsic motivation developed in reading. Originally, the core contents used in CORI were mostly from science or social studies. However, the content in each unit could be instructed and practiced in themes (Vongkrachang & Chinwonno, 2015).

As can be seen that motivations are essential in reading, Grabe and Stoller (2011: 154) presented the following 12 steps: 1) Teachers can share their love of reading with their students; 2) Teachers encourage and praise their students for sharing what they are reading; 3) Teachers should find out what interests students have; 4) Teachers should work toward promoting the development of group cohesiveness; 5) Teachers should increase students' expectancy of success; 6) Teachers should devise good lead-ins for major texts and associated reading tasks to build initial interest; 7) Student skills are matched with appropriate challenge; 8) Teacher build relevance into the curriculum, and by extension the assigned readings; 9) Teachers encourage active participation among students; 10) Teachers should give students some degree of choice in reading materials whenever possible; 11) Teacher should help students discover what they have actually learned from reading; and 12) Teachers should guide students in building real levels of expertise in reading topics.

Principles of AMARA Model (Concept-Oriented Reading Instruction and Project-based Learning)

Many principles have been found in many books that describe the concepts of Concept-Oriented Reading Instruction (CORI). According to McNamara (2010: 264), five principles have been revealed. They are: 1) use knowledge goals, by placing each text in a broader theme and culminating the instruction with the task of making an across-text concept map; 2) provide real-world interaction with the topic, as nearly as possible; 3) permit students to choose the texts they read, to identify key words they perceived as highly important; 4) use interesting texts with vivid details and visual appeal; and 5) arrange for student collaboration with feedback on its effectiveness. However, O'Hara (2007: 136, 167) and Swan (2003:12-34) shared the same 9 principles which are as follows: 1) the integration between learning with scientific concepts and themes and knowledge aims in reading instruction; 2) student collaboration / collaboration support; 3) student autonomy / autonomy support; 4)

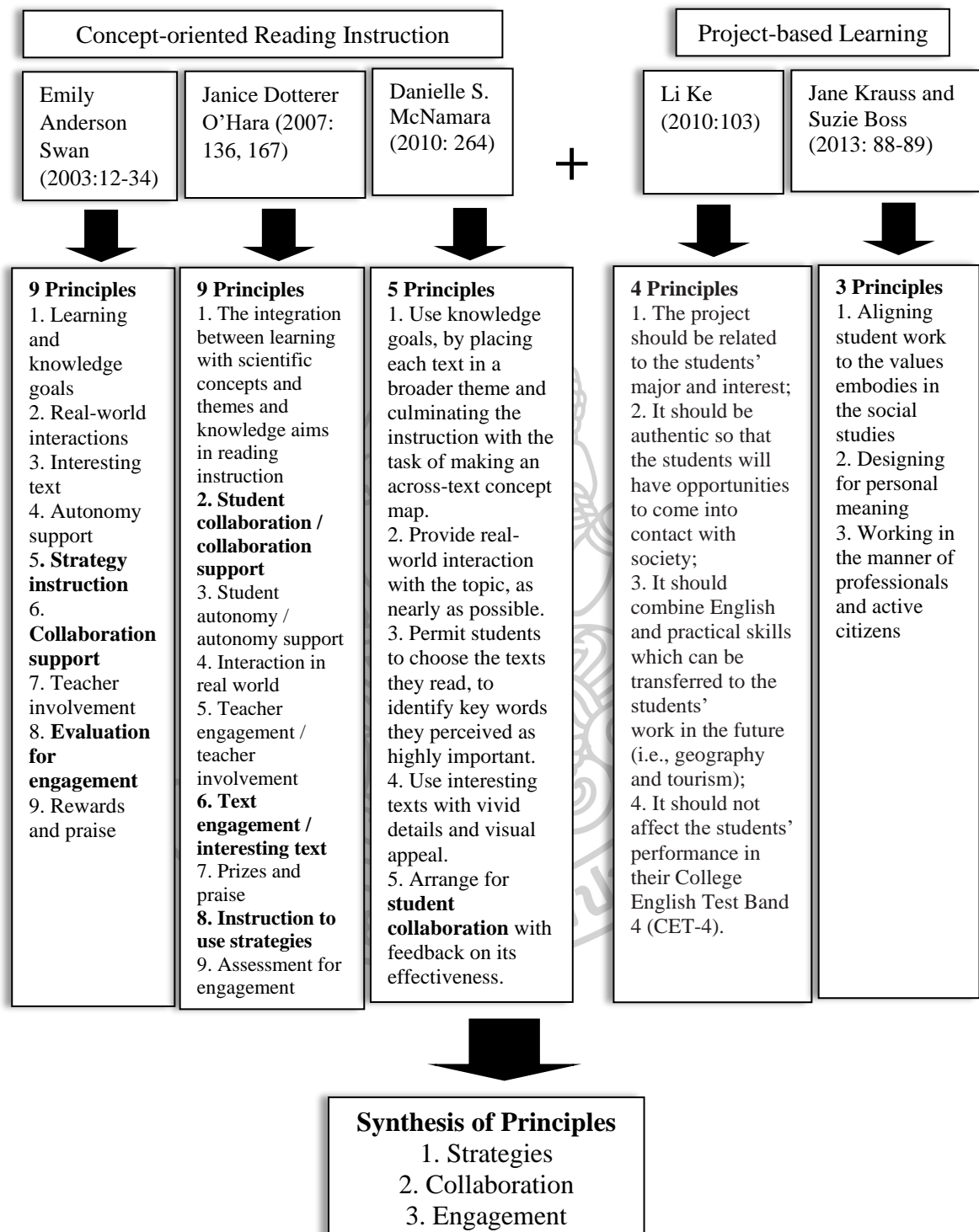
interaction in real world; 5) teacher engagement / teacher involvement; 6) text engagement / interesting text; 7) prizes and praise; 8) instruction to use strategies and; 9) assessment for engagement.

In creating the draft model of business reading instruction, the principles of both Concept-Oriented Reading Instruction (CORI) and project-based learning were investigated. In terms of project-based learning, Krauss and Boss (2013: 88-89) explained that there were three principles found in project-based learning. The first one is aligning student work to the values embodying in the social studies. The second principle is designing for personal meaning and the third principle is working in the manner of professionals and active citizens. Li (2010) proposed these four principles for project-based learning which were as follows: 1) the project should be related to the students' major and interest; 2) it should be authentic so that the students will have opportunities to come into contact with society; 3) it should combine English and practical skills which can be transferred to the students' work in the future (i.e., geography and tourism); and 4) it should not affect the students' performance in their College English Test Band 4 (CET-4).

It can be concluded that the prominent principles of CORI and project-based learning consist of **1) Strategies, 2) Collaboration and 3) Engagement**. All of them are shown in the following table.



Table 20 Synthesis of Principles for AMARA Model



Swan (2003: 4-5) stated that the first step of the components in the process of reading engagement is motivations for reading. Students who have motivations to read tend to gain knowledge taken from what they have read. Therefore, reading is important here for their learning which they see as a goal. Guthrie, Taboada, and Coddington (Cited in McNamara, 2010: 247) suggested five instructional practices which are 1) knowledge goals for reading instruction in a conceptual theme, 2) real-world interactions related to the knowledge goals, 3) student choice and self-direction in reading activities, 4) interesting texts for instruction, and 5) student collaboration in reading and writing.

In terms of strategy instruction, O'Hara (2007: 136, 167), McNamara (2010: 264) and Grabe and Stoller (2011: 156) have the similar strategies in Concept-Oriented Reading Instruction (CORI). The strategies that they presented are activating background knowledge and questioning, searching texts for information. O'Hara (2007: 136, 167) added two more strategies which are graphically organizing information/ integrating information through graphic organisers and summarizing texts. Meanwhile, Grabe and Stoller (2011: 156) added nine additional strategies which are forming questions, noting text structure and text characteristics, answer questions, taking notes, determining main ideas, synthesising information, paraphrasing, monitoring and repairing comprehension, and carrying out a range of project tasks. Strategies on Concept-Oriented Reading Instruction (CORI) is synthesized and presented in the table.

Table 21 Synthesis on Concept-oriented Reading Instruction

Janice Dotterer O'Hara (2007: 136, 167)	John T. Guthrie, Angela McRae, and Susan Lutz Klauda (2007)	Emily A. Swan, (2003: 34) and William Grabe (2009: 344)	Danielle S. McNamara (2010: 264)	William Grabe and Fredricka L. Stoller (2011: 156)	Guthrie et al., 2004(Cited by Kaminsia Mercedes Fannin, 2011)	Abdullah Azis (2015)
<ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning, searching texts for information 3. Graphically organizing information 4. Summarizing texts. 	<ol style="list-style-type: none"> 1. Modeling 2. Scaffolding 3. Guided practice 4. Extended engaged reading <p>Motivational practices</p> <ol style="list-style-type: none"> 1. Relevance (hands-on activities, relevant texts and self-referencing during inferencing) 2. Choice (student selection of subtopics for reading, specific passages for inferencing, partners for oral reading fluency, book composition topics) 3. Success/self-efficacy support (helping students set realistic goals for book selection, reading passages orally, writing questions, and identifying texts at the appropriate level of difficulty for optimal comprehension development) 4. Collaboration (partner oral reading, team poster making, summary exchanges and peer editing) 5. Thematic units (fostered mastery goals by placing knowledge goals prominently, and assuring conceptual coherence across texts and time) <p>Cognitive practices</p> <p>Explicit reading strategy instruction</p> <ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning 3. Summarizing 4. Organizing graphically 5. Learning story structures 	<ol style="list-style-type: none"> 1. Observe and personalize 2. Search and retrieve 3. Comprehend and integrate 4. Communicate to others 	<ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning, searching for information 	<ol style="list-style-type: none"> 1. Forming questions 2. Noting text structure and text characteristics 3. Activate background knowledge 4. Answer questions 5. Taking notes 6. Determining main ideas 7. Synthesising information 8. Paraphrasing 9. Summarising 10. Monitoring and repairing comprehension 11. Integrating information through graphic organisers 12. Carrying out a range of project tasks 	<ol style="list-style-type: none"> 1. Activating background knowledge 2. Questioning 3. Observe and personalize 4. Searching and summarizing 5. Communication to others 	<ol style="list-style-type: none"> 1. Perceiving text structures: identify the text structure of narrative texts 2. Inferencing: analyze the words in the texts and make inference on the content of the story 3. Concept-mapping: recall all the specific information about the text by mapping the concept according to the feature of the texts



Synthesis of Strategies on Concept-Oriented Reading Instruction (CORI)



Preparation and Motivational Stage

1. Observe and Personalize:

- Activate background knowledge and make connections with the text
- The teacher provides the relevant texts and sample projects to let the students engage in hand-on activities that build interest

2. Search and Retrieve:

- Form questions;
- Search text for information
- With the teacher's help, let the students set their goals for text selection, select their own interesting texts, topics for reading and passages for inferencing

Cognitive Stage

- Collect and analyze data; Conduct experiments

3. Comprehend and Integrate:

- Scaffolded lessons
- Teach strategies
- Guided practice
- Let the students read the passages, identify the text structure and text characteristics, analyze the words in the texts and make inference on the content of the story
- Find the main ideas
- Paraphrase / Summarize
- Take note
- Develop discourse awareness
- Learn story structures
- Summarize and synthesize information
- Read for additional information
- Strengthen the students' vocabulary development
- Concept- mapping: Synthesize; Recall all the specific information about the text by mapping the concept and making inferences; Integrate information through graphic organizers
- Extended engaged reading

Action Stage

4. Communicate to others:

- Carry out the project tasks / collaborate on group tasks
- Write reports or reflection in reading logs; Make a class book on the topic; Write about a story; Share team or class projects; Make a video presentation

Multiple Reading Strategies

CORI is one of instructional programs appropriate for the use of multiple strategies in the classroom context. The strategies combining the teaching procedures of CORI and reading strategies are activating background knowledge, questioning, searching for information, summarizing, organizing graphically and structuring stories (Guthrie et al., 2004). Shang (2015) presents the Scaffolded Reading Experience (SRE) which involves three stages of activities based on the CORI procedures: Pre-reading activities; During-reading activities; and Post-reading activities. In the pre-reading stage, the teachers activate the students' background knowledge. They prepare or motivate ESL/EFL students to read the selected material, relate the content to students' prior knowledge, and activate their background knowledge. The CORI instruction is more effective when teachers use several sources of trade books which are regarded as the most essential materials and compatible with the students' levels of reading proficiency (Anderson and Guthrie, 1996; Guthrie, Mcrae, & Klauda, 2007). Furthermore, Anderson and Guthrie (1996) explain about four main components implemented in classroom at the same time are: observe and personalize; search and retrieve; comprehend and integrate; and communicate to others. Shang (2015) adds that while the students are doing the pre-reading activities, the students are asked the general to specific questions to find the concept they are learning about and then they observe, find the information in various texts and integrate the contents and their reading strategies. At this stage, they need reading strategies for their comprehension. Additionally, they learn to collaborate to others and use the reading strategies independently (Guthrie, 1996). During-reading activities which are the stage to guide understanding, the teachers assist the students while they are reading to use multiple reading strategies, including understanding vocabulary, predicting reading content, identifying and skimming for the main idea/getting the gist, scanning for specific information and making inferences, corresponding to what many researchers did in their studies especially Manoli, Papadopoulou and Metallidou (2016). Interestingly, many multiple reading strategies used to enhance the students' comprehension were found to share some similarities. Nasri and Biria (2016) develop the strategies which are divided into the following four main strategies: 1) simple fix-up strategies consisting of rereading difficult segments/reread as appropriate and guessing the

meaning of unknown words from the context similar to Manoli, Papadopoulou and Metallidou (2016); 2) comprehensive strategies comprising summarizing and relating what is being read to the readers' background knowledge; 3) essential strategies for Focused Strategy Instruction such as questioning as well as inferencing corresponding to Grabe and Stoller (2013); and 4) multiple strategy instruction involving with making connection, predicting, questioning, inferencing, monitoring, visualizing and summarizing. Most of strategies found in Nasri and Biria (2016) correspond to those found in Grabe and Stoller (2013). However, Grabe and Stoller (2013) additionally present multiple strategies as the followings: plan and form goals before reading; read selectively according to goals; identify important information; use text structure information to guide understanding; build interpretations of the text as they read; build main idea, evaluate the text and the author and form feelings about the text; attempt to resolve difficulties and reflect on information in the text. Besides, Manoli, Papadopoulou and Metallidou (2016) suggest more reading strategy which comprises using semantic mapping.

In the post-reading activities, it's time to monitor and evaluate the students' understanding. The students synthesize the content and the teachers evaluate their students' understanding of the text by asking text-based questions in order to help students discover the correct answers (Shang, 2015). Guthrie (1996) also points out that after getting the knowledge and concept, the students communicate and explain what they have learned to their peers.

After having studied many reading strategies done by these three researchers, synthesis of multiple reading strategies was made by selecting from the similarly used strategies in these three researches and could be applied in business reading instructional model. They were as follows: predict the content; use the context clues; reread as appropriate; relate to the readers' background knowledge; monitor reading, fill in gaps in the text through inferences and prior knowledge and summarize the main ideas.

According to the procedures of multiple reading strategies with CORI mentioned previously, it can be seen that the conceptual knowledge, motivation or engagement, reading strategies and collaboration are all vital to enhance the students' reading comprehension.

Project-based Learning

The investigation and synthesis on procedures of project-based learning were conducted, according to many scholars. In the study, the procedures derived from five scholars were analyzed, synthesized and presented as the procedures used in AMARA business reading instructional model. Those scholars were: 1) Shu-jing and Li-hua (2010) who used six following steps for project-based learning: choosing a project, making a plan for the project, implementing the plan, working on the product, presenting the product and assessing the project; 2) Van Lam (2011) explained that in project-based learning, students and teacher agreed on a theme for the project, determined the final outcome of the project, and structured the project, the teacher prepared students for the demands of information gathering, data compiling and analyzing, the language demands of the final activity that the students made a presentation and evaluated the project as the final product; 3) Bas (2011) employed project-based learning by stating the subject and sub-subjects, organising the groups, creating projects including application of the project, planning and making the presentation, and doing evaluation; 4) Zafirov (2013) proposed the following stages for project-based learning which indicated that the teacher-coach set the stage for the students with real-life samples of the projects they would be doing, the students took on the role of project designers and possibly establishing a forum for display or competition, students discussed and accumulated the background information needed for their designs, the teacher-coach and students negotiated the criteria for evaluating the projects, the students accumulated the materials necessary for the project, created, prepared and presented their projects, and lastly after presentation the students reflected on the process and evaluated the projects based on the criteria established; and 5) Shiraz and Larsari (2014) created and done the steps for project-based learning which were introducing and brainstorming on the topics, sharing what the students had found and agreed to work with their peers, coming to class with a designed blueprint of the layout, choosing an appropriate one among the presented designs, as well as publishing the work in the course of the project.

After considering all steps presented by five scholars, synthesis of procedures for project-based learning used in the business reading instruction model was made. There were four stages which were 1) Preparation Stage - Cooperation, 2) Creation

Stage, 3) Presentation or Publish Stage, and 4) Evaluation Stage. The following were the details of these four stages. In the first stage, preparation stage dealt with cooperation. The students were asked to choose the project, make some agreement on theme, brainstorm on the topics, plan and design the structure of the project, gather information and materials necessary for creating the project, analyze the data obtained and share with class. Then in creation stage, the students were assigned to create the project; however, in the study the project was in the form of mini-project. Next in presentation or publish stage. The students were prepared the language used in presentation, planned and presented the mini-project as the product of learning. It came to the final stage which was evaluation. In this stage, both teacher and students evaluated the mini-project.

The synthesis of strategies on project-based learning is presented in the following table.

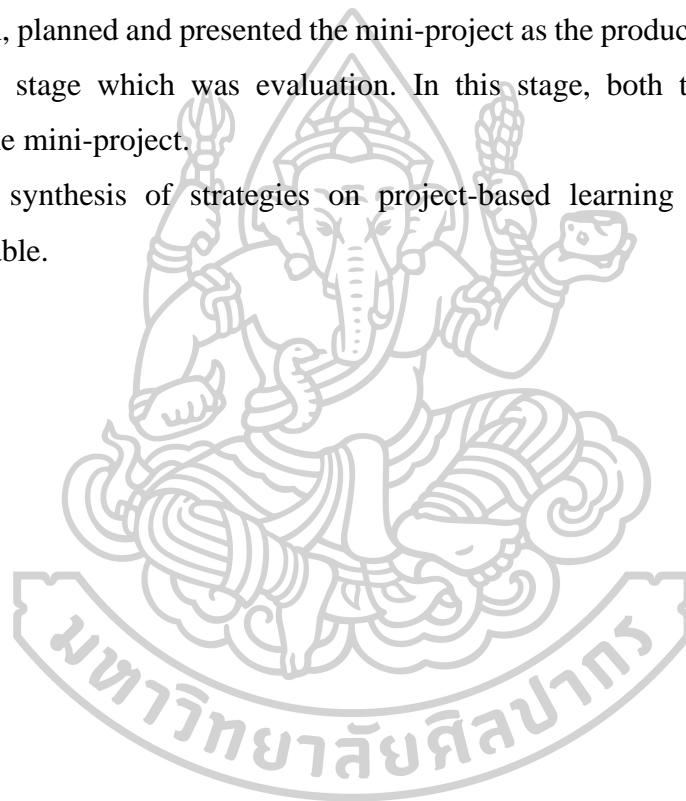


Table 22 Synthesis of Procedures for Project-based Learning

WU Shu-jing, MENG Li-hua (2010)	Nguyen Thi Van Lam (2011)	Gokhan Bas (2011)	Ch. Zafirov (2013)	Shiraz and Larsari (2014)
<ol style="list-style-type: none"> 1. Choosing a project 2. Making a plan for the project 3. Implementing the plan 4. Working on the product 5. Presenting the product 6. Assessing the project 	<ol style="list-style-type: none"> 1. Students and teacher agree on a theme for the project 2. Students and teacher determine the final outcome of the project 3. Students and teacher structure the project 4. Teacher prepares students for the demands of information gathering 5. Students gather information 6. Teacher prepares students to compile and analyze data 7. Students compile and analyze information 8. Teacher prepares students for the language demands of the final activity 9. Students present the final product 10. Students evaluate the project 	<ol style="list-style-type: none"> 1. Stating the subject and sub-subjects, organising the groups 2. Groups create projects 3. Application of the project 4. Planning of the presentation 5. Making the presentation 6. Evaluation 	<ol style="list-style-type: none"> 1. The teacher-coach sets the stage for students with real-life samples of the projects they will be doing 2. Students take on the role of project designers, possibly establishing a forum for display or competition 3. Students discuss and accumulate the background information needed for their designs 4. The teacher-coach and students negotiate the criteria for evaluating the projects 5. Students accumulate the materials necessary for the project 6. Students create their projects 7. Students prepare to present their projects 8. Students present their projects 9. Students reflect on the process and evaluate the projects based on the criteria established 	<ol style="list-style-type: none"> 1. Introducing and brainstorming on the topics 2. Share what the students had found and agreed to work with their peers 3. Coming to class with a designed blueprint of the layout 4. Among the presented designs, choosing an appropriate one 5. Publish the work in the course of the project

Preparation Stage: Cooperation

1. Choose the project, make some agreement on theme and brainstorm on the topics
2. Plan and design the structure of the project
3. Gather information and materials necessary for creating the project and analyze the data obtained
4. Share with class

Creation Stage

5. Create the project

Presentation or Publish Stage

6. Prepare the language used in presentation and plan to present the project
7. Present the product

Evaluation Stage

8. Evaluate the project

Business Reading Instruction

In the past, it was found that content-based instruction (CBI) was done and applied in instructional activities of English for Specific Purposes (ESP) programs. Business was one of disciplines which was grouped into this category. However, instruction on specific content integrated with language skills has been popular for forty years. As stated by Grabe and Stoller (as cited in Snow and Brinton, 1997:5, 16), business reading instruction was considered as content-based instruction. It was firstly taken in second language (L2) vocational and workplace contexts. However, it has been widely applied and used in both L1 and L2 instruction and found popular in various contexts such as foreign language instruction in tertiary level and in bilingual education, and English for Specific Purposes (ESP) as well as English for Academic Purposes (EAP) programs as ones for advanced level. It can be said that content-based instruction and language skills have been popularized and then designed for learners in various disciplines, for example, engineering, medical, law, business, airline industry, banking and hotel industry.

The use of English as the language for business communication is increasingly widespread, and more and more teachers are being asked to teach it. Business English teaching is not just about what happens in the classroom, however it covers a huge variety of activities (Frendo, 2007). According to Bojović (2016), learning vocabulary as the building blocks for communication plays an important role in foreign and second language learning as it is an essential component of becoming a fluent foreign language user. Vocabulary learning occurs more frequently as an outcome of reading. While reading, a sentence could be incomprehensible to the readers encountering with a single unknown word and the learner can consult the dictionary to understand the text.

Findings on the syntheses of theories, principles and procedures for reading abilities, and creative thinking abilities

Reading Abilities

Many scholars proposed many aspects of reading abilities in terms of definition. Some scholars presented reading abilities as reading skills (Yimwilai, 2008: 135), or the coherence between reading skills and creativity (Ritchie, Luciano, Hansell, Wright and Bates, 2013). Besides some regarded reading abilities as “engagement model” to develop reading comprehension (Guthrie and Wigfield, 2000 and Guthrie et al., 2006 as cited in J. K. Smith, L. F. Smith, Gilmore, and Jameson, 2012). In the study, reading abilities were defined as the result of using skills with increasing vocabulary and motivational engagement in reading and relating to creativity especially in ESP content-based learning.

Reading abilities also known as reading comprehension abilities are studied by many theorists. Among reading strategies as procedures to achieve students’ reading abilities, the researcher investigated the reading strategies to enhance reading comprehension abilities presented by the following five scholars: Yimwilai (2008); Echeverri and Ferri (2010); Kucukoglu (2013); Soleimani and Hajghani (2013); and Stoller F. et al (2013).

After the strategies for reading abilities were found and reviewed, the synthesis of reading abilities was made by selecting from the repetitively used reading strategies. It can be concluded that in the business reading instruction, the students should be able to 1) use the context clues, 2) find the main ideas, 3) reread for clarification, 4) make inferences, 5) take notes, 6) identify text structure, 7) predict, 8) summarize and 9) use graphic organizers.

The following is the table of synthesis on students’ reading abilities.

Table 23 Synthesis of Reading Abilities

Yimwilai (2008)	Echeverri and Ferri (2010)	Kucukoglu (2013)	Soleimani and Hajghani (2013)	Stoller F. et al (2013)	Synthesis of Reading Abilities
<ul style="list-style-type: none"> -Topics -Main ideas -Details -References -Vocabulary (guessing meaning from context) -Purposes -Meaning of the sentence (understanding relations within the sentence) 	<ul style="list-style-type: none"> -Activate students' background knowledge -Have them make predictions -Complete graphic organizers -Answer questions 	<ul style="list-style-type: none"> - Predicting -Making connections -Visualizing -Inferring -Questioning -Summarizing 	<ul style="list-style-type: none"> -Read text once -Read text twice -Read the first line of paragraphs -Use titles to predict text content -Use illustrations to understand content -Read questions first -Use teacher's introduction to understand content -Guess meanings based on cognates in English -Guess meaning based on similarity to other words -Guess meanings from context -Use dictionaries -Write main points in one's own words 	<ol style="list-style-type: none"> 1. Extensive practice and exposure to print 2. Commitment to building student motivation 3. Attention to reading fluency 4. Vocabulary building 5. Comprehension skills practice and discussion <ul style="list-style-type: none"> - Ask students to anticipate, predict, confirm, or modify their predictions, and summarize - Ask how, when and why questions about reading strategy use <ul style="list-style-type: none"> ➢ Preview and form questions about the text, Answer questions while reading, Identify difficulties encountered in the text, Take steps, such as rereading, to repair faulty comprehension, Judge how well goals are met, Take notes, underline, or highlight main ideas and summarize using notes. - Model strategy use <ul style="list-style-type: none"> ➢ Reading goals, Make predictions, Point out contextual clues that help clarify the meaning of key vocabulary, Connect textual information to background knowledge or a previously read text, Make inferences, and/or Reread to clarify a possible misunderstanding. - Ask students to follow up initial post-reading question responses with further elaboration - Assign summary tasks - Use graphic organizers <ul style="list-style-type: none"> ➢ Indicate the discourse organization of a text paragraph or section - Give students a list of transition words and phrases that they have encountered and ask them to cluster them into similar groups 	<p>Reading Comprehension and reading strategy use</p> <ul style="list-style-type: none"> - Use the context clues - Find the main ideas - Reread for clarification - Make inferences - Take notes - Identify text structure - Predict - Summarize - Map the concepts

Creative Thinking

After many definitions given by a lot of theorists on creative thinking were inspected, the conclusion has been made. Creative thinking may be defined as the process to be able to create the new and useful things or ideas beneficial for both person and society.

Many theorist such as Wallas, De Bono, Plsek, Paul E., Hsieh, Lou and Shih, Vogel, Sriwongchai, Jantharajit, and Chookhampaeng developed the design processes as the creative thinking tools to enhance the students' creative thinking abilities.

Wallas (1926) suggested four phases for creative thinking skill which were 1) preparation (information gathered), 2) incubation (unconscious mental work goes on), 3) illumination (solution emerges), and 4) verification (solution tested and elaborated). These phases were quite similar to those of De Bono's framework (1986). The creative thinking framework initially developed by De Bono (1996) was implemented in project-based learning with five thinking steps which were: purpose; input; solutions; choice; and operations. They were described in detail as follows: (1) design purpose (the problem and the need, the target clientele and restrictions and the design goals); (2) inquiry field (information sources, research aspect and organize the information and its assessment); (3) solutions: alternatives, ideas and factors (idea documentation, consider all factors and other people view); (4) choosing the preferred solution; (5) operation steps; and (6) evaluation.

Plsek (1997) extensively developed the ideas that he found in Edward de Bono's book published in 1992. He imposed three basic principles used in the methods for creative thinking abilities which are mental attention, escape and movement. He stated that creativity occurred when attention on something was focused. Then escape was done from current thought pattern on a topic to other different one. The creative thoughts emerged with this way. The last principle was movement which the learners continued exploring, brainstorming and connecting the flow of ideas or thoughts. Plsek presented the phases which were used to promote creative thinking. They were as follows: 1) preparation; 2) imagination; 3) development; and 4) action.

As noted by Hsieh, Lou and Shih (2013), seven phases were introduced: 1) preparation; 2) situation observation and raising questions; 3) guiding discussion and confirming questions; 4) generating creative proposal; 5) implementing creative

proposal; 6) outcome presentation and 7) evaluation. Additionally, Vogel (2014) also presented five phases which were 1) determine the task/situation analysis (preparation), 2) research the topic and gather as much information as possible (incubation), 3) generate as many ideas as possible (interpretation), 4) choose the best ideas out of the ideas that were generated (experimentation), and 5) test the idea, build prototypes, and make changes as needed (application). Later, Sriwongchai, Jantharajit, and Chookhampaeng (2015) created the following phases to enhance creative thinking skill: 1) engagement and connection to prior knowledge; 2) encounter of problem and thoughtful incubation; 3) analyzing alternative and investigating solutions; 4) applying and modifying thinking pattern; and 5) concluding and evaluating creative thinking.

The following is the table of synthesis on the instructional processes used to enhance the students' creative thinking skill.

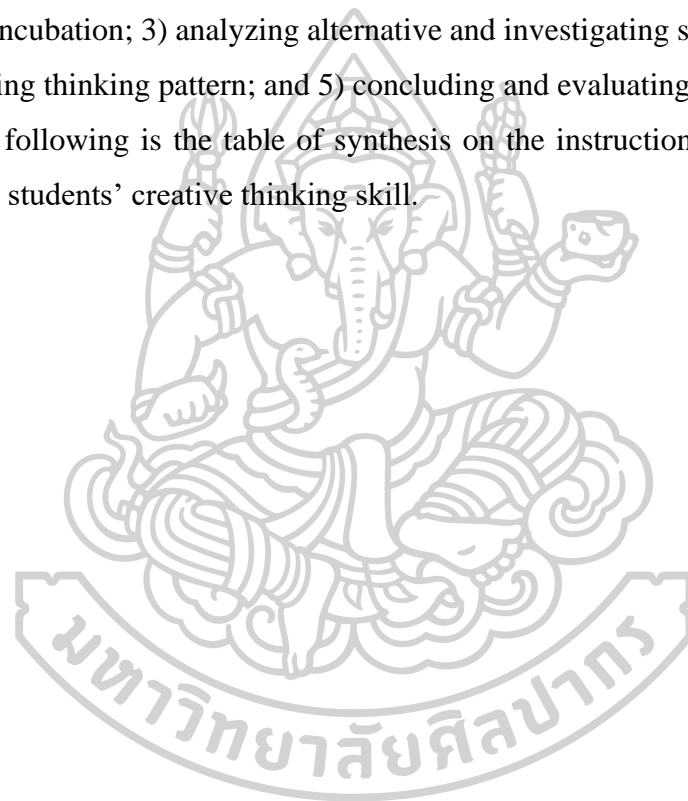


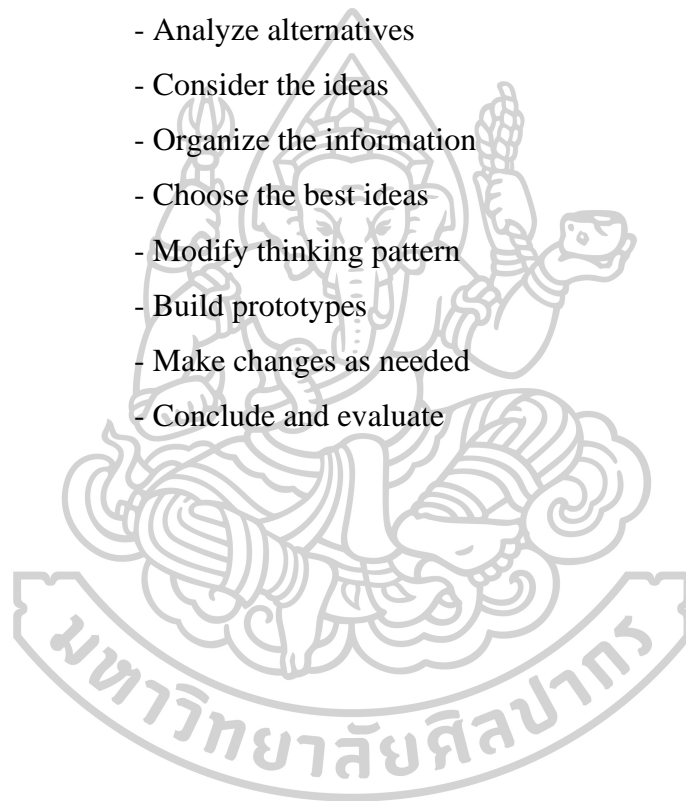
Table 24 Synthesis of Procedures for Creative thinking

Scholars	Procedures	Synthesis of Procedures
Wallas (1926)	1. Preparation (Information gathered) 2. Incubation (unconscious mental work goes on) 3. Illumination (Solution emerges) 4. Verification (Solution tested and elaborated)	1. Preparation Phase - <u>Design purpose/goals</u>
De Bono (1996)	1. Design Purpose; -The problem and the need, the target clientele and restrictions, the design goals 2. Inquiry Field; -Information sources, research aspect, organize the information and its assessment 3. Solutions: Alternatives, Ideas and Factors; - Idea Documentation, consider all factors, other people view 4. Choosing the Preferred Solution; 5. Operation; and Steps 6. Evaluation	- Analyze the problem and need - Observe the situation - <u>Engage and connect to prior knowledge</u> - <u>Record concepts</u> 2. Incubation Phase - Research the topic
Plsek, Paul E. (1997)	1. Preparation - Prepare for a noticing notebook in which you record concepts extracted from observations, conversations, and readings, - Lists of assumptions, feelings, information sources, and direct analogies relevant to the topic of the design effort, - Expansive questions based on who, what, when, where, why and how 2. Imagination - Conduct an initial harvest about two-thirds of the way through the time allocated to the imagination phase and plan additional idea generation sessions to fill in any gaps, - Separate the ideas into those that represent a radically different product (WHOLE) and those that represent a modification of a part of the existing product or service (PART). 3 Development - Include both WHOLE- and PART-type ideas, - Consider involving customers directly in harvesting, developing, testing prototypes, and evaluating innovative ideas, - Use the enhancement checklist and quality design tools to further develop the ideas, - Prototyping is a must, - Develop a business case and present your ideas clearly. Discuss this openly and seek clarity on intuitive decision criteria, - Consider integrating the strong points of several ideas to develop a better idea. 4. Action - Just do it, - Consider your organization's usual procedures for launching new products and services.	- Gather information 3. Interpretation Phase - <u>Generate the ideas as much as possible</u> - <u>Analyze alternatives</u> 4. Solution Phase - <u>Consider the ideas/</u> Investigate solutions - Choose the preferred solution - <u>Organize the information</u> 5. Experimentation Phase - <u>Choose the best ideas</u> - Test and elaborate the solution
Hsieh, Lou and Shih (2013)	1. Preparation; 2. Situation observation and raising questions 3. Guiding discussion and confirming questions 4. Generating creative proposal; 5. Implementing creative proposal 6. Outcome presentation; 7. Evaluation	6. Application and Development Phase - <u>Modify thinking pattern</u>
Thomas Vogel (2014)	1. Determine the task/Situation analysis (Preparation) 2. Research the topic and gather as much information as possible (Incubation) 3. Generate as many ideas as possible (Interpretation) 4. Choose the best ideas out of the ideas that were generated (Experimentation) 5. Test the idea, build prototypes, and make changes as needed (Application)	- Test the ideas - <u>Build prototypes</u> - <u>Make changes as needed</u>
Sriwongchai, Jantharajit, and Chookhampaeng (2015)	1. Engagement and connection to prior knowledge 2. Encounter of problem and thoughtful incubation 3. Analyzing alternative and investigating solutions 4. Applying and modifying thinking pattern 5. Concluding and evaluating creative thinking	7. Evaluation Phase - <u>Conclude and evaluate</u> creative thinking

After analyzing the procedures for creative thinking, some steps were synthesized, selected and used as instruction procedures in business reading instructional model (AMARA Model). They were as follows:

Creative Thinking

- Design purpose/goals
- Engage and connect to prior knowledge
- Record concepts
- Generate the ideas as much as possible
- Analyze alternatives
- Consider the ideas
- Organize the information
- Choose the best ideas
- Modify thinking pattern
- Build prototypes
- Make changes as needed
- Conclude and evaluate



According to Doppelt (2004), creative thinking abilities could be enhanced and assessed in the project-based learning approach (PBL) which helped the students to research, plan, design and feedback their projects in creative activities. Creative thinking was divided into two different types which were lateral and vertical thinking. Both were essential due to the fact that lateral thinking encourages the discovery of new methods, ideas or imaginations that were different whereas vertical thinking emphasized the development of the ideas based on the evidence and objectives. In other words, the students used lateral thinking in their learning process because they had to find out the alternatives and investigate various solutions. Vertical thinking was employed in the process of making a decision on the best solution and implement it (De Bono, 1986 and Waks, 1997 as cited in Doppelt, 2004). It can be said that both forms of thinking were the necessary components in creative thinking skill and supported with one another in project-based learning.

Creative thinking abilities were fostered to the various backgrounds of students and altered the instructional methods and learning settings by using portfolio assessment as a new assessment method. A Creative Thinking Scale (CTS) was created, developed and used as a tool to assess the students' portfolios. As noted by De Bono (1996), it comprised four thinking layers which were: 1) awareness of one's own thinking; 2) observation of one's own thinking; 3) thinking strategy; and 4) reflection upon thinking. Besides, a Creative Thinking Scale (CTS) was created and applied in two aspects of portfolios which were 1) system or product design, construction and evaluation which both lateral and vertical thinking was used and 2) processes of learning, thinking, problem-solving and teamwork.

However, the creative thinking questionnaire as an assessment rubric was also recreated and adjusted in the study in terms of two areas which were 1) thinking layers in creating the project and 2) product construction. The rubric aimed to assess the students' process and products (outcomes). According to the synthesis on instructional strategies of Concept-Oriented Reading Instruction (CORI), project-based learning, reading abilities and creative thinking, they were shown in the following details.

Table 25 Synthesis of Procedures for AMARA Model

Synthesis of Each Variable	Procedures	Synthesis of Procedures for Business Reading Instructional Model (AMARA Model)
Synthesis of Strategies on Concept-Oriented Reading Instruction (CORI)	<p>Preparation and Motivational Stage</p> <p>1. Observe and Personalize: - The teacher provides the relevant texts and sample projects to let the students engage in hand-on activities that build interest - Collect and analyze data, Conduct experiments</p> <p>Cognitive Stage</p> <p>2. Search and Retrieve: - Scaffolded lessons, Form questions; Teach strategies, Search text for information, With the teacher's help, let the students set their goals for text selection, select their own interesting texts, topics for reading and passages for inferencing, Guided practice, Let the students read the passages, identify the text structure and text characteristics, analyze the words in the texts and make inference on the content of the story, Find the main ideas, Paraphrase, Summarize, Take note, Develop discourse awareness</p> <p>3. Comprehend and Integrate: - Learn story structures, Summarize and synthesize information, Read for additional information, Activate background knowledge and make connections with the text, Strengthen the students' vocabulary development, Concept- mapping, Synthesize, Recall all the specific information about the text by mapping the concept and making inferences, Integrate information through graphic organizers, Extended engaged reading</p> <p>Action Stage</p> <p>4. Communicate to others: - Carry out the project tasks / collaborate on group tasks, Write reports, Make a class book on the topic, Write about a story, Share team or class projects, Make a video presentation</p>	<p>1. Activating interest and activity engagement - Provide the texts and sample to let the students engage in hand-on activities - Observe and personalize - Analyze the problem and need - Form the questions to engage and connect to the students' prior knowledge - Search text for information - Set the goal and select the topics for the texts</p> <p>2. Motivation and model - Provide the relevant texts - Help them with the difficult vocabulary found in the texts - Model strategies</p> <p>3. Action-taking and ability to use the strategies - Let the students read the passages and find the main ideas, paraphrase, make inference, predict, summarize and take note - Synthesize by mapping the concept and integrate information - Carry out the project tasks by asking the students to work in groups and brainstorm on the topics - Choose the best ideas - Plan and design the structure of the projects - Create the projects</p> <p>4. Recalling and presenting - Modifying thinking pattern, build prototypes and make some changes - Plan to present the projects - Communicate by sharing their projects and present to the class</p> <p>5. Assessment and amplifying - Evaluate the project - Evaluate creative thinking - Extend their knowledge for further reading</p>
Synthesis of Procedures for Project-based Learning	<p>Preparation Stage: Cooperation 1. Choose the project, make some agreement on theme and brainstorm on the topics, 2. Plan and design the structure of the project, 3. Gather information and materials necessary for creating the project and analyze the data obtained, 4. Share with class</p> <p>Creation Stage 5. Create the project</p> <p>Presentation or Publish Stage 6. Prepare the language used in presentation and plan to present the project 7. Present the product</p> <p>Evaluation Stage 8. Evaluate the project</p>	<p>4. Recalling and presenting - Modifying thinking pattern, build prototypes and make some changes - Plan to present the projects - Communicate by sharing their projects and present to the class</p>
Synthesis of Reading Abilities	<p>Reading comprehension ability - Use the context clues, Find the main ideas, Reread for clarification, Make inferences, Take notes, Identify text structure, Predict, Summarize, Map the concept</p>	
Synthesis of Procedures for Creative Thinking	<p>Preparation Phase - Design purpose/goals, Analyze the problem and need, Observe the situation, Engage and connect to prior knowledge, Record concepts</p> <p>Incubation Phase - Research the topic, Gather information</p> <p>Interpretation Phase - Generate the ideas as much as possible, Analyze alternatives</p> <p>Solution Phase - Consider the ideas/ Investigate solutions, Choose the preferred solution, Organize the information</p> <p>Experimentation Phase - Choose the best ideas, Test and elaborate the solution</p> <p>Application and Development Phase - Modify thinking pattern, Test the ideas, Build prototypes, Make changes as needed</p> <p>Evaluation Phase - Conclude and evaluate creative thinking</p>	

Findings on the study of general background for the business reading instructional model

Semi-structured interviews of business English lecturers

After conducting the focus group in the form of semi-structured interviews, many ideas were conveyed by a group of business English lecturers who have been teaching business English at Nakhon Pathom Rajabhat University for many years. The interesting aspects of ideas were revealed according to 3 topics which are business reading, Concept-Oriented Reading Instruction (CORI) and project-based learning. They can be concluded into 3 sections which are as follows:

1. Regarding business reading, the interviewees give their similar ideas which can be used in considering the instructional model. The following are their suggestions.

“In my opinion, business reading becomes an essential skill for students because business plays a vital role in global community. Business reading should be taught to students for the purpose of better comprehension, vocabulary learning and the use in their future career.”

“Business reading becomes the necessary skill for me to try to understand the business texts. I think that reading business news comprehensively can help me succeed in doing my own business. It is not about getting knowledge on business only in our country, but also global one which can extend my viewpoints on business. Getting an idea from business English texts may cause the problems for the one who cannot understand business English. For me, business reading instruction is needed for the students. The teacher can teach students to use the reading strategies and guess the meaning in the context in case of students’ limited vocabulary which is very important to gain the ideas from the texts, I think.

“I think that business reading instruction should be done in class because it helps the students understand business English texts more. The students can make use of the reading strategies outside class when they read the English texts on their own. The strategies or techniques must be considered when reading business texts.”

2. As for Concept-Oriented Reading Instruction (CORI), the interviewees shared the similar and different ideas which are:

“Concept-Oriented Reading Instruction (CORI) may be a way of teaching the students to read for the concepts. It may need the students’ reading engagement, reading

strategies and teacher's support for enhancing students' reading comprehension. For these reasons, I think Concept-Oriented Reading Instruction (CORI) is important in business reading."

"Concept-Oriented Reading Instruction (CORI) plays an important role in enhancing readers' comprehension. As you said the main principles of Concept-Oriented Reading Instruction (CORI) are engagement, collaboration and strategy instruction, I think all of these can help students develop their reading skill. However, students themselves need the drill for their improvement with the assistance from their teacher."

