A Development of Community-Based Materials to Enhance English Reading Ability and Local Cultural Knowledge for Upper Secondary School Students

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บทคัดย่อและแฟ้มข้อมูลฉนับที่โอรณร์ รัณษาพิพย์ส์ทั้งแต่มีคุณส์ คืนที่เนิดโลก เป็นที่เหลือ Redunie พื้นผลเรจุฬาฯ (CUIR) for the Degree อุสา Massien ได้การใหวจริง Program โก่ส่ยพ่อแรก ละเลทิศกิชยากลับ onal Language

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นายปริพัตร สลับสี



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาวิชาภาษาอังกฤษเป็นภาษานานาชาติ (สหสาขาวิชา) บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2558 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

Thesis Title	A Development of Community-Based Materials to Enhance English Reading Ability and Local Cultural Knowledge for Upper Secondary School Students
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Field of Study	English as an International Language
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ปริพัตร สลับสี : การพัฒนาสื่อการสอนโดยใช้ชุมชนเป็นฐานเพื่อเสริมสร้าง ความสามารถในการอ่านภาษาอังกฤษและความรู้วัฒนธรรมท้องถิ่นสำหรับนักเรียน ระดับชั้นมัธยมศึกษาตอนปลาย (A Development of Community-Based Materials to Enhance English Reading Ability and Local Cultural Knowledge for Upper Secondary School Students) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: รศ. คร. สุมาลี ชิ โนกุล, หน้า.

งานวิจัยนี้มีวัตถุประสงค์เพื่อ 1) หาความต้องการในการพัฒนาสื่อการสอนภาษาอังกฤษ โดยใช้ชุมชนเป็นฐาน 2) ทดสอบความมีประสิทธิภาพของสื่อการสอนโดยใช้ชุมชนเป็นฐานเพื่อ เพิ่มความสามารถในการอ่านภาษาอังกฤษ 3) ทดสอบความมีประสิทธิภาพของสื่อการสอนโดยใช้ ชุมชนเป็นฐานในการสอนความรู้วัฒนธรรมท้องถิ่น กลุ่มตัวอย่างประกอบไปด้วย นักเรียนชั้น มัธยมศึกษาปีที่ 6 จำนวน 44 คนจากโรงเรียนรัฐบาลในเขตทวีวัฒนา จังหวัดกรุงเทพมหานคร การ ทดลองใช้เวลาทั้งสิ้น 10 สัปดาห์ เครื่องมือที่ใช้ในการทดลองนี้ได้แก่ 1) แบบสอบถามความ กิดเห็นเพื่อพัฒนาสื่อการสอนโดยมีชุมชนเป็นฐาน 2) ข้อสอบวัดความสามารถในการอ่าน ภาษาอังกฤษ และ 3) ข้อสอบวัดความรู้ในวัฒนธรรมท้องถิ่น สถิติที่ใช้ในการวัดข้อมูลคือ pair sample t-test ค่าเฉลี่ย และค่าเบี่ยงเบนมาตรฐาน

ผลลัพธ์ที่ได้จากการทดลองสื่อการสอนการอ่านภาษาอังกฤษโดยมีชุมชนเป็นฐานมีดังนี้
1) รูปแบบ เนื้อหา และกิจกรรมการอ่านสำหรับนักเรียนชั้นมัธยมศึกษาปีที่ 6 เพิ่มความสามารถใน
การอ่าน และความรู้วัฒนธรรมท้องถิ่น 2) คะแนนเฉลี่ยความสามารถในการอ่านภาษาอังกฤษหลัง
การทดลองสื่อการสอนภาษาอังกฤษโดยใช้ชุมชนเป็นฐานของนักเรียนชั้นมัธยมศึกษาปีที่ 6 สูงกว่า
คะแนนเฉลี่ยก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 3) คะแนนเฉลี่ยความรู้
วัฒนธรรมท้องถิ่นหลังการทดลองสื่อการสอนภาษาอังกฤษโดยใช้ชุมชนเป็นฐานของนักเรียนชั้น
มัธยมศึกษาปีที่ 6 สูงกว่าคะแนนเฉลี่ยก่อนการทดลองอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ผลที่
ได้บ่งชี้ว่าสื่อการสอนการอ่านภาษาอังกฤษโดยใช้ชุมชนเป็นฐานนั้นมีประสิทธิภาพในการเพิ่ม
ความสามารถในการอ่านภาษาอังกฤษ และความรู้วัฒนธรรมท้องถิ่นเพื่อส่งเสริมการเป็นพลเมืองที่
ดีและกระตือรือรันต่อชมชนของผู้เรียน

สาขาวิชา	ภาษาอังกฤษเป็นภาษานานาชาติ	ลายมือชื่อนิสิต
ปีการศึกษา	2558	ลายมือชื่อ อ.ที่ปรึกษาหลัก

5587571220: MAJOR ENGLISH AS AN INTERNATIONAL LANGUAGE

KEYWORDS: COMMUNITY-BASED MATERIALS / COMMUNITY-BASED EDUCATION / ENGLISH READING ABILITY / LOCAL CULTURAL KNOWLEDGE / MATERIAL DEVELOPMENT

PARIPAT SALUBSEE: A Development of Community-Based Materials to Enhance English Reading Ability and Local Cultural Knowledge for Upper Secondary School Students. ADVISOR: ASSOC. PROF. SUMALEE CHINOKUL, Ph.D., pp.

The objectives of this study are 1) to investigate the needs for developing community-based materials, 2) to examine the effectiveness of community-based materials for teaching English reading ability, and 3) to examine the effectiveness of community-based materials for teaching local cultural knowledge. The samples were 44 twelfth grade students a government school in Thawi Watthana District, Bangkok. The duration of the experiment lasted for 10 weeks. The instruments were 1) community-based questionnaire, 2) English reading ability test, and 3) local cultural knowledge test. The data will be analyzed using a pair sample t-test, mean score, effect size, and standard deviation.

After the implementation of the community-based materials, the results were 1) the materials' physical aspects, content, and reading tasks for twelve grade students to teach English reading ability and local cultural knowledge. 2) The post-test mean scores of the students taking English reading ability test were higher than their pre-test mean scores significantly of 0.05. 3) The post-test mean scores of the students taking local cultural knowledge test were higher than their pre-test scores significantly of 0.05. This indicates that community-based materials is effective to teach English reading ability and promote local cultural knowledge and the sense of being active citizens towards their own local community.



Field of Study:	English as an International Language	Student's Signature
Academic Year:	2015	Advisor's Signature

ACKNOWLEDGEMENTS

I am deeply grateful to many people for their contribution to support me to complete my thesis. First of all, I would like to express my gratitude to my thesis adviser Associate Professor Sumalee Chinokul, Ph.D., who always encourages me and offers me very useful suggestion, support, encouragement and advice throughout conducting the thesis. I would not succeed in my degree if I did not have her guidance and support.

I am heartily thankful to my thesis committee members, Assistant Professor Dr. Apasara Chinwonno her encouragement and practical guidance which help me shape up my ideas and see the whole picture of my thesis more clearly.

Special thanks also go to the experts: Dr. Tanyaporn Arya, Dr. Pramarn Subphadoongchone and Mrs.Kantana Sutthikorn for guiding me with their valuable comments and suggestions on my instructional and research instruments.

My great appreciation and deepest thank go to Director Second Lieutenantat Saksit Siengsanok Darasamutr and teachers at Nawaminthrachinuthit Satriwitthaya Phutthamonthon for their warm welcome and kind assistance. In addition, I am indebted to my 44 twelfth grade students in science program who participated in my course for their attention and cooperation any my 40 students in pilot group study. Moreover, I would like to show my gratitude to my 3 local wisdoms, Mr. Warin Keawsaard, Father Pitakphol Kesaro, and Mr. Chuchai Buangam, for giving me helpful information on local cultural knowledge and history.

I would like to offer my special thanks to Ms. Raveewan Viengsang, Thanat Ratchatapatthrakul, and Ms. Pornpan Kongsontana for their constant support and help when I faced every problem occurring during doing my thesis.

Last but not least, my deepest gratitude goes to my dearest family for their unconditional love and support in all the endeavors I have taken throughout my study and my life.

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Chapter I

Introduction

In this chapter, the researcher explains about the background of the study, the rationale, the research questions, the research objectives, statement of hypotheses, scope of the study, definition of terms, and significance of the study. The details of the introduction are presented as follows:

1.1 Background of the study

1.1.1 The Importance of English Reading

Many of us take reading as something for granted because reading appears to consume little effort and little planning. According to Grabe (2009), more than 80 percent of the world's population is able to read in some extent. Despite long human history, reading text is considered to be a relatively recent human activity. It has been being around for about 5,000 years. Through text, writers can communicate with others at great distances. In academic context, Nunan (2003a) estimates that more than 50% of academic publications is in English each year, and the percentage continues to grow gradually year by year. In a more recent study, Weifen (2012) conducted a research of language preference for academic publication in various languages such as English, German, and Spanish. He found that research published in English tend to be related to the 'harder' Physical and Life Sciences (i.e. Physics, Engineering, and Material Science). On the contrary, researchers who publish their works in other languages such as Dutch, French, Italian, Spanish, and Portuguese have their works in 'softer' sciences such as Health Sciences, Social Sciences, and Humanities. This suggests that one of the main factors to be able to accomplish in academic and professional life is to be capable in communicating in English, especially in reading. As a result, one needs to acquire good reading skills to obtain knowledge and learning new information. Mckay (2002) stated that, to access higher education in many countries, it is depended on the knowledge of English as one of the essential elements. This implies to Thai students intending to pursuit in higher education both domestically and abroad that they need to have good command in English, specifically in reading because a wild range of academic sources are available in English. However, Sripangen (2008) wrote that English reading comprehension skills of students at the upper secondary level in Thailand are below the 80% criterion which is considered to be quite low. This problem is going to make a massive impact toward Thailand's young workforce in the future. According to Rattanaphumma (2006), almost every field of knowledge is available in English, and many well-paid jobs in private and public sectors require their employees to have a reasonably decent skill in English language communication. Not long ago, many government agencies, local businesses, and transnational corporations in Thailand require their applicants to have a minimum certain score of TOEIC exam (Test of English for International Communication). Moreover, some agencies and corporation use their current employees' TOEIC score for their employees' promotion. In Thailand, the TOEIC test available is Listening and Reading test which the test construction is divided into 2 parts equally: 100 listening questions and 100 reading questions. Therefore, those who have low proficient in reading ability are likely to struggle in both their academic and professional lives.

The Government of Thailand formed 'The Basic Education Core Curriculum B.E. 2551 (A.D. 2008) which all of the governmental schools in Thailand must follow. In this policy, there are 4 main objectives in learning foreign language: 1) language for communication, 2) language and culture, 3) language and relationship with other learning areas, and 4) language and relationship with community and the world. The policy also states the learner's quality for grade 12 graduates that they should be able to utilize the foreign language that they learn in 4 different skills in the real world situation both inside and outside the classroom. The students should be able to respond well to various types of instructional tools such as news, advertisements, poems, announcements, and skits which they have read and are able to identify the main idea, express their opinions, and conclude after reading the materials and other instructional tools. Lastly, the students should be able to communicate with everything around them using the amount of vocabulary of 3,600 – 3,750 words with different levels of usage (Education (2008).

1.1.2 Bangkok and its identities

Bangkok was founded as a new capital city of the Kingdom of Thailand in 1782 by Rama I. Currently, the city has 50 districts with 5.7 million Bangkok local citizens. However, the total population (locals and immigrants) in Bangkok is 10.4 million people (Bangkok & Statistics, 2013). This statistic suggests that Bangkok is facing the rapid transition in terms of population growth, housing expansion, and business development in order to accommodate both locals and immigrants. As a result, there are many parts of Bangkok where their communities' identities have gone missing or are about to disappear. In order to reverse of the situation, several stakeholders both in national level and community level such as the government of Thailand, local educational institutions, and local citizens feel the necessity to preserve local communities' identities in Bangkok. In the national level, the Ministry of Education of Thailand states in the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) that the key to success in implementing the core curriculum is to have the concerted efforts of all the concerned parties at all level – individual, family, community, and national. All of the parties need to work on a systematic and continuous basis on planning, promoting, and supporting the teaching and learning (Education, 2008). As stated earlier, there is an attempt to include community in order to respond to the individuals' needs in the community and solve the community's problem as a whole. Consequently, every governmental school should integrate local community and community knowledge as a part of the school's curriculum. Particularly in Nawaminthrachinuthit Satriwitthaya Phutthamonthon School, a governmental school located in Thawi Watthana District, where the school and its area are the context of the study, has a subject on local community taught by the local teachers in the school. However, there has been no attempt to promote the local community and its knowledge as a part of curriculum in foreign language subjects particularly English despite the fact that the school has some flexibility to manage its curriculum.

1.1.3 English Textbooks in Thailand

It is very common to see Thai secondary schools both governmental and private select global English language commercial textbooks as their preferred English instructional materials. Normal global commercial textbooks contain content mainly about Western cultures and lifestyle such as places, cuisine, and human interaction. This creates difficulties to non-Western students because they do not have sufficient inter cultural background knowledge to comprehend the content. Therefore, many times, local English language instructors would customize some aspects, parts, or lessons of their English courses to suit more with the instructors' needs, students' needs, and their background knowledge of both teachers and students. However, customized local English instructional materials for a full course are hardly done and supported. Mckay (2002) recommended that educators should recognize the importance of adding content relates to learners' local culture and support the selection of appropriate teaching methodology that is suitable to the local educational context. In addition, Rattanaphumma (2006) stated "the carrier content of English teaching should concern Thai and local culture and issues or general and scientific knowledge". In conclusion, there are strong supports for local culture content in English language instruction which indicate that it can help promote and enhance English language skills and a learner's knowledge of own culture.

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1.2 The Rationale of the Study

Developments of English instructional materials using a framework of community-based education have been conducted in several local educational institutions (e.g. Rajabhat Rajanagarindra University in Chachoengsao Province and Matthayom Sunguipadee School in Narathiwat Province), or by local English instructors for specific course use only (e.g. the development of English reading materials for three southern border provinces of Thailand). Despite the fact that community-based English instructional materials have been conducted in many parts of Thailand, there has been not much effort to do similarly in Bangkok. Bangkok has

been ignored, possibly, due to the nature of being a loose and urban community. English language curriculums in governmental secondary education in Thailand, normally, use international commercialized English instructional textbooks to teach English reading ability. International commercialized English instructional textbooks may be contextually and culturally alienated to many Thai students because they are mostly about Western culture and lifestyle such as places, cuisine, and human interactions which many Thai students are not familiar with and have only little intercultural background knowledge to comprehend them. As a result, this affects on Thai students' ability to improve English reading ability due to the lack of schema both culturally and contextually. Moreover, an effort to develop an English reading materials using community-based in Bangkok has never been done. There are needs from several stakeholders in Bangkok, specifically Nawaminthrachinuthit Satriwitthaya Phutthamonthon School (SW 3), for community-based English instructional materials to be developed and used in a school English elective course for reading and writing in upper secondary level.

1.3 Research Questions

- 1. What are the needs in developing community-based materials for upper secondary school students?
- 2. To what extent do community-based materials enhance English reading ability for upper secondary school students?
- 3. To what extent do community-based materials enhance local cultural knowledge for upper secondary school students?

1.4 Research Objectives

- 1. To investigate the needs for developing community-based materials for upper secondary school students
- 2. To examine the effectiveness of the community-based materials for teaching English reading ability
- 3. To examine the effectiveness of the community-based materials for teaching local cultural knowledge

1.5 Statement of Hypothesis

Community-based education is not something new. It has been implemented in many places and institutions around the world since the early of 1980s. According to Ingram (2003), the first large scale implementation of community-based education was done as a part of on-arrival segment of the Adult Migrant Education Program to help the migrants able to adapt to the local community better. The outcome of the program was very satisfying because the students improved both language proficiency and positive attitudes on cross culture. Holden (1999) conducted a community-based program on adult literacy ESOL in Baltimore, Maryland. The result was also very pleasing because the course helped its students improving both reading and writing in English language as well as life skills, personal life, family life, and professional life. Perhaps, the most similar research to this thesis is the one conducted by Rattanaphumma (2006) at Rajabhat Rajanagarindra University in Chachoengsao Province. She lunched an English language course based on the concept of community-based education. The subjects were 19 undergraduates majoring in English in the faculty of Education. In the needs analysis phase, it was proved that there were needs for designing a community-based English language course. After the course was implemented and finished, subjects' posttest scores were higher than the pretest score. Moreover, the use of local cultural materials as course's instructional materials was found to be very beneficial to enhance students' local cultural knowledge and general knowledge about the community. In the end, the course and

its instructional materials were found effective because subjects could achieve the learning goals in terms of language knowledge, local culture, and local knowledge. Since one of the aspects of community-based education is based on the familiarity of students to their local culture, there is a research conducted by Gürkan (2012) at Kocaeli University in Turkey. He conducted this research to see the effects of cultural familiarity on L2 reading comprehension. He found that the use of nativized version of short stories from a target language culture contributed to comprehension of L2 readers significantly. It can be concluded from this research that the more culturally familiar readers are, the better they can comprehend the text because readers are provided and equipped with cultural background knowledge before doing the reading task.