"I think that Concept-Oriented Reading Instruction (CORI) should be carefully and appropriately used in class. The teacher should consider the level of students' proficiency. In other words, this kind of instruction is suitable for high levels of proficiency because students themselves have to get the concept of reading text. It may not be suitable for the students with low proficiency."

3. In terms of project-based learning, the interviewees agreed on using this kind of learning approach in class. The ideas are the following:

"I think nowadays many teachers start using project-based learning in their class more and more because students can work cooperatively. It is very useful in language instruction."

"It is a good idea to use project-based learning in reading instruction. It can stimulate students to work together on tasks. More importantly, when we talk about projects, we think of science, industry or even business. I just wonder how to integrate project-based learning in reading instruction. However, it would be more interesting and beneficial if you can use project-based learning in your reading instruction to create something."

"Project-based learning is quite popular approach in language teaching and learning. It can help to enhance the students' group work and knowledge sharing. I think it is interesting to use this approach in teaching reading and integrate it with business English instruction."

Needs analysis of university learners and their general background

In instructional model, needs analysis should be conducted. This part expressed the information gained from needs analysis questionnaires which were distributed to

university learners in order to investigate their needs and opinions on business English reading instruction through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance their reading abilities and creative thinking abilities. The results were presented as follows:

Personal Information, Reading Proficiency and Interest

Table 26 Personal information of students

Gender	N	Percent
Male	24	36.36
Female	42	63.64
Total	66	100.00

Table 26 shows the data collected from the total 66 informants who were 24 males and 42 females. They were all undergraduate students who studied in business English course and were asked to do needs analysis questionnaire. The results gained from the questionnaires would be used to create the procedures of teaching reading strategies in the draft model. They were presented in the form of means, standard deviations, frequency and percentage and shown in the following tables.

Table 27 Means and Standard Deviations for Students' Levels of Ability in Reading Proficiency

Skills and Competencies	Mean	SD	Result
Reading for Concepts	2.41	0.68	Low
Reading Comprehension	2.27	0.62	Low
Fluency in Reading	2.26	0.64	Low
Word Recognition	2.12	0.69	Low
Vocabulary	2.12	0.67	Low

Table 27 indicates the mean scores and standard deviations for students' levels of ability in reading proficiency. The students had to assess themselves on their levels of reading proficiency in terms of five aspects which were ranked by using 4-point scale as follows: Reading for Concepts ($\bar{x} = 2.41$); Reading Comprehension ($\bar{x} = 2.27$); Fluency in Reading ($\bar{x} = 2.26$) and Word Recognition together with Vocabulary ($\bar{x} = 2.12$) respectively. However, it was interpreted from these results that most students' levels of ability in reading proficiency were "Low" according to their skills and competencies. Then the students were asked to investigate their own frequency of reading business English texts in a week and the results were shown in the table below.

Table 28 Frequency and Percentage of Business English Reading

Items	Frequency	Percent
Less than one text	29	43.93
1-2 text(s)	15	22.73
3-4 texts	17	25.76
5-6 texts	4	6.06
More than 8 texts	1	1.52
TOTAL	66	100.00

Table 28 presents the students' frequency of reading business English texts in a week. It was found that each week, out of 66, 29 students read less than one text. 17 students read 3-4 texts. 15 students read only 1-2 text(s). However, there were 4 students reading 5-6 texts. There was only one student reading more than 8 texts. The percentage was shown as 43.93, 25.76, 22.73, 6.06 and 1.52 respectively.

Although only 29 students read less than one text, 17 students read 3-4 texts. More details on types of business English texts were investigated and results shown and ranked in the following table.

Table 29 Frequency and Percentage for Reading Types of Business English Texts

ITEM	FREQUENCY (N=66)	PERCENT	Ranking
Advertisement	27	40.91	3
Business News	41	62.12	1
Brochure	26	39.39	4
Product description	41	62.12	1
Business letter	6	9.09	5
Blog	28	42.42	2
Others	5	7.58	6

Table 29 shows the frequency and percentage of business English texts that the students chose to read most. From the total students (N=66), the students selected to read business news and product description most at the frequency of 41 (62.12%). Blog, advertisement and brochure were chosen at the frequency of 28, 27 and 26 (42.42%,

40.91 and 39.39%). Business letter was chosen at the frequency of 6 (9.09%). However, others were the least selected at the frequency of 5 (7.58%). In the item “others”, 4 students liked to read the text about technology whereas only 1 student was interested in reading a business magazine. The following bar chart indicates the clear picture of the reading type ranking.

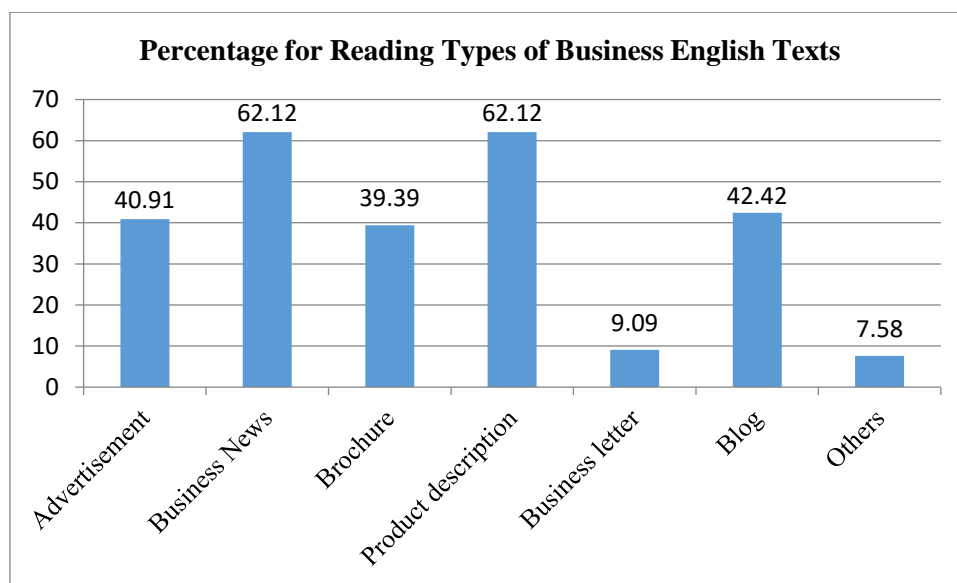


Figure 11 Percentage for Reading Types of Business English Texts

However, the top five ranking numbers were used to create the contents and find reading materials for the business reading instructional model.

In the part of the difficulties that the students find when reading business English texts, vocabulary and getting the main ideas were their weaknesses that cause them the problems. They said that they did not know much vocabulary and it was hard for them to get the main ideas from reading texts and they needed some techniques to help them enhance their reading comprehension.

After the investigation on the students' reading proficiency, interest and problems found while reading, needs on the development of business reading instructional model were also focused. The topics used in the questionnaire were derived from the synthesis of business reading instructional model which consists of business reading instruction, principles of Concept-oriented Reading Instruction (CORI), multiple reading strategies and cooperative learning corresponding to the Cooperation Stage in project-based learning. The mean scores and standard deviations were shown in the following table.

Table 30 Means and Standard Deviations of Needs Analysis for the Development of Business Reading Instructional Model

TOPICS	NEEDS		
	MEAN	SD	RESULT
1. Business reading instruction	3.45	0.50	High
2. Reading for concepts	3.64	0.48	Very High
3. Motivation in reading	3.26	0.62	High
4. Guidelines for reading business texts	3.24	0.56	High
5. Reading Comprehension Strategies	3.38	0.49	High
6. Making predictions	2.94	0.55	High
7. Using prior knowledge to interpret texts	3.18	0.63	High
8. Thinking about and analyzing the clues the author provides	3.58	0.50	Very High
9. Identifying text structure	2.92	0.69	High
10. Forming questions	2.08	0.36	Average
11. Integrating information through graphic organisers	3.21	0.60	High
12. Summarizing texts	3.18	0.49	High
13. Taking notes	3.29	0.55	High
14. Determining main ideas	3.58	0.50	Very High
15. Paraphrasing	2.44	0.59	Average
16. Reread for clarification	3.02	0.57	High
17. Getting the gist (Skimming)	2.12	0.60	Average
18. Identifying specific information (Scanning)	2.24	0.56	Average
19 Making Inferences	3.15	0.53	High
20. Using the business concepts from reading texts to create own business projects	3.79	0.41	Very High

Table 30 indicates means and standard deviations of needs analysis for the development of business reading instructional model. The results showed the students' needs toward these topics. It was found that most students considered the following topics most needed and the very high scores of needed levels were used in considering the model design. In terms of needs, most students were asked to do a 4-point scale by

rating the topics needed for the instructional model design. The results show that most students needed the following topics included in the business instruction model so they rated very high scores for reading for concepts ($\bar{x} = 3.64$, $SD = 0.48$), thinking about and analyzing the clues the author provides ($\bar{x} = 3.58$, $SD = 0.50$), determining main ideas ($\bar{x} = 3.58$, $SD = 0.50$) and using the business concepts from reading texts to create own business projects ($\bar{x} = 3.79$, $SD = 0.41$). However, the scores gained from students' needs for each topic which were ranked as very high and high were used to design the procedures of business English reading strategy instruction combined with the strategies of Concept-Oriented Reading Instruction and project-based learning. Besides the quantitative data got from 4-point rating scales, the students' recommendations as qualitative data were put in the questionnaire. The following were more recommendations given by the informants. They were very useful for the development of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

"I need a technique to get main ideas in order not to waste time to interpret all the content in a reading text."

"I need you to teach me more vocabulary."

"I think that analyzing a text, getting main ideas and comprehending the context should be taught in class."

"Reading instruction is needed especially getting main ideas and guessing meaning from context clues."

"Context clues should be taught."

"I would like you to teach me how to guess meaning of difficult vocabulary so as to gain more and better comprehension."

"I want to know more about vocabulary in each business lesson. It can help me understand more when I read business English texts."

"A list of important vocabulary used frequently in business texts should be given to me before reading the texts. It can help me understand the texts more."

"I think reading instruction is needed."

"I would like to read with confidence."

“I recognize the importance of English and business and I want to use business English correctly.”

“Good reading comprehension needs vocabulary which helps me understand texts more.”

“I need more instruction on guessing meaning from context clues, and getting the concept or main ideas from the texts.”

“The way how to get the main ideas is important and should be taught.”

“Vocabulary is important so the technique how to guess the meaning of unknown words is needed.”

“I need you to teach me how to guess meaning of difficult vocabulary and to get main ideas of the texts. Reading strategy instruction should be done so that I can apply it in my next reading.”

“I want to improve my reading comprehension abilities.”

“Mind mapping should be emphasized in the instruction so that I can organize systematically my critical thinking.”

Regarding both quantitative and qualitative data, the very high and high rating on students' needs according to reading comprehension strategies together with their recommendations to solve reading problems were used to design and create the tests used as research instruments for the study.

Details of the business reading instructional model (Draft model)

The Design and Creation of Business Reading Instructional Model (Draft)

This part shows the results gained from principle and procedure synthesis of Concept-oriented reading instruction, project-based learning, reading abilities, creative thinking abilities and multiple reading strategies together with the depth information after the semi-structured interviews with business English lecturers and needs analysis of university learners in terms of business English reading instruction to design and create the research conceptual framework of the business reading instructional model named “AMARA” draft model after the acronym of five stages used in the instruction procedures of the model. The draft model was designed, created, implemented and developed consistently to be an approval model.

Based on both principles and instruction procedures, the following draft model was created. The model consisted of four components which were shown in the details.

Component 1: Principles

Firstly, the model and its components were designed and created from the principles of Concept-Oriented Reading Instruction (CORI) and project-based learning which were **1. Strategies, 2. Collaboration and 3. Engagement.**

Component 2: Objective

The objective of the study was set to develop and enhance reading abilities and creative thinking abilities for the undergraduate students by using business reading instructional model (AMARA Model) comprising Concept-Oriented Reading Instruction (CORI) and project-based learning.

Component 3: Instruction procedures

1. A: Activating interest and activity engagement

- Provide the texts and sample to let the students engage in hand-on activities
- Observe and personalize
- Analyze the problem and need
- Form the questions to engage and connect to the students' prior knowledge
- Search text for information
- Set the goal and select the topics for the texts

2. M: Motivation and model

- Provide the relevant texts
- Help them with the difficult vocabulary found in the texts
- Model strategies

3. A: Action-taking and ability to use the strategies

- Let the students read the passages and find the main ideas, paraphrase, make inference, predict, summarize and take note
- Synthesize by mapping the concept and integrate information
- Carry out the project tasks by asking the students to work in groups and brainstorm on the topics
- Choose the best ideas
- Plan and design the structure of the projects
- Create the projects

4. R: Recalling and presenting

- Modifying thinking pattern, build prototypes and make some changes

- Plan to present the projects
- Communicate by sharing their projects and present to the class

5. A: Assessment and amplifying

- Evaluate the project
- Evaluate creative thinking
- Extend their knowledge for further reading

Component 4: Assessment

In the study, the students' reading abilities, creative thinking abilities and multiple reading strategies were evaluated after they got the treatment to see the development of their reading proficiency and strategy use. Additionally, their creative thinking abilities were also measured through their product and advertisement as the outcomes they produced in the mini-projects.

However, this version of AMARA Model (draft) would be verified by the experts before it had been used in a tryout. After it was submitted to the experts together with the results gained from the tryout, some revisions were made according to their recommendations. When the draft model was revised, it was implemented and the results were shown later. The draft model was shown on the next page.



Draft Version of AMARA Model
Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for the Undergraduate Students

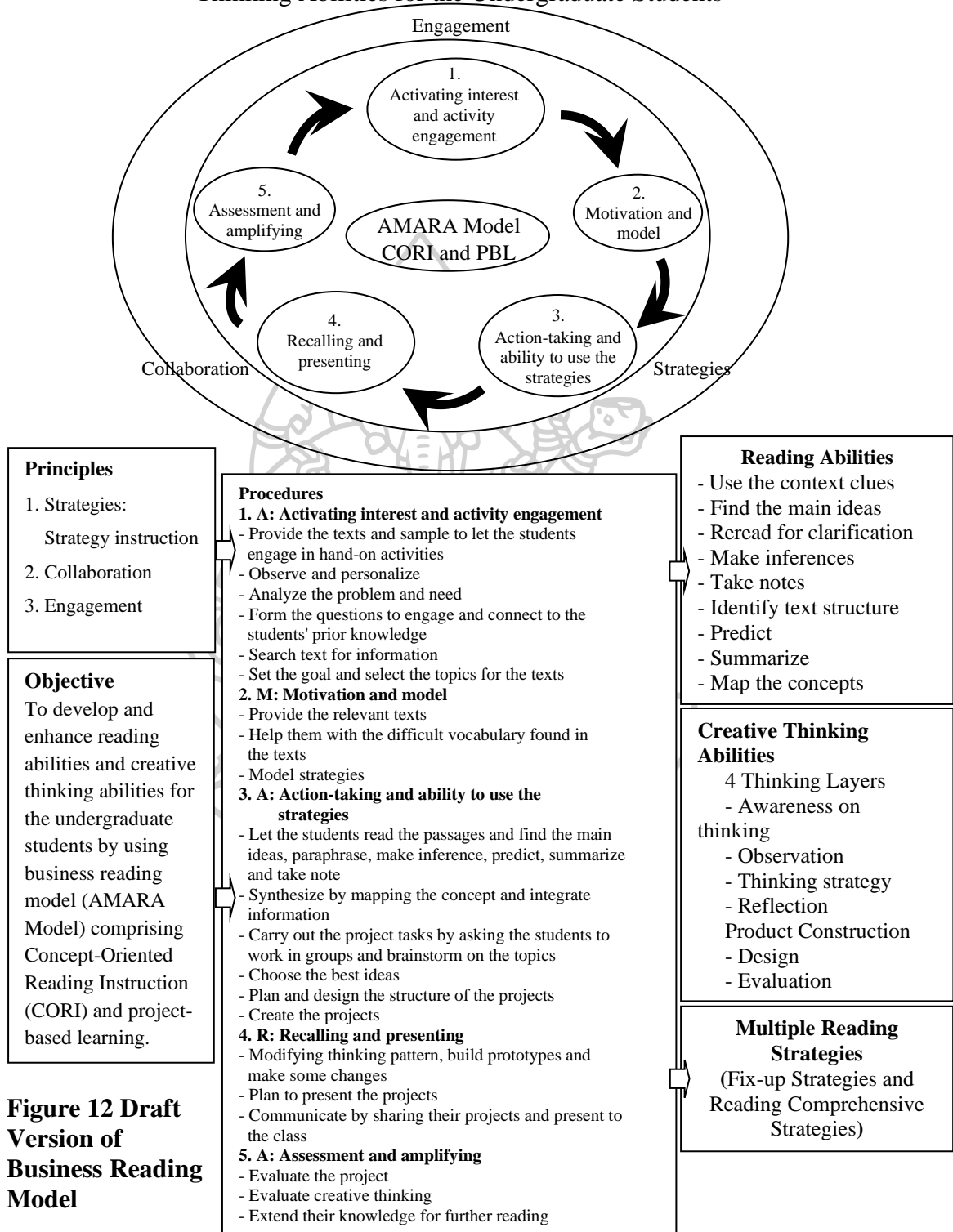


Figure 12 Draft Version of Business Reading Model

Findings on the model approval process of experts

The draft model was submitted to the experts for verification before tryout and the following part showed the model approval process done by 5 experts. After designing and constructing the draft of business reading instructional model, the efficiency of the draft should have been evaluated. The three out of five experts were the qualified business instructors who were full of teaching experience in business English reading and capable of using reading comprehension strategies in English instruction. Another two experts were highly proficient in curriculum and instruction, English language testing and research development. In order to validate the efficiency and approve the draft of business reading instructional model, the questionnaire was distributed to each expert to evaluate the process of creating draft model including its congruence of principles, theoretical rationality, probability, and conceptual framework. The results were presented as follows:

Table 31 Mean Scores and Standard Deviations for Theoretical Rationality on Principles, Theories and Instructional Procedures of the Draft Model

Item	Evaluation Aspects	Theoretical Rationality		
		Mean	SD	Result
1	Principles of business reading model are corresponded to theories and fundamental concepts.	4.80	0.45	Highest
2	Objectives of business reading model are congruent with principles and clear enough to reach learners' goals.	4.80	0.45	Highest
3	The first step of activating students' interest and background knowledge is considered appropriate for preparing them before the instruction.	4.20	0.45	High
4	The second step of motivating the students is appropriate for encouraging them to search background information for the purpose of preparing for project work and also reading comprehension.	4.00	0.00	High
5	The next step of action taking is appropriate for students to be able to use the reading strategies to enhance their reading comprehension.	4.40	0.55	High
6	The step of running the project and presentation is appropriate for students to cooperatively, creatively and systematically create their mini-projects.	4.20	0.45	High

Item	Evaluation Aspects	Theoretical Rationality		
		Mean	SD	Result
7	The step of assessment is appropriate. Students can evaluate their own project together with their peers, reflect their learning by using reading logs and implement reading strategies in their extensive reading.	4.60	0.55	Highest
8	The procedures of business reading model are congruent with relevant concepts, principles including theories and appropriate for further instruction.	4.00	0.00	High
	Total	4.38	0.23	High

Table 31 indicates the mean scores and standard deviations for theoretical rationality on principles, theories and conceptual framework of the business English reading draft model that were assessed by the 5 experts. The results show that the total scores of mean and standard deviation gained from this part of questionnaire were at 4.38 (\bar{x}) and 0.23 (SD). According to the total mean score, it can be interpreted that the theoretical rationality of the principles of business reading instructional model (draft), theories, fundamental concepts, objectives, and procedures was rated as “High” which means that the business reading instructional model (draft) had the high rationality in theory on the principles, theories, fundamental concepts, objectives, and instruction procedures.

The following are the comments that were given by the experts. They were presented in detail.

“Each component is well related and corresponded but the steps of instruction procedure should be reconsidered for more appropriateness, systematic and easier to understand.” (Expert No. 2)

“Some sub-steps are redundant and they should be reorganized. For example, modeling strategies in step 2 seems to be the same as the one done in step 3.” (Expert No.4)

“The step of running the project and presentation should be given more information regarding the students’ cooperation, creative thinking and systematically creating their mini-projects.” (Expert No. 2)

Table 32 Mean Scores and Standard Deviations for Probability and Appropriateness on Principles, Objectives, Procedures and Assessment (Draft Model)

Item	Evaluation Aspects	Probability and Appropriateness		
		Mean	SD	Result
Principles and Objectives				
1	Principles, concepts and objectives of the model are appropriate for developing Business Reading model and correspond to the conditions and needs of learners.	4.60	0.55	Highest Congruence
2	Principles, concepts and theories of the model are all congruent with one another and can be created as conceptual framework for appropriately conducting teaching and learning activities.	4.80	0.45	Highest Congruence
Procedures and Assessment				
3	All steps in teaching and learning procedures are appropriate and consistently relevant.	4.20	0.45	High Congruence
4	The procedures in teaching and learning are congruent with principles, concepts and objectives of the model.	4.60	0.55	Highest Congruence
5	The procedures in teaching and learning are appropriate for learners and can reach the objectives at last.	4.60	0.55	Highest Congruence
6	Research instruments used in each step of the model correspond to the objectives of implementation.	4.60	0.55	Highest Congruence
7	The methods of assessment are congruent with the objectives of instructional model.	4.20	0.45	High Congruence
8	The model can be implemented in classroom.	4.20	0.45	High Congruence
9	The framework and procedures of instructional model are appropriate for university contexts.	4.80	0.45	Highest Congruence
Total		4.51	0.19	Highest Congruence

Table 32 presents mean scores and standard deviations for congruence on probability and appropriateness of principles, objectives, procedures and assessment. The results show that the mean scores of these aspects were at 4.51 (\bar{x}) and standard deviation was at 0.19 (SD). The scores of business English reading instructional model (draft) were rated and interpreted as “Highest Congruence” on its principles, objectives, procedures and assessment. This means that principles, concepts, objectives, instruction procedures and assessment with revised research instruments are considered as probable and appropriate for further implementation.

According to the results gained from the questionnaires, it can be concluded that the model had the efficiency for using in the tryout in terms of the theoretical rationality,

probability and appropriateness. However, some parts were adjusted according to the experts and advisor's recommendations.

In addition to descriptive statistics used as quantitative data, some comments were considered as qualitative ones. They were presented in detail as follows:

“The assessment part needs more details so that it is more congruent with the objectives of the study.” (Expert No. 5)

“In evaluation part, the details of performance that the students will be assessed should be clearly and concisely given. Moreover, the students' reading strategies modeled by the teacher should be evaluated and investigated their self-reading reflection.” (Expert No.3)

After getting the feedback from the advisor and experts, the research instruments together with the draft model were revised. However, the following present the revised parts based on the experts' recommendations.

Table 33 The Adjusted Parts in the Draft Model and the Experts' Recommendations

Recommendation 1: The steps of instruction procedure should be reconsidered for more appropriateness, systematic and easier to understand.	
Draft	Revised
Step 1. A: Activating interest and activity engagement - Provide the texts and sample to let the students engage in hand-on activities - Observe and personalize - Analyze the problem and need - Form the questions to engage and connect to the students' prior knowledge - Search text for information - Set the goal and select the topics for the texts	Step 1. A: Activating students' interest, background knowledge and activity on reading engagement - Provide the relevant text to let the students engage in hand-on activities - Help them with the difficult part found in the texts - Form the questions for students' engagement and connect to the students' prior knowledge - Observe and personalize - Analyze the need
Recommendation 2: Some sub-steps are redundant and they should be reorganized.	
Draft	Revised
Step 2. M: Motivation and model - Provide the relevant texts - Help them with the difficult vocabulary found in the texts - Model strategies	Step 2. M: Motivating the students and searching information - Search for various kinds of information and find out their own interesting one - Set the goal and select the topics together (identify the topic for the project)

Draft	Revised
<p>Step 3. A: Action-taking and ability to use the strategies</p> <ul style="list-style-type: none"> - Let the students read the passages and find the main ideas, paraphrase, make inference, predict, summarize and take note - Synthesize by mapping the concept and integrate information - Carry out the project tasks by asking the students to work in groups and brainstorm on the topics - Choose the best ideas - Plan and design the structure of the projects - Create the projects 	<p>Step 3. A: Action-taking and ability to use the strategies</p> <ul style="list-style-type: none"> - Model strategies so as to comprehend the texts - Let the students read the passages and use the strategies learned <p>(Project production and presentation are run in the next step.)</p>
<p>Recommendation 3: The step of running the project and presentation should be given more information regarding the students' cooperation, creative thinking and systematically creating their mini-projects.</p>	
Draft	Revised
<p>Step 4. R: Recalling and presenting</p> <ul style="list-style-type: none"> - Modifying thinking pattern, build prototypes and make some changes - Plan to present the projects - Communicate by sharing their projects and present to the class 	<p>Step 4. R: Running the project and presentation</p> <ul style="list-style-type: none"> - Carry out the plan for project tasks by asking the students to work in groups and brainstorm the project details on each topic - Make some agreement and choose the best idea - Plan and design the structure of the projects - Create the projects (each in form of mini-project) - Modifying thinking pattern, build prototypes and make some changes - Plan to present the mini-projects - Communicate to class by presenting their mini-projects
<p>Recommendation 4: The assessment part needs more details so that it is more congruent with the objectives of the study.</p>	
Draft	Revised
<p>Step 5. A: Assessment and amplifying</p> <ul style="list-style-type: none"> - Evaluate the project - Evaluate creative thinking - Extend their knowledge for further reading 	<p>Step 5. A: Assessment</p> <ul style="list-style-type: none"> - Evaluate reading comprehension - Reflect reading strategies - Evaluate the project (Peer-assessment and Teacher-assessment) - Evaluate creative thinking (Both Peer- and Teacher-assessment)
<p>Recommendation 5: In assessment, the details of performance that the students will be evaluated should be clearly and concisely given.</p>	

Draft	Revised
What to assess: Outcomes Creative Thinking - Design purpose/goals - Engage and connect to prior knowledge - Record concepts - Generate the ideas as much as possible - Analyze alternatives - Consider the ideas - Organize the information - Choose the best ideas - Modify thinking pattern - Build prototypes - Make changes as needed - Conclude and evaluate	Creative Thinking Abilities 4 Thinking Layers - Awareness on thinking - Observation - Thinking strategy - Reflection Product Construction - Design - Evaluation Add more performance to evaluate: Multiple Reading Strategies (Fix-up Strategies and Reading Comprehensive Strategies) - Predict the content (Relating to the background knowledge) - Use the context clues - Reread to clarify a possible misunderstanding - Find the main ideas - Make inferences - Take notes - Summarize - Identify text structure - Map the concepts and integrate information

The revised version was made and presented in the following details.

The draft model was based on the principles of both Concept-Oriented Reading Instruction and project-based learning which were **1) Strategies, 2) Collaboration and 3) Engagement** shown in the outer section of the circle as the main framework of the model. The inner section showed the cycle of AMARA procedures that were used in the business reading instruction and the heart of the circle represented the outcomes that all stages led to. The objectives to develop the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning were to enhance reading abilities and creative thinking abilities for undergraduate students. This draft model was then implemented and revised for the experts' verification. The components of AMARA Model were explained in detail as follows:

Component 1: Principles

The principles of AMARA Model were derived from the synthesis of both Concept-Oriented Reading Instruction and project-based learning. They were 1) Strategies, 2) Collaboration and 3) Engagement used as the framework of the model.

Component 2: Objectives

The objectives were to develop and enhance reading abilities and creative thinking abilities for undergraduate students by using business reading instructional model (AMARA Model) comprising Concept-Oriented Reading Instruction (CORI) and project-based learning.

Component 3: Instruction Procedures

The AMARA Model was named from the acronym of the five steps of which the details were shown as follows:

Step 1. Activating students' interest, background knowledge and activity on reading engagement

The teacher provided the relevant texts and some sample pictures to let the students engage in hand-on activities. The students were assisted with the difficult vocabulary or the students noted down important vocabulary found in the texts. Then the teacher formed the questions to let the students engage and connect to their prior knowledge by asking them to observe the things they could see or experience. They might be the pictures, the graphic use, the model, the color selection that encouraged them to try to find more information on that topic later. In this step, the students' needs were analyzed to begin to motivate their reading.

Step 2. Motivating the students and searching information

The teacher let the students search many kinds of text for information and find out their own interesting one. After that the goal was set and the topics for the texts were selected. The teacher asked the students to use the information they had found and read to prepare for their project.

Step 3. Action-taking and ability to use the reading strategies

In this step, reading strategies were modeled to the students. The teacher let the students read the passages and practice using the multiple reading strategies which were predicting the content (relate to the readers' background knowledge), using the context clues, finding the main ideas, rereading to clarify a possible misunderstanding, making inferences, taking notes, summarizing, identifying text structure, and mapping the concepts to integrate information.

Step 4. Running the project and presentation

It was time to run the project. The project tasks were carried out and planned by asking the students to work in groups and brainstorm the project details on each topic to choose the best ideas after making some agreement. The students planned and designed the structure of the projects and then created the projects which were all in the form of mini-projects. Then they helped to modify thinking pattern, build prototypes and make some changes. The project presentation was planned. The students had a chance to communicate by sharing their ideas about mini-projects and present to the class.

Step 5. Assessment

The teacher evaluated the students' reading comprehension abilities by using the post-test. Additionally, the teacher evaluated the students' strategy use which was reflected on the reading log. The students' mini-projects were simultaneously evaluated by using both peer-assessment and teacher-assessment. After each mini-project was submitted, the teacher evaluated the students' creative thinking abilities by using Creative Thinking Questionnaire. The students used self- and peer-assessment to evaluate their creativity.

The roles of teacher and students

The following are the roles of both teacher and students in each stage of AMARA instructional model:

Teacher's roles

1. The teachers played the role as "facilitators" who helped their students engage in their reading and use the strategies in each activity. The teachers also motivated their students to find information they wanted to know more, work in group and create the mini-projects innovatively.

2. The teachers created the learning atmosphere with full attention, understanding about the learners' different learning levels and motivation so that the students felt relaxed and engaged more in class activities. They helped activate their students' interest and use background knowledge in reading texts. With the teachers' assistance, the students felt free to share their ideas and opinions with their classmates and the teachers. Therefore, the teachers should pay attention to the students' learning

process, in-group and between-group sharing in the activities, and productive mini-projects.

3. The teachers had clear understanding on instructional model and were ready to give the students assistance all the time when they had unpredictable problems while learning.

Students' roles

1. The students participated in class, did the activities and were motivated by the teacher.

2. The students read the passages and listed difficult vocabulary that caused the problem in their reading and comprehension.

3. The students observed everything they found in their real life and raised the questions on the points they were interested in. They were motivated to find the answer by themselves by searching for the information they wanted to know on other sources such as on the internet, in the newspaper and so on.

4. The students discussed in class to fulfil their curiosity and respond their queries including analyze the problems emerged.

5. The students chose the subtopics gained from the discussion on each theme and decided their topics for the project.

6. The students paid attention to the models of strategies that the teacher demonstrated them. Then they themselves practiced by reading the passages and using the strategies learned both individually and in group.

7. The students planned and designed the structure of the projects and then created the projects which were all in the form of mini-projects. They worked in group and helped create, modify thinking pattern, build prototypes and make some changes of the mini-projects on each theme under the teacher's supervision. Then the project presentation was planned and prepared for presentation to the class.

8. The students did the reading comprehension ability test, reflected the reading strategies by using the reading log, used peer-assessment rubric to evaluate their friends' project and used Creative Thinking Questionnaire to evaluate their friends' mini-project.

Component 4: Assessment

The students' reading abilities and creative thinking abilities were evaluated to achieve the research objectives. Besides, the use of multiple reading strategies was also investigated and their details were identified in the revised version. Creative thinking abilities were checked and based on two domains which were 1) 4 thinking layers: awareness on thinking; observation; thinking strategy; and reflection, and 2) product construction: design, and evaluation. In terms of multiple reading strategies which integrated the fix-up strategy, reading comprehension strategies and cooperative learning, the use of predicting the content (relating to the background knowledge), using the context clues, rereading to clarify a possible misunderstanding, finding the main ideas, making inferences, taking notes, summarizing, identifying text structure and mapping the concepts and integrating information was assessed.

The revised version was shown as follows:

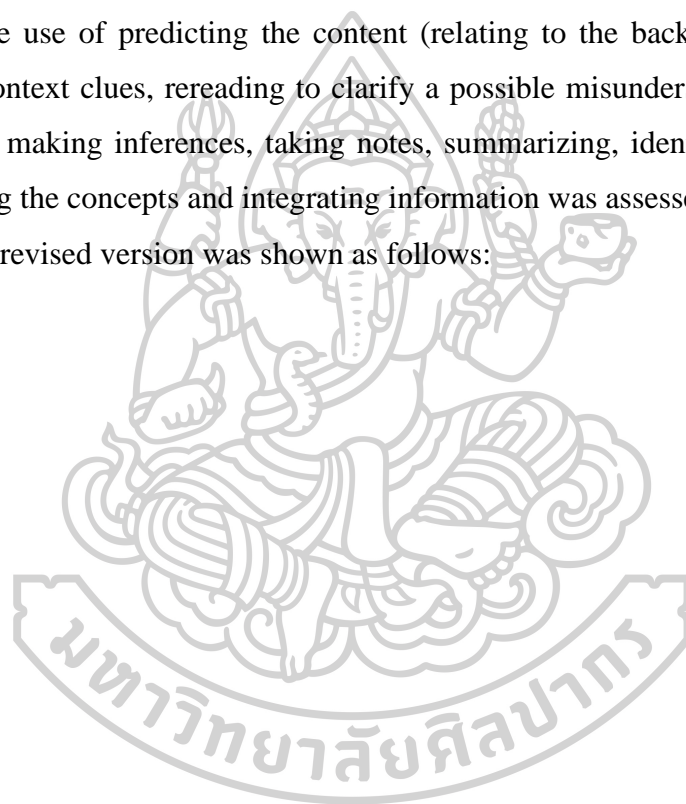
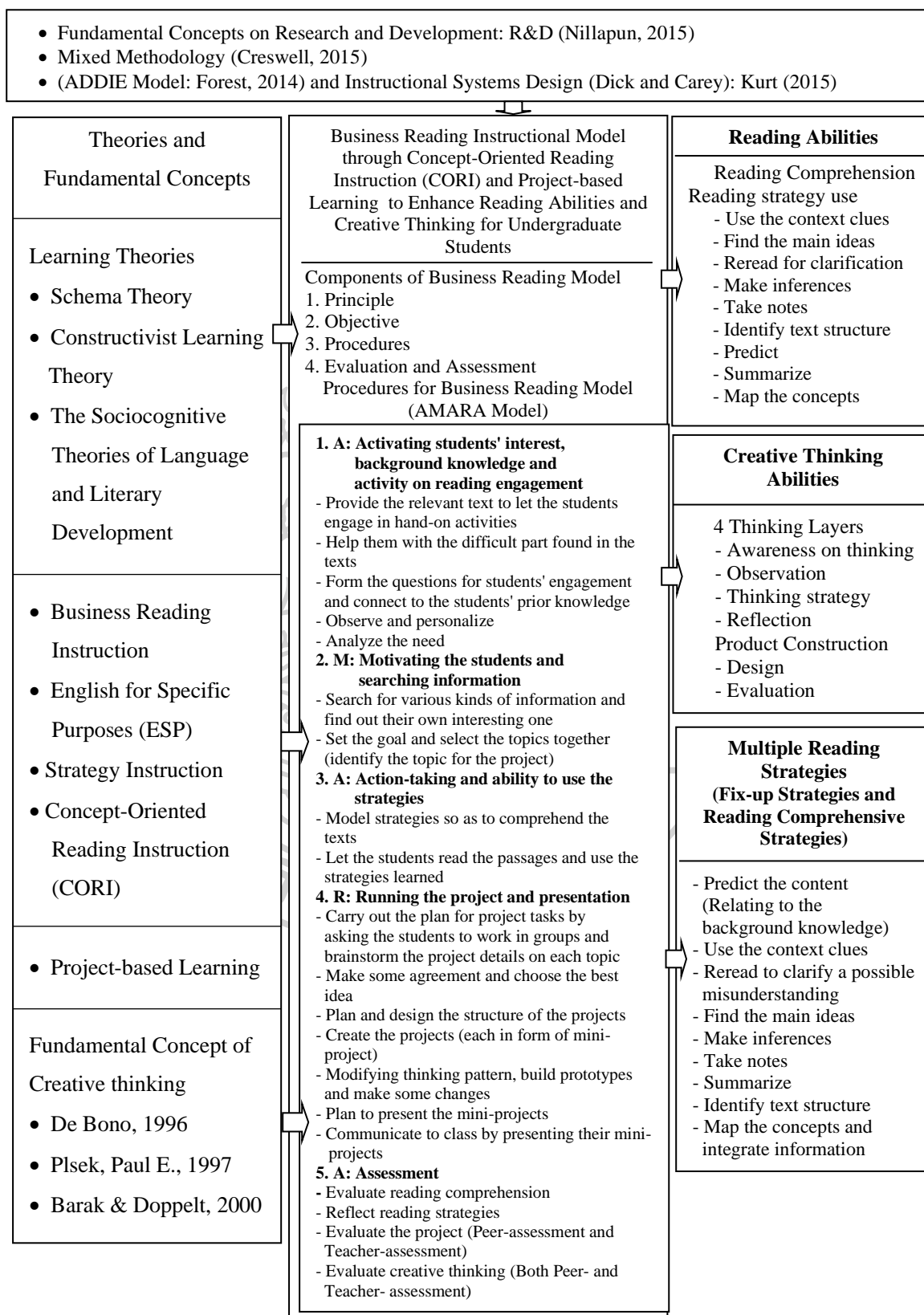


Figure 13 Research Conceptual Framework



AMARA Model (Revised Version)
Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI)
and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for
Undergraduate Students

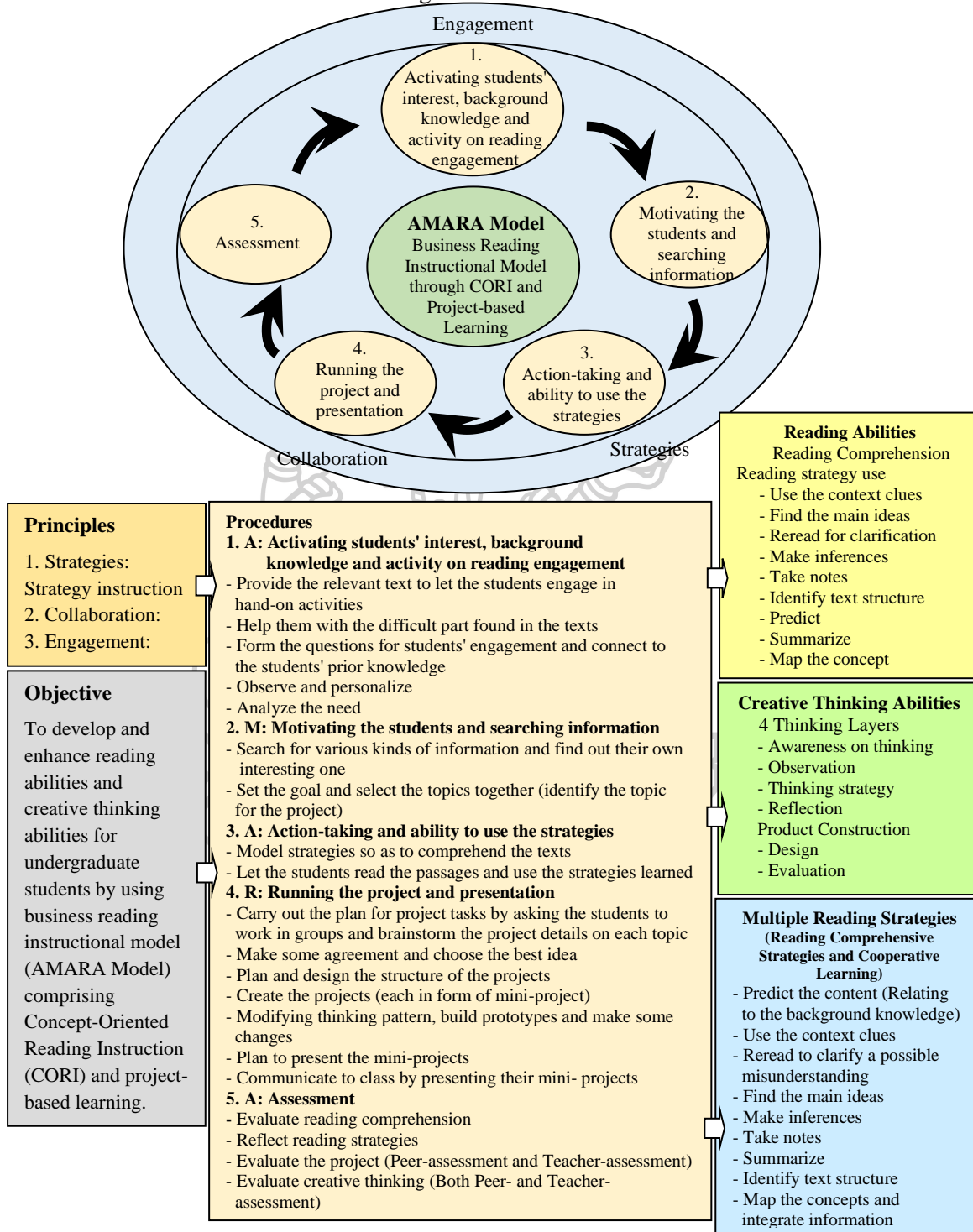


Figure 14 Business Reading Model (Revised Version)

Section II: Findings on the effectiveness of process undertaken in the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, as the set criteria at 75/75

This section indicates the results of implementation of the business reading instructional model. The model was instructed to the sample group after having been used in the tryout and revised according to the experts' recommendations. The following are the mean scores, standard deviations, and efficiency values:

Table 34 Efficiency of Process and Product in Implementation Stage

Score	Number of	Total scores	Mean	SD	Efficiency
E1: Process	35	15/120	11.26/90.11	0.57/4.59	75.10
E2: Product	35	40	31.11	2.04	77.79

Table 34 shows the efficiency of both process (E1) and product (E2) which was 75.10 and 77.79. In E1 process, the students were asked to do exercises after units with the total scores of 15 items in each unit. There were eight exercises after units that the students had to do. This phase investigated the efficiency of students' learning along the process. It focused on the percentage of the average or means of all scores the students earned from their exercises after units. Regarding E2, the efficiency of E2 was derived from the percentage of the average or means of all scores the students earned from their post-test. However, the results of both E1/E2 were 75/78 and met the set criteria (75/75). This meant that the business reading instructional model had the quality appropriate for further dissemination.

Section III: Findings on the students' reading abilities and comparison between their pre-test and post-test scores after using the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning

In this part, the results gained from both pre-test and post-test were compared to see the improvement of students' reading abilities. The table below indicates the comparison of the students' scores before and after employing the business reading instructional model.

Table 35 Comparison on Means and Standard Deviations of Pre-test and Post-test Scores

Reading Abilities	Pre-test		Post-test		t	p
	Mean	SD	Mean	SD		
Reading Abilities	22.17	3.33	31.11	2.04	20.62	0.00

Table 35 indicates the mean scores of both pre-test and post-test showing the students' reading abilities. Before the students were given the treatment or taught by using the model, they had taken the pre-test and the mean score was 22.17 (\bar{x}), 3.33 (SD). However, they had to take the post-test after the instructional model was employed. The result of post-test showed that the mean score was 31.11 (\bar{x}), 2.04 (SD) higher than the pre-test. However, the scores between pre-test and post-test was significantly different ($p < 0.05$).

In both pre-test and post-test, the items that most students can do correctly and reading strategies of those items were also focused. There were nine parts of reading abilities that were tested. They were: 1) predict the content (relating to the background knowledge); 2) use the context clues; 3) find the main ideas; 4) reread to clarify a possible misunderstanding; 5) make inferences; 6) take notes; 7) summarize the text; 8) identify text structure; and 9) map the concepts and integrate information. The table below shows all 9 reading strategies that were used correctly and ranked in top five according to the percentage of the highest numbers of right responses.

Table 36 Percentage of Each Reading Sub-skill in Pre-and Post-test According to Students' Correct Responses

Reading Abilities	Pre-test		Post-test	
	%	Rank	%	Rank
1. Predict the content (Relating to the background knowledge)	46.43	7	72.86	6
2. Use the context clues	30.95	8	68.57	8
3. Find the main ideas	82.29	1	94.29	1
4. Reread to clarify a possible misunderstanding	53.57	6	76.43	5
5. Make inferences	62.14	4	71.43	7
6. Take notes	67.43	3	89.14	2
7. Summarize the text	69.29	2	79.29	4
8. Identify text structure	23.81	9	60.00	9
9. Map the concepts and integrate information.	57.14	5	80.57	3

Table 36 shows the percentage of top five reading sub-skills that the respondents gave correctly in both pre-test and post-test. In the pre-test, the most accurate responses were find the main ideas (82.29%), summarize the text (69.29%), take notes (67.43%), make inferences (62.14%), and map the concepts and integrate information (57.14%), respectively. The sub-skill that the students could respond the least correctly was identify text structure (23.81%). After the treatment was given to the students, they were asked to do the post-test. When compared with the pre-test, it was found that the students could improve every reading sub-skill in the post-test and do more strategies correctly. More students were able to get more scores and use strategies correctly. The reading strategies were also ranked in top five orders which were find the main ideas (94.29%), take notes (89.14%), map the concepts and integrate information (80.57%), summarize the text (79.29), and reread to clarify a possible misunderstanding (76.43%). However, identify text structure was the sub-skill the least correctly responded by the students. To sum up and make the picture clearer, the bar chart was made and presented as follows:

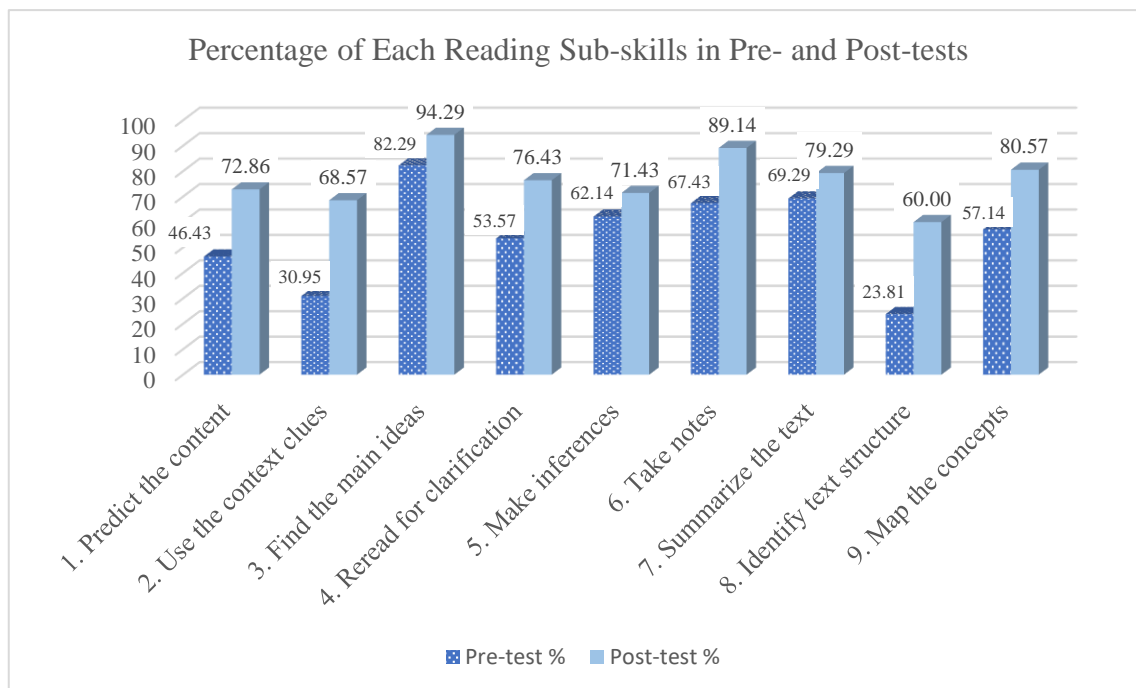


Figure 15 Percentage of Each Reading Sub-skill in Pre- and Post-tests

In conclusion, the students gave more correct answers for the post-test. It can be seen that find the main ideas was ranked as number 1 as the sub-skill that the most students could do correctly in both pre- and post-test. Moreover, every sub-skill in the post-test was higher and more students could do more correct answers. Therefore, it can be interpreted that more students' reading abilities were more developed in every sub-skill instructed and drilled in class.

Section IV: Findings on the students' creative thinking abilities on mini-projects after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning

After each mini-project development, each student was asked to assess his friends' creative thinking performance in his group. This part demonstrated the results on peer assessment after getting each mini-project done. In the study, students had to do totally eight mini-projects and the teacher would assign one mini-project for one week. There were 35 students in this course and they were asked to divide into seven groups with five students in each. All the group had to be named and used in doing a mini-project. After each mini-project assigned by the teacher, everyone in the group had to assess their peers with six items which related to their opinions and feelings while cooperating on their mini-project. The 6 items were constructed in a form based on stages of project running which cooperation was involved. The items were as follows: 1) Everyone in the group helped brainstorm the project details and made a lot of good suggestion. 2) Everyone in the group helped plan and design the project. 3) Everyone in the group made some agreement, modified thinking pattern and chose the best idea together. 4) Everyone in the group cooperated with one another and was on task most of the time they worked together. 5) Everyone in the group was open to any suggestion that had been made. And 6) Everyone in the group could complete the project effectively because of working with the friends. The results gained from the students in each group were statistically assessed and presented in group. In this result, mean and standard deviation were focused and shown in the following table.

Table 37 Mean Scores of Peer Assessment during Mini-project 1 Development

Peer Assessment on Mini-Project 1: Product/ Service Design	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.20 (0.84)	4.60 (0.55)	4.80 (0.45)	4.20 (1.10)	4.80 (0.45)	4.00 (0.71)	4.20 (1.10)	4.40
2. Everyone in the group helped plan and design the project.	3.80 (1.10)	4.60 (0.55)	4.80 (0.45)	4.40 (0.89)	4.40 (0.89)	3.80 (0.84)	3.80 (0.84)	4.23
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	3.80 (1.10)	4.60 (0.55)	5.00 (0.00)	4.20 (0.84)	4.20 (0.84)	3.80 (0.45)	4.20 (1.10)	4.26
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.00 (1.00)	4.60 (0.55)	4.80 (0.45)	4.00 (0.71)	4.60 (0.89)	4.00 (0.71)	3.80 (0.84)	4.26
5. Everyone in the group was open to any suggestion that had been made.	4.00 (1.00)	4.60 (0.55)	5.00 (0.00)	4.80 (0.45)	4.80 (0.45)	4.00 (0.71)	4.20 (1.10)	4.49
6. Everyone in the group could complete the project effectively because of working with the friends.	4.20 (0.84)	4.60 (0.55)	4.60 (0.55)	4.60 (0.89)	4.60 (0.89)	4.40 (0.55)	4.00 (1.00)	4.43
Mean	4.00	4.60	4.83	4.37	4.57	4.00	4.03	4.35
SD	0.94	0.55	0.29	0.69	0.69	0.41	0.96	
Result	High	Very High	Very High	High	Very High	High	High	

In mini-project 1, the students in each group were assigned to design their product or service. The scores that the students in Group 2, 3, 5 assessed and rated their peers in doing a group mini-project 1 were “Very High” while scores of Group 1, 4, 6 and 7 were rated as “High” which meant the groups cooperated very well and helped to design and develop their products. In the questionnaire, the students gave some comments which were shown below.

“Members cannot find same time to do group work.”

“We get the best agreement.”

“There are different thinks and many limitations of creating our product.”

“The problem is about time schedule.”

Table 38 Mean Scores of Peer Assessment during Mini-project 2 Development

Peer Assessment on Mini-Project 2: Brand name and Logo Design	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.40 (0.89)	4.60 (0.89)	4.80 (0.45)	4.20 (0.84)	5.00 (0.00)	4.20 (0.45)	3.80 (0.84)	4.43
2. Everyone in the group helped plan and design the project.	4.40 (0.89)	4.60 (0.89)	4.80 (0.45)	4.20 (1.10)	5.00 (0.00)	4.20 (0.45)	4.00 (0.71)	4.46
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.40 (0.89)	4.60 (0.89)	4.80 (0.45)	4.40 (0.55)	4.60 (0.55)	4.60 (0.55)	4.00 (1.00)	4.49
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.60 (0.55)	4.80 (0.45)	4.80 (0.45)	4.40 (0.89)	5.00 (0.00)	4.40 (0.55)	4.00 (0.71)	4.57
5. Everyone in the group was open to any suggestion that had been made.	4.40 (0.89)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	5.00 (0.00)	4.20 (0.84)	4.20 (0.84)	4.60
6. Everyone in the group could complete the project effectively because of working with the friends.	4.60 (0.55)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	5.00 (0.00)	4.20 (0.84)	3.80 (0.84)	4.57
Mean	4.47	4.70	4.80	4.47	4.93	4.30	3.97	4.52
SD	0.74	0.67	0.45	0.57	0.09	0.50	0.77	
Result	High	Very High	Very High	High	Very High	High	High	

In mini-project 2, the students were assigned to design their own brand name and logo. Most groups rated their peers and the scores of cooperation in doing their mini-projects were “High”. However, the students left some comments as follows:

“Some didn't pay much attention on the project.”

“Different thinks but finally we made a decision with satisfy to everyone in our group.”

Table 39 Mean Scores of Peer Assessment during Mini-project 3 Development

Peer Assessment on Mini-Project 3: S.W.O.T. analysis	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	3.80 (1.10)	4.60 (0.89)	4.80 (0.45)	4.40 (0.89)	4.60 (0.55)	4.20 (0.84)	4.00 (0.71)	4.34
2. Everyone in the group helped plan and design the project.	4.00 (1.00)	4.60 (0.89)	4.60 (0.55)	4.60 (0.55)	5.00 (0.00)	3.80 (0.84)	4.00 (0.71)	4.37
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.20 (0.84)	4.60 (0.89)	4.80 (0.45)	4.40 (0.89)	5.00 (0.00)	4.00 (0.00)	4.00 (1.00)	4.43
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.20 (1.10)	4.60 (0.89)	4.60 (0.55)	4.40 (0.89)	4.80 (0.45)	3.60 (0.55)	4.00 (0.71)	4.31
5. Everyone in the group was open to any suggestion that had been made.	4.40 (0.89)	4.60 (0.89)	4.80 (0.45)	4.60 (0.55)	5.00 (0.00)	4.20 (0.45)	4.20 (0.84)	4.54
6. Everyone in the group could complete the project effectively because of working with the friends.	4.40 (0.89)	4.60 (0.89)	4.40 (0.89)	4.60 (0.55)	5.00 (0.00)	4.00 (0.00)	4.20 (0.45)	4.46
Mean	4.17	4.60	4.67	4.50	4.90	3.97	4.07	4.41
SD	0.87	0.89	0.52	0.71	0.15	0.36	0.63	
Result	High	Very High	Very High	Very High	Very High	High	High	

In mini-project 3 development, the theme of the contents taught in this session was marketing plan. The students investigated their own company's strength, weakness, opportunity and threat. Therefore, they were assigned to do S.W.O.T. analysis. The scores that the students in Group 2, 3, 4, 5 assessed and rated their peers in doing a group mini-project 3 were "Very High" while scores of Group 1, 6 and 7 were rated as "High" in cooperation and making some agreements. There were no problem or any comments found in this phase.

Table 40 Mean Scores of Peer Assessment during Mini-project 4 Development

Peer Assessment on Mini-Project 4: Marketing Plan	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.20 (1.10)	4.60 (0.89)	4.60 (0.55)	4.00 (1.00)	5.00 (0.00)	3.80 (0.45)	4.20 (0.84)	4.34
2. Everyone in the group helped plan and design the project.	4.20 (1.10)	4.80 (0.45)	4.80 (0.45)	4.40 (0.89)	5.00 (0.00)	4.20 (0.45)	4.20 (0.45)	4.51
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.40 (0.89)	4.80 (0.45)	4.60 (0.55)	4.20 (0.84)	4.80 (0.45)	4.40 (0.89)	4.40 (0.89)	4.51
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.60 (0.89)	4.60 (0.89)	4.80 (0.45)	4.20 (0.84)	5.00 (0.00)	4.00 (0.00)	4.40 (0.55)	4.51
5. Everyone in the group was open to any suggestion that had been made.	4.60 (0.89)	4.80 (0.45)	4.80 (0.45)	4.60 (0.55)	4.60 (0.55)	4.40 (0.55)	4.20 (0.84)	4.57
6. Everyone in the group could complete the project effectively because of working with the friends.	4.60 (0.89)	4.80 (0.45)	4.60 (0.55)	4.20 (0.84)	4.80 (0.45)	4.40 (0.89)	4.40 (0.55)	4.54
Mean	4.43	4.73	4.70	4.27	4.87	4.20	4.30	4.50
SD	0.88	0.59	0.41	0.75	0.22	0.22	0.54	
Result	High	Very High	Very High	High	Very High	High	High	

Most students rated their peers in teams as “High” after they got the mini-project 4 done. In this project, they were required to create their own marketing plan which need more cooperation and agreement in achieving. However, there was no comment from students in this phase.

Table 41 Mean Scores of Peer Assessment during Mini-project 5 Development

Peer Assessment on Mini-Project 5: Script of Video advertisement	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.40 (0.89)	4.80 (0.45)	4.80 (0.45)	4.00 (1.00)	5.00 (0.00)	3.80 (0.45)	4.00 (0.71)	4.40
2. Everyone in the group helped plan and design the project.	4.60 (0.55)	4.60 (0.89)	4.80 (0.45)	4.20 (0.84)	5.00 (0.00)	4.20 (0.45)	4.40 (0.55)	4.54
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.40 (0.89)	4.80 (0.45)	4.80 (0.45)	4.40 (0.89)	5.00 (0.00)	4.00 (1.00)	4.60 (0.55)	4.57
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.40 (0.89)	4.80 (0.45)	4.40 (0.55)	4.40 (0.55)	4.57
5. Everyone in the group was open to any suggestion that had been made.	4.20 (1.10)	4.80 (0.45)	4.60 (0.55)	4.60 (0.55)	4.80 (0.45)	4.20 (0.45)	4.60 (0.55)	4.54
6. Everyone in the group could complete the project effectively because of working with the friends.	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.60 (0.55)	4.80 (0.45)	4.00 (0.71)	4.20 (0.84)	4.51
Mean	4.47	4.77	4.70	4.37	4.90	4.10	4.37	4.53
SD	0.73	0.52	0.45	0.64	0.15	0.40	0.56	
Result	High	Very High	Very High	High	Very High	High	High	

In mini-project 5, the theme of this week was creating a VDO advertisement. The students had to create a script for their VDO advertisement first. Three groups (Group 2, 3, and 5) had “Very High” cooperation in achieving this project while Group 1, 4, 6 and 7 rated their team as “High”. However, there was no problem or any comment while developing the mini-project 5.

Table 42 Mean Scores of Peer Assessment during Mini-project 6 Development

Peer Assessment on Mini-Project 6: Story board of VDO advertisement	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.20 (1.10)	4.60 (0.89)	5.00 (0.00)	4.00 (1.00)	5.00 (0.00)	3.80 (0.84)	4.40 (0.55)	4.43
2. Everyone in the group helped plan and design the project.	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.20 (0.84)	5.00 (0.00)	4.00 (0.71)	4.20 (0.84)	4.49
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.40 (0.89)	4.80 (0.45)	5.00 (0.00)	4.40 (0.55)	5.00 (0.00)	4.40 (0.89)	4.40 (0.55)	4.63
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.40 (0.89)	4.80 (0.45)	4.60 (0.55)	4.40 (0.89)	4.80 (0.45)	4.40 (0.89)	4.00 (1.00)	4.49
5. Everyone in the group was open to any suggestion that had been made.	4.60 (0.55)	4.60 (0.89)	5.00 (0.00)	4.60 (0.55)	4.80 (0.45)	4.20 (0.84)	4.40 (0.55)	4.60
6. Everyone in the group could complete the project effectively because of working with the friends.	4.60 (0.55)	4.80 (0.45)	5.00 (0.00)	4.40 (0.89)	5.00 (0.00)	4.40 (0.55)	4.40 (0.55)	4.66
Mean	4.47	4.73	4.87	4.33	4.93	4.20	4.30	4.55
SD	0.73	0.59	0.18	0.66	0.15	0.60	0.65	
Result	High	Very High	Very High	High	Very High	High	High	

The mini-project 6 was still in the theme of VDO advertisement but the students were assigned to create a storyboard for their VDO. In working in groups, students from Group 2, 3, 5 had the “Very High” cooperation and “High” cooperation was rated by the students in Group 1, 4, 6 and 7. In this mini-project, some comments were left and presented as follows:

“We have limitations of our brand, the results is not for as our plans, the equipment for making our cookies are not enough efficiently, we have no time much to do our cookies.”

Table 43 Mean Scores of Peer Assessment during Mini-project 7 Development

Peer Assessment on Mini-Project 7: Product/Service Review	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.60 (0.55)	4.60 (0.89)	4.60 (0.55)	4.40 (0.89)	5.00 (0.00)	3.80 (0.84)	4.40 (0.55)	4.49
2. Everyone in the group helped plan and design the project.	4.60 (0.55)	4.60 (0.89)	4.60 (0.55)	4.60 (0.89)	5.00 (0.00)	3.60 (0.55)	4.20 (0.45)	4.46
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.60 (0.55)	4.60 (0.89)	4.40 (0.55)	4.40 (0.89)	5.00 (0.00)	3.80 (0.45)	4.20 (0.84)	4.43
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.60 (0.55)	4.60 (0.89)	4.60 (0.55)	4.40 (0.89)	4.80 (0.45)	4.20 (0.84)	4.00 (1.00)	4.46
5. Everyone in the group was open to any suggestion that had been made.	4.60 (0.55)	4.60 (0.89)	4.80 (0.45)	4.60 (0.89)	4.60 (0.55)	4.20 (0.45)	4.40 (0.55)	4.54
6. Everyone in the group could complete the project effectively because of working with the friends.	4.40 (0.89)	4.60 (0.89)	4.60 (0.55)	4.40 (0.89)	4.80 (0.45)	4.20 (0.45)	4.20 (0.45)	4.46
Mean	4.57	4.60	4.60	4.47	4.87	3.97	4.23	4.47
SD	0.60	0.89	0.44	0.87	0.18	0.38	0.57	
Result	Very High	Very High	Very High	High	Very High	High	High	

The mini-project 7 was about the theme of customers. The students as customers might have an experience to review products they had bought. If they wanted to be entrepreneurs, they had to think more about the customers' needs, problem solving and after-sale service. Firstly, they were required to recall their experience on buying a product and write a review for it. This helped them to concern if they were business owners. In mini-project 7 development, most groups rated their peers as "Very High" cooperation and only Group 4, 6 and 7 had "High" cooperation. However, there was any comment while doing mini-project 7.

Table 44 Mean Scores of Peer Assessment during Mini-project 8 Development

Peer Assessment on Mini-Project 8: Customer Survey	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.40 (0.89)	4.80 (0.45)	4.80 (0.45)	4.40 (0.89)	4.80 (0.45)	4.20 (0.45)	4.60 (0.55)	4.57
2. Everyone in the group helped plan and design the project.	4.60 (0.55)	4.20 (0.84)	4.40 (0.55)	4.80 (0.45)	4.80 (0.45)	4.60 (0.55)	4.00 (0.71)	4.49
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.60 (0.55)	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.80 (0.45)	4.40 (0.55)	4.60 (0.55)	4.63
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.40 (0.89)	4.60 (0.89)	4.80 (0.45)	4.80 (0.45)	4.60 (0.55)	4.20 (0.45)	4.40 (0.89)	4.54
5. Everyone in the group was open to any suggestion that had been made.	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.80 (0.45)	4.80 (0.45)	4.40 (0.55)	4.60 (0.55)	4.66
6. Everyone in the group could complete the project effectively because of working with the friends.	4.40 (0.89)	4.60 (0.55)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	4.20 (0.45)	4.63
Mean	4.50	4.60	4.70	4.70	4.77	4.43	4.40	4.59
SD	0.69	0.56	0.41	0.51	0.43	0.34	0.39	
Result	Very High	Very High	Very High	Very High	Very High	High	High	

The last mini-project was customer survey which was mini-project 8. The teacher asked each group to create a customer survey. While doing the project, almost every group rated their peers as “Very High” cooperation and some comments were given as the following:

“Actually, I did not find any problem in our group because we are very close friend and we always work together in every subject. We can get along. We always participate.”

“Almost people in the group helped brainstorm the project details.”

“We have to think about the time schedule.”

Table 45 Mean Scores of Peer Assessment on 8 Mini-projects Development

Groups / Mean in each unit	Mini-project U.1	Mini-project U.2	Mini-project U.3	Mini-project U.4	Mini-project U.5	Mini-project U.6	Mini-project U.7	Mini-project U.8	mean	S.D.	Result
Group 1	4.00	4.50	4.20	4.40	4.50	4.50	4.60	4.50	4.39	0.20	High
Group 2	4.60	4.70	4.60	4.70	4.80	4.70	4.60	4.60	4.67	0.07	Very High
Group 3	4.80	4.80	4.70	4.70	4.70	4.90	4.60	4.70	4.73	0.09	Very High
Group 4	4.40	4.50	4.50	4.30	4.40	4.30	4.50	4.70	4.44	0.13	High
Group 5	4.60	4.90	4.90	4.90	4.90	4.90	4.90	4.80	4.84	0.11	Very High
Group 6	4.00	4.30	4.00	4.20	4.10	4.20	4.00	4.40	4.15	0.15	High
Group 7	4.00	4.00	4.10	4.30	4.40	4.30	4.20	4.40	4.21	0.16	High

To sum up the peer assessment on all mini-projects development, it was found that almost every group rated their teammates' cooperation as "High" which showed that all mini-projects were created with very well planned operation and collaboration. However, only group 2, 3 and 5 rated their teammates as "Very High" level with regard to planned operation and cooperation.

In terms of items, the following table shows the mean scores found in each mini-project.



Table 46 Mean Scores of Peer-Assessment on Each Questionnaire Item in 8 Mini-project Development

Peer-Assessment on 8 Mini-projects/Each questionnaire item	Mini-Project 1	Mini-Project 2	Mini-Project 3	Mini-Project 4	Mini-Project 5	Mini-Project 6	Mini-Project 7	Mini-Project 8	Mean
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	4.40	4.43	4.34	4.34	4.40	4.43	4.49	4.57	4.43
2. Everyone in the group helped plan and design the project.	4.23	4.46	4.37	4.51	4.54	4.49	4.46	4.49	4.44
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	4.26	4.49	4.43	4.51	4.57	4.63	4.43	4.63	4.49
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.	4.26	4.57	4.31	4.51	4.57	4.49	4.46	4.54	4.46
5. Everyone in the group was open to any suggestion that had been made.	4.49	4.60	4.54	4.57	4.54	4.60	4.54	4.66	4.57
6. Everyone in the group could complete the project effectively because of working with the friends.	4.43	4.57	4.46	4.54	4.51	4.66	4.46	4.63	4.53
Mean	4.35	4.52	4.41	4.50	4.52	4.55	4.47	4.59	4.49
SD	0.11	0.07	0.09	0.08	0.06	0.09	0.04	0.06	0.05
Result	High	Very High	High	Very High	Very High	Very High	High	Very High	High

Table 46 shows the mean scores of peer-assessment on each questionnaire item in 8 mini-project development. The students thought that everyone in their group was open to any suggestion that had been made ($\bar{x} = 4.57$), could complete the project

effectively because of working with the friends ($\bar{x} = 4.53$) and made some agreement, modified thinking pattern and chose the best idea together ($\bar{x} = 4.49$).

After the students completed each mini-project, the teacher assessed each of them. The following presented the mean scores of each questionnaire item from all 8 mini-projects with results interpreted in item details. The mean scores of each were shown as follows:

Table 47 Mean Scores of Teacher-Assessment on Each Questionnaire Item of Mini-project Running in 7 Groups

Teacher-Assessment on 8 Mini-projects/Each questionnaire item	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
1. The students made a lot of good suggestion and shared their opinion to the group.	4.00	4.13	4.13	4.13	4.38	4.13	4.25	4.16
2. The students were on task most of the time they worked together.	4.00	4.00	4.13	4.25	4.13	4.13	4.25	4.13
3. The students were open to their friends' suggestions.	4.00	4.13	4.00	4.50	4.50	4.13	3.88	4.16
4. The students gave some help and cooperated with one another.	4.13	4.25	4.63	4.38	4.50	4.00	4.38	4.32
5. The students could complete their project effectively because of working together.	4.25	4.38	4.75	4.50	4.88	4.50	4.63	4.56
Mean	4.08	4.18	4.33	4.35	4.48	4.18	4.28	4.27
SD	0.11	0.14	0.34	0.16	0.27	0.19	0.27	0.18
Result	High	High	High	High	High	High	High	High

According to the teacher's assessment on each questionnaire items of the 8 mini-project development, it was found that most of students could complete their project effectively because of working together ($\bar{x} = 4.56$). Besides, they also gave some help and cooperated with one another ($\bar{x} = 4.32$).

It can be concluded as a whole that the students in 7 groups cooperated in project creation due to their good opinion sharing, suggestion giving, and effectively cooperative working on each mini-project. The mean scores of 7 groups gained in each questionnaire item were at 4.27 which could be interpreted as “High”.

However, the teacher’s assessment on each group’s mini-project were given in details so as to illustrate each group’s performance in creating their mini-projects based on the teacher’s viewpoints. The mean scores were also calculated to see which group got high or highest performance. The details were shown below.

Table 48 Mean Scores of Teacher Assessment on 8 Mini-projects Development

Groups / Mean in each unit	Mini-project U.1	Mini-project U.2	Mini-project U.3	Mini-project U.4	Mini-project U.5	Mini-project U.6	Mini-project U.7	Mini-project U.8	mean	S.D.	Result
Group 1	4.00	4.00	3.80	4.20	4.00	4.00	4.40	4.20	4.08	0.18	High
Group 2	4.60	4.00	4.00	4.20	4.20	4.00	4.20	4.20	4.18	0.20	High
Group 3	4.40	4.60	4.20	4.20	4.00	4.40	4.20	4.40	4.30	0.19	High
Group 4	4.40	4.40	4.20	4.20	4.20	4.40	4.40	4.60	4.35	0.14	High
Group 5	4.60	4.80	4.40	4.40	4.00	4.60	4.40	4.60	4.48	0.24	High
Group 6	4.20	4.40	3.80	4.20	4.20	4.20	4.20	4.20	4.18	0.17	High
Group 7	4.20	3.60	4.00	4.20	4.40	4.60	4.40	4.60	4.25	0.33	High

In the development of 8 mini-projects, every groups were rated by the teacher as an assessor as “High” cooperation. The following is the bar chart that shows the mean scores of 8 mini-projects assessed by both peers and teacher.

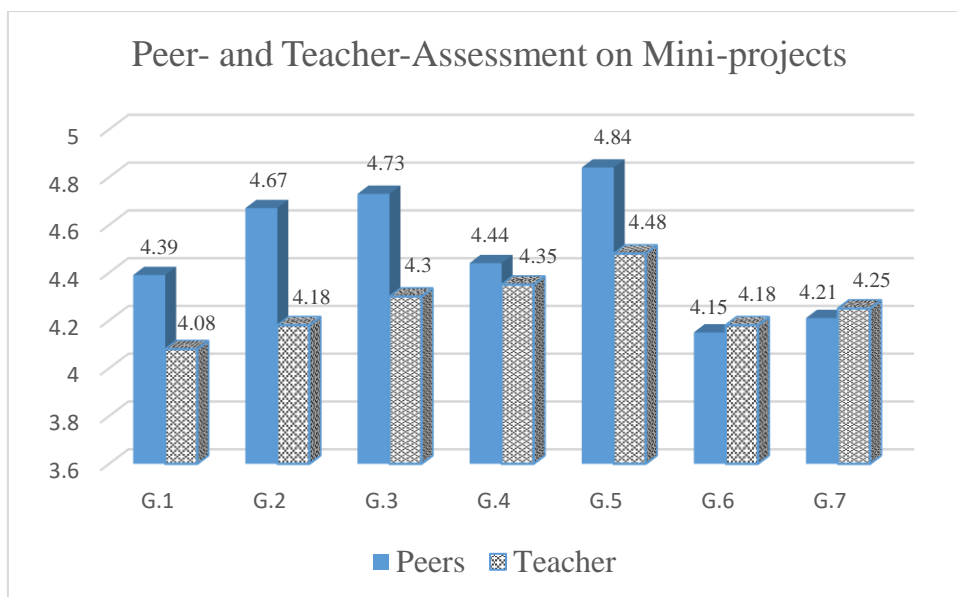


Figure 16 Peer- and Teacher-Assessment on Mini-projects

However, it could be concluded that both teacher and peers rated Group 5 as the “Higher” cooperation than others in completing the mini-projects with the right steps of project running. It could also be interpreted that this group cooperatively helped to carry out the plan and design the project tasks and brainstorm the project details on each topic. Then they made some agreement, chose the best idea, designed the structure, and created the projects together.

In terms of creative thinking, the students were required to assess their teammate’s creative thinking. The criteria employed in assessing the students’ creative thinking were based on the following two domains which were 1) four thinking layers in creating the projects based on Creative Thinking Scale, and 2) product construction. With regard to four thinking layers, awareness on thinking, observation, thinking strategy and reflection were emphasized; however, design and evaluation were assessed with regard to product construction. After the criteria were determined, item questions based on those two domains were created.

Firstly, four thinking layers are explained. There were seven items asking about their thinking layers in creating the projects. They were presented in the following details: Awareness on Thinking – Item no.1 Everyone in my group is aware that thinking is a skill that can be developed, and no.2 Everyone in my group listens to other people's opinions and prepares to give reasons when being inquired; Thinking strategy

– No.3 Everyone in my group helps design goals connecting to prior knowledge, generate and analyze the ideas, record concepts and choose the best one, and no.4 Everyone in my group helps modify thinking pattern, build prototypes and make changes as needed; Observation – No.5 Everyone in my group observes and considers the consequences of choices having been made; Reflection – No.6 Everyone in my group is aware of reflective thinking of the friends within and between group(s), and no.7 Everyone in my group considers methods to implement these designed thinking tasks. The table below showed the results of peers-assessment on creative thinking in detail.

Table 49 Details of Mean Scores on Peer-assessment on Thinking Layers

Peer Assessment on Thinking Layers	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
Awareness on Thinking								
1. Everyone in the group is aware that thinking is a skill that can be developed.	4.60 (0.55)	5.00 (0.00)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	4.60 (0.55)	4.60 (0.55)	4.74
2. Everyone in the group listens to other people's opinions and prepares to give reasons when being inquired.	4.80 (0.45)	5.00 (0.00)	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.60 (0.55)	4.60 (0.89)	4.71
Thinking Strategy								
3. Everyone in the group helps design goals connecting to prior knowledge, generate and analyze the ideas, record concepts and choose the best one.	4.20 (1.10)	4.80 (0.45)	4.40 (0.55)	4.80 (0.45)	4.80 (0.45)	4.20 (0.84)	4.60 (0.55)	4.54
4. Everyone in the group helps modify thinking pattern, build prototypes and make changes as needed.	4.60 (0.55)	5.00 (0.00)	4.20 (0.45)	5.00 (0.00)	5.00 (0.00)	4.00 (0.71)	4.60 (0.55)	4.63
Observation								
5. Everyone in the group observes and considers the consequences of choices having been made.	4.40 (0.89)	5.00 (0.00)	4.20 (0.45)	5.00 (0.00)	4.60 (0.55)	4.20 (0.45)	4.40 (0.89)	4.54
Reflection								
6. Everyone in the group is aware of reflective thinking of the friends within and between group(s).	4.60 (0.55)	4.80 (0.45)	4.40 (0.55)	4.80 (0.45)	4.80 (0.45)	4.20 (0.84)	4.40 (0.89)	4.57
7. Everyone in the group considers methods to implement these designed thinking tasks.	4.60 (0.55)	5.00 (0.00)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	4.40 (0.89)	4.60 (0.55)	4.71
Mean	4.54	4.94	4.49	4.86	4.77	4.31	4.54	4.64
SD	0.19	0.10	0.25	0.10	0.14	0.23	0.10	0.09
Result	Very High	Very High	High	Very High	Very High	High	Very High	Very High

To ease comprehension, four thinking layers with criteria are indicated in the table below.

Table 50 Mean Scores of Peer-assessment on Thinking Layers in Each Criteria

Peer Assessment on Thinking Layers	Mean	SD
Awareness on Thinking	4.73	0.02
Thinking Strategy	4.59	0.06
Observation	4.54	0.34
Reflection	4.64	0.10
Result	4.63 = Very High	

Table 50 reveals mean scores on students' assessment in their own group on thinking layers in creating the project. Besides, the findings according to each criteria are also given. It can be seen that in four thinking layers of creative thinking, the students' awareness on thinking was mostly used while processing the project with the mean score showing at 4.73, followed by reflective thinking at 4.64, thinking strategy at 4.59 and observation at 4.54, respectively. In conclusion, the teammates in every group rated their peers as "Very High" level of thinking layers with the mean score at 4.63. However, it can be shown for better comprehension in the following chart.

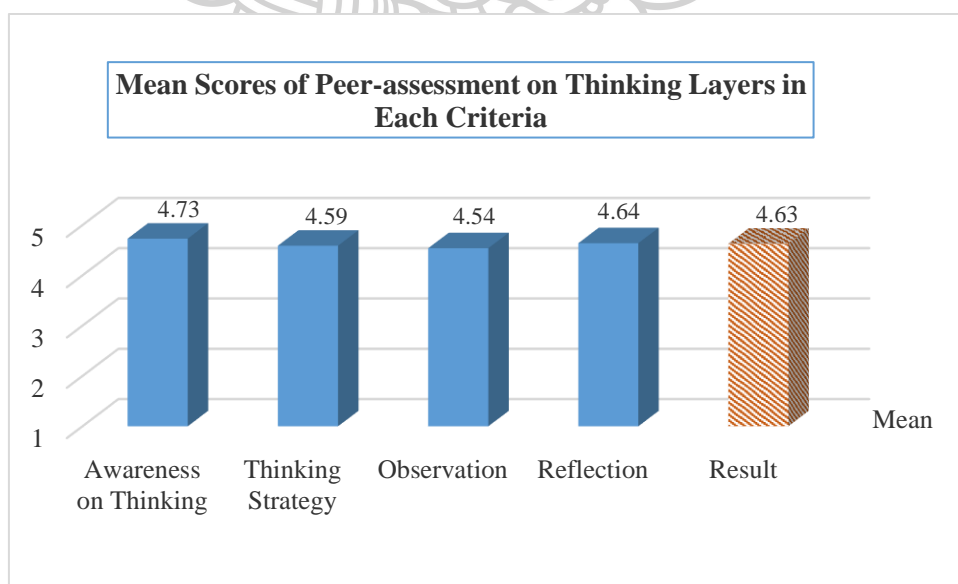


Figure 17 Mean Scores of Peer-assessment on Thinking Layers

Additionally, the students in each group were required to design and construct their own product as a mini-project so the teammates need to brainstorm and plan together to creatively construct it. For this reason, after constructing their own product, they were asked to assess their planning processes in designing and constructing the product. The question items on product construction were also asked by using two criteria which were design and evaluation. Then each question item was created as follows: Design: Item no.1 The product's features and specifications are considered and well planned, no.2 The product is well designed, constructed step by step and achieved the set goals, no. 3 The detailed drawing of the model is planned and made; Evaluation: no.4 The different models have been considered, made, compared and chose the best one, and no.5 The product is creatively developed and presented. The following showed the results of both peers-assessment on product construction in detail.

Table 51 Mean Scores on Peer-assessment on Product Construction

Peer Assessment on Product Construction	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
Design								
1. The product's features and specifications are considered and well planned.	4.60 (0.55)	4.80 (0.45)	4.40 (0.55)	5.00 (0.00)	4.40 (0.55)	4.60 (0.55)	4.40 (0.89)	4.60
2. The product is well designed, constructed step by step and achieved the set goals.	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.80 (0.45)	4.40 (0.55)	4.60 (0.55)	4.20 (1.10)	4.57
3. The detailed drawing of the model is planned and made.	5.00 (0.00)	4.80 (0.45)	4.60 (0.55)	5.00 (0.00)	4.40 (0.55)	4.20 (0.84)	4.40 (0.89)	4.63
Evaluation								
4. The different models have been considered, compared and chose the best one.	4.40 (0.89)	5.00 (0.00)	4.40 (0.55)	4.80 (0.45)	4.60 (0.55)	4.60 (0.55)	4.60 (0.55)	4.63
5. The product is creatively developed and presented interestingly.	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	4.80 (0.45)	4.60 (0.55)	4.80 (0.45)	4.60 (0.55)	4.74
Mean	4.68	4.84	4.56	4.88	4.48	4.56	4.44	4.63
SD	0.23	0.09	0.17	0.11	0.11	0.22	0.17	0.06
Result	Very High	Very High	Very High	Very High	High	Very High	High	Very High

Table 51 shows the details of mean scores on students' assessment in their own group on product construction in terms of design and evaluation. The results were expressed in each item.

Besides, two teachers as assessors rated the students' product construction. The results gained from teacher-assessment were presented in the following table.

Table 52 Mean Scores of Teacher-assessment on Students' Product Construction

Teacher-assessment on Product Construction	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Mean
Design								
1. The product's features and specifications are considered and well planned.	5.00	5.00	4.50	5.00	5.00	4.50	5.00	4.86
2. The product is well designed, constructed step by step and achieved the set goals.	5.00	4.50	5.00	5.00	4.50	5.00	5.00	4.86
3. The detailed drawing of the model is planned and made.	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Evaluation								
4. The different models have been considered, compared and chose the best one.	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5. The product is creatively developed and presented interestingly.	4.50	4.50	4.00	4.50	5.00	4.50	4.50	4.50
Mean	4.90	4.80	4.70	4.90	4.90	4.80	4.90	4.84
SD	0.22	0.27	0.45	0.22	0.22	0.27	0.22	0.20
Result	Very High	Very High	Very High	Very High	Very High	Very High	Very High	Very High

Table 52 reveals the details of mean scores on teachers' assessment on students' product construction in each item. To give a clear picture on both peer- and teacher-assessment in the domain of product construction, the following table shows the mean scores analyzed in relation to design and evaluation.

Table 53 Mean Scores of Peer- and Teacher-assessment on Product Construction

Product Construction	Peers	Teachers
Design		
- Well-planned product's features and specifications	4.60	4.91
- Well-designed and detailed drawing of the model		
- Systematically constructed product		
Evaluation		
- Best consideration, comparison and selection of various models	4.69	4.75
- Creative development on product and interesting presentation		
Mean	4.65	4.83
SD	0.06	0.11
Result	Very High	Very High

As can be seen from both teachers and group members' assessment on product construction, the mean scores gained from students' assessment were at 4.60 and

teachers' assessment at 4.91 in terms of design. Regarding evaluation, the students rated their peers with average scores at 4.69 and the teachers' mean scores were at 4.75. However, in the domain of product construction, the students' mean scores were at 4.65 and the teachers at 4.83 which were interpreted as "Very High" level of abilities in constructing creative product.

When considering each aspect in product construction, it can be seen that the mean scores rated by the teachers were higher than those given by peers in terms of well-planned product's features and specifications, well-designed and detailed drawing of the model, systematically constructed product, best consideration, comparison and selection of various models and creative development on product and interesting presentation. Interestingly, design was rated with the higher mean scores than evaluation. The students, on the other hand, rated very high mean scores on evaluation, followed by design. The following bar chart can help better comprehension.

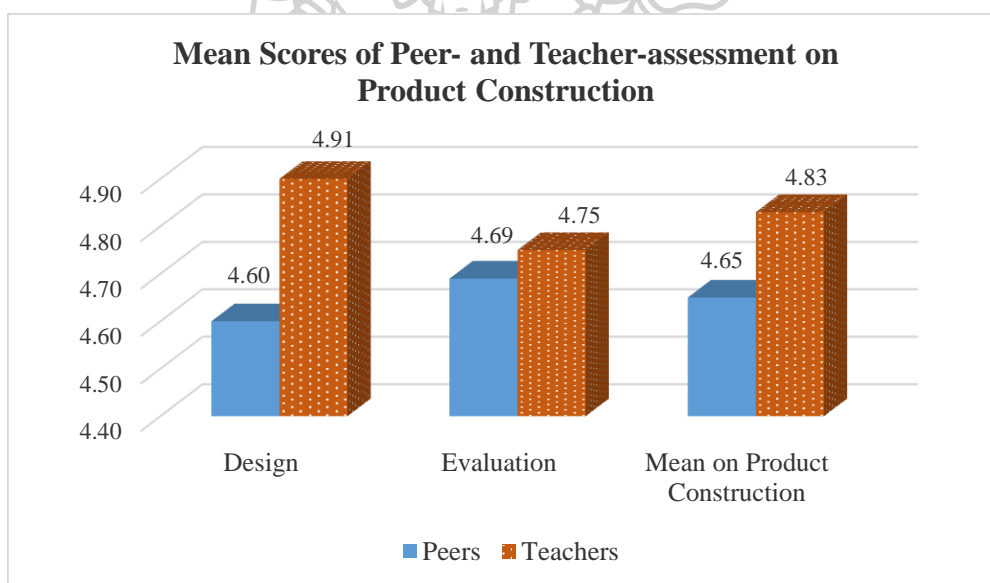
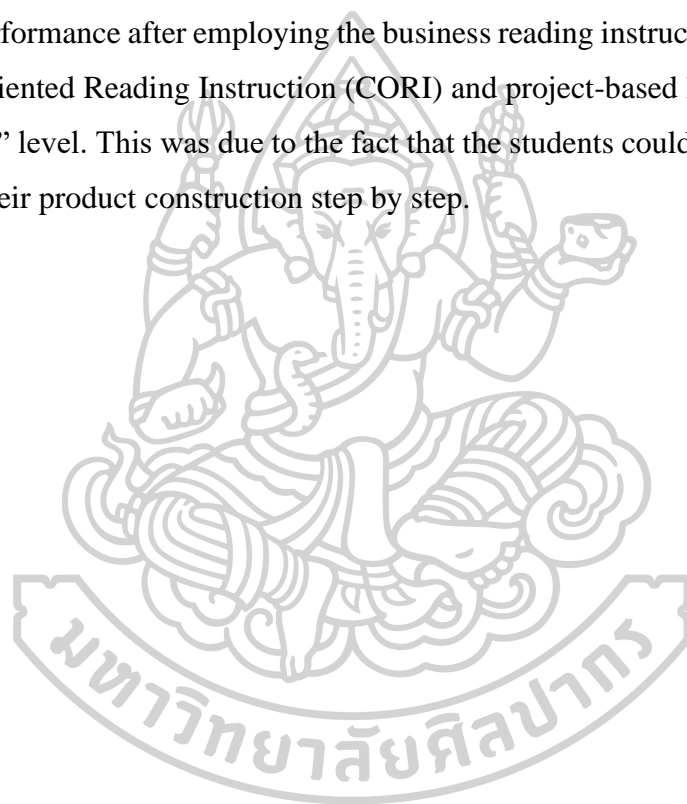


Figure 18 Peer- and Teacher-Assessment on Product Construction

To assess creative thinking abilities or thinking layers in constructing the product, the students gave priority to best consideration, comparison and selection of various models, creative development on product and interesting presentation. They develop their product by planning and designing creatively with the awareness on developing thinking skill, reflective thinking of friends and the logical opinion sharing with good reasons. Moreover, the students focused on evaluating their product after assistance on designing goals, connecting to prior knowledge, generating, analyzing the

ideas, recording concepts, observing and considering the consequences of choices, choosing the best one, modifying thinking pattern, building prototypes and making changes. It indicated that both teachers and students' opinions on thinking layers and product construction representing creative thinking were fully expressed in all students' mini-projects.