According to the positive results of the above projects and research, the researcher addresses the following hypotheses tested in this study as follow:

- 1. Students' English reading ability will improve after the implementation of community-based education.
- 2. Students' local cultural knowledge will increase after the use of community-based education.

1.6 Scope of the Study

- The study takes place at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School (Satriwit 3) in Thawi Watthana District on the Thonburi Side (West of Chao Praya River) of Bangkok Province.
- 2. The population of this study is the 470 Mathayom 6 (Grade 12) students from 11 classes in the academic year 2014.
- 3. The samples of this study are 44 Mathayom 6 students who are in Science program of Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in the academic year 2014.

- 4. The duration of the materials implementation is one semester of academic year 2014.
- 5. All of the learning activities are conducted inside the classroom due to the school's policy on student safety.

1.7 Definitions of Terms

- 1. Community-based materials refers to the systematic efforts to create English reading materials to enhance students' reading ability and local cultural knowledge. The contents in the materials are taken from various aspects in a community such as history, local education place, religion, and local knowledge based on the results of the needs analysis conducted on 3 local stakeholders (local students, local English teachers, and local wisdoms) in the community in order to respond to their community's problems and needs.
- 2. English reading ability refers to English reading ability aspects in terms of reading which participants use in both daily and academic situations such as understanding main ideas, supporting details, guessing word meaning, and drawing inference. The subjects gain these reading abilities from the implementation of the community-based materials. The subjects' reading abilities are measured by the English reading ability test both before and after the implementation of the materials.
- 3. Local cultural knowledge refers to the knowledge in 3 areas (Thawi Watthana District (Bangkok), Nong Khaem District (Bangkok), and Phutthamonthon District (Nakhon Pathom Province) which participants gain from 4 categories based on the results of the needs analysis as follows
 - a. Local history
 - b. Local educational places
 - c. Religion
 - d. Local knowledge

The subjects' local cultural knowledge are measured by local cultural knowledge test both before and after the implementation of community-based materials (single-group pre-test and post-test).

4. Upper secondary school students refer to Mattayom six (grade-twelfth students) who are in the Science program at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in the academic year 2014.

1.8 Significance of the Study

- A community-based education helps enhance learners and their community partnership through active and democratic participation among various stakeholders in the community in order to utilize community's resources for community-based materials development
- 2. A community-based education focuses on leaner-centered approach to develop learners' knowledge, skills, and attitude to live and develop their local community via active and democratic participation
- 3. The study will respond to the process and product of the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) and Nawaminthrachinuthit Satriwitthaya Phutthamonthon School's policy.

Chapter II

Literature Review

In this section of the research proposal, the researcher will explore the theoretical frameworks on needs analysis, material development, community-based education, reading instruction, and reading assessment. The details of the literature review are presented as follows.

2.1 Needs Analysis

In the field of education including second language instruction, needs of various stakeholders are taken and highlighted on such as students', teachers', local wisdoms', institutions, and communities in order to design language curriculum, instructional materials and teaching methodology more effectively and holistically. To explore the needs of various stakeholders, a needs analysis has to be conducted systematically. Altschuld and White (2010) compares data obtained from needs analysis as a jigsaw puzzle when it comes out of the box. When one opens the jigsaw box, all of the pieces spread out and do not make a comprehensible picture. From there, one has to determine the side (the frame) before beginning to put it together. In terms of needs analysis, needs analysis conductors or analysts face a very similar situation but quite harder because they have to create the picture without having the whole picture like on the jigsaw box due to the imperfection of data.

2.1.1 Definition

In foreign language teaching, Richards, Richards (1992) define needs analysis as the process of determining and underlining the needs of a learner or a group of learners requires a language and arranging those needs depending on priorities. The simpler definition can be found in the work of Soriano (2005) who defines the term as a systematic process of the gathering and assessing the specific needs of an identified group of people or learners. In same way as Soriano (1995), Linguistics.byu.edu (2013) defines needs analysis in a much more comprehensible

concept as any kind of activities to collect information about one's students' learning needs, problems, and desires. The process also includes multiple stakeholders such as teachers, administrators, financial supporters, and others who are impacted by the program. Long (2005) suggests that needs analysis is the gathering information via various methods and from various sources. On the contrary, the interesting part is what he implies in his work, "Second Language Needs Analysis", that needs analysis is not simply the gathering of the language and skills required to accomplish a task successfully, and the texts encountered. Needs analysis should have the variation in language, skills, and texts emphasizing differences in roles with the beliefs, practices, ways of speaking, and culture of the discourse communities where the subjects seek to become members. The key point of Long (2005) is to identify needs from other stakeholders not just the learners. Therefore, the most suitable definition of needs analysis for this research is from Long (2005). A needs analysis can be both formal (extensive and time consuming) and informal (focused and quick). There are several resources for conducting a needs analysis such as questionnaires, test scores, and interviews. Moreover, the objective of a needs analysis is that the information gathered from a needs analysis can be used to shape program's goals. These goals are related to specific teaching objectives which will result as the foundation of lesson plans, materials, tests, assignments, and activities. Long (2005) gives a very meaningful definition of second language needs analysis.

2.1.2 Steps in conducting a needs analysis

Several sources identify steps in conducting a needs analysis in a very similar way. McKillip (1987) identifies 5 steps in needs analysis:

- 1. Step1: Identify users and uses of the needs analysis the users in the needs analysis are the primary stakeholder who will act and be affected from the basis of the report. Thereby, knowing the users helps focus on the problems and solutions that can be achieved.
- 2. Step 2: Describe the target population and the service environment one has to explore geographic dispersion, transportation, and

- demographic characteristics of the target population to make the process of needs analysis smooth and efficient.
- 3. Step 3: Identify needs one has to describe problems and solutions. In terms of problems, according to McKillip (1987), there are 3 types of problems identified by needs analysis.
 - a. Discrepancies are problems which are revealed by comparing expectations with outcomes.
 - b. Poor outcome are problems of the subjects that are at-risk of developing poor outcomes.
 - c. Maintenance need is a problem of the subject who may perform poor outcome, if services presently offered are withdrawn or altered.

In terms of solutions, McKillip (1987) identify 3 criteria for evaluating solution which cost analysis, impact, and feasibility.

- 4. Assess the importance of the needs when problems and solutions have been identified, needs must be evaluated accordingly.
- Communicate results when the final results are revealed, the results
 must be communicated to decision makers, the stakeholders, and other
 relevant audience.

On the other hand, McCawley (2009) states only 7 but similar steps in conducting needs analysis in conducting educational needs assessment. The 7 steps are identified as follows:

- 1. Write objective
- 2. Select audience
- 3. Collect data
- 4. Select audience sample
- 5. Pick an instrument
- 6. Analyze data

7. Follow-up (What will be proceeded with the information gained)

2.1.3 Sources for a needs analysis

Long (2005) suggests that there should be 5 sources for conducting a needs analysis: 1) published and unpublished literature, 2) learners, 3) teachers and applied linguists, 4) domain experts, and 5) triangulated sources

- Published and unpublished literature Over the past 30 years, there is
 a vast store of both published and unpublished needs analysis. In
 addition, there are numerous other written sources existing in both
 public and private sectors as well as several government departments
 (education departments and universities). All of these sources can be
 used to navigate conductors toward the appropriate methods of
 conducting needs analysis.
- 2. Learners Long (2005) believes that learners had the ultimate right to decide the content of the courses that they are to undergo. Both perceived and actual needs among teachers and learners can raise awareness of both parties about instruction. However, leaners in needs analysis can be separated into 2 types: pre-experience and in-service learners. For obvious reasons, pre-experience learners constitute usually unreliable results due to the lack of experience. While inservice learners usually make excellent sources on the content of their jobs, training courses, and field of study.
- Applied linguists Long (2005) suggests that opinions from applied linguists could be considered only if they had experiences working in specialized domain in the same area as the topic of needs analysis.
 Opinions from random applied linguists may create serious mismatches in data.
- 4. Domain experts (Long, 2005) strangely objects opinions from domain experts when asked about language needs. He says that most domain experts have proved to be unreliable. It is not only just at the

- detailed linguistic level, but also where higher discourse events are concerned.
- 5. Triangulated sources triangulation is a procedure which has been used frequently by researchers in both qualitative and naturalistic tradition to help validate data. As a result, this increases the credibility of their interpretation of those data. Researchers should compare different sources and sets of data with one another. Triangulation can have comparisons among two or more different sources, methods, and theories. Furthermore, the use of different data collection procedures such as observation, questionnaires, testing, and interviews can be methods of triangulation as well.

2.2 Material Development

Hidalgo, Hall, and Jacobs (1995) state that normally, in the language classroom, there are 3 important components which are the teacher, the learner, and the materials. Traditionally, the actual content comes from either the teacher or the materials. This is an emphasis that instructional materials can make a great impart in language teaching. Therefore, most people including teachers and students think of the term 'language-learning materials' as a source of knowledge of language instruction. Materials development is one of the main fields in language instruction that stakeholders should pay close attention to develop language instructional materials to maximize language learning opportunities for students.

2.2.1 Definitions of Material Development and Instructional Materials

Tomlinson (2011) gives 2 definitions for materials development in language learning field. The 2 definitions are separated into 1) Theoretical definition and 2) Practical definition. For theoretical definition, Tomlinson (2011) defines materials development as a field of studying the principles and procedures of the design, implementation and evaluation of language teaching materials. For practical

definition, Tomlinson (2011) defines as anything which is done by writers, teachers, or learners to give source of language input in order to stimulate meaningful output. In a simpler version, material development is the supplying of information about and/or experience of language in ways designed to promote language teaching.

While Tomlinson (2011) deals with the whole process of material development in his definitions, Hainsworth (2008) defines only instructional materials as materials which provide teachers with tools to deliver message creatively, clearly, accurately, and in a timely fashion. Hainsworth (2008) definition, she defines instructional materials as a tool which is to help teacher clarify message, explain concepts, and simplify difficult information. Moreover, Chetsadanuwat (2012) defines instructional materials as bridges connecting teaching content and knowledge with learning objectives between learners and teachers. As a result, the primary objective of instructional materials is to reduce obstacles during teaching session and to maximize the possibility to acquire knowledge for learners. However, Chetsadanuwat (2012) strongly emphasizes that instructional materials as a tool to supplement teachers not to replace them.

2.2.2 Types of Instructional Materials

Tomlinson (2003) defines materials as anything that can facilitate language learning. They can be visual, audio, and kinesthetic which can be in forms of print, live performance, digital records, or the internet. There is an inconvenience that many language teachers and learners face which is that commercial publishers or commercial materials developers may be less interested to produce materials for specific or small groups due to marketing reasons. As a result, materials for specific groups can be divided into 3 types. First is materials used in corporation employed employers, foreign language department, or human resource developing department. Second is that materials used in educational institutions for their students. Lastly, materials used by individual teachers or teach particular groups of students (Tomlinson, 2003).

Hainsworth (2008) categorizes 3 types of instructional materials more in detail: written materials (printed media), demonstration materials, and audiovisual materials.

Firstly, written materials or printed media can be both commercial and instructor-made materials such as books, commercial textbooks, and teaching exercises. The key concern is the matter of relevance in the materials. The advantages are that they are widely available and they provide explanations of difficult concepts. Disadvantages are learners have limited or inauthentic feedbacks. Some learners may find it hard to utilize some concepts in classroom or real situations. Thereby, teachers may specifically select useful information and develop their own printed materials themselves in order to maximize students' chances of language acquisition.

Secondly, demonstration materials do not include printed materials such as models, real equipment, photographs, charts, and diagram. These materials encourage learners to engage in the sense of sight and physical contact. They are very beneficial to stimulate learners' cognitive and psychomotor skills in learning. Disadvantages are this type of material is very time consuming in production. Moreover, they are not suitable to teaching in a large group of learners or visually challenged learners.

Thirdly, audiovisual materials are computer-aided instruction (CAI), digital records, and other electronic devices. Like demonstration materials, they encourage learners to engage in the sense of visual and audio perception. This type of materials can influence learning in 3 areas by promoting cognitive development, inspiring attitude change, and enhancing the building of psychomotor skills. In addition, visual materials are suitable for visually challenged learners. On the other hand, the disadvantages are difficulty in operation due to the needs of other equipment such as software, projectors, or speakers. Furthermore, this materials decreases the level of interaction between teachers and learners when teachers rely too much on teaching materials.

2.2.3 Components and Characteristics of Language Instructional Materials

Nunan (1995) gives 4 components for writing language instructional materials as follows:

The first component is input. Input provides knowledge and information for learners to learn their intended language skills in order to utilize knowledge or information in the real world. Nunan (1989) suggests sources of input such as newspapers, picture stories, letters, or anything with authentic language use.

The second component is content focus. Content focus means that material writers must present necessary vocabulary, grammatical rules, and relevant contents in language teaching. The focus content can either be linguistic written or non-written (pictures and audio) which depends on the communication purpose and learning objectives.

The third component is language focus. Material writers should concern about showing grammatical rules from the content which may help students to apply those rules in real-world communication.

The fourth component is tasks. Tasks are activities in classroom which can enhance language understanding for students and facilitate them to be able to communicate in the real situation in their target language. Material writers should realize the true objective before designing tasks in language teaching materials. Nunan (1995) suggests crucial elements in writing instructional materials where tasks are one of the main keys.

- 1. Choosing the topic
- 2. Collecting relevant materials such as pictures and advertisement
- 3. Choosing appropriate tasks from collection of materials such as reading advertisement
- 4. Designing activities

- 5. Specifying grammar points based on the contents and the activities
- 6. Designing grammar tasks such as cloze test
- 7. Designing more tasks to encourage the student to use language they have learned such as role play
- 8. Giving tasks for students to practice the language they have learnt.

On the contrary, Tomlinson (2011) does not state specifically about components that language instructional materials should have but he states a number of characteristics that good language instructional materials should give to learners.

- Materials should enhance learners' second language acquisition.
 Tomlinson gives 6 basic principles to develop materials to enhance learners' second language acquisition.
 - i. Learners must be exposed to a rich, meaningful, and comprehensible input of actual language use.
 - ii. Learners need to be engaged both affectively and cognitively in the language experience to maximize their exposure to language in use.
 - iii. Learners, who feel positive, are likely to achieve communicative competence better than those who do not.
 - iv. Second language learners can make use of their mental resources which they typically utilize when they acquire and use their native language.
 - v. Learners can benefit from noticing notable features of the input and from discovering how they are used.
 - vi. Learners need opportunities to use language that they have learned to achieve communicative purposes.

- 2. Materials should achieve impact materials need to create noticeable effects to learners achieving learners' curiosity, interests, and objectives. Materials can achieve impact through...
 - i. Novelty (e.g. unusual topics, illustrations, and activities)
 - ii. Variety (e.g. using many text types, breaking up the monotony of a unit routine, and using various types of sources such as video and CD)
 - iii. Attractive presentation (e.g. provide a lot of white space, use of attractive colors and photograph)
 - iv. Appealing content (e.g. target learners' topic of interest or topic that allow learners to create something new)
 - v. Achievable challenge (e.g. tasks that are accomplishable but not too easy that do not require learners' higher thinking skills)
- 3. Materials should help learners feel at ease. Most researchers agree that learners can increase their learning capacity when they feel less anxious and comfortable. Some materials developers suggest that it is teacher responsibility to help learners feel at ease and materials cannot help much to lower learners' anxiety, but Tomlinson (2011) does not agree. Tomlinson (2011) suggests that learning materials can help learners feel at ease in many ways. For example,
 - i. Providing a lot of white space than packing too many activities on the same page
 - ii. Providing culturally related texts than giving what appear to learners as culturally alien
 - iii. Show the efforts of helping learners to learn than trying always to test them
- 4. Materials should help learners to develop confidence. Tomlinson (2011) knows that most material developers recognize that they need to help learners feel confidence. Therefore, they help learners through the process of simplification by asking learners to use or accomplish

simple language use or tasks such as completing tables, writing simple sentence, and filling in the blanks in dialogues. However, learners begin to realize that they are not really using their brains and their success in language use and task accomplishments are insignificant. Tomlinson (2011) suggests that, building learner proficiency, material writers should push learners slightly beyond their existing proficiency or (i+1). As a result, materials need to engage learners in tasks which are stimulating and problematic but also achievable. The trend of engaging learners' higher thinking and minds by utilizing learner existing proficiency seems to be valued in countries which produce their own materials through textbook projects rather than relying on commercial or global textbooks which seem to underestimate the ability.