In conclusion, opinions gained from both teachers and the students were the same in terms of creative thinking layers and product construction. To develop the mini-projects, the students could cooperatively work with their teammates and their creative thinking performance after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning was rated in "Very High" level. This was due to the fact that the students could creatively think and well plan their product construction step by step.



Section V: Findings on the students' usage of multiple reading strategies after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students

In instruction process, the multiple reading strategies were taught and used individually by the students. The multiple reading strategies were the combination between CORI and reading comprehension strategies. Three stages of activities were based on the CORI procedures: Pre-reading activities; During-reading activities; and Post-reading activities. In the pre-reading stage, the teachers activated the students' background knowledge by preparing or motivating them to read the selected materials, related the content to students' prior knowledge, and activated their background knowledge. In the pre-reading, the teacher perceived the students' reading strategies by observation. After the students were instructed and modeled the multiple reading strategies, in the assessment stage the teacher let them read, use and reflect the strategies independently. The reading log was distributed to each of them so as to record their strategy use. This was carried out after each lesson before doing the exercises after units. There were nine reading strategies which were: predict the content (relating to the background knowledge); use the context clues; find the main ideas; reread to clarify a possible misunderstanding; make inferences; take notes; summarize; identify text structure; and map the concepts and integrate information. The data gained from the reading log were presented in both quantitative and qualitative way. The table below showed the accumulated number of times on multiple reading strategy usage in 8 units from the reading log presented in the frequency and percentage.

Table 54 Accumulated Number of Times on Multiple Reading Strategy Usage in 8 Units from Reading Log

Strategies	Unit 1		Unit 2		Unit 3		Unit 4		Unit 5		Unit 6		Unit 7		Unit 8		Total		Rank
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	
Strategy 1 Predict the content (Relating to the background knowledge)	75	20.22	45	12.13	40	10.78	61	16.44	44	11.86	38	10.24	32	8.63	36	9.70	371	15.58	2
Strategy 2 Use the context clues	39	13.64	31	10.84	38	13.29	28	9.79	32	11.19	30	10.49	47	16.43	41	14.34	286	12.01	3
Strategy 3 Reread to clarify a possible misunderstanding	7	6.14	26	22.81	14	12.28	17	14.91	12	10.53	24	21.05	3	2.63	11	9.65	114	4.79	9
Strategy 4 Find the main ideas	69	11.98	79	13.72	58	10.07	65	11.28	96	16.67	68	11.81	65	11.28	76	13.19	576	24.19	1
Strategy 5 Make inferences	14	6.17	16	7.05	13	5.73	79	34.80	21	9.25	31	13.66	27	11.89	26	11.45	227	9.53	6
Strategy 6 Take notes	6	4.03	16	10.74	44	29.53	15	10.07	12	8.05	16	10.74	23	15.44	17	11.41	149	6.26	7
Strategy 7 Summarize	18	6.36	18	6.36	30	10.60	27	9.54	60	21.20	54	19.08	35	12.37	41	14.49	283	11.89	4
Strategy 8 Identify text structure	28	11.52	40	16.46	23	9.47	30	12.35	37	15.23	36	14.81	20	8.23	29	11.93	243	10.21	5
Strategy 9 Map the concepts and integrate information	4	3.03	22	16.67	27	20.45	10	7.58	14	10.61	14	10.61	20	15.15	21	15.91	132	5.54	8

Table 54 showed the number of times on multiple reading strategy usage in every unit reflecting through the reading log. There were eight units and nine reading strategies in each used as multiple reading strategies which integrated between fix-up strategies and reading comprehension strategies. The fix-up strategies comprised the first three strategies which were 1. predicting the content, 2. using the context clues, and 3. rereading to clarify a possible misunderstanding. Reading comprehension strategies consisted of the other six strategies which were 4. finding the main ideas, 5. making inference, 6. taking note, 7. summarizing, 8. identifying text structures, and 9. mapping the concepts and integrate information.

The results presented the number of times accumulated as the sum of frequency use of each strategy in each unit. Additionally, the percentage was also given. When considering on the top five ranking, it was found that the results were presented as follows: 1st rank - find the main ideas (24.19%); 2nd rank - predict the content (15.58%); 3rd rank - use the context clues (12.01%); 4th rank - summarize (11.89%); and 5th rank - identify text structure (10.21%), respectively. In contrast, 9th rank - reread to clarify a possible misunderstanding (4.79%) and 8th rank - map the concepts and integrate information (5.54%) were found to use least of all.

The ranking numbers of multiple reading strategy usage were presented in the table below so as to ease comprehension.

Table 55 Percentage on Multiple Reading Strategy Usage in 8 Units

Strategies	Percent
1. Find the main ideas	24.19
2. Predict the content	15.58
3. use the context clues	12.01
4. Summarize	11.89
5. Identify text structure	10.21
6. Make inferences	9.53
7. Take notes	6.26
8. Map the concepts and integrate information	5.54
9. Reread to clarify a possible misunderstanding	4.79
Total	100.00

It can be shown in bar chart as follows.

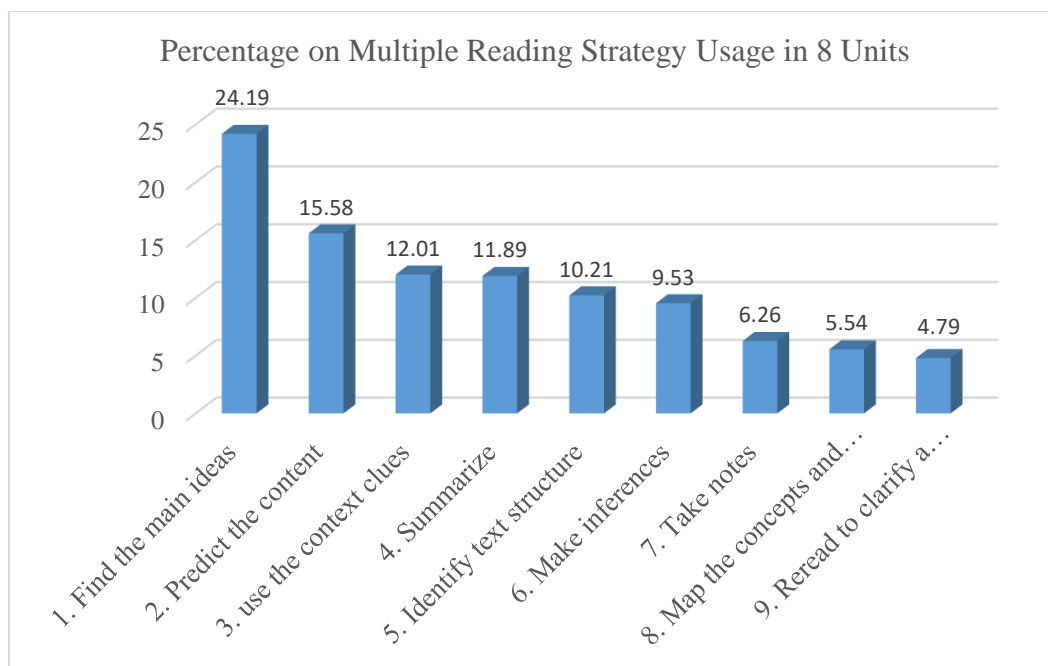
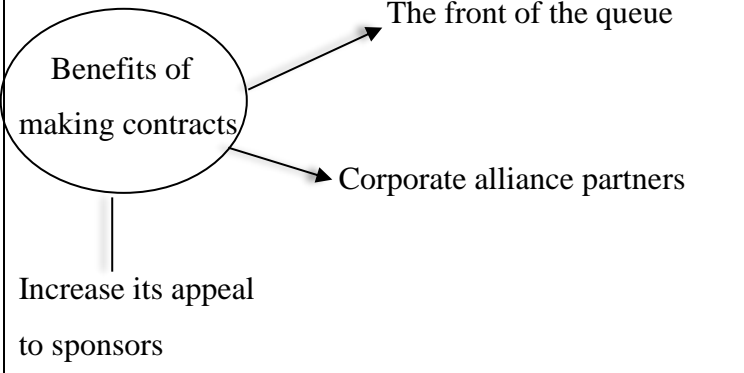


Figure 19 Percentage on Multiple Reading Strategy Usage in 8 Units

Besides frequencies as quantitative data, the students' think-aloud on reading strategy usage was qualitatively reflected and shown below.

Table 56 Examples of the Students' Think-aloud

Reading Strategies	Examples of Students' reflection (Post-reading)
<ul style="list-style-type: none"> Predict the content (Relating to the background knowledge) 	<p>"They mention about Siemens, the German industrial group, many time along with Disney. It makes me predict that this context is about Siemens as a sponsor for Disney." (Informant No. 3)</p>
<ul style="list-style-type: none"> Use the context clues 	<p>"I guess that awry is a negative word and I think it means wrong or unwell because the next sentence signifies with the word 'apologize'." (Informant No. 23)</p>
<ul style="list-style-type: none"> Find the main ideas 	<p>"I read the whole of the text and find the words such as customers very often. Then the main idea that this text is talking about customers' need." (Informant No.35)</p>
<ul style="list-style-type: none"> Reread to clarify a possible misunderstanding 	<p>"I reread the whole paragraph C 2 times. The paragraph is quite long, then I need to read it twice" (Informant No. 22)</p>

Reading Strategies	Examples of Students' reflection (Post-reading)
<ul style="list-style-type: none"> ▪ Make inferences 	<p>“I try to think beyond why instant coffee cannot be sold well in France and I infer that the French people do not support instant coffee. They prefer to drink fresh coffee. (Informant No. 16)</p>
<ul style="list-style-type: none"> ▪ Take notes 	<p>“I note down the important details. For example, In paragraph G, Disney hopes to win the market:</p> <ol style="list-style-type: none"> 1. Sponsor a sport event 2. Attach names to a stadium.” (Informant No.16)
<ul style="list-style-type: none"> ▪ Summarize 	<p>“In the paragraph titled Product Categories, I catch the main points found in the paragraph. The head title told me about categories which are 1. Electronic and 2. Fashion. I can summarize that there is a huge increase in growth in electronic and fashion categories.” (Informant No. 7)</p>
<ul style="list-style-type: none"> ▪ Identify text structure 	<p>“In this text, I found the word that describe the text structure such as at first, as a former. When I saw these words, I think this text may be ‘Sequence or Chronological order structure’ but in the same text, it is more clear that the text gives the meaning of the word so it might also be ‘Description’.” (Informant No. 30)</p>
<ul style="list-style-type: none"> ▪ Map the concepts and integrate information 	<p>“In paragraph H, I find the important points. (Informant No.16)</p>  <pre> graph TD A((Benefits of making contracts)) --> B[The front of the queue] A --> C[Corporate alliance partners] A --> D[Increase its appeal to sponsors] </pre>

More reflections were made by other students and shown as follows:

“I don’t understand paragraph H so I read it many times.”

“I misunderstand the content in the text, and I read it again and again.”

“I reread the confusing part in the paragraph and try to find the important points that used to ease my understanding. I have the problem: confuse the word meaning in the paragraph and the solution I do is to reread the paragraph and find the important point to clarify the confusing part.”

“I predict the content by looking at the title, the subtitle and the picture found in the text provided. My problem is that I can’t predict the text. I solve the problem by reading the title and find key words.”

“I found some sentences that make me confused so I reread them 2 times.”

“I have problem with this sentence ‘The price does not always indicate its quality’ and I don’t understand context so I review it.”

To sum up, as can be seen from the tables, the top three out of nine strategies that in average of 29 and 23 students out of 35 used mostly in extensive reading to comprehend reading texts were 1st rank - find the main ideas, 2nd rank - predict the content and 3rd rank – use the context clues. In contrast, reread to clarify a possible misunderstanding was the least frequently used strategy on an average of 9 students.



Section VI: Findings on the experts' verification of the business reading instructional model (Final model)

In the study, the draft of AMARA Model has been developed and implemented as the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. Before the model was verified by the experts, many principles, fundamental concepts, and theories had been investigated, studied, analyzed and synthesized. After that the conceptual framework of the model together with research instruments used in data collection process had been designed, created and submitted to the advisor and then 5 experts to evaluate, approve and verify the model in terms of content validity, and quality of instruction process. The researcher used the experts' recommendations to revise the model and research instruments before the tryout. The results gained from the tryout were employed in model revision. The revised model was implemented and submitted to the experts for verification. The following are the results of the experts' verification.

Table 57 Mean Scores and Standard Deviations for Theoretical Rationality on Principles, Theories and Instructional Procedure of the Draft Model

Item	Evaluation Aspects	Theoretical Rationality		
		Mean	SD	Result
1	Principles of Business Reading Model are corresponded to theories and fundamental concepts.	4.80	0.45	Highest
2	Objectives of Business Reading Model are congruent with principles and clear enough to reach learners' goals.	4.60	0.89	Highest
3	The first step of activating students' interest and background knowledge is considered appropriate for preparing them before the instruction.	4.60	0.89	Highest
4	The second step of motivating the students is appropriate for encouraging them to search background information for the purpose of preparing for project work and also reading comprehension.	4.60	0.89	Highest
5	The next step of action taking is appropriate for students to be able to use the reading strategies to enhance their reading comprehension.	4.80	0.45	Highest
6	The step of running the project and presentation is appropriate for students to cooperatively, creatively and systematically create their mini-projects.	4.80	0.45	Highest
7	The step of assessment is appropriate. Students can evaluate their own project together with their peers, reflect their learning by using reading logs and implement reading strategies in their extensive reading.	4.80	0.45	Highest

Item	Evaluation Aspects	Theoretical Rationality		
		Mean	SD	Result
8	The procedures of Business Reading Model are congruent with relevant concepts, principles including theories and appropriate for further instruction.	4.80	0.45	Highest
	Total	4.73	0.61	Highest

Table 57 shows the mean scores and standard deviations for theoretical rationality on principles, theories and conceptual framework of the business English reading instructional model assessed by the 5 experts. It can be seen that mean scores and standard deviation derived from this part of questionnaire were at 4.73 (\bar{x}) and 0.61 (SD). As can be seen that the theoretical rationality of the principles of business reading instructional model, theories, fundamental concepts, objectives, and procedures was rated as “Highest” which means that the business reading instructional model had the highest rationality in theory on the principles, theories, fundamental concepts, objectives, and instruction procedures.

Table 58 Mean Scores and Standard Deviations for Probability and Appropriateness on Principles, Objectives, Procedures and Assessment

Item	Evaluation Aspects	Probability and Appropriateness		
		Mean	SD	Result
	Principles and Objectives			
1	Principles, concepts and objectives of the model are appropriate for developing Business Reading model and correspond to the conditions and needs of learners.	4.80	0.45	Highest Congruence
2	Principles, concepts and theories of the model are all congruent with one another and can be created as conceptual framework for appropriately conducting teaching and learning activities.	4.60	0.89	Highest Congruence
	Procedures and Assessment			
3	All steps in teaching and learning procedures are appropriate and consistently relevant.	4.80	0.45	Highest Congruence
4	The procedures in teaching and learning are congruent with principles, concepts and objectives of the model.	4.60	0.89	Highest Congruence
5	The procedures in teaching and learning are appropriate for learners and can reach the objectives at last.	4.60	0.89	Highest Congruence
6	Research instruments used in each step of the model correspond to the objectives of implementation.	4.60	0.89	Highest Congruence
7	The methods of assessment are congruent with the objectives of instructional model.	4.80	0.45	Highest Congruence

Item	Evaluation Aspects	Probability and Appropriateness		
		Mean	SD	Result
8	The model can be implemented in classroom.	4.80	0.45	Highest Congruence
9	The framework and procedures of instructional model are appropriate for university contexts.	4.80	0.45	Highest Congruence
	Total	4.71	0.65	Highest Congruence

Table 58 indicates mean scores and standard deviations for congruence on probability and appropriateness of principles, objectives, procedures and assessment. The results express that the mean scores were at 4.71 (\bar{x}) and standard deviation was at 0.65 (SD). The rated scores of business English reading instructional model were interpreted as “Highest Congruence” on its principles, objectives, procedures and assessment. Therefore, principles, concepts, objectives, instruction procedures and assessment with revised research instruments are considered as probable and appropriate for further implementation.

According to the results gained from the experts, it can be concluded that the model had the efficiency for further use in terms of the theoretical rationality, probability and appropriateness.

In addition to descriptive statistics used as quantitative data, some comments were considered as qualitative ones. They were presented as follows:

“In the first step of activating students' interest and background knowledge which is considered appropriate for preparing them before the instruction, I think the activities used in this phase should be differentiated from others. Importantly, they should well correspond to the content in each unit so as to promote the highest efficiency and effectiveness on learners' abilities.”

“In terms of assessment, the research instruments should have clear instructions and criteria for each topic of assessment. It would help to avoid ambiguity while using them”

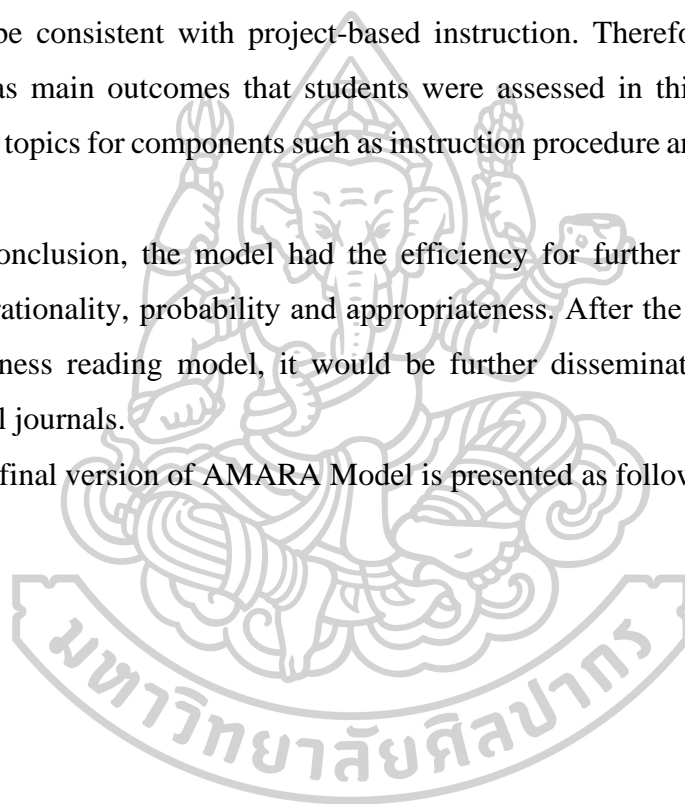
After the research instruments were revised and approved by the experts, it was ready for further use. It could be seen from the experts' assessment that the business reading instructional model had the “highest” rationality in theory and “highest” congruence on the principles, theories, fundamental concepts, objectives, and instruction procedures. Besides, it was found that the model had “highest congruence”

in terms of principles, concepts, objectives, instruction procedures and assessment with revised research instruments. For this reason, the model was considered as “probable and appropriate” for further implementation.

However, there were some points that needed to be reviewed. As for multiple reading strategies as the performance of strategy use, the cooperative learning should be changed into fix-up strategies in which this model had some relevant sub-skills such as predict the content, use the context clues, find the main ideas, and reread for clarification to show the students’ multiple strategy use. Anyhow, cooperative learning seemed to be consistent with project-based instruction. Therefore, fix-up strategies were used as main outcomes that students were assessed in this instruction model. Besides, the topics for components such as instruction procedure and assessment should be added.

In conclusion, the model had the efficiency for further use in terms of the theoretical rationality, probability and appropriateness. After the experts’ verification on the business reading model, it would be further disseminated by publishing in international journals.

The final version of AMARA Model is presented as follows:



AMARA Model (Final Version)
Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI)
and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for
Undergraduate Students

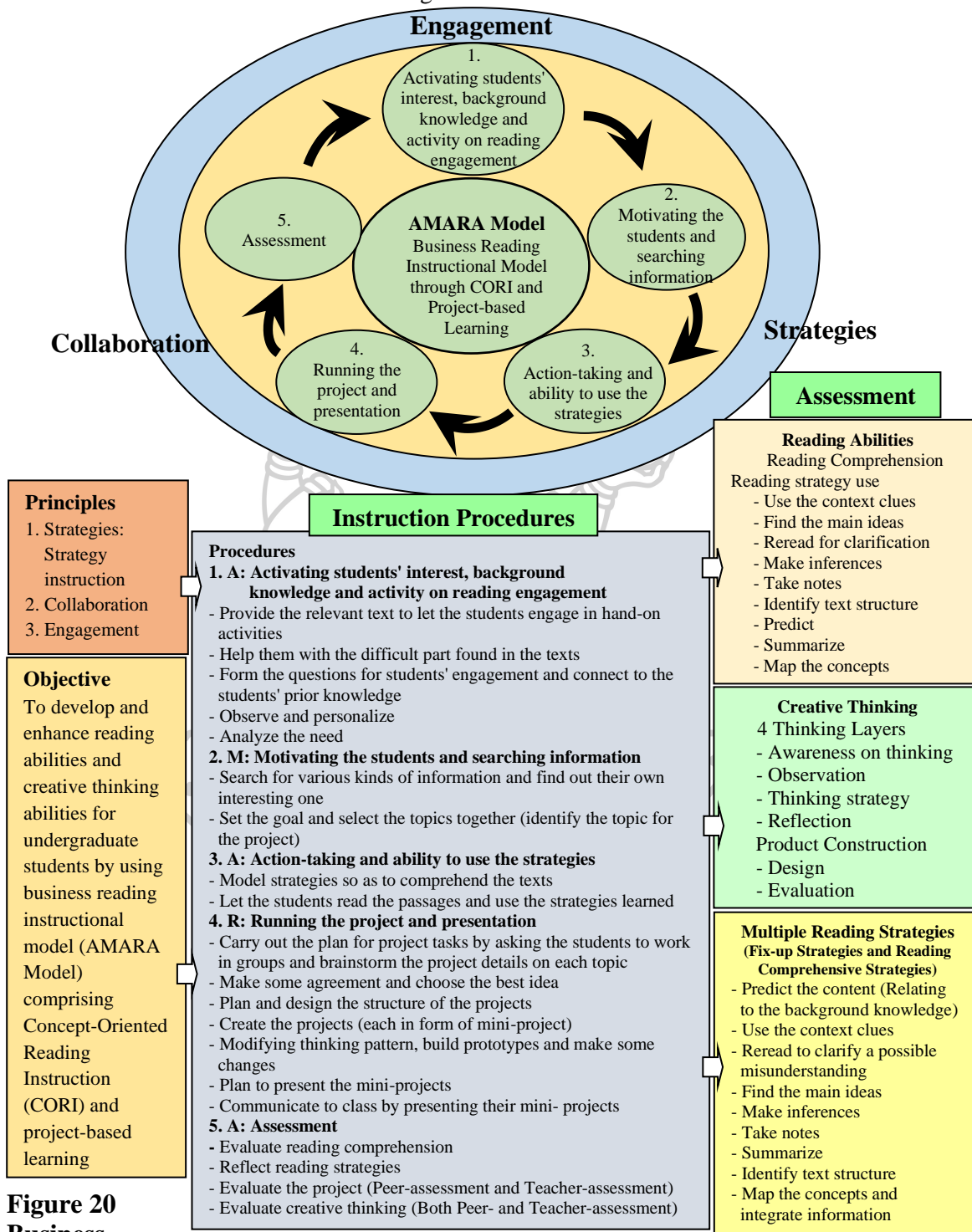


Figure 20
Business
Reading Model
(Final Version)

CHAPTER FIVE

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

In this chapter, the conclusion, discussion and recommendations for further study are shown. The conclusion was made according to the research questions of the study which were as follows:

1. What were the components and teaching procedures of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning?

2. Was there the efficiency on the criteria 75/75 of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning?

3. Were the students' reading abilities after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning more developed and the post-test scores got higher?

4. Did the students develop creative thinking abilities on mini-projects after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning and to what extent its effect was?

5. Did the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning enhance the students' usage of multiple reading strategies and to what extent its effect was?

6. Was the business reading instructional model verified by the experts?

In the research, the process of study was conducted in the form of Research and Development (R&D) using a mixed-method approach to collect the data. Therefore, the findings were presented in both qualitative and quantitative data which were collected from a group of students in the tertiary level. The samples of the study were from one class which had 35 students who took part in the course "Business English Communication Skills" in the first semester of 2018 and were taught by the researcher. They were both English major and minor, third- and fourth-year students. Simple Random Sampling was used for a sampling unit. The samples were the students from the Faculty of Archaeology, Silpakorn University who were interested in developing their business reading skills and registered in the course "Business English Communication Skills". This course is regarded as one of elective subjects for English

major and minor students. The research design was conducted in the form of Pre-experimental Design which studied only one experimental group subject and its type is considered as the One-group Pretest-posttest Design. The researcher established the Research and Development procedures which were organized in the following four phases: Phase 1 Research 1 (R1: Analysis) The study and analysis of general background information, theories and principles, problems found in teaching business English reading and needs analysis were conducted in order to investigate the reading motivation, strategy usage and needs in conceptual teaching and learning in English business reading in the tertiary level which were required to develop business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. Phase 2 Develop 1 (D1: Design and Development) The design and development were carried out on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. They were based on the informational synthesis from theories and principles of Concept-Oriented Reading Instruction (CORI), project-based learning, multiple reading strategies to enhance reading abilities and creative thinking abilities, as well as needs analysis in phase 1. The model was developed, sent to the supervisor who initially verified and then approved by 5 experts who gave the comments for possible revisions. Phase 3 Research 2 (R2: Implementation) The experimental research is conducted on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students by employing the One-group Pretest-posttest Design. In this phase, the following research instruments which were developed and employed to collect data were 1 reading comprehension test (used in both pre- and post- tests), 8 units of lesson plans and exercises, a teacher's instruction manual, a student' reading log reflecting usage of reading strategies, a peer assessment rubric for each mini-project, an assessment rubric for students' mini-project by the teacher, and creative thinking assessment rubric by both peer- and teacher. Phase 4 Develop 2 (D2: Evaluation) The evaluation is taken on business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance

reading abilities and creative thinking abilities for undergraduate students. The data gained in the phase were evaluated and presented in both quantitative and qualitative analysis. In terms of quantitative data, the descriptive statistics employed in data analysis were means, and standard deviations. To evaluate the effectiveness of the instructional model, the paired sample t-test was used to analyze the difference between the pre-test and post-test scores. With this approach, the researcher can see the subjects' development before and after implementing the model. The students' development after using the model can reflect on the quality of the model which was confirmed its verification by experts.

Conclusion

In the study on development of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, it can be concluded that the model can produce the positive effects on students' reading comprehension abilities, creative thinking enhancement, multiple reading strategy usage, collaboration and their reading achievement. The findings are concluded and presented in this part as follows:

1. The development on the business reading instructional model was conducted according to the synthesis on principle and procedures of Concept-Oriented Reading Instruction, project-based learning, and multiple reading strategies. Additionally, the semi-structured interviews with business English lecturers and needs analysis of university learners in terms of business English reading instruction were done. The components and teaching procedures of the draft model were based on the principles of both Concept-Oriented Reading Instruction and project-based learning which were 1) Strategies, 2) Collaboration and 3) Engagement. All information gained from the processes was used to design and create the research conceptual framework of the business reading instructional model named "AMARA" draft model after the acronym of five stages. The AMARA reading model consisted of four important components: 1) Principle; 2) Objective; 3) Instruction procedure and 4) Assessment. The model comprised five steps which were 1. Activating students' interest, background knowledge and activity on reading engagement (A); 2. Motivating the students and searching information (M); 3. Action-taking and ability to use the strategies (A); 4.

Running the project and presentation (R); and 5. Assessment (A). This draft model was then used in the tryout and revised for the experts' verification.

2. The results on efficiency of the model in implementation was 75.10 and 77.79. They showed that the model met the set criteria ($E1/E2 = 75/75$) which meant the business reading instructional model had the quality appropriate for further dissemination.

3. The mean score of both pre-test and post-test showing the development of students' reading abilities. The mean score of pre-test was 22.17 (\bar{x}), 3.33 (SD) whereas the result of post-test after the instruction model showed that the mean score was 31.11 (\bar{x}), 2.04 (SD), higher than the pre-test. However, the scores between pre-test and post-test was significantly different ($p < 0.05$). From the total 35 students, the number of respondents who could give the right answer in pre-test and post-test according to nine reading sub-skills identified in the test specification were investigated. At the beginning of study, the pretest was taken. The findings indicated the students who gave the correct answers and were presented in the form of percentage. Then the correct answers of test items reflecting on sub-skills were focused and ranked in the following top five reading sub-skills with percentage: find the main ideas (82.29%), summarize the text (69.29%), take notes (67.43%), make inferences (62.14%), and map the concepts and integrate information (57.14%), respectively. After the treatment, the post-test was taken and its results showed that the students could improve their reading sub-skills and gave more correct answers for more sub-skills when compared with the pre-test. Regarding the number of correct respondents, the items with reading sub-skills were ranked in top five orders which were presented in the following: find the main ideas (94.29%), take notes (89.14%), map the concepts and integrate information (80.57%), summarize the text (79.29%), and reread to clarify a possible misunderstanding (76.43%).

In conclusion, the reading sub-skills that showed the students' reading abilities after employing the business reading instructional model were more developed and the post-test scores got higher in every sub-skill according to the higher number of students who could do more correct answers. However, it can be evidently seen that find the main ideas was found the 1st rank in both pre- and post-test.

4. The development on the students' mini-projects and creative thinking after employing the business reading instructional model through Concept-Oriented Reading

Instruction (CORI) and project-based learning was investigated and evaluated by peers (7 groups with 5 students in each) and teachers (1 assessor for mini-project assessment and 2 assessors for creative product construction). In terms of cooperation to develop 8 mini-projects in 8 units, the mean scores showed that four groups assessed and rated their peers as “High” cooperation whereas only three groups rated their peers as “Very High”. In terms of the mean scores of peer-assessment on each questionnaire item in 8 mini-project development, the students thought that everyone in their group was open to any suggestion that had been made ($\bar{x} = 4.57$), could complete the project effectively because of working with the friends ($\bar{x} = 4.53$) and made some agreement, modified thinking pattern and chose the best idea together ($\bar{x} = 4.49$). With regard to the teacher’s assessment, every group was rated as “High” cooperation. However, the mean scores of total 7 groups gained in each questionnaire item were at 4.27 which could be interpreted as “High”. This meant that the model helped the students to develop their mini-projects with high cooperation. This was confirmed by the teacher’s assessment on each questionnaire items of the 8 mini-project development. It was found that most of students could complete their project effectively because of working together ($\bar{x} = 4.56$). Besides, they also gave some help and cooperated with one another ($\bar{x} = 4.32$). Obviously, it was found that both teacher and peers rated Group 1, 4, 6, and 7 as the “High” cooperation in mini-project running.

Regarding creative thinking, based on Creative Thinking Questionnaire, four thinking layers in creating the products and product construction with the creative planning were also investigated and evaluated within the students’ groups (peer-assessment) and by 2 teachers who rated in the product construction part (teacher-assessment). Interestingly, the results gained from peer- and teacher-assessment were all “Very High” scores with the mean scores on thinking layers at 4.63 and product construction at 4.65 rated by peers and the mean score of product construction rated by two teachers was at 4.83. This meant that both teachers and group members thought every mini-project presented was planned and designed creatively with the awareness on developing thinking skill, the logical opinion sharing, assistance on designing goals, connecting to prior knowledge, generating, analyzing the ideas, recording concepts, choosing the best one, modifying thinking pattern, building prototypes and making changes. Besides, everyone thought that the processes to create the products were really

excellent because of the creative plan and design on product construction with well-planned product's features and specification, well-designed construction to achieve the goals, planned and well-made detailed drawing, best chosen model, creatively developed and well-presented product.

In conclusion, the students could well cooperate with their peers and their creative thinking performance after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning was rated in "Very High" level because the students could think step by step and plan their product construction creatively.

5. The findings of multiple reading strategy use gained from the reading log were investigated. The reading process was conducted in 3 stages: Pre-reading activities; During-reading activities; and Post-reading activities. In the pre-reading stage, the teachers activated the students' background knowledge by preparing or motivating them to read the selected materials, and related the content to their prior knowledge. The teacher observed that during their reading in unit 1-2, the students did not know how to use the strategies to enhance their reading comprehension; some still used their mobile phone to find some difficult vocabulary and gave the wrong answers on main ideas and inferences. They did not know how to use the strategies to comprehend texts. However, they became more independent users with more strategies used in unit 3-8. Then in during-reading activity, the teacher modeled how to use the reading strategies to ease comprehension and let the students use the strategies on their own with the teacher's monitoring. A reading log as students' self-reflection was distributed to each student in extensive reading which was carried out in the assessment stage and focused after the lesson. The findings were shown on the number of times accumulated as the sum of frequency use and percentage of each strategy in each unit. They were ranked in top five as follows: 1) find the main ideas; 2) predict the content (relating to the background knowledge); 3) use the context clues; 4) summarize; and 5) identify text structure, respectively. Moreover, in terms of the mean scores on the frequency and percentage on number of students out of 35 who used multiple reading strategies in 8 units, it was found that 29 students in average used "predict the content (relating to the background knowledge)" and "find the main ideas" in their reading activity; 23 students as mean score used "use the context clues"; and in average of 18

students used “make inferences” as well as “summarize” in their reading practice. However, it was found that reread to clarify a possible misunderstanding was the least frequently used strategy on an average of 9 students.

6. The findings gained from the experts’ verification showed that the business reading instructional model was rated as “Highest” rationality in theory on the principles, theories, fundamental concepts, objectives, including instruction procedures and “Highest Congruence” on probability and appropriateness of principles, objectives, procedures and assessment. The mean scores and standard deviation derived from rationality in theory were at 4.73 (\bar{x}) and .61 (SD). With regard to probability and appropriateness, the mean scores were at 4.71 (\bar{x}) and standard deviation was at .65 (SD). Therefore, the rated scores of business English reading instructional model were interpreted as “Highest Congruence” in theory’s rationality, probability and appropriateness and the model had the efficiency for further use.

Discussion

This research studied on the development of the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students. The findings of study were presented in mix-method approach. Both quantitative and qualitative data were used to investigate whether the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning could enhance reading abilities, multiple reading strategy use and creative thinking for undergraduate students. The findings of the study were employed to discuss and supported with the related literature based on the objectives of the study.

1. After the design and development of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, it was submitted to the experts whose verification showed that the model had “Highest Congruence” in theory’s rationality, probability and appropriateness with the efficiency for further use. It might be due to the fact that the model was systematically designed and developed with four important components which consist of 1) Principles; 2) Objective; 3) Instruction Procedures; and 4) Assessment. The model was named after the acronym of five steps as “AMARA” which were as follows: Step 1. Activating

students' interest, background knowledge and activity on reading engagement; Step 2. Motivating the students and searching information; Step 3. Action-taking and ability to use the reading strategies; Step 4. Running the project and presentation; and Step 5. Assessment. The design and development of AMARA Model were done with the fulfilment of students' needs and their problem-solving in English business reading. In addition to this, many researches and related theories were reviewed, analyzed and synthesized so as to help to support the instruction approach with the rational and systematic methods.

As can be seen that the research conceptual framework of the business reading instructional model was systematically and logically designed and ready for implementation. The design processes were based on the analysis and synthesis of principles and instruction procedures of theories: Concept-Oriented Reading Instruction, project-based learning, reading abilities, multiple reading strategies and creative thinking abilities together with the depth information after the semi-structured interviews with business English lecturers and needs analysis of university learners in terms of business English reading instruction. However, the processes of the model design were all discussed in detail as follows:

In the study, the methodology was processed in Research and Development which played the key role in initiating the new knowledge and innovation to promote the students' performance. Innovation here might be creating the new body of knowledge on an existing or totally new product or process. The main objective of the study was to design an effective business reading instructional model to enhance the students' proficiency and the processes were counted. Therefore, the procedures to design and create the business reading instructional model were to review the instruction theories, principles, teaching procedures, assessment including interview with business English lecturers and needs analysis, then analyze and synthesize the existing data to formulate and create the new one which was differentiated and developed. This idea was consistent with Luenendonk (2014) who gave a Research and Development overview in his research article. In addition to R&D process, both "ADDIE" instructional design and mixed-method approach were employed to construct the research conceptual framework, methodology and data collection. ADDIE design was differentiated from other instructional designs with its clear instruction and

implementation in each stage as stated by Forest (2014). Interestingly, the components of ADDIE design are Analysis, Design, Development, Implementation and Evaluation which enable the model to be well and systematically organized. The design of the business reading instructional model was fundamentally conducted on the analysis of theories, instruction procedures and students' needs corresponding to what Forest (2014) and Kohn (2015) recommended in their studies that the important things that the researcher should focus on were in the analysis stage in which the target audience, their achieved performance and the documents relevant to them such as university curriculum and course syllabus were emphasized. Then the researcher could make use of the data derived from analysis stage to design the model as well as other research instruments such as lesson plan, instruction materials, exercises and assessment form. The processes of ADDIE Model were quite similar to Dick and Carey instructional model. In the implementation stage, the reflective feedback was gained as the reflection on efficiency of the model which would be revised and developed to the maximum results according to the expert's evaluation. However, the mixed-method approach was employed in data collection and finding presentation. The results were indicated in both quantitative and qualitative data integrated in the methods of study. This method is beneficial for better comprehension in terms of research problems or questions. (Creswell, 2013, 2015).

In the design of the study, the framework of the business reading instructional model comprised 1) Principles; 2) Objective; 3) Instruction Procedures; and 4) Assessment. The principles of the model were created from the main instruction theories of this study which were Concept-Oriented Reading Instruction and project-based learning. The principles synthesized from both CORI and project-based learning were 1) Strategies, 2) Collaboration and 3) Engagement. The reasons why Concept-Oriented Reading Instruction and project-based learning were selected in process design were to promote the students' engagement or motivation and reading strategy instruction in accordance with the business English lecturers' opinions and students' needs analysis. One of them thought that Concept-Oriented Reading Instruction (CORI) could increase the students' reading engagement, reading strategy use and teacher's support for promoting students' reading comprehension abilities. In addition to this, supported by the students' needs, they said that they need a technique to get main ideas

in order not to waste time to interpret all the content in a reading text so they thought reading strategy instruction was crucial. This corresponds to the findings that Vongkrachang and Chinwonno (2015), and Kalsum, SUWARNO, and Dharmayana (2017) revealed in their research articles. They pointed out that CORI enable students to promote their reading engagement or motivate them and effectively enhance their reading comprehension abilities. Furthermore, project-based learning was integrated in the study owing to the fact that it also assisted the students to work in groups and mutually helped to promote their reading comprehension abilities. Interestingly, there was a meaningful and positive connection between project-based activities and reading comprehension (Shiraz & Larsari, 2014). Additionally, collaboration could promote the students' motivation and let them engage more on their reading texts to gain more knowledge especially for readers who were struggling with their reading because they themselves could select their teammates and felt free to work with them (Grabe, 2009 as cited in Vongkrachang and Chinwonno, 2015). From these advantages, these two theories were used in designing and developing the business reading instructional model based on the set objective which was to develop and enhance reading abilities and creative thinking abilities for undergraduate students by using business reading instructional model (AMARA Model) comprising Concept-Oriented Reading Instruction (CORI) and project-based learning. The instruction procedures were also significant with their benefits on using reading strategies, collaboration and engagement (Vongkrachang & Chinwonno, 2015).

2. According to the findings on the efficiency of using the developed business reading instructional model, the result showed that the model met the set criteria at 75/75 (Brahmawong, 2013). For this reason, it could be said that the model was considered as effective for implementation so as to enhance reading abilities and creative thinking abilities of university students. Each step and its advantages of using AMARA Model were presented in detail as follows:

Step 1. Activating students' interest, background knowledge and activity on reading engagement (A)

The teacher used the thematic unit to categorize the activities and contents in each unit. There were 8 units presented in 4 themes with 2 subtopics which were: Product (Product and Brand); Marketing (Marketing strategies and Market Research);

Advertising (Advertisement and Selling); and Customers (Customers and Customer Service). The teacher provided the relevant texts and some sample pictures to let the students engage in hand-on activities. The students were assisted with the difficult vocabulary or the students noted down important vocabulary found in the texts. Then the teacher formed the questions to let the students engage and connect to their prior knowledge by asking them to observe the things they can see or experience. They might be the pictures, the graphic use, the model, the color selection that encourage them to try to find more information on that topic later. In this step, the students' needs were analyzed to begin to motivate their reading.

Activities and materials played the vital role in classroom and were considered in Concept-Oriented Reading Instruction strategy as one of the factors to activate the students' interest. This was consistent with what Fannin (2011) and Azis (2015) presented in their findings that classroom activities and teaching materials could help to improve the students' reading comprehension of scientific and narrative texts. This was affirmed by Swan (2003) as cited in Guthrie et al. (2004). She conducted an experimental study and her findings showed that when hands-on activity was used together with interesting texts could help enhance reading comprehension. Besides, the students could connect their background knowledge to the texts which attracted their interest in reading. This concept was presented by Grabe and Stoller (2013) and Vongkrachang and Chinwonno (2015) who reported in their findings that connecting the text to the students' background knowledge could increase their interest. Additionally, the conceptual theme was one of constructs that could also help the students to promote their comprehension and collaborative work (Guthrie, McRae & Klauda, 2007; Guthrie, Klauda & Ho, 2013; and Guthrie & Klauda, 2014 as cited in Vongkrachang & Chinwonno, 2015).

This step, Activating students' interest, background knowledge and activity on reading engagement (A), could help to attract the students' interest and let them participate in the class activities more. Additionally, the students could select their themes as they needed. As many scholars said, reading comprehension could be more developed if the readers engaged in their reading activities. Besides, the students made use of their background knowledge to connect with the text they read and share the

ideas with their friends. This could also enhance their cooperative learning and team work.

Step 2. Motivating the students and searching information (M)

The teacher let the students search many kinds of text for information and find out their own interesting one. After that the goal was set and the topics for the texts were selected. The goal was the knowledge the students wanted to achieve and what topics could help them to comprehend more on the conceptual theme. The teacher asked the students to use the information they had found and read to prepare for their project.

Motivation was one of the main factors found in Concept-Oriented Reading Instruction that encouraged the students to engage in reading and could help them to increase scores on reading comprehension. This concept corresponded to what Guthrie, et al. (2004) reported in their study. They believed that Concept-Oriented Reading Instruction with motivational practices were more beneficial for the students in terms of cognitive and motivational advantages than strategy support only. This was due to the fact that the students had the content goal that they were interested in and then motivated them to find their preferred topics to read and enhance their comprehension. In this study, motivation was regarded as an essential factor that led to the students' achievement in reading. It was not only vital in Concept-Oriented Reading Instruction, but also project-based learning. It was stated that project-based learning was used by teachers to enhance the students' engagement, motivation as well as collaboration (Tamim & Grant, 2013).

This step, Motivating the students and searching information (M), was beneficial for the students' choices to read as interested so as to enhance their motivation which was considered as very important in reading engagement. When the readers had motivation, they attempted to find every information and methods as the input that they were interested in. Then they could learn from them. As can be said that they were willing to be engaged and developed if they were motivated.

Step 3. Action-taking and ability to use the reading strategies (A)

In this step, reading strategies were modeled to the students by the scaffolding teacher. Explicit instruction was conducted and then the teacher let the students read the passages and practice using the reading strategies which were: predicting the content (relate to the readers' background knowledge); using the context clues; finding

the main ideas; rereading to clarify a possible misunderstanding; making inferences, taking notes; summarizing; identifying text structure; and mapping the concepts to integrate information.

Using reading strategies to comprehend texts was beneficial for the students especially in Concept-Oriented Reading Instruction because it helped to encourage the students to practice reading strategies to enhance their reading abilities. This concept corresponded to what Guthrie, McRae and Klauda (2007) presented in their findings that reading strategies were tools to comprehend the information presented in the theme of the books. The scaffolding teacher should explicitly teach the strategies by modeling, teaching them step by step, guided practicing and engaging their extensive reading.

Reading strategies used in the study were all selected from the students' needs analysis and suggested by Grabe and Stoller (2013) in terms of second language (L2) reading instruction. In their findings, vocabulary recognition, reading strategies, background knowledge and reading motivation which all were constructs in this study could influence readers' comprehension especially reading strategies (Guthrie, Wigfield, & Perencevich, 2004). However, most reading strategies used in the study were the ones which were chosen carefully based on the scholars' recommendations to integrate contents and language learning goal (strategic readers) so as to foster the students' use of integrated skills, beneficial project work and authentic tasks on interpretation, integration and evaluation of various information from many sources of texts (Grabe & Stoller, 2013).

To sum up, this step, Action-taking and ability to use the reading strategies (A), could help readers to practice using reading strategies and develop their reading comprehension until they become autonomous strategic readers.

Step 4. Running the project and presentation (R)

The project tasks were carried out and planned by asking the students to work in groups and brainstorm the project details on each topic to choose the best ideas after making some agreement. The students planned and designed the structure of the projects and then created the projects which were all in the form of mini-projects. Then they helped modify thinking pattern, build prototypes and make some changes. The project presentation was planned. The students had a chance to communicate by sharing their ideas about mini-projects and presented to the class.

The projects were assigned in the study in the form of mini-projects which the researcher thought that they encouraged the students' cooperation on their learning and creative thinking known as one of twenty-first century skills. Bell (2010) suggested in her study that project-based learning could assist her students to promote their creativity and become effective members of their society. This was consistent with what Tamim and Grant (2013) and Vongkrachang and Chinwonno (2015) found in their studies that projects help to promote the students' collaboration. They could work with their peers, exchange ideas and sharing what they learned from reading texts. Moreover, projects also enhance the students' reading motivation especially L2 readers who struggle in reading. When the students read and tried to connect their personal background knowledge, experience, the strategy use with information from the texts, they became more engaged, shared the information they learned to increase their comprehension and constructed a product including process together with their peers. This corresponded to what Tamim and Grant (2013) suggested in their work that project-based learning led to group work and sharing knowledge including experience. It could promote high performance with quality and foster the students' learning with various skills.

This step, Running the project and presentation (R), prepped the students for future career. Moreover, it could enhance their teamwork, critical thinking, creative thinking and communication as learning skills which were all considered as vital skills in 21st Century. The students could show their collaboration, critical thinking and their creativity through mini-project running. Furthermore, they communicated with their teammates, teacher, and other peers through business presentation which they need social skills and communication to achieve the task.

Step 5. Assessment (A)

The teacher evaluated the students' reading comprehension abilities by using the post-test. Additionally, the teacher evaluated the students' strategy use which was reflected on the reading log. The students' mini-projects were simultaneously evaluated by using both peer-assessment and teacher-assessment. After each mini-project was submitted, the teacher evaluated the students' creative thinking abilities by using Creative Thinking Questionnaire. The students used peer-assessment to evaluate their creativity.

Post-test was used by many researchers to assess the students' achievement which in this study was the improvement of their reading comprehension abilities. The reading log was the tool that the students reflected their strategy use to ease their reading comprehension. They might not get used to the contents on English for Specific Purposes and the reading strategies could help them to increase their comprehension. In terms of assessment on the students' both mini-projects and creative thinking abilities, rubrics were suggested to be used. However, Creative Thinking Scale as a rubric to evaluate the students' creative thinking abilities was considered authentic assessment. Bell (2010) and Tamim and Grant (2013) suggested that the students' reflection on how well they work collaboratively in their group and how well they shared, negotiated and made some agreement on their peers' ideas in terms of thinking layers. Besides, the students also evaluated their own projects in terms of product construction. It could be said that the students assessed not only the products, but also the process to construct the mini-projects.

This step, Assessment (A), was advantageous in terms of both quantitative and qualitative data collection. Besides, it could tell the researcher if the model was valid and should be verified by considering from the students' reading development and achievement or even failure they made. Assessment with effective tools helped the researcher to collect the authentic data and also could develop their instruction procedure for the most appropriate implementation.

3. When the mean score of post-test was compared to pre-test, the study indicated the students' development on reading comprehension abilities. The mean score of pre-test was 22.17 (\bar{x}), 3.33 (SD) whereas the result of post-test after the instruction showed that the mean score was 31.11 (\bar{x}), 2.04 (SD), higher than the pre-test and significantly different ($p < 0.05$). The study showed that in the pre-test, the higher number of students could do more correct answers on the following sub-skills: find the main ideas, summarize the text, take notes, make inferences, and map the concepts and integrate information. Then the students were tested again after instruction, they took the post-test. It was discovered that they could give the correct answers on these five reading sub-skills such as find the main ideas, take notes, map the concepts and integrate information, summarize the text, and reread to clarify a possible misunderstanding. The reasons why the business reading instructional model

could enable the students to promote their reading abilities were explained in detail as follows:

It was discovered that the students' reading abilities were improved owing to the fact that Concept-Oriented Reading Instruction assisted the students with the strategies they needed for facilitating their comprehension. This was consistent with what Komiyama (2005) reviewed in her work. She also indicated that Concept-Oriented Reading Instruction was expected to be used by readers who had enough linguistic abilities and were able to convey the ideas to others in terms of the conceptual themes. However, Stoller (2004) as cited in Komiyama (2005) pointed out that Concept-Oriented Reading Instruction could enhance the accomplishment in learning with the combination between content-based instruction and reading in second language affirmed by Fannin (2011) and Kalsum, SUWARNO, Dharmayana (2017) who investigated the effect of using Concept-Oriented Reading Instruction and found out that the strategy could promote the students' reading comprehension effectively. They demonstrated in their research that the students' improvement on reading comprehension and their scores on the post-test resulted from the use of Concept-Oriented Reading Instruction. Because of CORI, the students became active readers, motivated and focused more on reading texts they were interested in, felt comfortable in their fascinating reading texts and promote their long-term memory in reading comprehension. Every concept was involved with any philosophy and theory to achieve ESL students' reading comprehension developed by Anderson (1999). However, most elements found in his theory correlated to the researcher's strategies which were: activate prior knowledge; cultivate vocabulary; teach for comprehension; increase reading rate; verify reading strategies; evaluate progress; build motivation and planning; and select appropriate reading materials. All of these features were regarded as the instruction strategies employed in the study and enabled to promote the students' achievement on their reading comprehension.

Regarding the reading sub-skills discovered the most correct in the study, many reasons were considered and discussed. The following sub-skills: finding the main ideas; summarizing the text; taking notes; making inferences; mapping the concepts and integrating information; and rereading to clarify a possible misunderstanding were the correct answers given by the students in both pre- and post-test. The reason why

most students gave the correct answers on these sub-skills might be because they were drilled in class by the teacher. Besides, these were all the necessary sub-skills employed in reading comprehension, particularly finding the main ideas which was correctly chosen in both pre- and post-tests whereas most students gave wrong answer on the sub-skill, identifying text structure. The students as the samples in the study were English major and minor students so they had knowledge on some reading strategies. Moreover, the teacher asked the students to find the main ideas very often in class activities so they could use this strategy correctly and autonomously. Regarding identifying text structure, least students could give the correct answer on this sub-skill. This may be owing to the number of test item of this sub-skill. In the test specification, the number, reading strategy use and contents of the test were considered and created from students' needs analysis and identifying text structure was needed the least so the researcher created only 7% of the test items for this sub-skill which was the least sub-skill to be assessed.

4. In the study, the researcher asked the students to rate their peers according to each questionnaire item after the business reading instructional model was employed and the findings indicated that most students rated their peers in their own groups as "High" cooperation ($\bar{x} = 4.49$). This meant that most of the students could well cooperate with their teammates in developing their mini-projects and their creative thinking performance after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning was rated as "Excellent" because the students could think step by step and plan their product construction creatively.

According to the finding shown earlier, project-based learning could enhance the students' interest through its activity and help to open up their mind or attract their interest to do the project. When the interest was increased, motivation and creativity were also triggered. This corresponded to what Rambely et al., (2013), Korkmaz (2002) and Ciftci (2006) cited by Bas and Beyhan (2010) presented in their research. Bas and Beyhan (2010) also supported that project-based learning could enhance the students' motivation and led to the success. Additionally, Alacapinar (2008) stated that the project-based learning could enhance the students' creativity, motivation and collaboration with their classmates and also acquirement of high level information.

Project-based learning was regarded as a technique appropriate for teamwork on creating a product or service (Alberto, Arantes do Amaral, Gonçalves, & Hess, 2015). It could be said that project-based learning was the right technique used to promote the students' motivation, collaboration and creative thinking abilities.

To enhance the students' creative thinking abilities, the assessment was done by using Creative Thinking Questionnaire developed for using in the study. The results of each criteria gained from four thinking layers demonstrated that the students' awareness on thinking was mostly considered, followed by reflection, thinking strategy and observation, respectively. Most students were aware that thinking was a skill that could be developed and listened to others' opinions and prepared to give reasons when they were inquired. Besides, reflective thinking of the friends within and between group(s) and consideration on methods to implement the designed tasks were also emphasized. Thinking strategy with cooperation on product development and observation were completely done and rated. Regarding product construction, mean score on evaluation was higher than design according to the students' rating. Therefore, this demonstrated that the students emphasized on best consideration, comparison, selection of various models, creative development on product and interesting presentation. In contrast, the teachers rated the very high mean score on design which showed that the students' product construction was excellent because of their well-planned product's features and specifications, well-designed and detailed drawing of the model and systematically constructed product. The reasons why both mean scores on four thinking layers and product construction were rated very high by the students might be because they were aware of the importance on creative thinking process together with cooperation in team to successfully construct the products and share their ideas and knowledge to peers.

This study was also aligned with the advantages of cooperation in project-based learning which supported the students' learning and creation process. As noted by Doppelt (2004), learning environment with project-based learning and creative thinking could promote the students' group projects. They helped to plan the project, build activities, and develop creativity. Moreover, it could be implied that the students' cooperation to develop their mini-projects and promote their creative thinking abilities could also increase their motivation in reading with the sharing knowledge and ideas with teammates. Motivation led to the achievement in reading comprehension but this

was not consistent with what Barr and Chinwonno (2016) found in their study. After investigating on students' reflections and interviews, they did not see the importance of peer scaffolding on their reading comprehension. Instead, McCloskey et al. (2010) as cited in Barr and Chinwonno (2016) noted that both teacher and peer scaffolding could enhance the students' achievement on reading comprehension.

5. Multiple reading strategies are found and used more in the research study at present. This is due to the fact that they enhance the readers to use various procedures in their reading process and interact with the teachers through reading instruction. As can be seen that not many researches were studied on multiple reading strategies; therefore the instructional processes and findings were rare. In this study, however, multiple reading strategies were intentionally created and integrated between the teaching procedures of Concept-Oriented Reading Instruction and reading strategies. The students' multiple reading strategy usage was then investigated after employing the business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking for undergraduate students. The findings were gained from the reading log done by the students. Therefore, both qualitative and quantitative data were collected in reading activities and presented in detail.

In the pre-reading stage, the teachers activated the students' background knowledge by preparing or motivating them to read the selected materials relating to their prior knowledge. The teacher observed that during their reading in first 3 units, the students were dependent readers with no idea how to use multiple reading strategies to foster their reading comprehension. After they were taught the reading strategies and motivated to read their interesting texts, they engaged more in activities and became independent users with more strategies used in another 5 units. In during- and post-reading activities, the students were modeled the multiple reading strategies by the teacher who later let them practice. The students used the multiple reading strategies to comprehend the rest of paragraphs and reflected their strategy usage on the reading log. In the assessment stage, the findings were collected and shown in both quantitative and qualitative data. However, in extensive reading done in the assessment stage after each lesson, the findings were about the number of times on multiple reading strategy usage in every unit reflecting through the reading log and showing in percentage of top five

ranking strategies. They were 1) find the main ideas; 2) predict the content (relating to the background knowledge); 3) use the context clues; 4) summarize; and 5) identify text structure, respectively. However, reread to clarify a possible misunderstanding was the least frequently used strategy on the percentage of 4.79.

While observing the students, it was found that at first, most students might not be confident in using reading strategies on their own. They still didn't know how to use them to comprehend their reading texts. Some students liked to translate the text and always found the difficult vocabulary in their mobile phone. It could be said that they were still independent reading strategy users; many students felt more comfortable when they work on reading texts with their friends because they could mutually share their strategies used in their reading comprehension. In class, fewer students used reading comprehension strategies to ease their reading texts; later, they could do them better and used the strategies more correctly even though they sometimes gave up their reading if they found the text too long and full of difficult words and expressions. Some students even asked the teacher how to use the reading strategies. When the teacher modeled them how to use the multiple reading strategies, they were more interested in using the strategies to enhance their reading abilities. It is very hard for the teacher when some students were passive readers because they think they cannot comprehend texts with too much difficult vocabulary. They know not much vocabulary and always feel discouraged when they try to comprehend the whole texts. After many units being taught how to use the reading strategies to comprehend texts, most students are more confident and challenged when they have to read and comprehend texts by themselves. In other words, they are eager to read.

Interestingly, reading strategies could help students to solve their difficulties in their reading process and promote their comprehension (Hall, 2012). The reading log showed that find the main ideas was the strategy frequently used by the students. This was due to the fact that the students were asked to practice a lot by the teacher during strategy modeling for reading comprehension. Therefore, it would be possible that the students' drill could increase their frequencies of the strategy use. Simmons. et al (2010) suggested that main ideas should be taught in early instruction for further use in summaries. This might be the first strategy that the students used so as to comprehend the whole text. Besides, predict the content (relating to the background knowledge was

found mostly used due to the fact that firstly the students saw the title and the picture found in the text. Then they skimmed the whole text to find the clues or key words that help them to guess the content. As noted by Duke & Pearson (2002), Echeverri & Ferri (2010), Kucukoglu (2013), and Klapwijk (2015), predicting could help readers to set the purpose for their reading and enhance their reading comprehension. It was a useful strategy to ease their comprehension. Simmons et al. (2010) also stated that vocabulary played the vital role in reading content-area text. Some students found some difficulties on vocabulary which became their obstacle in reading comprehension. The strategy, use the context clues, was used very often because the students recognized the importance of vocabulary that affected their comprehension. They found that this strategy could help them to guess the meaning of difficult words and promote their reading comprehension. Chen & Intaraprasert (2014) suggested that the students with higher level of proficiency tended to use the strategies involving guessing meaning. In contrast to the strategies mentioned, there was only one strategy which was the least used by the students. It was reread to clarify a possible misunderstanding. The reason why the students used least was that they might be familiar with business reading texts so they did not need to use the strategy or that they used other strategies such as find the main ideas or use the context clues instead when they got stuck with ideas of the text or difficult words and did not comprehend some paragraphs of the texts.

The reading process of using multiple reading strategies could systematized the classroom activities and facilitate in data collection. In the pre-reading stage, the teacher observed the students how they make themselves understand the business texts. The findings were reported in qualitative information which helped to picture the problems found before the reading strategies were modeled and the students' development to become more strategic readers after completing unit 3. However, in extensive reading, the students were asked to use reading strategies on their own and the drills were used to enhance their reading comprehension abilities.

It could be seen that some students integrated the strategies to help them more understand the text. For example, they tried to reread the text that was quite long and faced with unknown word so they had to reread the texts and use the contexts clues to guess the meaning of difficult word. Apart from this, one tried to take note and

encountered the difficult words so the information in the note could help to guess logically the meaning of that word. This can be implied that they became more strategic.

6. The business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students was developed, implemented and verified by the experts. This indicated that the model had the efficiency for further use in terms of the theoretical rationality, probability and appropriateness. This might be due to the fact that the model was systematically designed in Research and Development (R&D) together with ADDIE and mixed-method approach, the combination of quantitative and qualitative data as the support and clarification. Moreover, every process was carefully organized. The principles, theories and tools used in the instructional model were analyzed and synthesized in accordance with the students' needs and experts' recommendations. For these reasons, the experts assessed the business reading model as "Highest congruence" in theoretical rationality, probability and appropriateness which could be implemented to teach undergraduate students.

Design and creation of the model were beneficial for curriculum and instruction development. Cheung (2016) supported using the model such as ADDIE model in instruction because it was beneficial for instructors and easy to use the model in curriculum that paved the students with knowledge and skills. Employing the model could help instructors to design and create the instructional process in order to deliver the highest effectiveness of lessons to the students. This was congruent with what Wang and Hsu (2009) showed in their research. They encourage the use of model in instruction because its principles employed in instructional design could enhance systematic teaching approach which helps instructors to create learning activities compatible with learning objectives and outcome assessment. After the model was created, it needed verification and validation from experts in order that the confirmation on process design, implementation and results was made according to learning objectives which were set. The model development was made according to any specific purpose and validity of the model was considered from the purpose that had been set. However, the model was considered as the acceptable one based on the acceptable range of accuracy. Moreover, the model with its instruction process and information gained from the model should be easy to use for instructors with simple and

understandable instructions so that the instructors had more confidence to use the model in their study and organize their instructional process systematically. Therefore, this could lead to the most effective results after using the model (Sargent, 2013).

Recommendations

The findings gained from the study on the development of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students can contribute to beneficial recommendations for pedagogical implication and recommendations for further study which are explained in the following details:

Recommendations for Pedagogical Implication

Many scholars emphasize on the factors that enhance the effectiveness of Concept-Oriented Reading Instruction and project-based learning which are both the fundamental theories used in AMARA Model. Therefore, some recommendations are given as follows:

1. In order to use Concept-Oriented Reading Instruction strategy and project-based learning the most effectively, the teachers should be well trained before using the CORI in terms of students' motivation enhancement and classroom engagement and have skills in classroom management and teaching strategy/approach, conduct pleasant atmosphere with collaborative learning in classroom activities, and create effective teaching materials.

2. In the study, the time management should be considered. When the teachers assigns the students to do the assignments, they should think about the timespan in each session, allocate and manage time properly according to a portion of work needed to be accomplished in class. In case of the limited time, the solution can be considered and the best one could be time extension.

3. The students like technology or social media so teaching media can attract their interest. The teachers who use teaching media to increase the students' engagement and motivation should have more knowledge on technology in order to fully and completely utilize it in their teaching and learning process to create the most effective products.

Recommendations for Further Study

Some recommendations for further study have been made as follows:

1. The business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students is very striking in terms of reading for concepts, personalizing, and searching for interesting information which are all found in Concept-Oriented Reading Instruction (CORI); additionally, cooperative activities, idea sharing and motivation development are features found in project-based learning (PBL). However, all these features led to reading engagement can be integrated with other disciplines which need motivation and cooperation to create innovative ideas in their activities. They might be used by students in different disciplines such as engineering, mass communication, or medical students.

2. It would be more interesting if AMARA Model can be used to instruct non-English major or non-English minor students. Moreover, the comparative study between the students with treatment and the ones with traditional instruction should be conducted so as to see the outcomes of these two different styles of teaching. Additionally, the group can be enlarged with greater amount of students in the treatment.

3. The multiple reading strategies can be done more with other different strategies. It can be suggested that other reading strategies including different instructional approaches used in modeling can be added more in order to investigate larger areas of knowledge and practice that the students gained.

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Appendixes

Appendix A
List of Experts



Appendix A

List of Experts (Focus Group Discussion, Research Instrument Verification)

1. Dr. Pranee Seenak

Instructor of Faculty of Humanities and Social Sciences,
Nakhon Pathom Rajabhat University

2. Ajarn Nupong Phusri

Instructor of Faculty of Humanities and Social Sciences,
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B.Ed. (English), Nakhon Pathom Rajabhat University

3. Ajarn Ruja Sukpat

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M.A. (Language and Culture for Communication and Development-
Translation), Mahidol University
B.A. (English), Thammasat University

4. Ajarn Kittiya Khongtan

Instructor of Language Institute,
Nakhon Pathom Rajabhat University

5. Ajarn Ubonrat Treepongphan

Instructor of Language Institute,
Nakhon Pathom Rajabhat University

List of Experts (Model's Verification)

1. Assistant Professor Dr. Sutaporn Chayarathee

Instructor of Faculty of Humanities and Social Sciences,
Nakhon Pathom Rajabhat University
(Ph.D.) Education, Edith Cowan University, Perth, Western Australia
(Experts on English Language Teaching)

2. Dr. Kandanai Worajittiphol

Instructor of Faculty of Humanities and Social Sciences,
Nakhon Pathom Rajabhat University
(Ph.D.) Composition and TESOL,
Indiana University of Pennsylvania, USA
(Experts on English Language Teaching)

3. Dr. Pranee Seenak

Instructor of Faculty of Humanities and Social Sciences,
Nakhon Pathom Rajabhat University
(Expert on Measurement and Assessment)

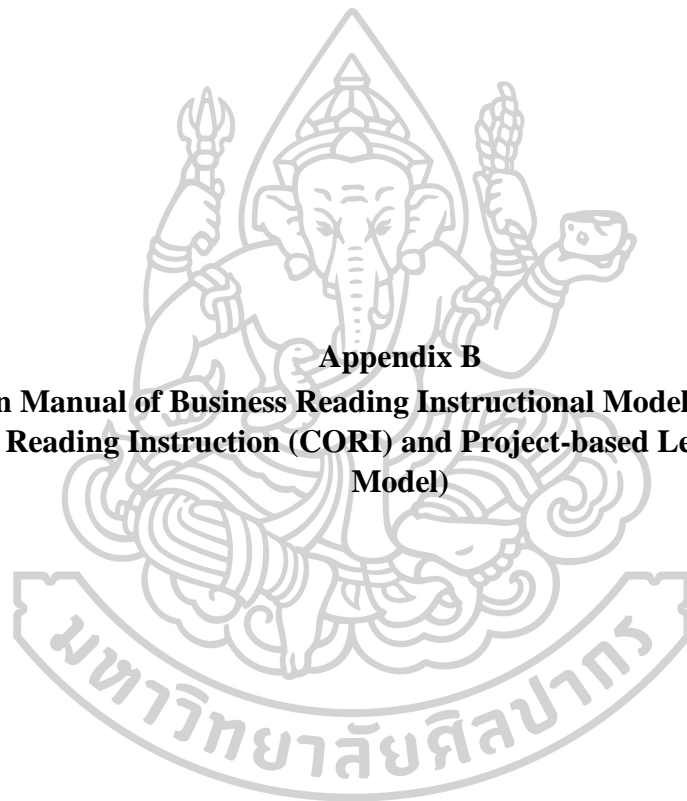
4. Dr. Chintana Sirithanyara

Instructor of Faculty of Education,
Nakhon Pathom Rajabhat University
(Experts on Instructional Design)

5. Dr. Nannabhat Niyomsap

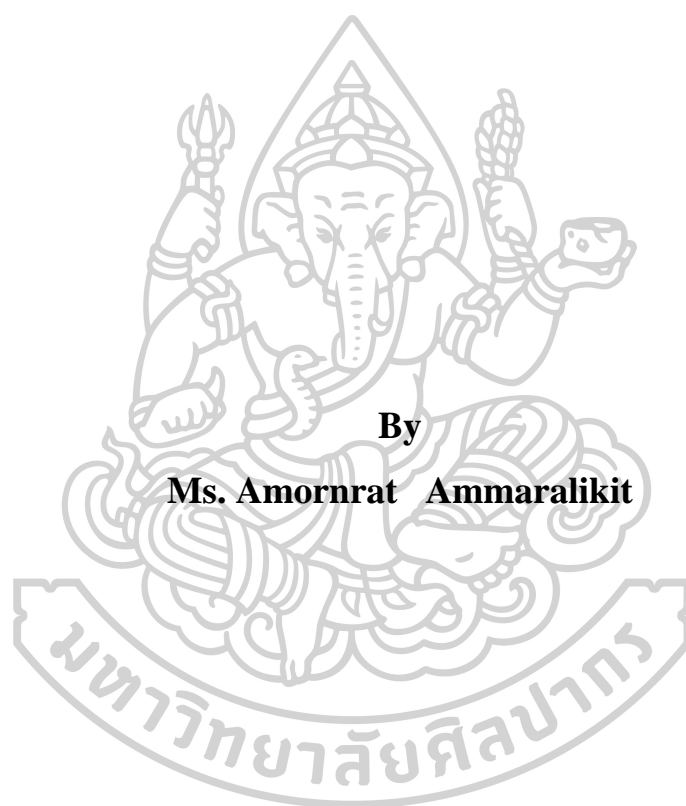
Instructor of Faculty of Education,
Nakhon Pathom Rajabhat University
(Experts on Instructional Design)

Appendix B
Instruction Manual of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning (AMARA Model)



Instruction Manual

**The Development of Business Reading Instructional Model through
Concept-Oriented Reading Instruction (CORI) and Project-based
Learning to Enhance Reading Abilities and Creative Thinking
Abilities for Undergraduate Students**



**By
Ms. Amornrat Ammaralikit**

**This document is part of Doctor of Philosophy in
Curriculum and Instruction, Silpakorn University**



**The Instruction Manual of Business Reading Instructional Model through
Concept-Oriented Reading Instruction (CORI) and Project-based Learning to
Enhance Reading Abilities and Creative Thinking Abilities
for Undergraduate Students**

Introduction

Regarding the instruction manual of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, all explanations on steps how to use the model are given to all lecturers who follow every step in their teaching in order to enhance their undergraduate students' reading comprehension abilities and to build their creative thinking. Before the model is implemented productively in class, the lecturers should thoroughly study every principle and step of business reading instructional model, teaching and learning activities including assessment of learning outcomes on students' reading abilities and creative thinking abilities. However, the main objectives to develop the business reading instructional model and the instruction manual which is created by the researcher are to help lecturers foster their students' reading abilities and also encourage their creativity after multiple reading strategies and learning approach are employed and integrated in the model.

The instruction manual of business reading instructional model comprises the followings:

1. Introduction on how to use the manual
2. Background of business reading instructional model development
3. Principles and fundamental concepts of business reading instructional model development
4. Contents and steps of business reading instructional model
5. Table of content specification

6. Lesson plan, teaching procedures, sample of material and exercises after unit
7. Documents used in teaching and learning

1. Introduction on How to Use the Manual

1. Introduction of the instruction manual of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students

Before using the model in the teaching, the users should study the manual carefully on the following details:

1.1 Read and study the introduction of model usage in the manual.

1.2 Study more on the background, principles and fundamental theories of the model so as to raise the awareness on every component integrated and developed in the model.

1.3 Study more on the contents and learning activities found in all steps that are also included in lesson plans.

1.3.1 The contents are categorized into themes which are all about business topics. They might be about products or services, marketing plan or marketing strategies, advertising, and customer analysis.

1.3.2 The learning activities are all described in the lesson plans. The activities are divided into five steps which are 1) Activating students' interest, background knowledge and activity engagement 2) Motivating the students and searching texts 3) Action-taking and ability to use the reading strategies 4) Running the project and presentation and 5) Assessment

2. Necessary preparation for the instruction

2.1 The users should study thoroughly all the details in the manual again for the clarity and accuracy.

2.2 Before doing the learning activities, the model users should prepare the equipment and facilities used in their instruction beforehand. Besides, the handouts should be created in accordance with the reading strategies needed to be taught in the lesson plans. The reading strategies are finding the main ideas, using the context clues and making prediction, making inference and paraphrase, taking notes and

summarizing. In the instruction, the teachers need to prepare the equipment used in class. The equipment might be a computer with an overhead projector to show the contents and model the strategies for the students' better comprehension.

2.3 The model users should study on the evaluation and assessment that are needed in the instruction. The reading strategies are taught and modeled in class by the teachers. The strategies used by the students should be evaluated to show about the students' reading abilities and their progress. In this instructional model, the students are asked to do some mini-projects which encourage the students to work in group and help to create the work together. Their creativities can be evaluated by using Creative Thinking Questionnaire. While conducting the instruction, the teachers inform all criteria to the students both in class and in the lesson plans. The evaluation forms about the reading abilities are pretest and posttest whereas Creative Thinking Questionnaire is used to assess the creativities. Furthermore, the students' reading strategy use is evaluated by employing the self-reflection form and the teachers use the reading log to see the students' frequent use in reading strategies.

3. Guidelines to use the instructional model.

After the model users prepare the equipment and facilities as well as study on every detail of teaching with its evaluation and assessment, they can instruct and follow each step comprehensively. The users should bear in mind the following guidelines:

3.1 The teachers need to understand the role as "facilitators" which help their students engage in their reading and use the strategies in each activity. The teachers also motivate their students to find information they want to know more, work in group and create the mini-projects innovatively.

3.2 The teachers should create the learning atmosphere with full attention, understanding about the learners' different learning levels and motivation so that the students feel relaxed and engage more in class activities. They help to activate their students' interest and use background knowledge in reading texts. With the teachers' assistance, the students feel free to share their ideas and opinions with their classmates and the teachers. Therefore, the teachers should pay attention to the students' learning process, in-group and between-group sharing in the activities, and productive mini-projects.

3.3 The teachers should have clear understanding on model instruction and be ready to give the students assistance all the time when they have unpredictable problems while learning.

2. Background of Business Reading Instructional Model Development

Reading is an activity that plays a vital role in everyone's life. Because of its importance, reading is emphasized on every level of education. In the curriculums for Thais as ESL learners, English reading becomes the subject that the L2 students have to learn and improve their literacy. The key purpose of reading should be to construct the meaning that affects readers' comprehension and response to what they have read. With its significance, Dr. Teerakiat Jareonsettasin, Deputy Minister of Education, participated at the office of the Basic Education Commission to talk on the time adjustment in teaching English in primary school level 1-3, changing from 1 hour a week to 5 hours a week. In the adjustment, however, reading skill enhancement has also been included and emphasized so that the students have more time to practise their reading through effective textbooks (Ritmun & Rohitsatien, 2016).

Reading instruction has been conducted in every grade levels in all education so it can be seen as an essential skill in leading one's future life in the society. Normally, reading is done everywhere even at home because it is one of the various ways to communicate with one another. Basic reading skills have been taught in schools whereas reading proficiency needs more time to develop. Regarding L2 learners, the general reading instruction is emphasized on the ideas got from the reading texts which may cause some difficulties for L2 learners to comprehend what they have read. This is due to the lexical limitations which block readers from their comprehension. However, this difficulty may not occur with some strategic readers who have higher level of word recognition. The readers also use reading strategies to gain comprehension.

General content is found in reading. Meanwhile, content for English for a specific purpose (ESP) is also found in business reading, for example, reading business news, articles, business plans and business correspondence. The ESP readers need more strategies to enhance their reading comprehension during activities. Concept-Oriented Reading Instruction (CORI) is considered a content-based strategy that is focused on

this research. CORI, a strategy to promote lifelong learning, is used along with project-based learning strategy to enhance readers' reading abilities and collaborative learning. Besides, project approach encourages learners to use their creativity or creative thinking to innovate new things for their project. Innovation with creativity begins one important factor that promotes skills in the 21st century.

3. Principles and Fundamental Concepts of Business Reading Instructional Model Development

3.1 Principles of Concept-Oriented Reading Instruction (CORI)

In doing the research on Concept-Oriented Reading Instruction (CORI), principles are studied and investigated by many researchers. McNamara (2010: 264) states that there are five principles in Concept-Oriented Reading Instruction (CORI) which are 1) use knowledge goals, by placing each text in a broader theme and culminating the instruction with the task of making an across-text concept map; 2) provide real-world interaction with the topic, as nearly as possible; 3) permit students to choose the texts they read, to identify key words they perceived as highly important; 4) use interesting texts with vivid details and visual appeal; and 5) arrange for student collaboration with feedback on its effectiveness. Nevertheless, O'Hara (2007: 136, 167) and Swan (2003:12-34) share the same 9 principles which are as follows: 1) the integration between learning with scientific concepts and themes and knowledge aims in reading instruction; 2) student collaboration / collaboration support; 3) student autonomy / autonomy support; 4) interaction in real world; 5) teacher engagement / teacher involvement; 6) text engagement / interesting text; 7) prizes and praise; 8) instruction to use strategies and; 9) assessment for engagement.

Swan (2003: 4-5) also states that the first step of the components in the process of reading engagement is motivations for reading. Students who have motivations to read tend to gain knowledge taken from what they have read. Therefore, reading is important here for their learning which they see as a goal. Guthrie, Taboada, and Coddington (2007) as cited in McNamara (2010: 247) suggested five instructional practices which are 1) knowledge aims for reading instruction in concepts and themes, 2) real-world interactions involved in the knowledge aims, 3) students' selection and self-direction in hands-on reading activities, 4) interesting informational reading texts

for instruction, and 5) students' collaboration in reading and writing tasks. It cannot be denied that motivations are essential in reading. Grabe and Stoller (2011: 154) presented the following 12 steps: 1. Teachers can share their love of reading with their students; 2. Teachers encourage and praise their students for sharing what they are reading; 3. Teachers should find out what interests students have; 4. Teachers should work toward promoting the development of group cohesiveness; 5. Teachers should increase students' expectancy of success; 6. Teachers should devise good lead-ins for major texts and associated reading tasks to build initial interest; 7. Student skills are matched with appropriate challenge; 8. Teacher build relevance into the curriculum, and by extension the assigned readings; 9. Teachers encourage active participation among students; 10. Teachers should give students some degree of choice in reading materials whenever possible; 11. Teacher should help students discover what they have actually learned from reading; and 12. Teachers should guide students in building real levels of expertise in reading topics.

It can be concluded briefly from the principles shown above that the principles of Concept-Oriented Reading Instruction (CORI) are mainly focused on reading engagement / motivation, collaboration / interaction and strategy instruction.

3.2 Principles of project-based learning

Some theorists have mentioned about principles of project-based learning. However, there are three principles found in project-based learning. Krauss and Boss (2013: 88-89) mentioned the first principle as aligning student work to the values embodying in the social studies. The second principle is designing for personal meaning, and the third principle is working in the manner of professionals and active citizens.

It can be easily described that the main principle of project-based learning is collaboration and interaction.

3.3 Fundamental concepts of Concept-Oriented Reading Instruction (CORI)

According to O'Hara (2007), Guthrie, McRae, and Klauda (2007), McNamara (2010), Grabe and Stoller (2011), Guthrie et al., 2004 (Cited by Fannin, 2011) and Azis (2015), the strategies on Concept-Oriented Reading Instruction (CORI) are synthesized and concluded in 3 main stages which are Preparation and Motivational Stage,

Cognitive Stage and Action Stage. However, many researchers conduct the researches on CORI with various steps; however, they have shared the mutual steps in their teaching procedure which are 1) Observe and Personalize, 2) Search and Retrieve, 3) Comprehend and Integrate, and 4) Communicate to others (Swan, 2003; Grabe, 2009, & Guthrie et al., 2004).

3.4 Fundamental concepts of project-based learning

Many theorists give many stages in doing project-based learning. However, it can be found that there are the same four stages which are Preparation Stage: Cooperation, Creation Stage, Presentation or Publish Stage, and Evaluation Stage. In the first stage, Preparation Stage deals with Cooperation. The teacher lets the students choose the project, make some agreement on theme, brainstorm on the topics, plan and design the structure of the project, gather information and materials necessary for creating the project, analyze the data obtained and share with class. Then in Creation Stage, the students create the project. After that it comes to Presentation or Publish Stage. The teacher prepares the language used in presentation and plan to present the project and then let the students present the product. The last stage is Evaluation Stage which the teacher evaluates the students' project.

Thomas (as cited in Zafirov, 2013: 301) demonstrated the outcomes of project-based learning as follows: leadership skills; critical thinking skills; problem-solving skills; performance ability; ability to find and use appropriate resources; self-directed learning skills; measurable knowledge base; social and ethical skills; ability to work on a team; congruence with workplace skills; communication skills; self-sufficient and self-motivated; facility with computer; and proactive thinking.

4. Contents and Steps of Business Reading Instructional Model (AMARA Model)

Business Reading Instructional Model: AMARA Model is a business reading instructional model created and developed from the synthesis of all principles and strategy combination between Concept-Oriented Reading Instruction (CORI) and project-based learning. The AMARA Model is named from the acronym of the five steps shown as follows:

Step 1. Activating students' interest, background knowledge and activity on reading engagement

1. The teacher provides the relevant texts and some sample pictures to let the students engage in hand-on activities.
2. The teacher helps the students with the difficult vocabulary or the students note down important vocabulary found in the texts.
3. The teacher forms the questions to let the students engage and connect to their prior knowledge by asking them to observe the things they can see or experience. They may be the pictures, the graphic use, the model, the color selection that encourage them to try to find more information on that topic later.
4. The needs are analyzed.

Step 2. Motivating the students and searching information

1. Let the students search many kinds of text for information and find out their own interesting one.
2. The goal is set and the topics for the texts are selected. The teacher asks the students to use the information they have found and read to prepare for their project.

Step 3. Action-taking and ability to use the reading strategies

1. Reading strategies are modeled to the students.
2. The teacher lets the students read the passages and practice using the multiple reading strategies which are predicting the content (relate to the readers' background knowledge), using the context clues, finding the main ideas, rereading to clarify a possible misunderstanding, making inferences, taking notes, summarizing, identifying text structure, and mapping the concepts to integrate information.

Step 4. Running the project and presentation

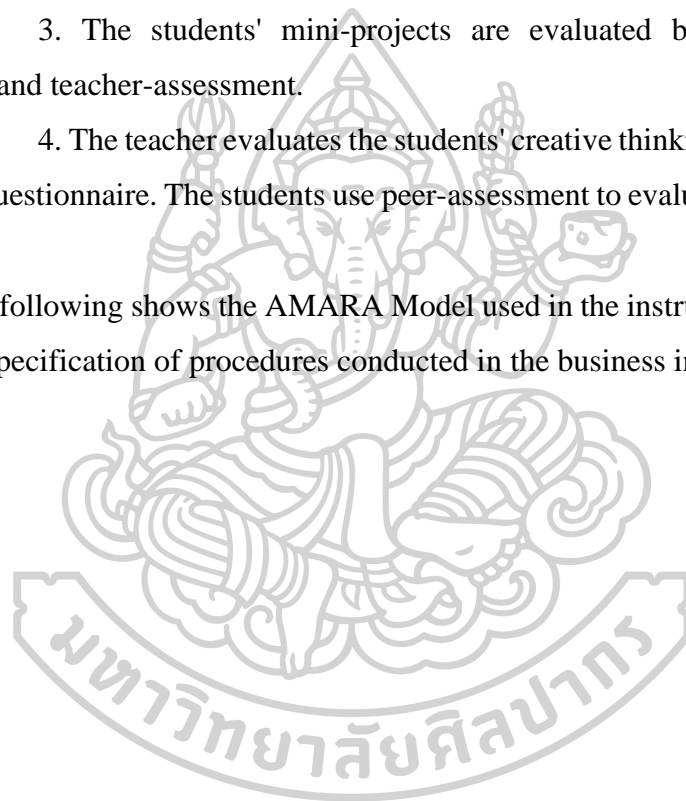
1. The project tasks are carried out and planned by asking the students to work in groups and brainstorm the project details on each topic to choose the best ideas after making some agreement.
2. The students plan and design the structure of the projects and then create the projects which are all in the form of mini-projects.
3. The students help to modify thinking pattern, build prototypes and make some changes.

4. The students plan the project presentation.
5. The students have a chance to communicate by sharing their ideas about mini-projects and present to the class.

Step 5. Assessment

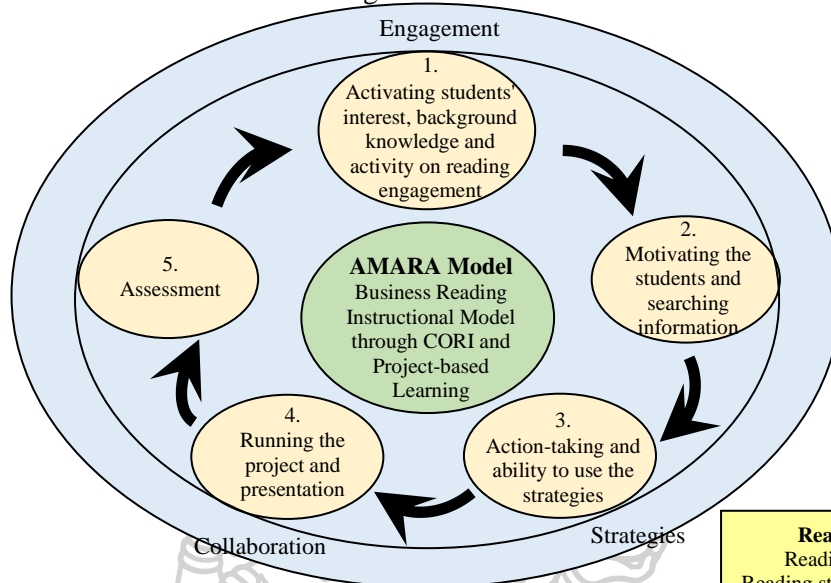
1. The teacher evaluates the students' reading comprehension abilities by using the post-test.
2. The teacher evaluates the students' strategy use which is reflected on a reading log.
3. The students' mini-projects are evaluated by using both peer-assessment and teacher-assessment.
4. The teacher evaluates the students' creative thinking by using Creative Thinking Questionnaire. The students use peer-assessment to evaluate their teammate's creativity.

The following shows the AMARA Model used in the instruction and the details of content specification of procedures conducted in the business instructional model.



AMARA Model

Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students



Principles
 1. Strategies:
 Strategy instruction
 2. Collaboration:
 3. Engagement:

Objective
 To develop and enhance reading abilities and creative thinking abilities for undergraduate students by using business reading instructional model (AMARA Model) comprising Concept-Oriented Reading Instruction (CORI) and project-based learning.