5. What is being taught should be perceived by learners as relevant and useful. In English language instructional materials, material developers should narrow the target readerships by conducting needs analysis of what the target learners are interested and their learning objectives.

2.2.4 Framework of Material Writing

In this study, the researcher uses framework of Tomlinson (2011) on material writing. There are 5 steps for material writing.

- 1. Identification the materials' stakeholders (in this case, they are local students, local teachers, and local wisdoms) need to identify their needs to fulfill or problems to fix by the creation of the materials.
- Exploration material developers need to conduct research of how language both content and linguistic aspect are used in real situation, so learners can utilize what they have learned in the real situation effectively.
- 3. Contextual realization material developers need to realize the context that language in the materials can be used for particular target learners. For example, Iraqi students in Iraqi may find the word "opera" hard to

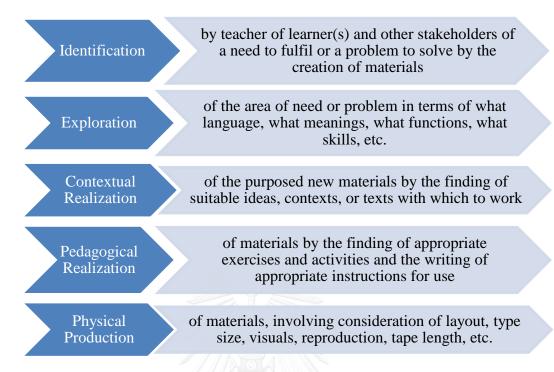
comprehend because it is beyond their cultural experience and completely useless for them to know. On the other hand, it is acceptable to find context or topics that are strange and exotic that target learners can understand rather than something completely alienated to them.

- 4. Pedagogical realization material writers need to provide meaningful practice with clear exercises and activities. Moreover, it is very crucial to write clear and efficient instructions including the proper use of meta-language. Poor language may waste students' valuable times and create confusions to students.
- 5. Physical appearance and production material developers need to care about their material presentation for both boosting student motivation and classroom effectiveness.

Tomlinson (2011) attempts to summarize the different steps involved in the process of material writing. He produces 2 types of process in material writing. The first type is a linear process, but the second type is a non-linear process. The linear process of material writing is illustrated in a figure 1 below.

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Figure 1 The linear process of material writing (Tomlinson, 2011)



On the contrary to this linear process, Tomlinson (2011) argues against his own work that the process stated earlier does not illustrate that material writing can be both a dynamic and self-adjusting process. Moreover, human mind does not work linearly which is suggested in the flow-chart above when one attempts to solve problems. For example, developing a language exercise could generate spontaneous second thoughts about the language being exercised. Furthermore, material evaluation is one of the most important component in material writing which the developers may evaluate their materials through actual use or student feedbacks, so they can come back to adjust their materials later on. Figure 2 shows non-linear process of material writing.

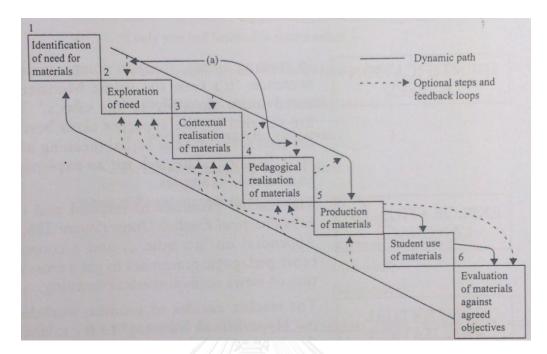


Figure 2 The non-linear processes of material writing (Tomlinson, 2011)

2.3 Community-based Education

Nowadays, many people around the world including in Thailand have questioned formal education for not fulfilling stakeholders' needs such as students, employers, and society in terms of learners' personal needs, real world experience, and connection with learners' local communities. Therefore, an education approach which answers to those needs from different stakeholders is required. Mckay (2003) states that educators should see the value including topics that are relevant to local culture and community, and they need to encourage the use of a methodology that is appropriate to the local education context. This education awareness has spread to Thailand as well. During 1997-2001, the 8th National Economic and Social Development Plan had been being implemented which emphasized that communities were encouraged to participate fully and actively in education management at all levels (Rattanaphumma, 2006). This has given the rise of community-based education to respond to stakeholders' needs as an alternative to formal education. According to cubek.org (2014), formal education focuses on mastering skills from practicing

through teaching content. However, in community-based education, expected skills, attitude development, and expectation obtained by learners must be related to how those subject matters contribute to community. The final result has to relate to the community, and how the result helps bring positive change to local members or community. As a result, the ultimate learning objective goes beyond mastery of knowledge, skills, and attitude.

2.3.1 Defining Community-based Education

There are a number of education scholars and major institutions trying to define community-based education or community-based learning which the 2 terms are being used interchangeably. From past to present, the definition moves toward to more pedagogical and practical implication in the real world situation.

Galbraith (1995) gives the definition of community-based education as an education process which individuals become competent in their knowledge, skills, and attitude in the process to live and develop their local communities through active and democratic participation.

Villani and Attkins (2000) define community-based education as education that is centered on students' ability to acknowledge and meet the needs of the local community. Students are responsible to express, develop, and solve the inherent problems existed in their community. Over the long-term implementation, the entire community will take part in the process which community administrators, educational institution, and community members are an integral part in developing, producing, and evaluating community-based education.

J.H.U. (2008), Johns Hopkins University, in the State of Maryland uses the term "community-based learning" instead. Community-based learning is a pedagogical model that connects classroom-based work with local community involvement and experience. Students must collaborate with other stakeholders within their community such as non-profit organizations, government agencies, grassroots

collectives, and other educational institutions to achieve in community-based learning objectives and community-identified goals.

2.3.2 Theoretical Foundation of Community-based education

Melaville, Berg, and M.J. (2006) who write 'Community-based Learning: Engaging Students for Success and Citizenship' which give 5 theoretical foundations of community-based education which are stated as follows.

- 1. Knowledge comes from social interaction between learners and local wisdoms such as local knowledgeable people or local employers.
- 2. Memory is influenced by experience, prior learning, and practice.
- 3. The motivation of learning comes from the perceived importance and attainability of the learning goals.
- 4. Protective factors such as attentive cares and resources from various parties in the community can reduce barriers to learning.
- 5. Home, school, and community must be connected to each other to achieve effective learning environment.

2.3.3 The Rationale of Community-based Education

Melaville et al. (2006) suggest 3 rationales of community-based education.

- Active citizen the main rationale of community-based education is to make students become active citizens by connecting that the content they learn in the school with their real-life context. This is considered to be imperative to make students become successful in the future.
- 2. Real-world learning experience community-based education commits to engage students into real-world learning experience. The community-based education involves various parties within the local community in student learning. Therefore, students have opportunities to learn and practice directly with knowledgeable people within their community in subject matters that they choose. Melaville et al. (2006)

that 95% of students aged 13-19 stated that more real-world opportunities practiced in school would improve their schools and their academic lives. While a research conducted by Educational Testing Service [E.T.S] (2005) Melaville et al. (2006) suggested that 70% of teachers firmly emphasized for real-world learning which formal education has not done enough to close the gap between living and learning.

3. The use of learner interest and community resources – one of the aims of community-based education is to engage members in community by using their natural interests in where and how they live in their community, and community resources can be exploited as supplements of student learning and action.