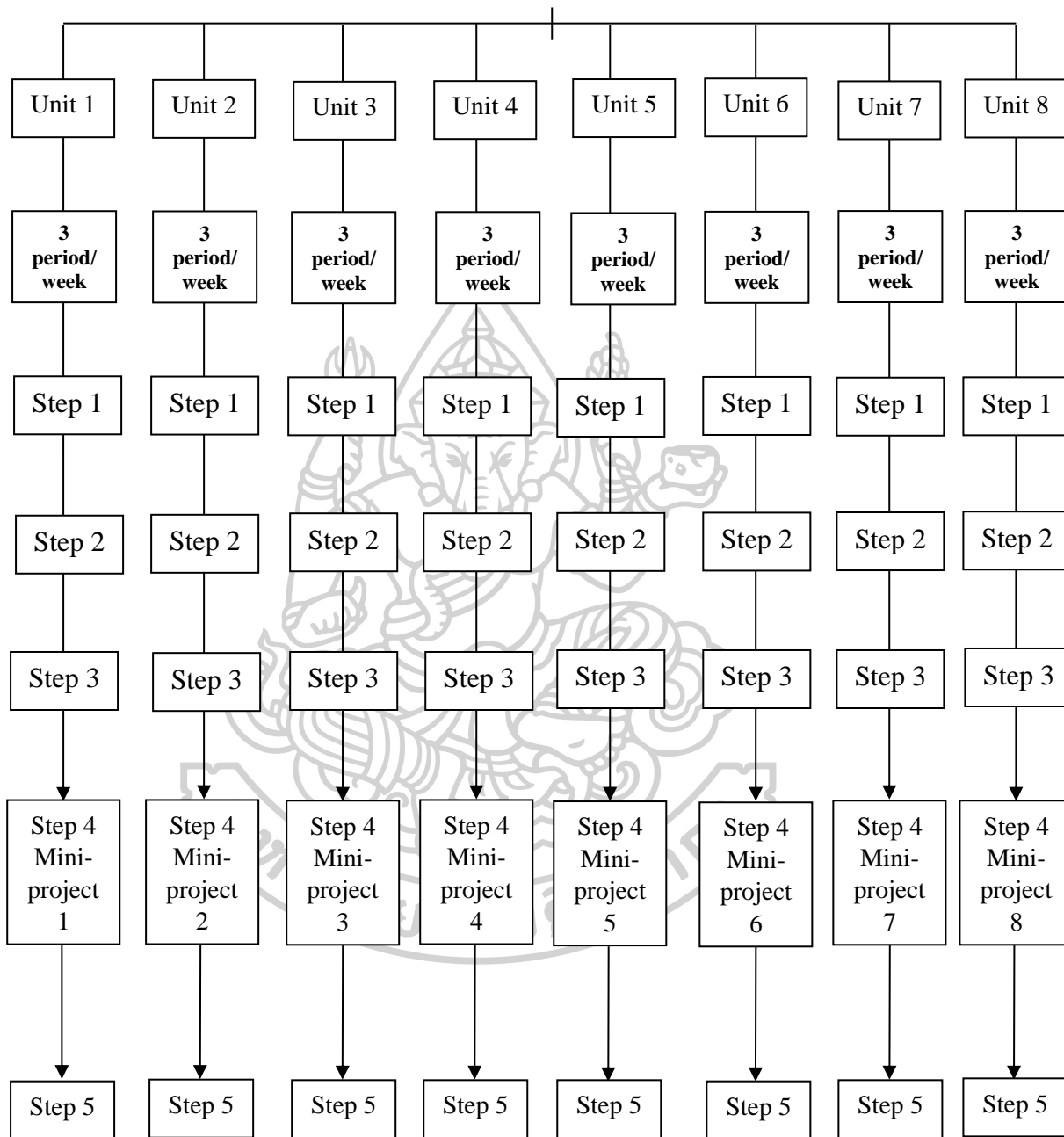
Procedures
1. A: Activating students' interest, background knowledge and activity on reading engagement
 - Provide the relevant text to let the students engage in hand-on activities
 - Help them with the difficult part found in the texts
 - Form the questions for students' engagement and connect to the students' prior knowledge
 - Observe and personalize
 - Analyze the need
2. M: Motivating the students and searching information
 - Search for various kinds of information and find out their own interesting one
 - Set the goal and select the topics together (identify the topic for the project)
3. A: Action-taking and ability to use the strategies
 - Model strategies so as to comprehend the texts
 - Let the students read the passages and use the strategies learned
4. R: Running the project and presentation
 - Carry out the plan for project tasks by asking the students to work in groups and brainstorm the project details on each topic
 - Make some agreement and choose the best idea
 - Plan and design the structure of the projects
 - Create the projects (each in form of mini-project)
 - Modifying thinking pattern, build prototypes and make some changes
 - Plan to present the mini-projects
 - Communicate to class by presenting their mini- projects
5. A: Assessment
 - Evaluate reading comprehension
 - Reflect reading strategies
 - Evaluate the project (Peer-assessment and Teacher-assessment)
 - Evaluate creative thinking (Both Peer- and Teacher-assessment)

Reading Abilities
 Reading Comprehension
 Reading strategy use
 - Use the context clues
 - Find the main ideas
 - Reread for clarification
 - Make inferences
 - Take notes
 - Identify text structure
 - Predict
 - Summarize
 - Map the concept

Creative Thinking Abilities
 4 Thinking Layers
 - Awareness on thinking
 - Observation
 - Thinking strategy
 - Reflection
 Product Construction
 - Design
 - Evaluation

Multiple Reading Strategies (Reading Comprehension Strategies and Cooperative Learning)
 - Predict the content (Relating to the background knowledge)
 - Use the context clues
 - Reread to clarify a possible misunderstanding
 - Find the main ideas
 - Make inferences
 - Take notes
 - Summarize
 - Identify text structure
 - Map the concepts and integrate information

5. Table of Content Specification of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students



**Table of Content Specification of Business Reading Instructional Model through
Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance
Reading Abilities and Creative Thinking Abilities for Undergraduate Students**

Unit/Topic	Contents	Subtopics / Concepts	Objectives	Activities	Suggested Reading	Learning Outcomes
1. Products/ Services (3 periods / 1 week)	1. Products / Services Title: What customers want Mini-project 1: Create your own product/ service	Products / Services 1. Value 2. Service 3. Trust 4. Quality 5. Simplicity	1. The students are able to use their background knowledge to participate in the in-class activity. 2. The students are able to find out more information on the topic they have learned and been curious to gain more knowledge. 3. The students are able to use reading strategies learnt in class to read business English texts and make use of their knowledge in reading comprehension . 4. The students are able to plan and create their own mini-project and present to class. They learn to think systematically. Critical and creative thinking are the skills needed in the 21 st century. 5. The students are able to share their ideas and work together in group to complete the	Step 1. Activating students' interest, background knowledge and activity on reading engagement 1. The teacher provides the relevant texts to let the students engage in hand-on activities. 2. The teacher helps the students with the difficult vocabulary or the students note down important vocabulary found in the texts. 3. The teacher forms the questions to let the students engage and connect to their prior knowledge. The teacher asks the students the questions that make the students want to find out the answers. The teacher also asks the students about the features that good products or services should have and be analyzed.	Influence of Product design on Consumer behavior Source: https://www.marketing91.com/product-design/#Process-of-Product-design What customers want Source: Grant, D., Hudson, J. & Hughes, J. (2017). Business Result (2nd Ed.). Oxford: Oxford University Press. A path to salvation through innovation Source: Cotton, D., Falvey, D. & Kent, S. (2012). Pre-intermediate Market Leader . Harlow: Pearson Education. Other sources: 1. Hollett Vicki. Business Objectives (International Edition). Oxford:	1. Activity engagement 2. Teamwork 3. Mini-project (Developing your product/ service)

Unit/Topic	Contents	Subtopics / Concepts	Objectives	Activities	Suggested Reading	Learning Outcomes
			mini-project on their product or service. 6. The students are able to self-evaluate on their learning.	4. The teacher lets the students observe and personalize what they have seen in their real world and discuss in class. The teacher asks the students to list the things to consider when they want to buy a product. 5. The needs are analyzed. Step 2. Motivating the students and searching texts 1. The teacher asks the students to search many texts for various kinds of information and find out their own interesting texts. 2. The goal is set and the topics for the texts are selected. The students will identify the topics for their mini-project. Step 3. Action-taking and ability to use the reading strategies 1. Reading strategies are modeled to the students by the teacher using Think-aloud. Multiple Reading Strategies are modeled to	Oxford University Press, 2006. 2. Other reading materials: Texts or News from the Internet or other related sources	

Unit/Topic	Contents	Subtopics / Concepts	Objectives	Activities	Suggested Reading	Learning Outcomes
				<p>enhance the students' reading comprehension abilities. The teacher lets the students read the passages and predict the content relating to the readers' background knowledge, use the context clues, find the main ideas, reread to clarify a possible misunderstanding, make inferences, take notes, summarize, identify text structure, and map the concepts and integrate information.</p> <p>2. The teacher lets the students read the passages and use the strategies learned.</p> <p>Step 4. Running the project and presentation</p> <p>1. The project tasks are carried out and planned by asking the students to work in groups and brainstorm the project details on each topic.</p> <p>2. Let them think about the concepts, brainstorm, analyze, organize the thinking</p>		

Unit/Topic	Contents	Subtopics / Concepts	Objectives	Activities	Suggested Reading	Learning Outcomes
				<p>systematically and then choose the best ideas after making some agreement.</p> <p>3. The students plan and design the structure of the projects.</p> <p>4. The students create the projects which are all in the form of mini-projects.</p> <p>5. The students help modify thinking pattern, build prototypes and make some changes.</p> <p>6. The students plan the project presentation.</p> <p>7. The students have a chance to communicate by sharing their ideas about mini-projects and present to the class.</p> <p>Step 5. Assessment</p> <p>1. The teacher evaluates the students' reading comprehension abilities by using the reading comprehension ability test.</p> <p>2. The students reflect reading strategies by using the reading log.</p> <p>3. The students' mini-projects are evaluated by using both peer-assessment and teacher-assessment.</p>		

Unit/Topic	Contents	Subtopics / Concepts	Objectives	Activities	Suggested Reading	Learning Outcomes
				4. The teacher evaluates the students' creative thinking by using Creative Thinking Scale. The students use peer-assessment to evaluate their creativity.		



6. Lesson Plan, Teaching Procedures, Sample of Material and Exercises after Unit

Lesson Plan

Unit 1

Products / Services

Subject: Business English Reading / Business English Communication Skills

Class: Undergraduate students (3rd and 4th year), English major and minor

Time: 3-hour face-to-face session (1 week) or 3 hours / Module

Conceptual Theme: Brand: Products / Services
(What makes your brand long lasting?)

Linguistic Content: Semantic (Vocabulary in Business)

Reading Comprehension Strategies:

1. Predict the content
2. Relate to the readers' background knowledge
3. Find the main ideas
4. Use the context clues
5. Reread to clarify a possible misunderstanding
6. Make inferences and prior knowledge
7. Identify text structure
8. Take note
9. Map the concepts and integrate information
10. Summarize

Goals: The students will be able to comprehend the text by using the strategies learned and creating the mini-project.

Learning Objectives: The students will be able to

1. use the reading strategies to enhance their reading comprehension abilities.
2. plan and create their own mini-project and present to class.
3. self-evaluate on their learning.

Number of Students in Class: Approximately 30-35 students

Group Size: Small Group of 5 students

Visual Aids and Sources of Materials needed:

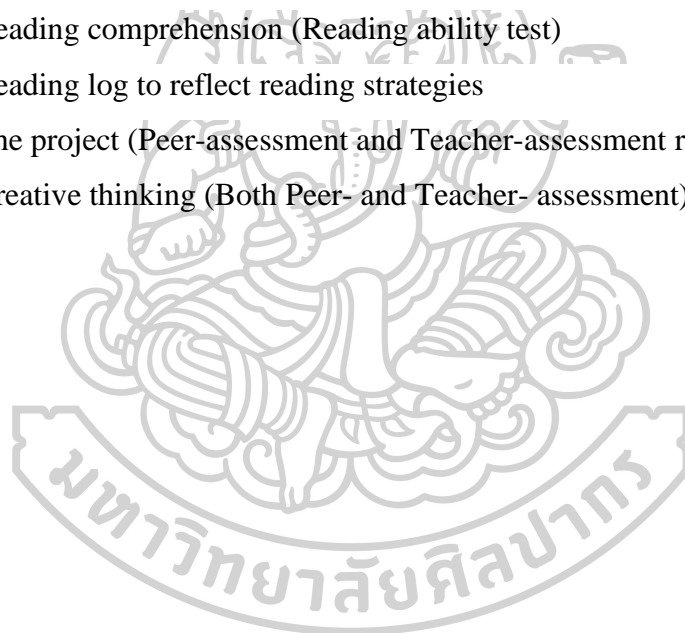
1. An appropriately selected texts: Duracell and its longer-lasting looks, The challenge of keeping brands strong
2. Texts chosen from the websites

Topics for students to learn

- 1 The value of brands
2. Brand Identity
3. Brandname
4. Catchy slogan
5. Logo

Evaluation:

1. Reading comprehension (Reading ability test)
2. Reading log to reflect reading strategies
3. The project (Peer-assessment and Teacher-assessment rubrics)
4. Creative thinking (Both Peer- and Teacher- assessment)



Teaching Procedures

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
<p>Goal: The students will be able to comprehend the text by using the strategies learned and creating the mini-project.</p> <p>Objectives: The students will be able to</p> <ol style="list-style-type: none"> 1. use the reading strategies to enhance their reading comprehension abilities. 2. plan and create their own mini-project and present to class. 3. self-evaluate on their learning's development and be assessed on their strategy use. 	<p>1. A: Activating students' interest, background knowledge and activity on reading engagement</p> <ul style="list-style-type: none"> - Provide the relevant texts to let the students engage in hand-on activities <p>The teacher asks the students to read the passages provided on their own and answer the questions</p> <ul style="list-style-type: none"> - Help them with the difficult vocabulary found in the texts <p>The teacher lets the students read the passages and take notes. After the students read the passages, they list the unknown vocabulary found in the passages and try to find the meanings by using the dictionary or asking the teacher. However, the teacher helps the students with the difficult vocabulary found in the texts so that they can read and search for data by themselves.</p> <ul style="list-style-type: none"> - Form the questions for students' engagement and connect to the students' prior knowledge <p>The teacher provides the sample pictures of popular and unknown product to let the students engage in</p>	<p>Be motivated by the text samples.</p> <p>Read the passages and list difficult vocabulary.</p> <p>Be motivated by the pictures of products and consider</p>			<p>1. Passages:</p> <ul style="list-style-type: none"> - Brands and brand names - Brand Fans

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>hand-on activities. Then the students are asked to observe the logo, the graphic use, the model, the color selection that make them wonder why the products are still popular and maintain their popularity. The teacher asks the students the questions that make the students want to find out the answers. The teacher also asks the students about the needs that customers should consider and be analyzed.</p> <p>- Observe and personalize what the students have seen in their real world and discussed in class.</p> <p>The teacher asks the students to investigate their belongings and choose one or two to answer the questions.</p> <p>- Analyze the problem and need</p> <p>Teacher asks the students to think about an unsuccessful brand and its problems. Then have them find the answer for their problems. The questions about the problems that make the products unknown or unpopular in the market are created here.</p>	<p>which ones they know or do not know and whether they are popular or unpopular.</p> <p>Observe everything they find in their real life and discuss in class to answer their questions.</p> <p>The students discuss what makes some brands unsuccessful in doing their business.</p>			

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>2. M: Motivating the students and searching texts</p> <p>- Search many texts for various kinds of information and find out their own interesting texts so as to answer the questions previously created on their interesting products.</p> <p>The teacher let the students search many kinds of text for information to answer the questions they ask before.</p> <p>Teacher: I will ask you to consider many components of products and find the texts that you are interested in, read them and find the answers for your curiosity. After that you fill in the table that is provided.</p> <p>- Set the goal and select the topics for the texts together. The students will identify the topic for their project.</p> <p>The goal is set by the teacher and the subtopics for the texts are selected.</p> <p>Teacher: After you find the texts you are interested in, you will know what the components of products are. I mean when you look at a product, what do you see on its appearance? Do you think they are important to you as a customer?</p> <p>The teacher concludes the subtopics for the students.</p>	<p>Raise the questions on the points they are interested in and want to find the answer by themselves.</p> <p>They can search for the information they want to know on other sources such as on the internet, in the newspaper and so on.</p> <p>Choose the subtopics gained from the discussion on products / services.</p> <p>Decide their topics for the project</p>			<p>Commercial books:</p> <p>Sources:</p> <p>1. O' Driscoll, N. (2010).</p> <p>Market Leader: Marketing</p> <p>. Harlow: Pearson Longman.</p> <p>2. Hollett Vicki.</p> <p>Business Objectives (International Edition). Oxford: Oxford University Press, 2006.</p> <p>3. Other reading materials: Texts or News from the Internet or other related sources</p>

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
The students will be able to use the reading strategies to enhance their reading comprehension abilities.	<p>3. A: Action-taking and ability to use the reading strategies</p> <p>- Model strategies so as to comprehend the texts Reading Comprehension The title of the reading text is on the theme of brand: What makes your brand long lasting?</p> <p>Reading strategies are modeled to the students by the teacher using Think-aloud. Multiple Reading Strategies are modeled to enhance the students' reading comprehension abilities.</p> <p>- Predict the content Teacher: When I firstly see the text that I have never read before, I will consider every part that helps me guess the content. The parts which are the title, the subtitle, the picture, and the words can show the meaning of the text. From the text provided, the title "Developing a brand identity that lasts" and the subtitle "Duracell and its longer-lasting looks" help me guess the content of text which shows the techniques how the brand keeps its long-lasting identity. Besides, the words that facilitate my prediction are: business success, powerful brand logo, design, branding, brand identity and so on. I will make use of the words found in the text and the picture to guess the overall</p>	<p>Pay attention to the models of strategies that the teacher demonstrates.</p> <p>- Let the students practice by reading the passages and using the strategies learned</p> <p>Pay attention to the strategy model and work individually.</p>	Predict the content	<p>1. Look at the title and the picture found in the text provided. 2. Skim the whole text to find the clues or key words that help the students guess the content. 3. Think of what the whole content might be.</p>	<p>1. Duracell and its Longer-lasting Looks Source: O' Driscoll, N. (2010). Market Leader: Marketing . Harlow: Pearson Longman.</p>

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>content. The content of the text might be about Duracell's business success. It is a powerful brand with its brand identity, logo and its design.</p> <p>- Relate to the readers' background knowledge</p> <p>Teacher: After you observe every part in the text, you can link what you have seen with your experience. From the picture, you can see an alkaline battery which you must have direct experiences on it. Everyone has their experience to buy and use it in their daily life. At this stage, your background knowledge can help you understand more on the product and its popularity. In addition, some words such as battery, energy source, endurance, supermarkets and so on help you recall buying the alkaline batteries when you needed them for your torch or tape recorder.</p>	<p>Pay attention to the strategy model and work individually.</p>	<p>Relate to the readers' background knowledge</p>	<p>1. Look at the picture and connect to the experience about the use of product. 2. Relate the background knowledge on the product to the general information found in the context. 3. Find more words in the text to facilitate the comprehension.</p>	
	<p>- Find the main ideas</p> <p>Teacher: When you read the text, you need to know what the text is about. Therefore, the topic sentence will help you understand more the whole idea of each paragraph that the writer wants to convey. Normally, The topic can be found in three positions in the text which are at the</p>	<p>Pay attention to the strategy model and work individually.</p>	<p>Find the main ideas</p>	<p>1. Explain what "Find the main ideas" is. Firstly, topic sentence can help identify the main ideas</p>	

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>beginning, in the middle and at the end of paragraph. However, we cannot sometimes find it directly. It need an interpretation for the main idea. From the text provided, how can you find the topic sentence of paragraph A?</p> <p>"Launching a product is one thing; keeping the product ahead of the competition is the next big challenge. As technology allows manufactures to match their competitors latest ideas ever faster, creating a powerful brand and effectively managing it over time is essential to ensure a lasting competitive advantage."</p> <p>From the paragraph, you can find the topic sentence which is at the beginning. The rest is the supporting details. However, the main idea of this paragraph is "Keeping brand long lasting is the most important."</p> <p>- Use the context clues</p> <p>Teacher: When you read English texts, you may find many difficult vocabulary that results in reading comprehension problems. Vocabulary is very important to understand the texts so you always find out the meaning of difficult vocabulary by using dictionaries. However, you cannot use dictionaries in some situations. The reading strategy "Using the context clues" can help you guess the meaning of</p>	<p>Pay attention to the strategy model and work individually.</p>	<p>Use the context clues</p>	<p>of the paragraph. 2. Show how to find the topic and main ideas in the text provided.</p> <p>1. Read the text roughly and underline the unknown or difficult words. 2. Read the sentences surrounding the difficult words to make a</p>	

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>difficult words and help you comprehend the text. Context means the contents before and after the difficult word. You should read the contents surrounding the difficult vocabulary so as to make a guess. For example, I don't know the meaning of word "torches" in the text "...the company extended into related products such as lithium, silver, oxide and zinc-air batteries, as well as lighting products such as torches." I can look at the information before and see the words "lighting products" which help me guess the meaning of torches. I can know "torch" is a kind of lighting products. This is a way how to use the context clue to guess the meaning of your unknown vocabulary.</p> <p>- Reread to clarify a possible misunderstanding</p> <p>Teacher: When you read a paragraph, you may find some parts confusing and difficult to understand. This is very important for readers because they may make you misunderstand the content, distort the idea or the purpose that the writer wants to convey. For example, the students may have a difficulty to comprehend this sentence. "The battery soon overtook Eveready to become the world's biggest-selling alkaline battery brand <u>in the face of the recent and rapid rise of supermarkets</u>'</p>	<p>Pay attention to the strategy model and work individually</p>	<p>Reread to clarify a possible misunderstanding</p>	<p>guess on meaning of words and help ease the comprehension.</p> <p>1. Reread the confusing part in the paragraph. 2. Try to find the important points that are used to ease the students' understanding.</p>	

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p><u>cheaper, own-label products.</u>" However, I will reread it and try to understand the phrase "<u>in the face of the recent and rapid rise of supermarkets'</u> <u>cheaper, own-label products.</u>" I think the face means facing with. Own-label products means other cheap products mostly found in the supermarket. After rereading the sentence, I can understand that Duracell becomes the best-selling alkaline battery brand compared with other brands in the supermarkets.</p> <p>- Make inferences Teacher: When you read the whole paragraph and draw the conclusion, you can think beyond the line and make inferences. Making inferences is the strategy that you need the logical consideration to think further because what you infer cannot be found directly in the text. For example, I can infer from the paragraph A that Panasonic lost its position in the market due to the intensive competitions and a lack of its marketing strategy.</p> <p>- Identify text structure Teacher: Identifying text structure is a way to see the organizational pattern of the whole text. The text structure can help you understand the main idea including supporting details in each paragraph or the paragraph as a whole. You can recognize the text</p>	<p>Pay attention to the strategy model and work individually.</p> <p>Pay attention to the strategy model and work in group.</p>	<p>Make inferences</p> <p>Identify text structure</p>	<p>1. Read the whole paragraph or text and draw the conclusion. 2. Inference can be made later, based on the story.</p> <p>1. Read the paragraphs and identify the organizational structure of the text. 2. Explain how many</p>	

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>by using the text structure since it shows the ideas organized in each pattern. The followings are the patterns of text structure:</p> <ul style="list-style-type: none"> - Description - Sequence - Problem and solution - Cause and effect - Compare and contrast. <p>Once the pattern is recognized, you will understand the organizational structure of the text. For example, I can identify the text structure of paragraph F which is description. The reason why I think it is description is the paragraph begins with "The key element of the Duracell brand identity are...". This is the way to describe things and give the information by using "are". Besides, the others are the supporting details that the writer describes more.</p> <p>- Take notes</p> <p>Teacher: After I read each paragraph, I like to note down the important details. Recording the main point helps you organize your ideas and see the big picture of what you have read.</p> <p>- Synthesize by mapping the concepts and integrate information</p> <p>Teacher: This strategy can be done after identifying the text structure. You can use the graphic organizer</p>	<p>Pay attention to the strategy model and work individually.</p> <p>Pay attention to the strategy model and work in group.</p>	<p>Take notes</p> <p>Map the concepts and integrate information</p>	<p>patterns of text structure there are.</p> <p>3. The patterns of idea can be found and recognized in the text.</p> <p>1. Read the text and note down the important details needed for comprehension.</p> <p>1. Use the information that has been noted down and</p>	

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
	<p>to chart and organize it systematically.</p> <p>- Summarize the paragraph/text</p> <p>Teacher: It is easier to comprehend the whole text if I can find the repeated words. Main ideas can be shown or interpreted in each paragraph of the passage or even the whole text by covering all the ideas that each paragraph wants to talk about. They must be neither too broad nor too specific. Importantly, they are the brief but informative summary. Finding the main point of each paragraph helps you understand the important idea or the concept that the writer wants to convey. It may not be shown directly, however, you can read the content and find the repeated words or phrases including the illustration that show the main ideas of that paragraph or passage. You can use them to interpret and deduce what the writer wants to communicate. For example, According to the text "Duracell and its longer-lasting looks", I can find the repeated words such as Duracell, brand, competition, position, battery, energy source and endurance. After I consider the title, the repeated words and picture, I can summarize the main idea of the text which is "Duracell, a brand of energy source, remains the competitive position as its battery endurance."</p>	<p>Pay attention to the strategy model and work individually.</p>	<p>Summarize the paragraph / text</p>	<p>identified the text structure to rearrange and reorganize in the graphic organizer.</p> <ol style="list-style-type: none"> 1. Review why main ideas are important and should be found. 2. Ask the students how to find the main idea. 3. Correlate the information and others found in the text to write in brief the main point that the writer wants to communicate. 	

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
The students will be able to plan and create their own mini-project and present to class.	<p>4. R: Running the project and presentation</p> <p>The project tasks are carried out by the teacher and planned by asking the students to work in groups and brainstorm the project details on each subtopic to choose the best ideas after making some agreement. The teacher gives the students a support and plays the role as 'a facilitator'</p> <p>Teacher: Carry out the plan for mini-project tasks by asking you all to work in groups and brainstorm the mini-project details on each topic. Then you make some agreement and choose the best idea for your mini-project. It is time to plan and design the structure of the mini-projects. After that I will ask you to create the mini-project of your group. When you create the pattern, you can modify your thinking pattern, create your own brand and make some changes. Then your group plans your presentation and prepares to communicate to others. Your ideas are shared to class by group presentation.</p>	<p>- Plan and design the structure of the projects and then create the projects which are all in the form of mini-projects.</p> <p>- Help modify thinking pattern, build prototypes and make some changes.</p> <p>- Plan the project presentation and present to the class.</p> <p>The students work in group and help create the mini-projects on the theme "Brand" and then prepare for presentation. The teacher will be their facilitator who gives them some advice.</p>		<p>Description of Project and Presentation</p> <ol style="list-style-type: none"> 1. Plan the mini-projects in group. 2. Choose the best ideas for the mini-projects. 3. Design the structure of the mini-projects. 4. Create thinking pattern, modify and make some changes. 5. Plan to present the mini-projects. 6. Share ideas to others in class by oral presentation 	<p>Other sources: The Internet, newspapers, magazines</p>

Goal and Objectives	Procedure		Reading Strategies	Strategy Description	Sources of Materials
	Teacher	Students			
The students will be able to self-evaluate on their learning's development and be assessed on their strategy use.	<p>5. A: Assessment</p> <p>- Evaluate reading comprehension</p> <p>The teacher evaluate the students' reading comprehension abilities.</p> <p>- Reflect reading strategies</p> <p>- Evaluate the project (Peer-assessment and teacher-assessment)</p> <p>The teacher uses assessment rubric to evaluate the students' project.</p> <p>- Evaluate creative thinking (Both Peer- and Teacher-assessment)</p> <p>The teacher uses Creative Thinking Questionnaire to evaluate the students' mini-project.</p>	<p>The students do the reading comprehension ability test.</p> <p>The students reflect the reading strategies by using the reading log.</p> <p>The students use peer-assessment rubric to evaluate their friends' project.</p> <p>The students use Creative Thinking Questionnaire to evaluate their friends' mini-project.</p>			<p>1. The Challenge of Keeping Brands Strong</p> <p>Source: O' Driscoll, N. (2010).</p> <p>Market Leader: Marketing . Harlow: Pearson Longman.</p>

Unit 1 Products / Services

What customers want

Step 1. A: Activating students' interest, background knowledge and activity on reading engagement

What to do A teacher provides the relevant texts to let the students engage in hand-on activities.

Directions: Read the following passages and write down the unknown vocabulary on the table below.

Influence of Product design on Consumer behavior

Product design is known to influence consumer behavior heavily. Brands like Louis Vuitton, Rolls Royce, BMW's American Tourister, are all built on the basis of Product design. These brands offer features which are not offered by anyone else. As a result, a brand which invests higher in product design and involves the customers in the design process, is guaranteed to give a higher ROI and to be chosen more than competition. This is because the product design will be loved by customers due to its customer friendly nature.

Process of Product design

There is a three pronged process of Product design.

- 1) Analysis / Observation – You observe your customers to understand their behavior and to note down things which are a hindrance in the purchase process. Many a times marketers might skip this step (like Steve jobs) because they feel that it is not the job of the customer / it is impossible for the customer to think what he wants.
- 2) Concept / Ideation – At this stage, various prototypes are created based on concepts. These concepts are just ideas and when compared with each other on the holistic ideas, some of the ideas will be better than the rest. Pure creativity is involved at this stage. This is what the R&D department does at all times.
- 3) Synthesis / Implementation – Once you have finalised a prototype product you pilot launch it in the market. If approved, the product can then go for mass production.

Source: <https://www.marketing91.com/product-design/#Process-of-Product-design>

Individual Work

Directions: Answer the following questions.

1. What information have you got from the reading text?

2. What do you know about the features of a product?

3. Think of 3 features of products that you concern and list them down.

Feature 1: _____

Feature 2: _____

Feature 3: _____

What to do

A teacher helps the students with the difficult vocabulary **or** the students note down important vocabulary found in the texts.

Vocabulary

Directions: List the difficult vocabulary that causes you the problem **or** the important vocabulary that makes you understand more in reading the article.

Vocabulary	Meaning	Vocabulary	Meaning
1.		6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

What to do A teacher forms the questions for students' engagement and connects to their prior knowledge.

Group Work

Directions: See the pictures of products provided and answer the questions.

Picture A: 15,000 Baht



Cr. <https://www.dignited.com/42510/how-to-use-your-tv-as-an-external-monitor-for-your-computer/>

Picture B: 15,000 Baht



Cr. <https://www.sencor.com/full-hd-led-television/sle-43f14tcs>

1. If you want to buy a television, which one will you choose?

2. What are the differences between these two products?

3. In your opinion, which one is easy to use and worth buying?

What to do A teacher lets the students observe and personalize what they have seen in their real world and discuss in class.

Individual Work

Directions: Now look back at things around you and pick up only two of your belongings as the products that you can't live without.

My personal belongings that are very important for the customer like me are:

1. _____ 2. _____

After considering your interesting belongings as the products that you can't live without, why do you think those products are very essential for you?

Reason

1 _____

Reason

2 _____

What to do A teacher asks the students to analyze the need.

Group work

Directions: When you went shopping somewhere and found out that a lot of people were waiting in a very long line to buy a very big pack of donuts, what kinds of questions came to your mind? (Think of at least 2 questions)

Question 1:

Question 2:

Step 2. M: Motivating the students and searching texts

What to do A teacher asks the students to search many texts for various kinds of information and find out their own interesting texts.

Group work

Directions: In creating a product, many components of products are considered. Find the texts that you are interested in, read them and find the answers for your curiosity and share what ideas you get from the text to class.

Nowadays many customers buy things online. Find the information on the Internet to see what aspects the customers always ask the buyers before placing the order. You can find the answers in many social networking services such as Instagram, Facebook, Shopee and so on.

1. _____
2. _____
3. _____

What to do A teacher sets the goal and selects the topics for the texts. The topics for the project are also identified.

Group Work

Directions: Discuss in group to share your conceptual knowledge.

In your opinion, what are the important components of products? (Find at least three)

1. _____
2. _____
3. _____

Now if you want to do a project about a start-up company, you must think about a product to sell. What topic of product components do you think is the most important to you to create a product that is really good value for money?

Topic:

Step 3. A: Action-taking and ability to use the strategies

What to do

A teacher models strategies so as to comprehend the texts. Then let the students read the passages using the strategies learned.

There are nine reading strategies which are explained with their easy steps as follows:

1. Predicting the content (Relating to the background knowledge)

- Look at the title, the subtitle and the picture found in the text provided.
- Skim the whole text to find the clues or key words that help you guess the content.
- Think of what the whole content might be and relate the background knowledge on the topic to the general information found in the context.
- Connect to the personal experience.

2. Using the context clues

- Read the text roughly and underline the unknown or difficult words.
- Context means the contents before and after the difficult word. Reading the sentences surrounding the difficult words to make a guess on meaning of words can help ease the comprehension.

3. Rereading to clarify a possible misunderstanding

- Reread the confusing part in the paragraph.

When the students read a paragraph, they may find some parts confusing and difficult to understand. This is very important for readers because they may make them misunderstand the content, distort the idea or the purpose that the writer wants to convey. However, rereading the confusing part can help them concentrate more on the text.

- Try to find the important points that are used to ease the students' understanding.

4. Finding the main ideas

Topic, Topic sentence and Supporting detail

- Firstly, find out the **topic or repeated words** in a paragraph.
- Then find out **the most important information** that can be shown in topic sentence or main idea. **The topic sentence or main idea** will help understand more the whole idea of each paragraph that the writer wants to convey.

The topic sentence can be found in three positions in the text which are:

- at the beginning;
- in the middle; and
- at the end of paragraph.

However, we cannot sometimes find the main idea directly. It need an interpretation for the main idea which is called "implied main idea".

- Finally find out the supporting details which give additional information about the topic sentence.

5. Making inferences

- Read the whole paragraph or text and draw the conclusion.
 - Think beyond the line and inference can be made later, based on the story.
- Making inferences is the strategy that needs the logical consideration to think further because what is inferred cannot be found directly in the text.

6. Taking note

- Read the text and note down the important details needed for comprehension. Recording the main point helps readers organize their ideas and see the big picture of what they have read.

7. Summarizing the paragraph/text

- It is easier to comprehend the whole text if the main points can be found. Finding the main point of each paragraph helps readers understand the important idea or the concept that the writer wants to convey.
 - Write them in your own words. They must be neither too broad nor too specific.
 - The summary should be brief but informative.
- *** Remember that the summary must contain the major points of the original text.

8. Identifying text structure

- Read the paragraphs and identify the patterns of organizational structure of the text or text structure.

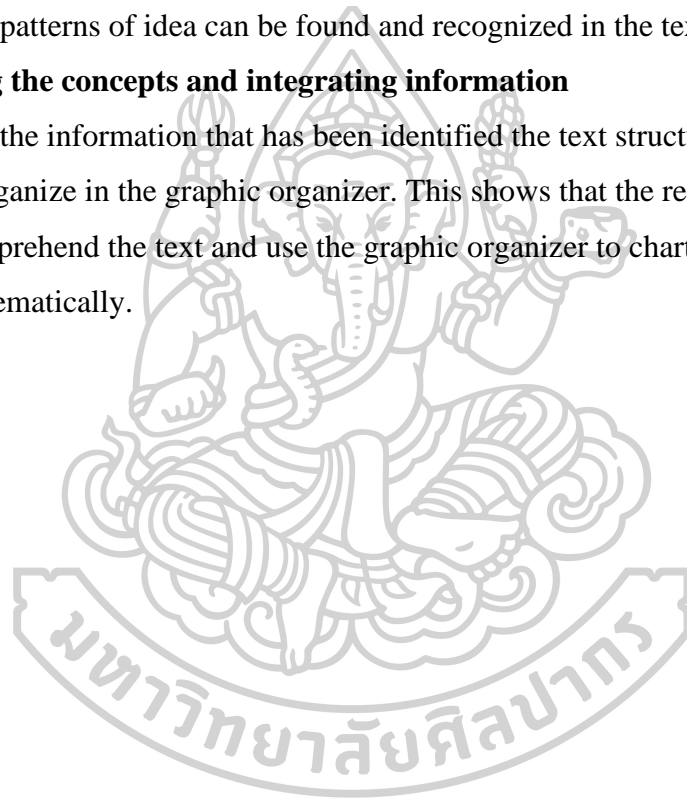
Identifying text structure is a way to see the organizational pattern of the whole text. The text structure can help readers understand the main idea

including supporting details in each paragraph or the paragraph as a whole. The readers can recognize the text by using the text structure since it shows the ideas organized in each pattern. The following are the patterns of text structure:

- Description
 - Sequence/Process/Chronological
 - Problem and solution
 - Cause and effect
 - Compare and contrast.
- The patterns of idea can be found and recognized in the text.

9. Mapping the concepts and integrating information

- Use the information that has been identified the text structure to rearrange and reorganize in the graphic organizer. This shows that the readers can comprehend the text and use the graphic organizer to chart and organize them systematically.



Full Text

A path to salvation through innovation

by Robin Harding



Cr. <https://casio-cmg.com/new-2017-g-shock-baby-g-denim-d-series/>

A Kazuo Kashio has led Casio, the Japanese consumer-electronics company that he founded with his three brothers, for 20 years. Whatever problem is put to him, whether it is the yen's strength, the economy's weakness or the **collapse** in Japanese mobile-phone sales, the energetic executive has a single answer: launch new products.

B "For us as a manufacturer, whether conditions are good or bad is all decided by our products, and our strategy is to make sure as many of them as possible are new," he says. Casio plans to replace 50 per cent of its product in the second half of the year.

C That strategy amounts to an attempt to maintain sales by taking a larger share of a shrinking market. Challenged as to whether that is possible, given that rivals are not only racing to launch new products but also cutting prices, Mr. Kashio argues that Casio's products are unique enough to do it.

D This confidence in his products is typical of Mr. Kashio. He often says that his long years of selling make him a keen judge of whether a new product will succeed. He **perks up** considerably when given the chance to praise his gadgets, such as radio-controlled watches that pick up a broadcast signal to set the time, and the toughened G-Shock brand, which redefined watch design.

E A source of pride at the moment is Casio's family of high-speed "burst" digital cameras, which can take up to 60 shots a second after the photographer presses the button.

F With such as a camera, Mr. Kashio says, a photographer can catch the precise moment at which a batter hits a baseball and judge instantly whether a runner was safe or out. The product has taken Casio into the professional photography market, which is dominated by Canon and Nikon.

G Two of Mr. Kashio's favorite phrases sum up the family's approach to research and development. One is to resist "preconceived ideas" of what a device should do and how it should do it; the other is "from zero to one", to describe how Casio creates something that did not exist- such as the electronic calculator that started it all in 1957 – from scratch.

H Mr. Kashio argues that Japan's electronics industry can stay ahead of its rivals in Taiwan, China and South Korea if it keeps innovating.

I His hopes for the future are those of a family company: to maintain Casio's stability and to keep the new products coming.

FT

Source: Cotton, D., Falvey, D. & Kent, S. (2012). Pre-intermediate Market Leader. Harlow: Pearson Education.

Modeling

Model Text

(Extracted from the text "A path to salvation through innovation")

A path to salvation through innovation



A Kazuo Kashio has led Casio, the Japanese consumer-electronics company that he founded with his three brothers, for 20 years. Whatever problem is put to him, whether it is the yen's strength, the economy's weakness or the **collapse** in Japanese mobile-phone sales, the energetic executive has a single answer: launch new products.

B "For us as a manufacturer, whether conditions are good or bad is all decided by our products, and our strategy is to make sure as many of them as possible are new," he says. Casio plans to replace 50 per cent of its product in the second half of the year.

Teacher's Model

Model for predicting the content

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
▪ Predicting the content (Relating to the background knowledge)	<p>Teacher: When I firstly read the text that I have never read before, I will consider every part that helps me guess the content. The parts which are the title, the picture, and the words can show the meaning of the text.</p> <p>From the text provided, the title "A path to salvation through innovation" helps me guess the content of text which must be involved with something new. Besides, the words in Paragraph A, and B that facilitate my prediction are: innovation, launch, product and so on. I will make use of the words, phrases and illustration found in the text to guess the overall content. The content of the text might be about how stable the company is getting when emerging the new and unique product.</p> <p>Moreover, after I observe every part in the text, I can link what I have seen with my experience. From the picture, I can see a G-Shock Baby G watch which I must see and have direct experiences on it. My friends, relatives or even I have our own experience to buy and use it in</p>	<ol style="list-style-type: none"> 1. Look at the title and the picture found in the text provided. 2. Skim the whole text to find the clues or key words that help the students guess the content. 3. Think of what the whole content might be and relate the background knowledge on the brand to the general information found in the context. 4. Connect to the experience about the brand and use of product.

Theme: Products / Services		
Title: What customers want		
(A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
	our daily life. At this stage, my background knowledge can help me understand more on the product and its popularity. In addition, some words such as innovation, launch and so on help me recall the products and their popularity.	

Students' practice: Group work

D This confidence in his products is typical of Mr. Kashio. He often says that his long years of selling make him a keen judge of whether a new product will succeed. He perks up considerably when given the chance to praise his gadgets, such as radio-controlled watches that pick up a broadcast signal to set the time, and the toughened G-Shock brand, which redefined watch design.

E A source of pride at the moment is Casio's family of high-speed "burst" digital cameras, which can take up to 60 shots a second after the photographer presses the button.

Directions: According to Paragraphs given, practise think-aloud and answer the following questions.

1. What are the important vocabulary found in these selected paragraphs?

2. What contents can you predict from the vocabulary?

Model for using the context clues

<p style="text-align: center;">Theme: Products / Services Title: What customers want (A path to salvation through innovation)</p>		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Using the context clues 	<p>Teacher: When I read English texts, I may find many difficult vocabulary that results in reading comprehension problems. Vocabulary is very important to understand the texts so I always find out the meaning of difficult vocabulary by using dictionaries. However, I cannot use dictionaries in some situations. The reading strategy "Using the context clues" can help me guess the meaning of difficult words and help me comprehend the text. Context means the contents before and after the difficult word. I should read the contents surrounding the difficult vocabulary so as to make a guess.</p> <p>For example, I don't know the meaning of word "collapse" in Paragraph A, "Whatever problem is put to him, whether it is the yen's strength, the economy's weakness or the collapse in Japanese mobile-phone sales." I can look at the information before and see the words " weakness</p>	<p>1. Read the text roughly and underline the unknown or difficult words.</p> <p>2. Read the sentences surrounding the difficult words to make a guess on meaning of words and help ease the comprehension.</p>

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
	or " which help me guess the meaning of collapse. I can know "collapse" has the same meaning as "weakness" because of the conjunction "or" which has the same level of word and meaning. This is a way how to use the context clue to guess the meaning of my unknown vocabulary.	

Students' practice: Group work

Directions: Guess the meaning from the context clues.

"**D** This confidence in his products is typical of Mr. Kashio. He often says that his long years of selling make him a keen judge of whether a new product will succeed. He **perks up** considerably when given the chance to praise his gadgets, such as radio-controlled watches that pick up a broadcast signal to set the time, and the toughened G-Shock brand, which redefined watch design.

What does the word "**perks up**" mean?

How can you guess its meaning?

Model for rereading to clarify a possible misunderstanding

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Rereading to clarify a possible misunderstanding 	<p>Teacher: When I read a paragraph, I may find some parts confusing and difficult to understand. This is very important for a reader like me because they may make me misunderstand the content, distort the idea or the purpose that the writer wants to convey.</p> <p>For example, when I begin to read the text from Paragraph A, I have a difficulty to comprehend this sentence. "Whatever problem is put to him, whether it is the yen's strength, the economy's weakness or the collapse in Japanese mobile-phone sales, the energetic executive has a single answer: launch new products." However, I will reread it and try to understand that the yen's strength, the economy's weakness or the collapse in Japanese mobile-phone sales are all the examples of the problems. After rereading the sentence, I can understand that these problems have one answer which is launching new products.</p>	<ol style="list-style-type: none"> 1. Reread the confusing part in the paragraph. 2. Try to find the important points that are used to ease the students' understanding.

Students' practice: Group work

Directions: Think aloud to find your confusing part in the reading passage.

1. My confusing part is in Paragraph _____
2. I try to find the important words or phrases that help my comprehension, underline them and reread that part.

Model for finding the main ideas

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Finding the main ideas 	<p>Teacher: When I read the text, I need to know what the text is about. Therefore, I will do the followings:</p> <ul style="list-style-type: none"> - The topic will be identified first. - Then find the topic sentence or main idea which will help me understand more the whole idea of each paragraph that the writer wants to convey. Normally, The topic sentence can be found in three positions in the text which are: <ul style="list-style-type: none"> • at the beginning; • in the middle; and • at the end of paragraph. <p>However, we cannot sometimes find it directly. It need an interpretation for the main idea which is called "implied main idea".</p> <p>From the text provided, how can I find the topic sentence of Paragraph A and B?</p>	<ol style="list-style-type: none"> 1. Explain what "topic, topic sentence and supporting detail" are. 2. Show how to find the topic and main ideas in the text provided. <ul style="list-style-type: none"> - Firstly, find out the topic or repeated words in a paragraph - Then find out the most important information or the general statement - Finally find out the supporting detail

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
	<p>From Paragraph A, I need to read and comprehend the idea. The topic is about the answer for Kashio's problem: launching new products. In other words, to solve the problems, Kashio's single answer is to launch new products. I can find that the topic sentence is not stated directly. However, it can be implied that "As a co-founder of Casio, Kazuo Kashio has faced with any problems of which his solution is launch new products.</p> <p>From Paragraph B, the topic sentence or the main idea can be found at the beginning which is "For us as a manufacturer, whether conditions are good or bad is all decided by our products, and our strategy is to make sure as many of them as possible are new". However, the next sentence is a supporting detail.</p>	

Students' practice: Group work

Directions: Find the topic sentence or main idea in the given paragraphs.

The topic sentence/main idea found in paragraph C is _____

The topic sentence/main idea found in paragraph D is _____

The topic sentence/main idea found in paragraph E is _____

The topic sentence/main idea found in paragraph F is _____

The topic sentence/main idea found in paragraph G is _____

The topic sentence/main idea found in paragraph H is _____

The topic sentence/main idea found in paragraph I is _____

Model for making inferences

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Making inferences 	<p>Teacher: When I read the whole paragraph and draw the conclusion, I can think beyond the line and make inferences. Making inferences is the strategy that I need the logical consideration to think further because what I infer cannot be found directly in the text.</p> <p>For example, I can infer from the last line in Paragraph A that there are many new products of Casio.</p> <p>According to Kazuo Kashio, the way to solve his problems is to launch new products.</p>	<ol style="list-style-type: none"> 1. Read the whole paragraph or text and draw the conclusion. 2. Inference can be made later, based on the story.

Students' practice: Group work

Directions: Think aloud for your answer.

"C That strategy amounts to an attempt to maintain sales by taking a larger share of a shrinking market. Challenged as to whether that is possible, given that rivals are not only racing to launch new products but also cutting prices, Mr. Kashio argues that Casio's products are unique enough to do it."

After reading this paragraph, what can be inferred?

Model for taking notes

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Taking notes 	<p>Teacher: After I read each paragraph, I like to note down the important details. Recording the main point helps me organize my ideas and see the big picture of what I have read.</p> <p>For example, after reading the article, I will find the information and fill in the following notes.</p> <p>Brand name: <u>Casio, G-Shock</u></p> <p>Brand owner: <u>Kazuo Kashio and his three brothers</u></p> <p>Company's age: <u>20 years</u></p> <p>Problems: <u>Yen's strength,</u> <u>Economy's weakness,</u> <u>Collapse in Japanese mobile-phone sales</u></p> <p>Solution: <u>Launch new products</u></p>	<p>1. Read the text and note down the important details needed for comprehension.</p>

Students' practice: Group work

Directions: After reading the article, answer the following questions.

According to the text, find the information and fill in the following notes.

Products: _____

Competitors: _____

Strategy use: _____

Research and development: _____

Model for summarizing the paragraph/text

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Summarizing the paragraph/text 	<p>Teacher: It is easier to comprehend the whole text if I can find the main points which can be shown in each paragraph. They must be neither too broad nor too specific.</p> <p>Importantly, the summary should be brief but informative. Finding the main point of each paragraph helps me understand the important idea or the concept that the writer wants to convey. Then I will write it in my own words. Remember that the summary must contain the major points of the original text.</p> <p>For example, according to Paragraph A of the text “A path to salvation through innovation”, I can summarize the content that is "As a Japanese co-founder of Casio, Kazuo Kashio's only one solution for any problems of product sales is to launch new products.</p>	<ol style="list-style-type: none"> 1. Ask the students how to write a summary. 2. Correlate the main points found in the text to write the summary in brief in the writer's own words.

Students' practice: Group work**Directions:** Answer the following question.

1. What are the main points found in Paragraph G?

2. The summary of Paragraph G is

Model for identifying text structure

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Identifying text structure 	<p>Teacher: Identifying text structure is a way to see the organizational pattern of the whole text. The text structure can help me understand the main idea including supporting details in each paragraph or the paragraph as a whole. I can recognize the text by using the text structure since it shows the ideas organized in each pattern. The followings are the patterns of text structure:</p> <ul style="list-style-type: none"> - Description - Sequence/Process/Chronological - Problem and solution - Cause and effect - Compare and contrast. <p>Once the patterns are recognized, I will understand the organizational structure of the text.</p>	<ol style="list-style-type: none"> 1. Read the paragraphs and identify the organizational structure of the text. 2. Explain how many patterns of text structure there are. 3. The patterns of idea can be found and recognized in the text.

Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
	For example, I can identify the text structure of Paragraph A which is Problem and solution. The cause is the yen's strength, the economy's weakness or the collapse in Japanese mobile-phone sales. The solution is launching new products.	

Students' practice: Group work

Directions: Think aloud for your answer.

1. What is the pattern of text structure found in Paragraph G?

"G Two of Mr. Kashio's favorite phrases sum up the family's approach to research and development. One is to resist "preconceived ideas" of what a device should do and how it should do it; the other is "from zero to one", to describe how Casio creates something that did not exist- such as the electronic calculator that started it all in 1957 – from scratch"

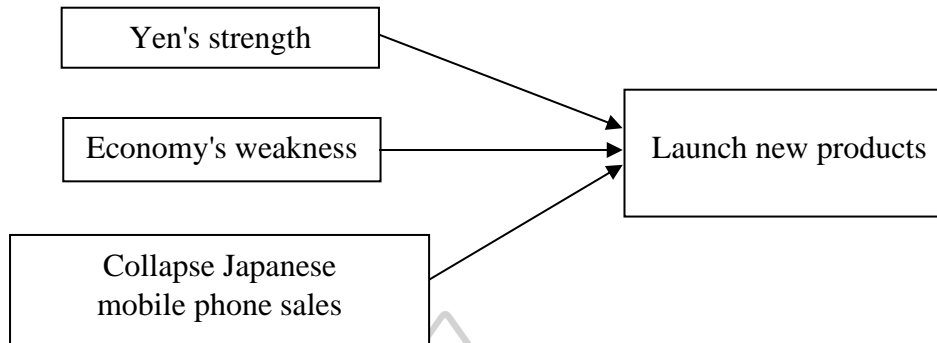
Text Structure: _____

Model for mapping the concepts and integrating information

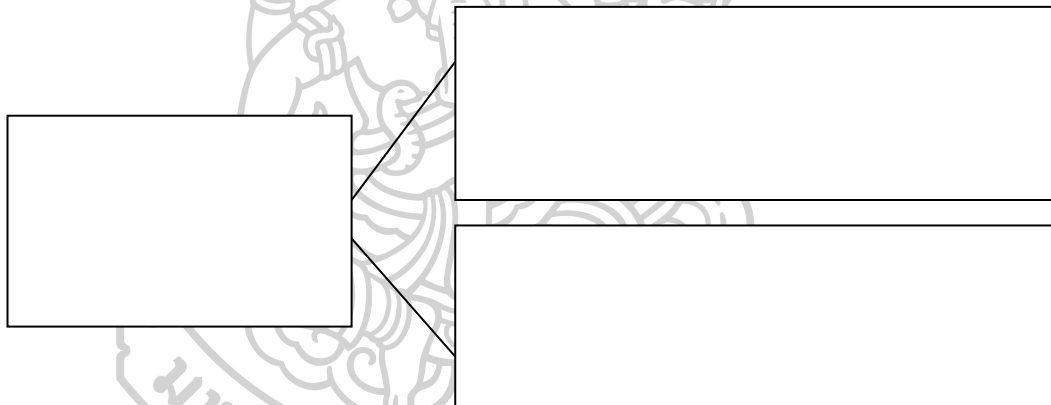
Theme: Products / Services Title: What customers want (A path to salvation through innovation)		
Reading Strategy Name	A Teacher's Model for Reading Strategies	Strategy Description
<ul style="list-style-type: none"> ▪ Mapping the concepts and integrate information 	Teacher: This strategy can be done after identifying the text structure. I can use the graphic organizer to chart and organize it systematically.	1. Use the information that has been noted down and identified the text structure to rearrange and reorganize in the graphic organizer.

Teacher's Model: Graphic Organizer

Directions: After reading Paragraph A, organize the ideas by mapping the concepts.

**Students' practice: Group work**

Directions: After reading Paragraph G, organize the ideas by mapping the concepts.



Step 4. R: Running the project and presentation

What to do

Work in group and build your successful business on a particular product.

Preparation for the Mini-project			
Mini-Project	A Teacher's Explanation for Project Running	Preparation for Mini-project and Presentation	Description of Project and Presentation
Create your own product	Teacher: Carry out the plan for mini-project task by asking you all to work in groups and brainstorm the mini-project details on each topic. Then you make some agreement and choose the best idea for your mini-project. It is time to plan and design the structure of the mini-projects. After that I will ask you to create the mini-project of your group. When you create the pattern, you can modify your thinking pattern, create your own product and make some changes. Then your group plans your presentation and prepares to communicate to others. Your ideas are shared to class by oral presentation.	The students work in group and help create the mini-projects on the theme "Product or Service" and then prepare for presentation. The teacher will be their facilitator who gives them some advice.	<ol style="list-style-type: none"> 1. Plan the mini-projects in group. 2. Choose the best ideas for the mini-projects. 3. Design the structure of the mini-projects. 4. Create thinking pattern, modify and make some changes. 5. Plan to present the mini-projects. 6. Share ideas to others in class by oral presentation.

Mini-project 1

Directions: Work in group and build your successful business on a particular product or service.

Your product/service:

Product design:

Main consumer benefit: _____

Target audience: _____

Audience's possible desires: 1. _____

2. _____

3. _____

Main competitors:

1. _____

2. _____

3. _____

Members in the group

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Step 5. A: Assessment

What to do Evaluate reading comprehension.

Reading Comprehension Assessment

Exercise after Unit 1

Directions: Read the passage "What customers want" and choose the best answer.

What Customers Want



Cr. <https://medium.com/@Pypestream/how-to-exceed-customer-expectations-e0ac5f100018>

A Shopping for new products is a very personal thing. Some of us are looking for original products that nobody else will have. Others want to have the same things as everybody else, so they are more attracted by popular products. But it seems that we all have the same reasons for choosing one product or service over another. _____

1. Value

B Most people want to be sure that they are getting **good value** when they buy a product. This doesn't always mean that the product is cheap; it means that it is the product we want and that we are happy with the price we are paying.

2. _____

C Most of us want to talk to people who know their job and can give us good advice. We want helpful staff who can deal with problems quickly and efficiently. This is true not only in shops, but also when we order by phone or online.

3. Trust

D Most customers want to buy from _____ companies that give them what they promise, every time. Companies that deliver late or that sell faulty products will soon lose our business.

4. Quality

E We know that a Cartier watch is a quality product, but quality isn't only about price and expensive materials. A cheap watch that looks good and still tells us the right time after ten years is also a high-quality product.

5. _____

F Most people want _____ products and services. We don't want to read a 200-page manual before we can use our mobile phone or other high-tech gadget.

*Sources: Grant, D., Hudson, J. & Hughes, J. (2017). **Business Result** (2nd Ed.).
Oxford: Oxford University Press.*

Reading Comprehension Test

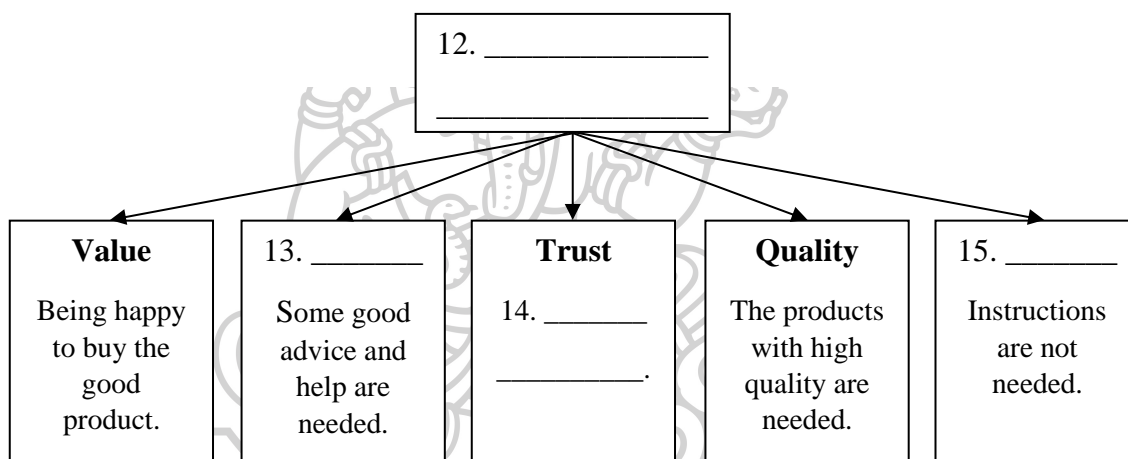
Choose the best answer for each item.

1. Which sentence should be put in the blank to complete the ending of Paragraph A?
 - a. According to a survey, the following reasons for customers were:
 - b. An online survey indicated that the most popular things for sellers were:
 - c. A recent online survey showed that the top five priorities for customers were:**
 - d. According to an online survey, the most important characteristics for customers were:
2. What is the antonym of the word "good value" in Paragraph B?
 - a. worthiness
 - b. waste**
 - c. markdown
 - d. deal
3. Which of the following is the main idea found in Paragraph B?
 - a. People prefer to buy the product that has value equal to the price no matter what the prices are.**
 - b. People buy the valuable product which is costly and extremely popular.
 - c. The product is increasingly sold and the price is extremely risen in the market.

- d. The product is the good reason to be produced and sold with acceptable price for the customers.
4. Which of the following is the best summary of Paragraph C?
- a. **It's important to be able to speak to an employee for help and advice.**
 b. Buying things online is more popular because people can ask for good advice.
 c. An employee who can solve the problems quickly and efficiently is always called.
 d. Most customers like to buy products in shops because the employee can give some help.
5. Which topic best expresses the author's purpose of the paragraph C?
- a. Advice **b. Service** c. Guidance d. Direction
6. Which of the following is the best word to complete the sentence in Paragraph D?
- a. well-known b. loyal **c. reliable** d. dependent
7. Which of the following can be inferred from Paragraph E?
- a. The quality is considered from price and material.
b. The millionaire can afford to buy a Cartier watch.
 c. The high-quality product is judged from its expensive material.
 d. The time to buy a product is very important for the customers to consider.
8. Which topic best expresses the author's purpose of the paragraph F?
- a. Service b. Product c. Manual **d. Simplicity**
9. Which of the following is the best word to complete the sentence in Paragraph F?
- a. detailed **b. user-friendly** c. reliable d. convenient
10. According to the whole passage, which of the following is **FALSE** ?
- a. Companies should be loyal to their customers.
b. The good products must be worthy and costly.
 c. Customers want the products with good value and high quality.
 d. Not every cheap product is worthless to be bought as long as their quality matters.
11. Which of the followings best describes the organizational pattern of the whole text?
- a. Sequence b. Problem and Solution
 c. Cause and effect **d. Description**

According to the whole passage, choose the followings and fill in the blank in the correct position.

- a. Loyalty is needed
- b. Advice
- c. Promise must be given
- d. Simplicity
- e. Popular things customers concern
- f. Facility
- g. Service
- h. Top 5 things customers need



12. ___h___

13. ___g___

14. ___a___

15. ___d___

7. Documents used in teaching and learning

Regarding the instruction manual of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students, the documents used in the instruction are the followings:

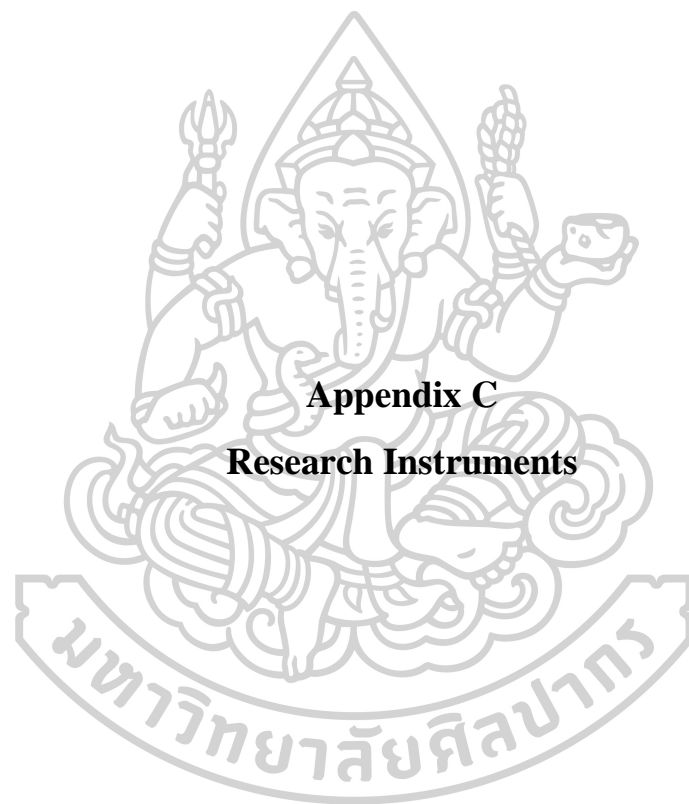
1. The instruction manual
2. Pre-test and post-test
3. Lesson plans with 4 themes including 2 sub-topics in each theme and teaching materials with exercises after units
4. The students' usage of multiple reading strategies after using business reading instructional model

All documents are regarded as research instruments which are all verified by experts who are in the field of education.

The followings are the details of learning modules identified in each week.

Learning modules

Week/Module	Contents	Number of week(s) / periods
1	1. Course Introduction 2. Pre-test	1 week (3 periods)
2-4	Products / Services and Brands	3 weeks (9 periods)
5-7	Marketing Research and Plan	3 weeks (9 periods)
8-10	Advertising: Script and Storyboard for VDO Advertisement	3 weeks (9 periods)
11-13	Customers: Survey and Reviews	3 weeks (9 periods)
14-15	1. Post-test 2. Assessment: Reading Log, Assessment Rubrics	2 week (6 periods)
Total		15 weeks (45 periods)

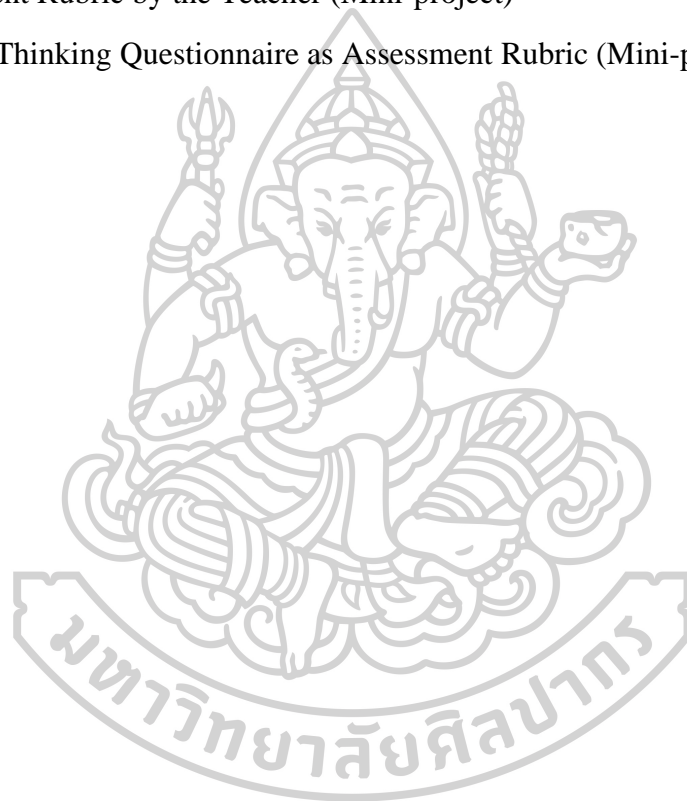


Appendix C
Research Instruments

Appendix C

Research Instruments

1. Needs Analysis Questionnaire
2. Semi-structure Interview Form for Focus Group with English Instructors
3. Pre-test and Post-test
4. Reading Log
5. Peer Assessment Rubric (Mini-project)
6. Assessment Rubric by the Teacher (Mini-project)
7. Creative Thinking Questionnaire as Assessment Rubric (Mini-project)



1. Needs Analysis Questionnaire

Needs Analysis Questionnaire for the Development of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students

Part I: General information and attitude in learning business English

Instructions: Tick the box that best describe yourself in learning business English reading.

1. Your gender Male Female
2. Your age years old
3. Your Levels of Ability in Reading Proficiency

Skills and Competencies	Levels of Ability in Reading Proficiency			
	Excellent	Good	Fair	Poor
Reading for Concepts				
Reading Comprehension				
Fluency in Reading				
Word Recognition				
Vocabulary				

4. Frequency of reading business English texts in a week
 - Less than one text 1-2 text(s) 3-4 texts
 - 5-6 texts 7-8 texts More than 8 texts
5. Business English texts you read most are about:
 - Advertisement Business News Brochure
 - Product description Business letter Blog
 - Others Please specify

(More than one answer is possible)

6. What are the difficulties do you find when reading business English texts? Please give your explanation in the box below:

Part 2: Needs

Instructions: Put the ✓ in the box for your needs in reading business English texts.

Topics	Needs			
	Strongly needed	Needed	Less needed	No needs
1. Business reading instruction				
2. Reading for concepts				
3. Motivation in reading				
4. Guidelines for reading business texts				
5. Reading Comprehension Strategies				
5.1 Making predictions				
5.2 Using prior knowledge to interpret texts				
5.3 Thinking about and analyzing the clues the author provides				
5.4 Identifying text structure				
5.5 Forming questions				
5.6 Integrating information through graphic organisers				
5.7 Summarizing texts				
5.8 Taking notes				
5.9 Determining main ideas				
5.10 Paraphrasing				
5.11 Reread for clarification				
5.12 Getting the gist (Skimming)				
5.13 Identifying specific information (Scanning)				
5.14 Making Inferences				
6. Using the business concepts from reading texts to create own business projects				

Part 3: Participants' recommendations

Instruction: Please give more recommendations that are useful for the development of business reading instructional model through Concept-Oriented Reading Instruction (CORI) and project-based learning to enhance reading abilities and creative thinking abilities for undergraduate students.

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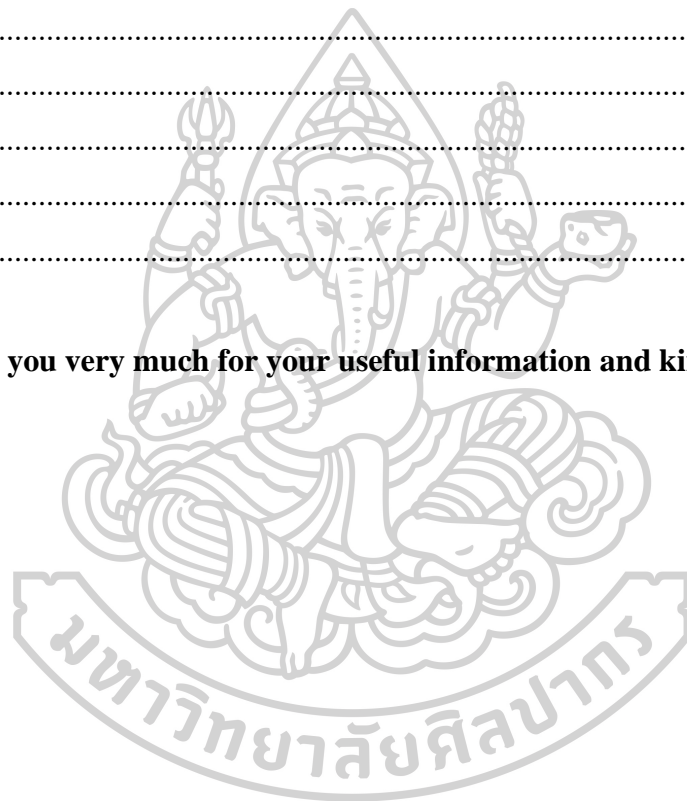
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Thank you very much for your useful information and kind cooperation



2. Semi-structure Interview Form for Focus Group with English Instructors

Focus Group Interview Form

Title: The Development of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students

Date of Focus Group Interview.....

Note Taker of an Interview.....

Assistant Moderator.....

Interviewees in Focus Group

1.

2.

3.

4.

5.

Questions in Focus Group Interview

1. Business Reading

1.1 What do you think of business reading?

1.2 How important is business reading in your daily life?

1.3 What do you think is important in business reading instruction?

1.4 What do you think must be considered by readers when reading business texts?

2. Concept-Oriented Reading Instruction (CORI)

2.1 What do you think of Concept-Oriented Reading Instruction or CORI?

2.2 What is the role of Concept-Oriented Reading Instruction (CORI) in enhancing readers' comprehension?

2.3 What do you think about the importance of Concept-Oriented Reading Instruction (CORI)?

3. Project-based Learning

3.1 What do you think of project-based learning?

3.2 What is the role of project-based learning in reading instruction?

3.3 How do you feel about the importance of project-based learning in reading instruction?

Note-taking Form for Focus Group Interview

Title: The Development of Business Reading Instructional Model through Concept-Oriented Reading Instruction (CORI) and Project-based Learning to Enhance Reading Abilities and Creative Thinking Abilities for Undergraduate Students

Date of Focus Group Interview.....

Topic Business Reading

Question Number	Details Taken from Focus Group Interview
1.1 What do you think of business reading?	
1.2 How important is business reading in your daily life?	
1.3 What do you think is important in business reading instruction?	
1.4 What do you think must be considered by readers when reading business texts?	

Topic Concept-Oriented Reading Instruction (CORI)

Question Number	Details Taken from Focus Group Interview
2.1 What do you think of Concept-Oriented Reading Instruction or CORI?	
2.2 What is the role of Concept-Oriented Reading Instruction (CORI) in enhancing readers' comprehension?	
2.3 What do you think about the importance of Concept-Oriented Reading Instruction (CORI)?	

Topic Project-based Learning

Question Number	Details Taken from Focus Group Interview
3.1 What do you think of project-based learning?	
3.2 What is the role of project-based learning in reading instruction?	
3.3 How do you feel about the importance of project-based learning in reading instruction?	

3. Pre-test and Post-test

Pre-test and Post-test

Directions: Read the following passages and choose the best answer for each item.

Then mark your answers on the separate answer sheet.

Passage 1

Black Friday

A The holiday shopping season usually begins on the day after Thanksgiving which mostly is a Thursday. _____. Since 2005, Friday or well-known day, Black Friday, has been known as the busiest shopping day of the year.

B On Black Friday, great deals with big discounts such as TVs, computers and so on are offered to the shoppers and most stores open their doors in the wee hours of the morning. The prices of many items are much lower than usual. Stores hope that shoppers spend money on those discounted items as gifts for their family, friends or other people they know even though they may lose money on those items.

C Regarding shoppers, Black Friday is considered as a great time to get good deals. However, the big issue is that each store does not have enough low-priced items for many shoppers to go around. It may only have a few. For this reason, these items become in high demand. People must wait in long lines to come in the store and get such great deals. Before a door opens, the people may line up hours outside the stores hoping to get a low-priced item like a laptop. But not everyone who wants one will get one. Some disappointed shoppers leave the stores.

D The situation becomes so tense that some Black Friday events cause violence. Workers have been _____ by very large, eager crowds. Fights have broken out over toys or people cutting in line. The worst event happened when people shot one another over parking spots; nevertheless, most Black Friday events are safe and fun. Still, if you plan on going, expect large crowds to rush and **a bit of shoving**.

E Why do people call "Black Friday"? It was firstly named in Philadelphia in the 1950s. It came from the police who called this day "Black Friday" due to the fact that

it led to the congested traffic. Later in the 1960s, stores tried to change the name of the day into "Big Friday." but it did not **stick**. The name "Black Friday" continued to be called and spread across the country. It seems that it is here to stay.

F At present people all over the country join in the event known as Black Friday. It becomes popular and spreads to other parts of the world. Black Friday events have been held in the U.K., Australia, and Brazil since 2012. In Costa Rica, Black Friday is known as "Viernes Negro." And in Mexico, an annual weekend of discounts are offered. It is called "El Buen Fin", which means "the good weekend" in Spanish. I guess the language of savings is regarded as universal.

Adapted from <https://www.ereadingworksheets.com/reading-comprehension-worksheets/nonfiction-reading-test-black-friday.pdf>

1. Which sentence should be put in the blank to make a meaningful paragraph A?
 - a. Therefore, the day after Thanksgiving must be a Friday.**
 - b. Then most people prefer going on the next day, Friday.
 - c. So people still celebrate on their Thanksgiving which is Friday.
 - d. Consequently, shoppers look forward to going to the stores on Friday.

2. Which situation most closely matches the meaning of the words "wee hours" in Paragraph B?
 - a. People have waited in front of the stores since 6 o'clock in the morning.
 - b. Most stores will be closed during the day but open again in the early morning.
 - c. After midnight, people spend time on shopping in the stores in the early hours of the morning.**
 - d. Most enthusiastic shoppers make a deal with most stores to open for many hours in the early morning.

3. What is the main idea of Paragraph C?
 - a. People who wait in long lines on Black Friday.
 - b. Black Friday is a great time for most shoppers to get good deals.
 - c. Black Friday deals are the most wanted ones which not everyone will get**

even one.

d. Black Friday offers low-priced electronic devices and people feel disappointed to leave the stores.

4. Which of the following is the best word to complete the sentence in Paragraph D?

a. admired **b. trampled** c. requested d. snatched

5. Which word is closest in meaning to "a bit of shoving"?

a. repelling **b. shouldering** c. forcing d. injuring

6. Which of the following is the best summary of Paragraph D?

a. There is a tension to participate in Black Friday events; however, people love them.

b. Although the Black Friday events are dangerous, people spend money on toys and gifts.

c. Fights and tension happening in some Black Friday events can harm people who attend the events.

d. Black Friday events can cause fights or injure people; however, people enjoy shopping on those days.

7. What is the synonym of the word "stick" in Paragraph E?

a. regain b. reuse **c. recall** d. rehearse

8. Which of the following can be inferred from the whole passage?

a. People must be aware of dangers on Black Friday and the police come to the stores.

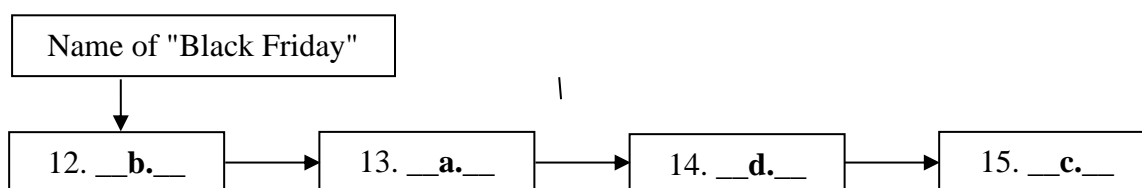
b. Black Friday offers low prices to people who like electrical devices such as a laptop, and a television.

c. Black Friday is a very great time for shoppers to travel abroad and get some souvenirs for their friends.

d. Black Friday is popular among shoppers who earlier come to the stores and wait outside the night before the stores open.

9. Which title best expresses the author's purpose of the text?
- Black Friday: Events from the parking lots
 - Black Friday: The stuff that shoppers should realize**
 - Black Friday: The reasons all shoppers must go this year
 - Black Friday: The ways to spend money on the Big Day
10. According to the whole passage, which of the following is **TRUE** ?
- Black Friday is the great time for shopping.**
 - Black Friday is regarded as a national holiday that most shoppers are waiting for.
 - People who deny losing money on their shopping items always spend money on electrical devices.
 - "El Buen Fin" has a good meaning for most shoppers who want to define "Black Friday" and use the words all over the place.
11. Which of the followings best describes the organizational pattern of Paragraph E?
- Description
 - Chronological order**
 - Compare and contrast
 - Cause and effect

According to Paragraph E, rearrange the following events in the correct position.



- The police called the day with the traffic congestion "Black Friday".
- People in Philadelphia started joining the event called "Black Friday".
- "Black Friday" is still popular across national borders.
- Stores renamed the day "Big Friday".

Passage 2

A Is there any fiber that is five times stronger than steel? This type of fabric can be resistant to temperatures which are higher than 500 degrees Fahrenheit? Also, this fiber was invented by a woman. Did you know her? This fabric is known as Kevlar. It is constructed to build everything from body armor to musical instruments.

B In 1964, there were shortages of gasoline caused by conflict in the Middle East. Stephanie Louise Kwolek, Polish-American chemist, was working for DuPont. She and her group were attempting to make a lightweight, but **consistent** fiber to be used with tires. Lighter tires would allow vehicles to get better gas mileage. However, the tires had to be strong enough to be used with the wear and tear of the street. These people had been dealing with the problem for some time and was not successful.

C Kwolek and her group tried to create fibers. During one of the processes, she made a milky white solution by putting two chemicals which were often employed in the process together. The solution was usually **rejected**. However, Kwolek persuaded one of the technicians to help her test the solution. It was found that the fabric was not only more durable than nylon, it was more durable than steel as well. At that time, Kevlar had been invented.

D Thus, Kevlar is known as remarkable fabric which is strong and durable. Kevlar is used in sporting equipment such as bike tires, bowstrings, and tennis racquets. Also, Kevlar is used in musical instruments, for example, drum heads, **reeds**, or speaker cones.

E In 1975, Richard Armellino created the first Kevlar bulletproof vest. There were 15 layers of Kevlar. These could stop handguns and shotgun bullets. In there a steel plate over the heart in the vest, which made it strong enough to stop rifle rounds. Vests were quickly picked up by police forces and it is estimated that by 1990, half of all police officers in the USA were bulletproof vests every day. By 2006, 2,000 documents police vest saves, where officers were protected from serious wounds by wearing bulletproof vests.

F Kevlar is a _____ fabric. It is used not only for its hardness and durability, but for its heat resistance as well. Due to this fact, this has been used to

replace asbestos. Asbestos can be resistant over 1000 degree Fahrenheit temperatures. Thus, this was used in roofs, electrical cables or brake pads. Kevlar causes no risks when compared to Asbestos which can lead to cancer and other serious health problems. Kevlar is lightweight, flexible, and resistant to fire. For asbestos in many cases, it has been proven a better replacement.

G Since 1964, Kevlar has won its means into our life. It is everywhere—from musical instruments and brake pads to protective tools and sporting gear. _____.

Adapted from <https://www.ereadingworksheets.com/reading-comprehension-worksheets/nonfiction-reading-test-7-kevlar.pdf>

16. Which situation most closely matches the meaning of the words "consistent" in Paragraph B?

- a. The vulnerable tires were used in the Middle East.
- b. The firm fiber was created to be used with tires.**
- c. The lightweight fiber was produced with delicate tires at DuPont.
- d. The chemist created exquisite vehicles because of lack of gasoline in the Middle East.

17. Which of the following can be inferred from Paragraph B?

- a. Gasoline was considered a rare item.**
- b. Tires were sold widely in both Poland and America by DuPont.
- c. Most tires were light but strong to the wear and tear of the street.
- d. Kwolek was a Polish-American chemist who worked in America.

18. What is the antonym of the word "rejected" in Paragraph C?

- a. discarded
- b. accomplished
- c. acknowledged**
- d. declined

19. What is the main idea of Paragraph D?

- a. Kevlar is remarkably used in sporting equipment.
- b. Kevlar is specifically used in musical instruments and sporting events.
- c. Kevlar is strong and durable enough to make sporting equipment and**

musical instruments.

d. Kevlar is a material which is a part of bike tires, tennis racquets, drums, and other musical instruments.

20. Which word is closest in meaning to "reeds" in Paragraph D?

- a. flutes b. guitars c. violins d. harp

21. What is the topic found in Paragraph E?

- a. Kevlar b. police officer **c. bulletproof vest** d. gun bullets

22. Which of the following is the best summary of Paragraph F?

- a. Kevlar is very famous for its heat resistance and can replace asbestos in some emergency cases.
- b. Kevlar is used to produce things instead of asbestos because it can resist the heat of fire and strengthen its fabric.
- c. Kevlar is well-known as a good and appropriate substitute for fabric which is more flexible, more durable and the most resistant to heat.
- d. Kevlar is made of fabric which can substitute for asbestos in many aspects because it is safer, lighter, more durable, and more resistant to heat.**

23. Which of the following is the best word to complete the sentence in Paragraph F?

- a. flexible b. vulnerable c. safe **d. fascinating**

24. Regarding Paragraph G, which sentence is likely to be put in the blank to complete the paragraph?

- a. It can be replaced asbestos for many reasons.
- b. You have to find more information about this item to know it more.
- c. You are exposed to something made better by Kevlar every day of your life.**
- d. It would be better for everyone to make known how to produce Kevlar on their own to use in their life.

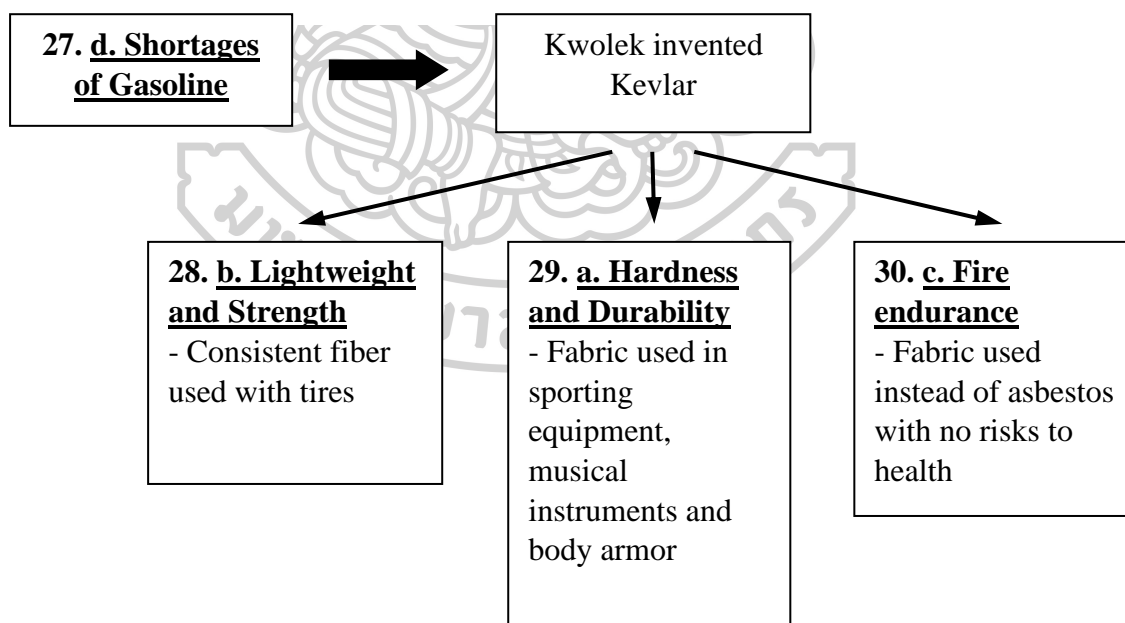
25. According to the whole passage, which of the following is **FALSE**?

- a. **One of products that has been made with Kevlar is Bungee jumping cords.**
- b. Kevlar is employed to save police officers' life by preventing them from the bullets.
- c. Kevlar is a kind of fabric which is well-known as its strength, durability and heat resistance.
- d. Kevlar is regarded as a multi-purpose fabric which was originated by a female chemist and her team.

26. Which of the followings best describes the organizational pattern of Paragraph F?

- a. Sequence
- b. Problem and Solution
- c. **Cause and effect**
- d. Description

According to the whole passage, put the following sentences in the correct position.



- a. Hardness and Durability
- b. Lightweight and Strength
- c. Fire endurance
- d. Shortages of Gasoline

Passage 3

Market Leaders

A Most mobile phones sold today have an operating system that was either designed by Apple or Google. Apple makes the iOS operating system powering their iPhones and iPads. Google makes the Android operating system that can be found on many different mobile phones and tablets. Both of these operating systems allow users to connect to app stores and download applications. To _____ these applications, users press small square buttons that appear on their home screens. One major difference between these two operating systems is that Apple makes all of its own hardware. That is to say, the iOS operating system only appears on products created by Apple. On the other hand, many different manufacturers like Samsung, Sony, and LG use the Android operating system. _____?

B Getting a new phone is a really cool feeling, but your phone can't do much without applications. In order to get the most from your new phone, you need to download apps. To do this you will need a data connection. Some plans allow you to get data from your phone network. If your plan lets you to do this, you can connect to web services anywhere that your phone gets a signal. If your plan does not let you to do this, you will need to connect your device to a Wi-Fi network. Free Wi-Fi can be found at coffee shops, **laundry mats**, and other public locations. Once your phone is receiving data, go to the application store on the device. Use the search or browse functions to find fun, interesting, or useful programs. Once you have found an application that you want to try, click the button to download and install it on your device. Not all applications are free, so make sure that you know how much the app costs before agreeing to download it. Also, if you are under the age of 18, get your parent's permission before downloading anything. You'll like your new phone so much more once you have some cool apps.

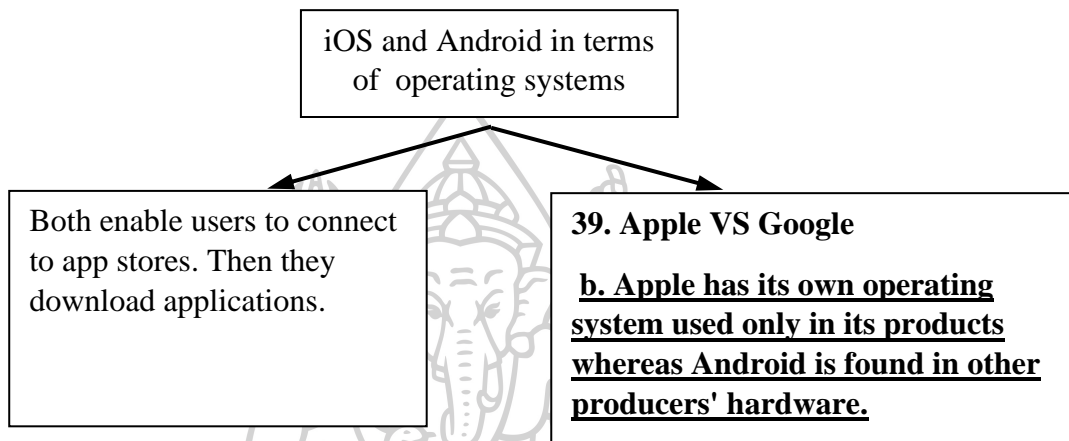
Abstracted from <https://www.ereadingworksheets.com/text-structure-worksheets/text-structure-worksheet-8.pdf>

31. Which sentence should be put in the blank to complete the ending of Paragraph A?
- When do you choose to buy one?
 - Which one do you like better: Android or iOS?**
 - Which brand is the most popular in your country?
 - What is the significance between these two manufacturers?
32. Which of the following is the best word to complete the sentence in Paragraph A?
- launch**
 - supply
 - provide
 - sync
33. According to Paragraph A, which of the following is **TRUE**?
- The mobile phones today have one operating system created both Apple and Google.
 - Some applications can be downloaded in stores for free anytime anywhere.
 - The iOS operating system is found partially in the iPhones and iPads.
 - Both Apple and Google have created their own operating system.**
34. What is the topic found in Paragraph B?
- Getting a phone
 - Finding free Wi-Fi
 - Connecting a network
 - Downloading Apps**
35. What is the main idea of Paragraph B?
- Installing applications in devices is very easy to do if users have programs.
 - Applications can help function mobile phones so downloading them is needed.**
 - Some cool applications are found in some mobile phones.
 - A data connection is very interesting if users need to use their mobile phones for work.
36. What can be used in laundry mats?
- data
 - Free Wi-Fi**
 - card
 - application
37. Which of the followings best describes the organizational pattern of Paragraph B?
- Sequence**
 - Problem and Solution
 - Description
 - Compare and Contrast
38. Which of the following can be inferred from Paragraph B?
- Applications can be downloaded by getting data connection.
 - Free Wi-Fi can be found and used at public places.

c. Applications are regarded as the significant working functions of your mobile phones.

d. Applications are so costly that mobile users should figure out before downloading them.

39. According to Paragraph A, select the best sentence to complete in the correct position.



a. Mobile phones have an operating system either designed by Apple or Google.

b. Apple has its own operating system used only in its products whereas Android is found in other producers' hardware.

c. Apple makes its own hardware.

d. Apple makes all of its own hardware, the iOS operating system, powering iPhones and iPads.

40. Which of the following can complete the note taken from Paragraph B?

Application Download: Signal from Phone network, or **d. Wi-Fi network**

a. program

b. browse function

c. application store

d. Wi-Fi network

Pre-test and Post-test

No. _____

Answer Sheet

Item No.	a.	b.	c.	d.	Item No.	a.	b.	c.	d.
1.					21.				
2.					22.				
3.					23.				
4.					24.				
5.					25.				
6.					26.				
7.					27.				
8.					28.				
9.					29.				
10.					30.				
11.					31.				
12.					32.				
13.					33.				
14.					34.				
15.					35.				
16.					36.				
17.					37.				
18.					38.				
19.					39.				
20.					40.				

4. Reading Log

What to do Reflect reading strategies.

The following is the reading log that the students use to reflect their reading strategies. The reading log is employed to evaluate the students' use of strategies in each paragraph and to confirm whether the students understand the reading passage.

Name _____

Directions: While reading the text, reflect each reading strategy you have used in this form.