2.3.4 The Principles of Community-based Education in Actual Academic Courses

In Johns Hopkins University, the State of Maryland, a community-based learning (the term used interchangeably with community-based education) has been formalized as academic courses in this institution to include local community members into community engagement (J.H.U., 2008). The community-learning courses lie on 4 principles.

- The collaboration of stakeholders in a local community such as educational institution, students, and community groups must be made to pursue academic course objective and other community-identified goals.
- 2. The courses provide relevant content, research, evaluation, reflection, and meaningful learning objectives for community work. The main course objective is to prepare students for community entry.
- 3. The course must ensure that the community would benefit from the partnership with the local education which provides the course.
- 4. Academic credit in classroom in community-based learning is based on the ability demonstrated by students' preparation for their experiential

learning, community service activities, reflection, and evaluation. Thereby, credits are based on these factors, not solely on community engagement by itself.

2.3.5 Community-based Education Assessment

There are many education scholars making efforts in defining community-based education in terms of definition, pedagogical approaches, and characteristics. However, there are not many who give details on community-based education assessment. Villani and Attkins (2000) characterize assessment in community-based education that assessment comes from the measure of creativity and innovation indicated by learners. Accordingly, learners need to pursue for further goals in both learning and applying upon what the learners' interests. Standard assessment and formal instructional strategies are not emphasized on but the emphasis is on high quality performance and the creation of life-long learners.

In conclusion, community-based education is an educational process which is to develop or enhance community members' knowledge, skills, and attitudes that are appropriate to a particular community by using resources available in the community in order to respond to the community's interests and needs and offer solutions to community's problems through active and democratic participation and involvement among community members to achieve the absolute objective of community development.

2.4 Reading Instruction

Second language reading instruction in many secondary schools in Thailand is excessively taught with the approach of grammar translation method where teachers usually introduce their students the reading text and the teachers begin to translate the texts word-by-word and then sentence-by-sentence in front of the class. In addition, this approach is done repeatedly in different texts with the expectation that students will gain reading proficiency through this repeated reading behavior.

Grabe (2004) in 'Research on Teaching Reading' mentions the 10 implications for second language reading instruction which aims to develop effective reading comprehension. The 10 implications are stated below:

- 1. Ensure word recognition fluency
- 2. Emphasize vocabulary learning and create a vocabulary-rich environment
- 3. Activate background knowledge in appropriate ways
- 4. Ensure effective language knowledge and comprehension skills
- 5. Teach text structures and discourse organization
- 6. Promote the strategic reader rather than teach individual strategies
- 7. Build reading fluency and rate
- 8. Promote extensive reading
- 9. Develop intrinsic for reading
- 10. Plan a coherent curriculum for student learning

Grabe (2009) suggests that second language reading curriculum should vary according to student proficiency level and collective learning goals of the class. Grabe (2009) ensures that there is no such concept as "one size fits all" recommendations for reading instruction or curriculum development. Therefore, second language reading instruction should be made flexible and sensitive to general students' needs and goals. When it comes to the real classroom application, the problem may not be an incompetency to comprehend the text but a lack of awareness of the real goal for that reading task. Accordingly, it is imperative for teachers to clarify goals explicitly to students before beginning the reading task in order to make students become more aware of the goals that they want to achieve while and at the end of the reading. In real teaching situation, first is to determine important purposes of reading in the curriculum. Second is indicating the range of supporting reading skills that should be taught explicitly. Third is to practice reading skills regularly. The final stage is to recycle consistently. Finally, the curricular goals for reading instruction need to promote ability to read effectively and rapidly, and they need to provide students with wide range of opportunities to practice in order to develop these skills and language resources through direct and explicit instruction and extended reading strategies.

Pressley (2001) states that reading instruction has 5 areas of instruction which are phoneme awareness, phonics, vocabulary, and comprehension strategies. However, today reading instruction focuses on teaching reading skills or strategies for comprehending elements such as content, textual feature, rhetorical elements, and cultural background. This statement is very similar to Susser and Robb (1999) as mentioned in Emmanoch (1999) who expressed that skill building emphasizes skills or strategies for text comprehension.

2.4.1 Reading Comprehension

In present days, reading strategies are taken to be an important part of reading instruction. McNamara (2007) defines reading comprehension strategies as "a cognitive or behavioral action that is enacted under particular contextual conditions with the goal of improving some aspects of comprehension". He also states that shallow readers believe that they can comprehend any text adequately, if they know meanings of the content words and can understand, mainly translate, most of the sentences. On the contrary, readers who have deep comprehension need to have inferences, linking ideas coherently, scrutinizing the validity of claims with a critical stance, and sometimes understand the objective and emotion of authors. Therefore, it is very important to teach readers reading comprehension strategies in order to gain deep comprehension. Li and Wilhelm (2008) mention that reading instruction should not only help students to realize that reading is actually an interaction between author/writer and reader, but also to realize a complex cognitive processing operation. This means that, in academic contexts, the learner should be able to know when and how to integrate a variety of language skills to remember, learn, and understand information in reading texts. Furthermore, Li and Wilhelm (2008) emphasize explicitly teaching reading strategies helps learners develop metacognitive awareness of how and when they use strategies. This type of awareness can help build learner autonomy and prepare students for self-access learning. This view of teaching reading strategies explicitly is similar to Duffy and Roehler (1993) states that teachers must reasoning process used by experts when making sense of the text and how to apply

various types of mental processes while reading such as monitoring strategies, organizing strategies, and access strategies.

2.4.2 Type of reading comprehension strategies

McNamara (2007) divides strategic reading comprehension into 3 types: Dictionary Artifact Strategy, Contextual Word Definition strategy, and Character Motive Strategy.

1. Dictionary Artifact Strategy

If word "W" is infrequent or reader does not know meaning of word "W", reader will do steps as follows. First, reader gets dictionary. Second, reader looks up for word "W". Third, reader reads dictionary definition. Forth, reader reads sentence with "W". Lastly, reader attempts to comprehend sentence as a whole. Failure to follow each step correctly increases the chance of misapplying the strategy, it is a situation that language teachers and researchers usually complain. On the contrary, most readers do not have such effort to look for a dictionary every time they encounter a rare word, and sometimes a dictionary is not available in that particular situation. As a result, an alternative strategy is often that reader infers the meaning from the context then a "Contextual Word Definition" might be as follows:

2. Contextual Word Definition Strategy

If word "W" is infrequent or reader does not know meaning for word "W", reader will do steps as follows. First, reader re-reads previous text for definitional clauses. Second, reader reads subsequent text for definitional clauses. Third, reader re-reads sentence with "W". Lastly, reader attempts to make sense out of sentence as a whole.

This strategy involves a lot of eye movements. Reader has to look back and forth in an effort to locate definitional clauses. This strategy encourages the cognitive action of eye movements because there is no need for behavioral actions of hunting for a dictionary. Sometimes, the text provides enough context or detail to infer the identity referenced by a word which has a specific attributes with enough specification for the reader to continue reading further and gather the main detail of the text (e.g. it is an animal with long neck eating leaves that lives in Africa). Mcnamara directly suggests that reader ought to construct self-explanations during reading. When readers try to create self-explanations, they employ their own world knowledge and personal, both direct and in-direct experiences to make sense out of the reading text and construct plausible inferences. In order to check for the right explanation, the constructivist theory of text comprehension should be employed. For example, readers are encouraged to explain the meaning of the text through the use of "wh" such as why and why questions; why did the content in the reading happened?; what are the consequences?; and why did the author bother to mention the content in the reading?

3. Character Motive Strategy

If clause N states that character C performs action A, reader chooses to implement one of these 3 steps. Reader retrieves from memory motives that explain A, or reader re-reads prior text for clauses with motives that explain A. Or else, reader constructs inferences from analogous prior experiences with motives that explain A. Reader can interpret and understand the reading text from the explanation of characters' actions which consist of the goals or motives that drive the action. For example, Tom (character A) might attack another character for revenge, survival, or rescue of a third party. This strategy is evidence that deep comprehenders construct self-explanation in order to understand the text. Thereby, when world knowledge is minimal for some readers, this kind of cognitive strategy is particularly important and differentiates between shallow and deep comprehenders. On the contrary, this conscious strategy may be disruptive when comprehending actions in simple stories where common knowledge exists in most readers.