Reflecting Reading Strategies

Reading Passage: _____

Reading Strategies	Procedures	Reflect the strategies
<ul style="list-style-type: none"> ▪ Predicting the content (Relating to the background knowledge) 	<ul style="list-style-type: none"> • Look at the title and the picture found in the text provided. • Skim the whole text to find the clues or key words that help the students guess the content. • Think of what the whole content might be and relate the background knowledge to the general information found in the context. • Connect to the personal experience. 	
<ul style="list-style-type: none"> ▪ Using the context clues 	<ul style="list-style-type: none"> • Read the text roughly and underline the 	

	<p>unknown or difficult words.</p> <ul style="list-style-type: none"> • Read the sentences surrounding the difficult words to make a guess on meaning of words and help ease the comprehension. 	
<ul style="list-style-type: none"> ▪ Rereading to clarify a possible misunderstanding 	<ul style="list-style-type: none"> • Reread the confusing part in the paragraph. • Find the important points that are used to ease the students' understanding. 	
<ul style="list-style-type: none"> ▪ Finding the main ideas 	<ul style="list-style-type: none"> • Find out the topic or repeated words in a paragraph • Find out the most important information or the general statement • Find out the supporting detail 	
<ul style="list-style-type: none"> ▪ Making inferences 	<ul style="list-style-type: none"> • Read the whole paragraph or text and draw the conclusion. • Inference can be made by considering from the evidence found in the text and think beyond, based on the story. 	
<ul style="list-style-type: none"> ▪ Taking notes 	<ul style="list-style-type: none"> • Read the text and note down the important details needed for comprehension. 	

<ul style="list-style-type: none"> ▪ Summarizing the paragraph/text 	<ul style="list-style-type: none"> • Find the main points • Correlate the main points found in the text to write the summary in brief in the writer's own words. 	
<ul style="list-style-type: none"> ▪ Identifying text structure 	<ul style="list-style-type: none"> • Read the paragraphs and identify the organizational structure of the text. • Recall how many patterns of text structure there are. • Find the transitional words • The patterns of idea can be found and recognized in the text. 	
<ul style="list-style-type: none"> ▪ Mapping the concepts and integrate information 	<ul style="list-style-type: none"> ▪ Use the main points that have been found, noted down and identified the text structure ▪ Rearrange and reorganize in the graphic organizer. 	

Usage of Reading Strategies

Reading Strategies	Tally Marks for Each Time the Strategy Used
▪ Predict the content (Relating to the background knowledge)	
▪ Use the context clues	
▪ Reread to clarify a possible misunderstanding	
▪ Find the main ideas	
▪ Make inferences	
▪ Take notes	
▪ Summarize	
▪ Identify text structure	
▪ Map the concepts and integrate information	

Number of Total Reading Strategies used

1. Predict the content (Relating to the background knowledge) _____
2. Use the context clues _____
3. Reread to clarify a possible misunderstanding _____
4. Find the main ideas _____
5. Make inferences _____
6. Take notes _____
7. Summarize _____
8. Identify text structure _____
9. Map the concepts and integrate information _____

5. Peer Assessment Rubric (Mini-project)

What to do

Evaluate the project.

A Peer Assessment Rubric (Mini-project)

Please complete this assessment form by filling in and selecting your most accurate response to each item.

Name-Surname _____

The group being assessed is _____.

Directions: Put ✓ in the box to assess your friends who work with you in the group of mini-project.

	Poor	Fair	satisfactory	Good	Excellent
1. Everyone in the group helped brainstorm the project details and made a lot of good suggestion.					
2. Everyone in the group helped plan and design the project.					
3. Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.					
4. Everyone in the group cooperated with one another and was on task most of the time they worked together.					
5. Everyone in the group was open to any suggestion that had been made.					
6. Everyone in the group could complete the project effectively because of working with the friends.					

Problem found while doing the mini-project

6. Assessment Rubric by the Teacher (Mini-project)

An Assessment Rubric by the Teacher (Mini-project)

The group being assessed is _____.

Directions: Put ✓ in the box to assess the students who work in the mini-project group.

	Poor	Fair	satisfactory	Good	Excellent
1. The students made a lot of good suggestion and shared their opinion to the group.					
2. The students were on task most of the time they worked together.					
3. The students were open to their friends' suggestions.					
4. The students gave some help and cooperated with one another.					
5. The students could complete their project effectively because of working together.					

Problem found while doing the mini-project

7. Creative Thinking Questionnaire as Assessment Rubric (Mini-project)

What to do Evaluate creative thinking (Peer-assessment).

Creative Thinking Questionnaire as Assessment Rubric (Mini-project)

Please evaluate the creative thinking found in the group of mini-projects and complete this assessment form by filling in and selecting your most accurate response to each item.

Name-Surname _____

The group being assessed is _____.

Directions: Put ✓ in the box to assess the creative thinking in the group.

Thinking Layers in Creating the Project	Poor	Fair	satisfactory	Good	Excellent
1. Everyone in the group is aware that thinking is a skill that can be developed.					
2. Everyone in the group listens to other people's opinions and prepares to give reasons when being inquired.					
3. Everyone in the group helps design goals connecting to prior knowledge, generate and analyze the ideas, record concepts and choose the best one.					
4. Everyone in the group helps modify thinking pattern, build prototypes and make changes as needed.					
5. Everyone in the group observes and considers the consequences of choices having been made.					
6. Everyone in the group is aware of reflective thinking of the friends within and between group(s).					
7. Everyone in the group considers methods to implement these designed thinking tasks.					

Product Construction	Poor	Fair	satisfactory	Good	Excellent
1. The product's features and specifications are considered and well planned.					
2. The product is well designed, constructed step by step and achieved the set goals.					
3. The detailed drawing of the model is planned and made.					
4. The different models have been considered, compared and chose the best one.					
5. The product is creatively developed and presented interestingly.					

Problems found in planning and construction

Other comments



What to do

Evaluate creative thinking (Teacher-assessment).

Creative Thinking Questionnaire as Assessment Rubric (Mini-project)

Please evaluate the creative thinking found in each group of mini-projects and complete this assessment form by filling in and selecting your most accurate response to each item.

Name-Surname _____

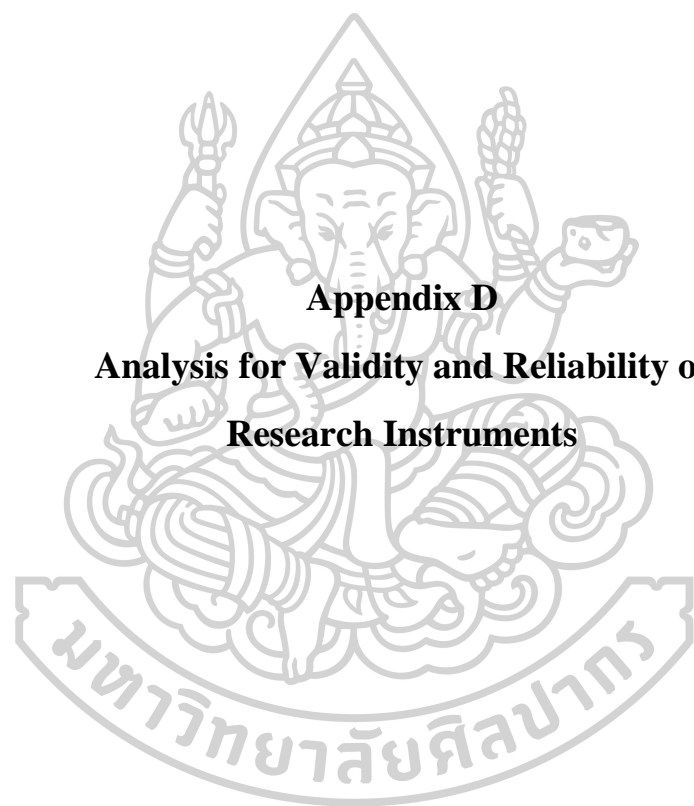
The group being assessed is _____.

Directions: Put ✓ in the box to assess the creative product construction in each group.

Product Construction	Poor	Fair	satisfactory	Good	Excellent
1. The product's features and specifications are considered and well planned.					
2. The product is well designed, constructed step by step and achieved the set goals.					
3. The detailed drawing of the model is planned and made.					
4. The different models have been considered, compared and chose the best one.					
5. The product is creatively developed and presented interestingly.					

Problems found in planning and construction

Other comments

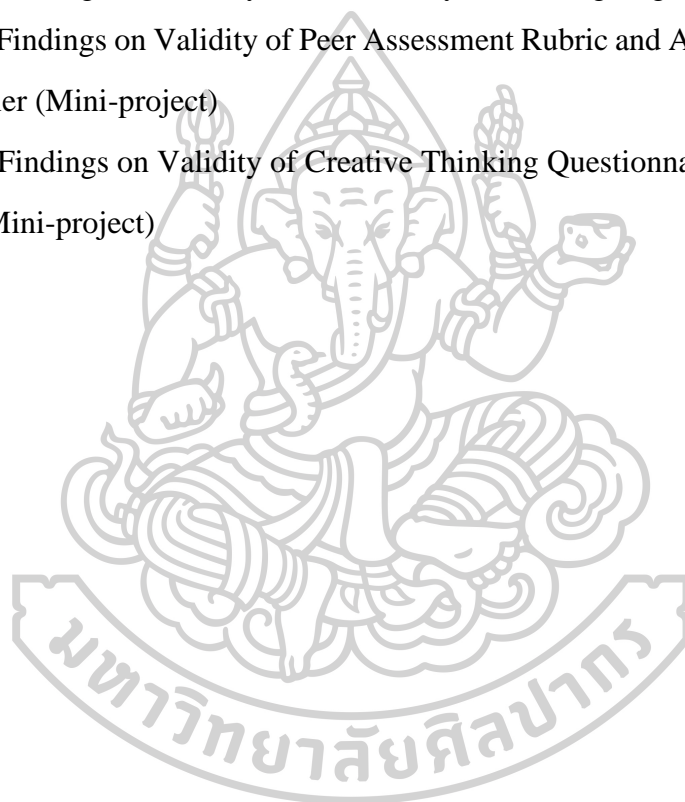


Appendix D
Analysis for Validity and Reliability of
Research Instruments

Appendix D

Analysis for Validity and Reliability of Research Instruments

1. Analysis Findings on Validity of Needs Analysis Questionnaire
2. Analysis Findings on Lesson Plan, Sample of Material and Exercises after Unit, and Instruction Manual of Model
3. Analysis Findings on Validity, Reliability, Difficulty Index (p) and Item Discrimination (r) of Business English Reading Ability Test
4. Analysis Findings on Validity and Reliability of Reading Log
5. Analysis Findings on Validity of Peer Assessment Rubric and Assessment Rubric by the Teacher (Mini-project)
6. Analysis Findings on Validity of Creative Thinking Questionnaire as Assessment Rubric (Mini-project)



1. Analysis Findings on Validity of Needs Analysis Questionnaire

Item No.	Aspects of Inquiry	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
Skills and Competencies								
1	Reading for Concepts	1	1	1	1	1	5	1
2	Reading Comprehension	1	1	1	1	1	5	1
3	Fluency in Reading	1	1	1	1	1	5	1
4	Word Recognition	1	0	1	0	1	3	0.6
5	Vocabulary	1	1	1	1	1	5	1
Opinions and Needs								
1	Business reading instruction	1	1	1	1	1	5	1
2	Reading for concepts	1	0	1	1	1	4	0.8
3	Motivation in reading	1	0	1	1	1	4	0.8
4	Guidelines for reading business texts	1	0	1	1	1	4	0.8
5	Reading Comprehension Strategies	1	1	1	1	1	5	1
5.1	Making predictions	1	1	1	1	1	5	1
5.2	Using prior knowledge to interpret texts	1	1	0	1	1	4	0.8
5.3	Thinking about and analyzing the clues the author provides	1	1	1	1	1	5	1
5.4	Identifying text structure	1	1	1	1	1	5	1
5.5	Forming questions	1	0	1	1	1	4	0.8
5.6	Integrating information through graphic organisers	1	1	1	1	1	5	1

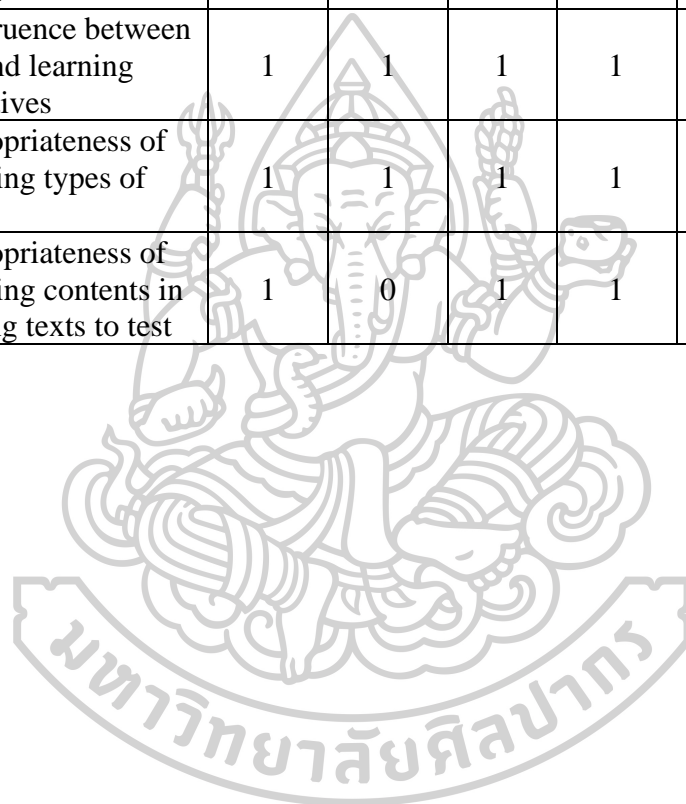
Item No.	Aspects of Inquiry	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
5.7	Summarizing texts	1	1	1	1	1	5	1
5.8	Taking notes	1	1	1	1	1	5	1
5.9	Determining main ideas	1	1	1	1	1	5	1
5.10	Paraphrasing	1	0	1	1	1	4	0.8
5.11	Reread for clarification	1	1	0	1	1	4	0.8
5.12	Getting the gist (Skimming)	1	1	1	1	1	5	1
5.13	Identifying specific information (Scanning)	1	1	1	1	1	5	1
5.14	Making Inferences	1	1	1	1	1	5	1
6	Using the business concepts from reading texts to create own business projects	1	1	1	1	1	5	1



2. Analysis Findings on Lesson Plan, Sample of Material and Exercises after Unit, and Instruction Manual of Model

Item No.	Reading Abilities	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
1 Aspect of Content								
1.1	Clarity of learning objectives	1	1	1	1	1	5	1
1.2	Congruence between contents and learning objectives	1	1	1	1	1	5	1
1.3	Accuracy and completeness of the contents	1	0	1	1	1	5	1
1.4	Attractiveness of the contents	1	0	1	1	1	4	0.8
1.5	Usefulness of the contents toward learners	1	1	1	1	1	5	1
1.6	Appropriateness of the contents in terms of the students' proficiency	1	1	1	1	1	5	1
2 Aspect of Explanation								
2.1	Chronological order of content explanation	1	1	1	1	1	5	1
2.2	Clarity of explanation	1	0	1	1	1	4	0.8
2.3	Attractiveness of explanation	1	0	1	1	1	4	0.8
2.4	Variety of stages in explanation	1	0	1	1	1	4	0.8
3 Aspect of Language Use								
3.1	Accuracy of language usage	1	1	1	1	1	5	1
3.2	Clarity of language used in explanation	1	1	1	1	1	5	1
3.3	Appropriateness of language use toward learners' proficiency	1	1	1	1	1	5	1
4 Aspect of Exercises after Units and Tests								
4.1	Clarity of instructions	1	1	1	1	1	5	1

Item No.	Reading Abilities	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
4.2	Straightforwardness of question items in both exercises and test	1	0	1	1	1	4	0.8
4.3	Congruence between exercises after units and reading strategies being taught	1	1	1	1	1	5	1
4.4	Congruence between test and learning objectives	1	1	1	1	1	5	1
4.5	Appropriateness of selecting types of tests	1	1	1	1	1	5	1
4.6	Appropriateness of selecting contents in reading texts to test	1	0	1	1	1	4	0.8

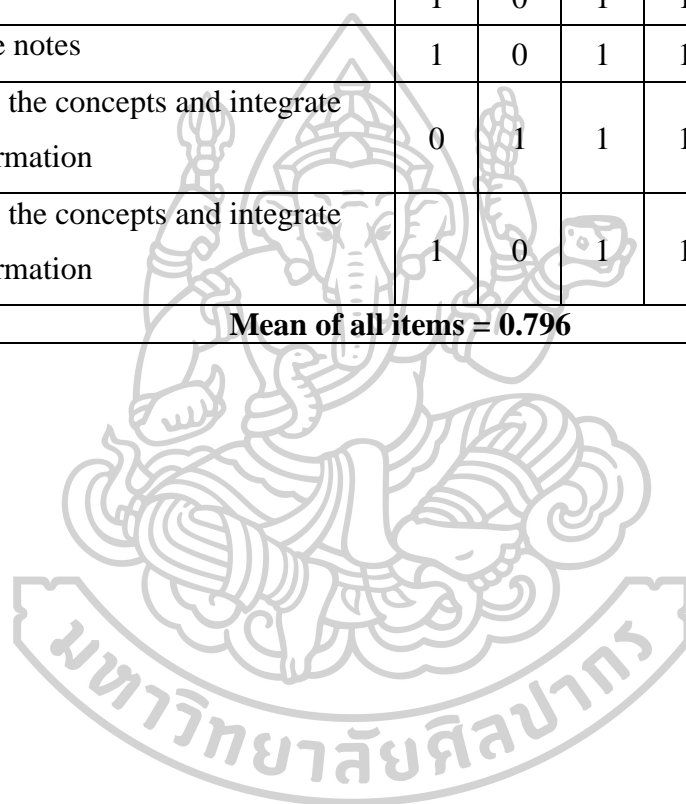


3. Analysis Findings on Validity, Reliability, Difficulty Index (p) and Item Discrimination (r) of Business English Reading Ability Test
Validity of English Reading Ability Test

Item No.	Reading Abilities	Experts' opinions					SUM	IOC
		Exp.1	Exp.2	Exp.3	Exp.4	Exp.5		
1	Predict the content (Relating to the background knowledge)	1	1	1	1	1	5	1
2	Reread to clarify a possible misunderstanding	1	1	1	1	1	5	1
3	Find the main ideas	1	1	1	1	1	5	1
4	Use the context clues	1	1	1	1	1	5	1
5	Use the context clues	1	0	1	0	1	3	0.6
6	Find the main ideas	1	0	1	0	0	2	0.4
7	Summarize the text	1	1	1	1	1	5	1
8	Use the context clues	1	1	1	1	1	5	1
9	Make inferences	1	0	1	1	1	4	0.8
10	Summarize the text	1	1	1	1	1	5	1
11	Identify text structure	0	1	1	0	1	3	0.6
12	Reread to clarify a possible misunderstanding	1	1	1	1	1	5	1
13	Identify text structure	1	1	1	1	1	5	1
14	Map the concepts and integrate information	1	0	1	1	1	4	0.8
15	Take notes	1	0	1	1	1	4	0.8
16	Take notes	1	1	0	1	0	3	0.6
17	Map the concepts and integrate information	1	0	1	0	0	2	0.4
18	Map the concepts and integrate information	1	0	1	1	1	4	0.8
19	Map the concepts and integrate information	1	0	1	1	1	4	0.8

Item No.	Reading Abilities	Experts' opinions					SUM	IOC
		Exp.1	Exp.2	Exp.3	Exp.4	Exp.5		
20	Reread to clarify a possible misunderstanding	1	0	1	1	1	4	0.8
21	Predict the content (Relating to the background knowledge)	1	1	0	1	0	3	0.6
22	Make inferences	1	0	1	1	1	4	0.8
23	Use the context clues	1	1	1	1	1	5	1
24	Reread to clarify a possible misunderstanding	0	1	1	0	0	2	0.4
25	Find the main ideas	1	1	1	1	1	5	1
26	Make inferences	1	1	1	0	1	4	0.8
27	Use the context clues	1	1	1	1	1	5	1
28	Find the main ideas	1	1	1	1	1	5	1
29	Summarize the text	1	0	1	1	1	4	0.8
30	Use the context clues	1	0	1	1	1	4	0.8
31	Predict the content (Relating to the background knowledge)	1	0	1	1	1	4	0.8
32	Summarize the text	1	0	1	1	1	4	0.8
33	Use the context clues	0	1	1	1	1	4	0.8
34	Identify text structure	1	0	1	1	1	4	0.8
35	Take notes	1	0	1	0	0	2	0.4
36	Take notes	1	0	1	1	1	4	0.8
37	Take notes	1	0	1	1	1	4	0.8
38	Take notes	1	0	1	1	1	4	0.8
39	Predict the content (Relating to the background knowledge)	1	0	1	1	1	4	0.8
40	Predict the content (Relating to the background knowledge)	1	1	1	1	1	5	1
41	Reread to clarify a possible misunderstanding	1	1	1	1	1	5	1

Item No.	Reading Abilities	Experts' opinions					SUM	IOC
		Exp.1	Exp.2	Exp.3	Exp.4	Exp.5		
42	Find the main ideas	1	1	1	1	1	5	1
43	Find the main ideas	1	1	1	1	1	5	1
44	Summarize the text	0	1	0	0	1	2	0.4
45	Make inferences	1	-1	1	1	1	3	0.6
46	Identify text structure	1	0	1	0	0	2	0.4
47	Make inferences	1	0	1	1	1	4	0.8
48	Take notes	1	0	1	1	1	4	0.8
49	Map the concepts and integrate information	0	1	1	1	0	3	0.6
50	Map the concepts and integrate information	1	0	1	1	1	4	0.8
Mean of all items = 0.796								



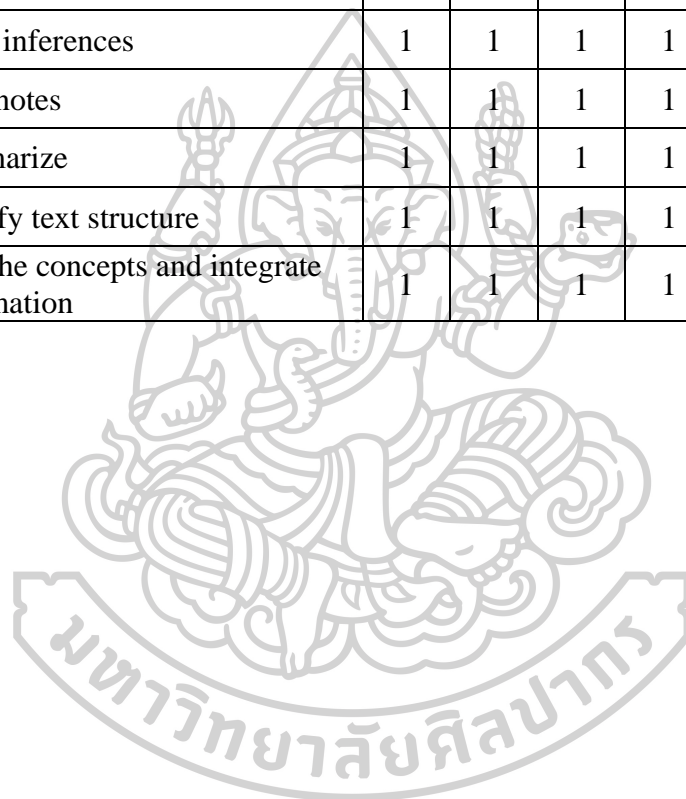
Difficulty Index (p) and Item Discrimination (r) of Business English Reading Ability Test

Item No.	p	r	Results	Item No.	p	r	Results
1	0.69	0.78	Acceptable	21	0.74	1.00	Acceptable
2	0.77	0.83	Acceptable	22	0.80	0.78	Acceptable
3	0.69	0.67	Acceptable	23	0.63	0.89	Acceptable
4	0.54	0.39	Acceptable	24	0.77	0.61	Acceptable
5	0.77	0.72	Acceptable	25	0.80	0.44	Acceptable
6	0.63	1.00	Acceptable	26	0.66	0.61	Acceptable
7	0.74	0.56	Acceptable	27	0.80	0.78	Acceptable
8	0.57	0.33	Acceptable	28	0.77	0.83	Acceptable
9	0.63	0.78	Acceptable	29	0.71	0.94	Acceptable
10	0.77	0.61	Acceptable	30	0.74	0.44	Acceptable
11	0.57	0.56	Acceptable	31	0.71	0.50	Acceptable
12	0.71	0.28	Acceptable	32	0.69	0.67	Acceptable
13	0.74	0.67	Acceptable	33	0.66	0.61	Acceptable
14	0.71	0.94	Acceptable	34	0.77	0.94	Acceptable
15	0.80	0.56	Acceptable	35	0.80	0.89	Acceptable
16	0.80	0.56	Acceptable	36	0.71	0.50	Acceptable
17	0.69	1.00	Acceptable	37	0.63	0.56	Acceptable
18	0.77	0.94	Acceptable	38	0.60	0.72	Acceptable
19	0.69	0.67	Acceptable	39	0.63	1.00	Acceptable
20	0.66	0.83	Acceptable	40	0.77	0.61	Acceptable

Difficulty Index (p) were ranged from 0.54 – 0.80 and Item Discrimination (r) from 0.28 – 1.00

4. Analysis Findings on Validity and Reliability of Reading Log

Item No.	Reading Strategies	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
1	Predict the content (Relating to the background knowledge)	1	1	1	1	1	5	1
2	Use the context clues	1	1	1	1	1	5	1
3	Reread to clarify a possible misunderstanding	1	0	1	1	1	4	0.8
4	Find the main ideas	1	1	1	1	1	5	1
5	Make inferences	1	1	1	1	1	5	1
6	Take notes	1	1	1	1	1	5	1
7	Summarize	1	1	1	1	1	5	1
8	Identify text structure	1	1	1	1	1	5	1
9	Map the concepts and integrate information	1	1	1	1	1	5	1

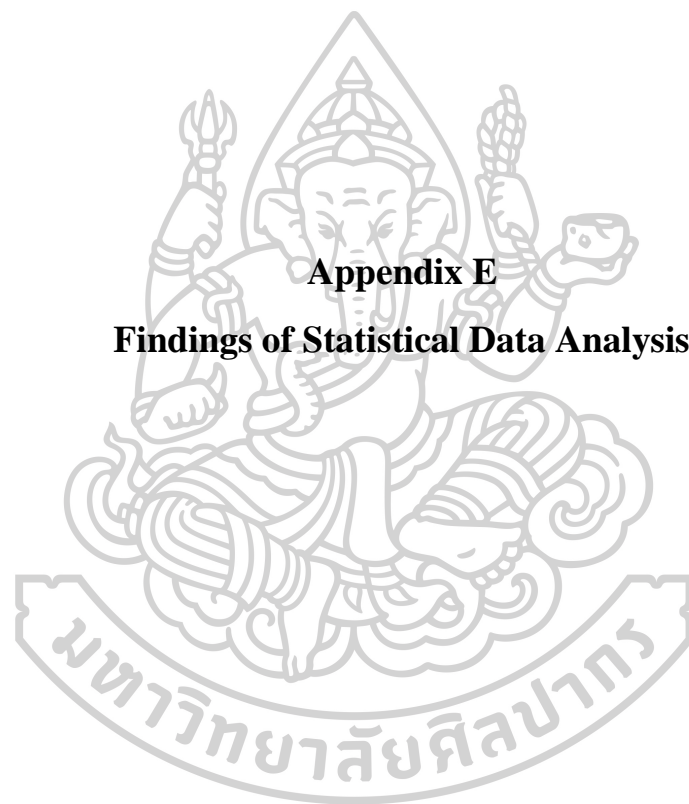


5. Analysis Findings on Validity of Peer Assessment Rubric and Assessment Rubric by the Teacher (Mini-project)

Item No.	Aspects to be enquired	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
Peer Assessment Rubric								
1	Everyone in the group helped brainstorm the project details and made a lot of good suggestion.	1	1	1	1	1	5	1
2	Everyone in the group helped plan and design the project.	1	1	1	1	1	5	1
3	Everyone in the group made some agreement, modified thinking pattern and chose the best idea together.	1	1	1	1	1	5	1
4	Everyone in the group cooperated with one another and was on task most of the time they worked together.	1	1	1	1	1	5	1
5	Everyone in the group was open to any suggestion that had been made.	1	1	1	1	1	5	1
6	Everyone in the group could complete the project effectively because of working with the friends.	1	1	1	1	1	5	1
Assessment Rubric by the Teacher								
1	The students made a lot of good suggestion and shared their opinion to the group.	1	1	1	1	1	5	1
2	The students were on task most of the time they worked together.	1	1	1	1	0	4	0.8
3	The students were open to their friends' suggestions.	1	0	1	1	1	4	0.8
4	The students gave some help and cooperated with one another.	1	1	1	1	1	5	1
5	The students could complete their project effectively because of working together.	1	1	1	1	1	5	1

**6. Analysis Findings on Validity of Creative Thinking Questionnaire as
Assessment Rubric (Mini-project)**

Item No.	Aspects to be enquired	Experts' opinions					SUM	IOC
		Expert 1	Expert 2	Expert 3	Expert 4	Expert 5		
Thinking Layers in creating the project								
1	Everyone in the group is aware that thinking is a skill that can be developed.	1	1	1	1	1	5	1
2	Everyone in the group listens to other people's opinions and prepares to give reasons when being inquired.	1	1	1	1	1	5	1
3	Everyone in the group helps design goals connecting to prior knowledge, generate and analyze the ideas, record concepts and choose the best one.	1	1	1	1	1	5	1
4	Everyone in the group helps modify thinking pattern, build prototypes and make changes as needed.	1	1	0	1	1	4	0.8
5	Everyone in the group observes and considers the consequences of choices having been made.	1	1	1	1	1	5	1
6	Everyone in the group is aware of reflective thinking of the friends within and between group(s).	1	1	1	1	1	5	1
7	Everyone in the group considers methods to implement these designed thinking tasks.	1	1	1	1	1	5	1
Product Construction								
1	The product's features and specifications are considered and well planned.	1	1	1	1	1	5	1
2	The product is well designed, constructed step by step and achieved the set goals.	1	1	1	1	1	5	1
3	The detailed drawing of the model is planned and made.	1	1	1	1	1	5	1
4	The different models have been considered, compared and chose the best one.	1	1	0	1	1	4	0.8
5	The product is creatively developed and presented interestingly.	1	1	1	1	1	5	1



Appendix E

Findings of Statistical Data Analysis

Appendix E

Findings of Statistical Data Analysis

1. Findings on Reliability, Difficulty Index (p) and Item Discrimination (r) of Business English Reading Ability Test (Tryout)
2. Findings of Efficiency ($E1/E2$) Analysis of AMARA Model (Tryout)
3. Frequency and Percentage on Each Student' Usage of Multiple Reading Strategies from Reading Log (Extensive Reading)



**1. Findings on Reliability, Difficulty Index (p) and Item Discrimination (r) of
Business English Reading Ability Test (Tryout)**

Item No.	p	r	Results	Item No.	p	r	Results
1	0.75	0.25	Acceptable	21	0.75	0.25	Acceptable
2	0.63	0.50	Acceptable	22	0.69	0.38	Acceptable
3	0.75	0.25	Acceptable	23	0.69	0.38	Acceptable
4	0.63	0.25	Acceptable	24	0.69	0.38	Acceptable
5	0.75	0.25	Acceptable	25	0.75	0.25	Acceptable
6	0.75	0.50	Acceptable	26	0.63	0.25	Acceptable
7	0.75	0.25	Acceptable	27	0.75	0.50	Acceptable
8	0.75	0.25	Acceptable	28	0.75	0.50	Acceptable
9	0.69	0.38	Acceptable	29	0.75	0.25	Acceptable
10	0.69	0.38	Acceptable	30	0.75	0.25	Acceptable
11	0.75	0.50	Acceptable	31	0.75	0.25	Acceptable
12	0.69	0.38	Acceptable	32	0.75	0.25	Acceptable
13	0.75	0.25	Acceptable	33	0.69	0.38	Acceptable
14	0.75	0.25	Acceptable	34	0.63	0.25	Acceptable
15	0.75	0.25	Acceptable	35	0.75	0.25	Acceptable
16	0.75	0.25	Acceptable	36	0.63	0.25	Acceptable
17	0.75	0.25	Acceptable	37	0.75	0.25	Acceptable
18	0.75	0.50	Acceptable	38	0.75	0.25	Acceptable
19	0.75	0.25	Acceptable	39	0.75	0.25	Acceptable
20	0.75	0.25	Acceptable	40	0.69	0.38	Acceptable

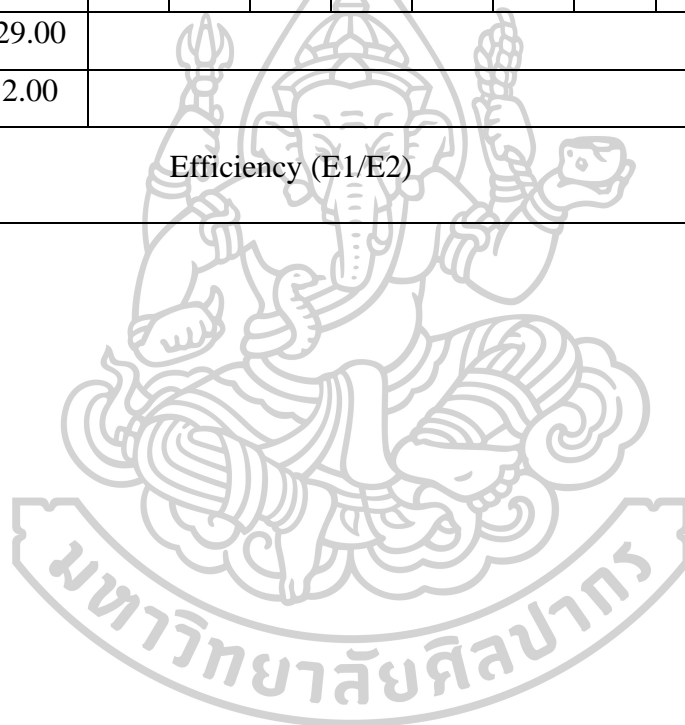
Difficulty Index (p) were ranged from 0.63 – 0.75 and Item Discrimination (r) from 0.25 – 0.50

Reliability (rKR20) = 0.962

2. Findings on Efficiency (E1/E2) Analysis of AMARA Model (Tryout)

Sample: 3 Students

Student No.	Pre-test Scores (40)	Scores of Exercises after Units (8 Units)									Post-test Scores (40)	
		1 (15)	2 (15)	3 (15)	4 (15)	5 (15)	6 (15)	7 (15)	8 (15)	Total (120)		
1	29	12	9	11	14	15	12	9	12	94	35	
2	31	8	8	8	11	12	13	11	12	83	29	
3	27	9	7	7	12	8	7	12	11	73	22	
\bar{X}	29.00										83.33	28.67
S.D.	2.00										10.50	6.51
Efficiency (E1/E2)										69.44 (E1)	71.67 (E2)	



Sample: 16 Students

Student No.	Pre-test Scores (40)	Scores of Exercises after Units (8 Units)									Post-test Scores (40)	
		1 (15)	2 (15)	3 (15)	4 (15)	5 (15)	6 (15)	7 (15)	8 (15)	Total (120)		
1	29	12	11	10	13	12	11	9	11	89	35	
2	20	8	9	12	11	10	10	11	10	81	22	
3	23	9	10	11	10	11	10	10	12	83	23	
4	29	12	13	11	11	10	13	12	10	92	36	
5	28	10	12	13	12	10	12	11	13	93	36	
6	20	8	9	11	11	11	10	9	10	79	22	
7	18	8	8	9	10	12	10	11	11	79	20	
8	19	9	7	10	9	11	10	11	10	77	21	
9	21	7	8	10	11	11	10	12	11	80	21	
10	24	8	9	11	8	10	11	10	11	78	25	
11	25	11	8	9	10	12	13	11	14	88	27	
12	29	11	12	12	11	12	11	12	13	94	31	
13	32	10	12	11	12	12	10	11	13	91	37	
14	30	10	12	11	12	10	12	11	11	89	34	
15	31	10	10	12	10	10	12	10	11	85	36	
16	33	9	12	11	13	11	12	11	12	91	37	
\bar{X}	25.68										85.56	28.93
S.D.	5.029										5.955	6.845
Efficiency (E1/E2)										70.88 (E ₁)	72.34 (E ₂)	

Sample: 27 Students

Student No.	Pre-test Scores (40)	Scores of Exercises after Units (8 Units)									Post-test Scores (40)	
		1 (15)	2 (15)	3 (15)	4 (15)	5 (15)	6 (15)	7 (15)	8 (15)	Total (120)		
1	29	12	11	10	13	12	11	9	11	89	33	
2	31	10	9	12	11	13	12	11	13	91	35	
3	27	9	11	14	12	11	13	10	12	92	32	
4	26	12	13	11	11	10	13	12	13	95	31	
5	20	8	9	11	12	8	9	9	13	79	27	
6	20	10	9	12	11	13	12	11	13	91	33	
7	21	9	11	14	12	11	13	10	12	92	32	
8	19	12	13	11	11	10	13	12	13	95	31	
9	22	8	9	11	12	8	9	9	13	79	27	
10	27	11	9	10	12	11	13	12	11	89	28	
11	25	10	12	11	8	12	11	13	12	89	33	
12	27	11	8	9	10	12	13	11	14	88	30	
13	29	12	11	10	13	12	11	9	11	89	33	
14	31	10	9	12	11	13	12	11	13	91	30	
15	31	11	9	10	12	11	13	12	11	89	28	
16	27	10	12	11	8	12	11	13	12	89	31	
17	26	11	9	10	10	12	13	11	14	90	30	
18	20	9	9	11	14	11	10	11	12	87	25	
19	20	10	9	10	11	12	13	11	12	88	24	
20	19	9	7	10	12	11	10	12	14	85	22	
21	22	11	9	10	12	11	13	12	11	89	28	
22	27	10	12	11	8	12	11	13	12	89	31	
23	25	11	9	10	11	12	13	12	14	92	30	
24	27	11	10	12	9	12	11	12	11	88	30	
25	22	11	12	11	11	12	10	11	13	91	33	
26	28	9	12	11	12	10	12	12	9	87	32	
27	24	12	13	12	10	13	12	9	11	92	32	
\bar{X}	24.89										89.07	30.04
S.D.	3.88										3.68	3.07
Efficiency (E1/E2)										74.23 (E ₁)	75.09 (E ₂)	

3. Frequency and Percentage on Each Student' Usage of Multiple Reading Strategies from Reading Log (Extensive Reading)

Student No.	Strategy 1 Predict the content (Relating to the background knowledge)		Strategy 2 Use the context clues		Strategy 3 Reread to clarify a possible misunderstanding		Strategy 4 Find the main ideas		Strategy 5 Make inferences		Strategy 6 Take notes		Strategy 7 Summarize		Strategy 8 Identify text structure		Strategy 9 Map the concepts and integrate information	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1	8	2.16	5	1.75	0	0.00	11	1.91	7	3.08	3	2.01	9	3.18	9	3.70	3	2.27
2	9	2.43	4	1.40	0	0.00	18	3.13	10	4.41	2	1.34	16	5.65	19	7.82	10	7.58
3	12	3.23	10	3.50	1	0.88	13	2.26	10	4.41	13	8.72	7	2.47	8	3.29	3	2.27
4	8	2.16	7	2.45	0	0.00	7	1.22	8	3.52	3	2.01	5	1.77	6	2.47	3	2.27
5	6	1.62	7	2.45	0	0.00	10	1.74	3	1.32	7	4.70	3	1.06	13	5.35	4	3.03
6	11	2.96	21	7.34	8	7.02	15	2.60	17	7.49	9	6.04	9	3.18	18	7.41	9	6.82
7	9	2.43	6	2.10	2	1.75	19	3.30	10	4.41	0	0.00	15	5.30	8	3.29	0	0.00
8	11	2.96	15	5.24	5	4.39	2	0.35	9	3.96	3	2.01	1	0.35	1	0.41	2	1.52
9	21	5.66	5	1.75	8	7.02	15	2.60	3	1.32	0	0.00	11	3.89	11	4.53	11	8.33
10	13	3.50	6	2.10	9	7.89	21	3.65	5	2.20	7	4.70	12	4.24	18	7.41	2	1.52
11	15	4.04	14	4.90	1	0.88	20	3.47	3	1.32	10	6.71	2	0.71	3	1.23	9	6.82
12	4	1.08	8	2.80	2	1.75	8	1.39	1	0.44	0	0.00	2	0.71	34	13.99	4	3.03
13	13	3.50	7	2.45	3	2.63	25	4.34	12	5.29	1	0.67	14	4.95	1	0.41	2	1.52
14	5	1.35	2	0.70	1	0.88	16	2.78	6	2.64	0	0.00	17	6.01	2	0.82	0	0.00
15	29	7.82	4	1.40	10	8.77	52	9.03	5	2.20	6	4.03	5	1.77	2	0.82	5	3.79
16	8	2.16	6	2.10	4	3.51	18	3.13	12	5.29	3	2.01	2	0.71	7	2.88	2	1.52
17	9	2.43	3	1.05	0	0.00	16	2.78	2	0.88	0	0.00	16	5.65	0	0.00	0	0.00
18	17	4.58	14	4.90	3	2.63	11	1.91	6	2.64	5	3.36	2	0.71	2	0.82	4	3.03
19	16	4.31	11	3.85	4	3.51	13	2.26	9	3.96	6	4.03	1	0.35	12	4.94	5	3.79
20	7	1.89	7	2.45	0	0.00	35	6.08	3	1.32	2	1.34	2	0.71	4	1.65	1	0.76
21	7	1.89	10	3.50	3	2.63	15	2.60	8	3.52	1	0.67	1	0.35	3	1.23	0	0.00

3. Frequency and Percentage on Each Student' Usage of Multiple Reading Strategies from Reading Log (Extensive Reading)

Student No.	Strategy 1 Predict the content (Relating to the background knowledge)		Strategy 2 Use the context clues		Strategy 3 Reread to clarify a possible misunderstanding		Strategy 4 Find the main ideas		Strategy 5 Make inferences		Strategy 6 Take notes		Strategy 7 Summarize		Strategy 8 Identify text structure		Strategy 9 Map the concepts and integrate information	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
22	9	2.43	8	2.80	10	8.77	5	0.87	10	4.41	5	3.36	4	1.41	3	1.23	2	1.52
23	3	0.81	6	2.10	0	0.00	22	3.82	8	3.52	3	2.01	11	3.89	3	1.23	1	0.76
24	13	3.50	8	2.80	2	1.75	20	3.47	3	1.32	10	6.71	12	4.24	4	1.65	2	1.52
25	7	1.89	4	1.40	1	0.88	18	3.13	11	4.85	7	4.70	20	7.07	4	1.65	7	5.30
26	15	4.04	16	5.59	7	6.14	13	2.26	8	3.52	1	0.67	7	2.47	0	0.00	4	3.03
27	7	1.89	10	3.50	5	4.39	11	1.91	4	1.76	1	0.67	8	2.83	14	5.76	1	0.76
28	9	2.43	4	1.40	1	0.88	26	4.51	4	1.76	1	0.67	18	6.36	3	1.23	1	0.76
29	20	5.39	10	3.50	3	2.63	6	1.04	7	3.08	6	4.03	1	0.35	3	1.23	4	3.03
30	7	1.89	8	2.80	14	12.28	17	2.95	2	0.88	4	2.68	6	2.12	13	5.35	8	6.06
31	12	3.23	12	4.20	2	1.75	21	3.65	7	3.08	7	4.70	10	3.53	4	1.65	6	4.55
32	8	2.16	9	3.15	0	0.00	17	2.95	3	1.32	4	2.68	11	3.89	2	0.82	3	2.27
33	8	2.16	5	1.75	2	1.75	9	1.56	4	1.76	5	3.36	6	2.12	3	1.23	4	3.03
34	7	1.89	7	2.45	2	1.75	13	2.26	3	1.32	7	4.70	9	3.18	4	1.65	6	4.55
35	8	2.16	7	2.45	1	0.88	18	3.13	4	1.76	7	4.70	8	2.83	2	0.82	4	3.03
Total	371		286		114		576		227		149		283		243		132	
Rank	2		3		9		1		6		7		4		5		8	

VITA

NAME Miss Amornrat Ammaralikit

DATE OF BIRTH 28 June 1978

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