Nunan (1999) divides reading comprehension strategy into 2 categories which are text-level strategies and word-level strategies. In text-level strategies, readers make efforts to try to comprehend the whole reading text or most of it by including their own background knowledge, scanning the text to look for the

organization of a paragraph and making prediction what the text might be. In word-level strategies, readers have to deal individual words or phrases. Therefore, readers have to make guesses of an unknown or unfamiliar word from the context. Many times, readers may have to hunt for a dictionary when they lack of their world knowledge to guess word meaning from the context.

Similar to Nunan (1999) and Barnette (1988) also categorize reading strategies into 2 types: text level and word level. Text-level strategies include employing readers' background knowledge, guessing meaning from context, skimming-and-scanning, and finding main idea. Whereas, word-level strategies involve heavily on finding meaning of individual word or sentence in order to comprehend the whole paragraph.

In contrast, Anderson (1999) categorizes reading comprehension strategies differently into 3 types which are cognitive, metacognitive, and compensating reading strategies.

In cognitive reading strategies, they seem to a mix between text-level strategies and word-level strategies. Readers' tasks are stated as follows.

- 1. Guessing the meaning of unknown or unfamiliar words or phrases from the context
- 2. Focusing on grammar in order to understand unfamiliar constructions
- 3. Analyzing theme, style, and connections to improve reading comprehension
- 4. Breaking down larger phrases into smaller parts to make sense out of difficult text
- 5. Finding the main idea of the text to comprehend the entire reading
- 6. Linking reader's first language with words in targeted language in the text
- 7. Creating a mind mapping to show the relationship between words and ideas
- 8. Writing a short summary to help comprehending the main idea

Metacognitive reading strategies aim to enhance important areas to have an effective reading. For example, readers have to make lists of relevant vocabulary to prepare for new reading. The other example is to work with readers' peers to develop reading skills or other kinds of collaborative measures to ensure steady progress and assess what has been learned to focus on next reading.

Compensating reading strategies are heavily counting on readers' world knowledge to improve reading comprehension such as taking notes to mark for main ideas, discovering the purpose and emotion of the text, and linking the content obtained with picturing scenes to help comprehending the text. These strategies involve largely with behavioral action to remember information in order to understand main ideas of the text which lead to comprehending the text as a whole.

On the other hand, Grabe and Stoller (2002) focus mainly on processes which readers should use to gain reading comprehension. They do not divide reading comprehension strategies into categories as Anderson (1999). According to Grabe and Stoller (2002), these are steps that readers should take to comprehend reading. The steps are mentioned below.

- 1. Specifying a purpose of the reading
- 2. Planning what to do/what steps to take
- 3. Previewing the text by scanning
- 4. Predicting the contents of the text
- 5. Finding answer to posed question earlier before the reading
- 6. Connecting ideas in the text together
- 7. Guessing the meaning of a new word from the context
- 8. Writing a short summary to help understand the main ideas.

2.4.3 How to Apply Reading Instruction

Hudson (1998) and Grabe (2009) both emphasize on the relationship between 3 factors which are reader's purpose, goals, and reading task as the most important elements in reading instruction. Grabe (2009) mentions that student's inability to comprehend reading materials may not be the major problem in reading instruction, but a lack of awareness of the real goal for that particular reading task is.

As a result, students should be able to negotiate with teachers about their reading assignments to suit with their needs and goals, or they should be able to adapt their goals when they face with difficult reading.

Hudson (1998) underlines 3 implications in reading instruction. The first implication is to consider the interaction between reader's language ability and the particular reading task. The second implication is to integrate reader's purpose on extensive reading in order to make the reading task in target language become more meaningful and motivation to readers. Moreover, reader can develop greater genre awareness in particular content-areas because the reading task suits with reader's purpose.

On the other hand, Grabe (2009) deals with reading instruction mostly conceptually in his research, but he suggested 5 steps to teach reading. The 5 steps are 1) presenting important result from reading research to students to provide purpose for reading 2) identifying implications for instruction to provide steps to achieve reading purposes 3) conducting research to find out the effectiveness of intended implications 4) converting research result and implications into the curriculum and classroom and 5) assessing learning outcome.

Grabe and Stoller (2014) present the latest second language reading instruction to this study. Their work on teaching reading for academic purposes underpins reading instruction conceptually. Grabe and Stoller (2014) underline a general set of 9 curricular principles on reading instruction for academic purposes. The 9 curricular principles are as follows.

- 1. Integrate reading instruction with extensive practice and exposure to materials
- 2. Use reading content which is interesting, attractive, and accessible
- 3. Give students some choices in what they want to read
- 4. Introduce reading skills and provide students with chances to practice
- 5. Connect reading to students' background knowledge

- 6. Structure lessons in 3 stages pre-, during, and post-reading tasks
- 7. Give students opportunities to experience comprehension success
- 8. Build expectation that reading occurs in every lesson
- 9. Plan reading instruction around a curricular framework which combine objectives for the development of reading abilities
 - a. promote word recognition efficiency
 - b. help students to build a large recognition of vocabulary
 - c. create opportunities to practice comprehension skills
 - d. build students' discourse-structure awareness
 - e. develop strategic readers
 - f. enhance fluency on reading to students
 - g. give consistent extensive reading opportunities
 - h. motivate students to read
 - i. integrate content- and language-learning goals

In other words, the 9 curricular principles guild EAP reading instruction which helps learners develop reading abilities. The first principle is maybe the most important one of all. Students gain reading abilities through consistent practice and exposure to various types of materials. Unfortunately, there is no shortcut except by reading and reading a lot. The second principle is that students are likely to feel more motivated in reading and reading instruction when the text materials is interesting, attractive, and easily accessible. Third, by giving students some choices of what they want to read and activities that they want to engage leads to more students' engagement, motivation, and autonomy which are keys to reading improvement. Forth, reading skills and activities should be built around the main passage in students' text books. Fifth, by connecting with students' specific and direct relevant background knowledge, this helps improve main-idea comprehension and strategic processing. Sixth, reading lessons should be constructed on a structure of a pre-, during, and post-reading framework consistently to prepare them before reading, helps them while reading, and then guide them to rethink about the text. Seventh, students need to experience success when reading otherwise it leads to students' disengagement. Eighth, instructors should include some actual text reading in every session. Finally, instructors should integrate the instructional goals which aim to develop skilled readers in EAP reading curricula.

2.5 Reading Comprehension Strategies

2.5.1 Defining Reading Comprehension

Zoghi, Mustapha, and Maasum (2010) define reading comprehension as a sequence which composes of a series of stages and each of which is complete before the next stage begins. To achieve reading comprehension, decoding skills are needed to be mastered. However, having skills in decoding or possessing linguistic knowledge does not necessarily transform into reading comprehension.

2.5.2 Reading Comprehension Process

There are 3 main reading comprehension approaches/models that many reading scholars portray in the reading comprehension process which are bottom-up process, top-down process, and interactive process.

Hudson (2007) categorizes reading comprehension process into 3 approaches in his book, 'Teaching Second Language reading'.

- 1. Bottom-up approaches focus on the cognitive information processing by making an assumption that a reader constructs meaning sequentially from letters, word, phrases, clauses, and sentences. This process occurs in a reader's head linearly from phonemic units which translate to lexical meaning then become comprehensible meaning. The bottom-up approaches greatly emphasize on the reader's ability to recognize words in isolation by linking the input directly to the reader's mental lexicon.
- Top-down approaches assume that a reader works his/her way down to the text by using knowledge of syntax and semantics to reduce his/her dependency on the phonics and lexical of the text. A reader needs to

apply his/her own world knowledge known as "schema" to the text to create personalized and sensitive meaning to the reader. These approaches are basically an interaction between thought and language which the reader makes assumptions of the reading text and try to confirm or disconfirm. Therefore, top-down approaches are an active process which a reader has to bring in now only his/her linguistic knowledge but past experiential background as well as general conceptual background Hudson (1998).

3. Interactive view is the combination of bottom-up and top-down approaches. Hudson (2007) suggests that both bottom-up and top-down approach are too simplistic. Reading seems to occur in both directions by its nature. Therefore, when a reader reads, he/she applies both higher-level thinking and background knowledge as well as linguistics knowledge to process text itself in the same time.

Nunan (2003a) also categorizes reading comprehension process into 3 different categories like Hudson (2007), and Nunan's (2003) categories seem to be very similar to the ones created by Hudson (2007).

- 1. Bottom-up models consist of lower level reading processes. A reader begins with the fundamental basics of letter and phonic recognition. The result allows a reader to have morpheme recognition which follows by word recognition, constructing up to the identification of grammatical structures, sentences, and longer texts. This model of comprehension works its way up from the smallest unit of a reader's linguistic knowledge to final meaning in achieving comprehension.
- Top-down models start when a reader uses his/her prior knowledge in order to make hypotheses and search through the reading material to confirm or reject the hypotheses. Generally, a reader can comprehend a reading text without understanding every single word appears in the text.

3. For the interactive models, Nunan (2003b) also thinks very similarly to (1998)Hudson that neither bottom-up nor top-down approaches/models is the key to the true nature of reading. The reasons are top-down models place too much emphasis on a reader's background knowledge in the reconstruction of the meaning in the text, and bottom-up models do not give any account to a reader's prior knowledge but heavily place importance on linguistic knowledge. Therefore, he suggests the combination of bottom-up and top-down models which are referred to as "interactive models". Nunan (2003a) that a reader uses information provided by several knowledge sources such linguistic knowledge and background knowledge simultaneously in order to comprehend a reading text.

2.5.3 Levels of Reading Comprehension

Nuttall (1996) mentions the 6 levels of reading comprehension to make readers become interactive readers. The 6 levels of comprehension are stated as follows: literal comprehension, re-organization, inference, prediction, evaluation, and personal response.

Literal comprehension means to understand explicit meaning from the text by using mainly linguistic knowledge to understand facts, times, and locations. To have literal comprehension means that a reader has basic understanding or surface meaning of the text.

Re-organization is on the foundation of a literal understanding of the text. A reader must exploit information read from the text to combine and construct further understanding about the text. Accordingly, teachers should coach students to explore the text entirely to move them from sentence-by-sentence understanding to a holistic view of the text.

Inference moves beyond a literal understanding of the text because the answers lie on information that the text does not clearly state. Thereby, a reader needs to combine his/her world knowledge with literal understanding.

Prediction makes a reader use his/her background knowledge with his/her literal understanding of the text in order to be able to assume what event or consequence will happen next or after the end of the story. There are 2 kinds of predictions involve in this process which are while-reading and pose-reading. For while-reading prediction, a reader's task is to predict events or consequences immediately while reading or by continuing to read the passage. On the contrary, for post-reading prediction, a reader's task is to predict events or consequences after the end of the passage, but a reader cannot continue to read to confirm his/her predictions.

Evaluation is that a reader must use both his/her background knowledge with his/her literal understanding obtained from the text. Then, a reader synthesizes information from using the combination of background knowledge and literal understanding to evaluate what he/she has read.

Personal response requires a reader to response his/her action to text either with logic or feelings of both to the reading. A reader needs to keep in mind that there is no right or wrong answer in his/her response. However, a reader's response needs to be relevant the text and reflect a literal understanding of the reading passage.

In conclusion, reading is an interactive process which a reader needs to construct literal understanding of the text as well as apply his/her background knowledge interchangeably and synchronously while reading. Therefore, a reader cannot rely solely on either linguistic knowledge to construct literal understanding or background knowledge to achieve comprehension. To acquire comprehension, a reader should move beyond literal understanding to re-organize the text holistically. A reader uses literal understanding to discover what the text tries to infer then make predictions to determine what might happen during and after the reading. Then, a

reader evaluates his/her understanding. Lastly, a reader responds to the text with his/her logics or feelings.

2.6 Reading assessment

In the old days, competence is considered to be an accumulation of facts and skills of learners. However, competence is currently thought to be multi-dimensional. According to Perkins (1998), he writes in Annual Review of Applied Linguistics (1998) that Mislevy defined competence as a complex combination of facts and concepts which has a network to connect them. The interconnection has to be done automatically and systematically. Increase competence in substantive areas does not need to be reflected in increasing chances of success on all tasks.

Perkins (1998) suggests that reading assessors should not expect on smooth, monotonic growth in reading skills, abilities, and knowledge from second-language readers as they continue reading in their second language. There was one research conducted by 2 applied linguistic researchers: Perkins and Brutten. They conducted their research by administering a thirty-item reading comprehension test to a group of 9 intensive ESL students at 3 different levels of proficiency. Each of ESL did the same test 3 times. The result showed some indication of disruptive growth in the knowledge, skills, and abilities assessed by the test.

The purposes of reading assessments are meant to provide feedbacks of knowledge, comprehension process, and skills that represent reading abilities. Grabe (2009) categorizes reading assessments into 5 purposes. However, due to the matter of relevance to this thesis, only the first three purposes are going to be mentioned in detail.

- 1. Reading-proficiency assessment (standardized testing)
- 2. Assessment of classroom learning
- 3. Assessment for learning (supporting student learning is the purpose)
- 4. Assessment of curricular effectiveness

5. Assessment for research purposes

1. Reading-proficiency assessment (standardized testing)

The purpose of this assessment is to gain better understanding of a student's reading abilities in general. In addition, it is used to make a decision on a student whether he/she is ready for the next stage of learning or educational advancement. Therefore, this assessment is considered to be high-stake testing which can decide a student's future. In terms of reading, this assessment is usually conducted in forms of oral fluency, multiple-choice, short answering, and essay writing.

2. Assessment of classroom learning

The purpose of this assessment is to measure skills and knowledge gained over a period of time. This is, often times, referred to as summative or achievement test. This assessment measures the increasing of proficiency during a certain period of time rather than gauging the growth of reading abilities based on what was taught in class. This kind of assessment can be done through alternative assessments such as student observation, self-report, and progress chart.

3. Assessment of learning

The purpose is to support and promote student learning. Teachers or assessors evaluate students' reading performance solely, so students' final score is not the main objective of this assessment. Accordingly, the main objectives are to provide immediate feedback on tasks or to engage in more effective learning and to gather feedbacks on student's reading performance on regular basis to improve student reading abilities.

2.6.1 Types of reading assessment

Irwin (2007), Farrell (2009), and Grabe (2009) categorize reading assessment mainly into 3 types with similar concepts and characteristics. However, each of them coined different names for each type of reading assessment.

Irwin (2007) and Grabe (2009) use the name "standardized test" for the first type of reading assessment, while Farrell (2009) use the term "traditional assessment". For the second type, Irwin (2007) used "multi-context assessment" but Grabe (2009) used "informal assessment". In contrast, Farrell (2009) prefers to use "alternative assessment". For the third type, Irwin (2007) does not clearly categorize this type of assessment as well as Grabe (2009), but they mention assessment approaches and procedures which are similar to "authentic assessment" which was categorized by Farrell (2009).

Aebersold and Field (1997) and Farrell (2009) who define assessment as "the engagement of on-going process which may include exam, tests, classroom exercises or other kinds of testing or learning instrument. However, Farrell (2009) goes further by arguing that to assess leaners does not always mean to test them but it can be done by other methods.

1. Standardized/traditional assessment on reading

The purpose of standardized or traditional assessment is to gain understanding on a student's reading abilities in general and also make a decision on the student whether he/she is ready for learning or education advancement (Grabe, 2009). This type of assessment is often a high-stake testing which decide students' academic future. Moreover, it can be used for institution's policy decision or curriculum change. However, Irwin (2007) mentioned 4 main obstacles of standardized/tradition testing procedure. Firstly, it is very time restraint – mostly, short passage is used which generally limits students' ability to summarize. Secondly, passages usually come in a mix of different types of texts. This creates difficulties to teacher to assess text specific effects. Thirdly, student's background knowledge is not generally assessed or controlled. This means that students' final scores may not always come from students' comprehension ability on the reading text. Lastly, students' critical and creative thinking skills cannot be assessed. Generally, standardized/traditional assessment measures lower level of comprehension skills (Irwin, 2007).

There are many types of standardized/traditional assessment procedures such as oral reading fluency, multiple-choice test, short-answer question, essay test, and cloze test stated in Farrell (2009).

1.1 Oral reading fluency

Oral reading fluency is very simple and quick to conduct. It measures accuracy and speed of which students can read. Therefore, a reader can read very fast and fluent, but he/she cannot comprehend what is read entirely.

1.2 Multiple-choice test

In multiple-choice test, a test taker can choose only one correct answer. Farrell (2009) that multiple-choice test is the most common type used to check reading comprehension in ELL. The advantages of this test are easy to score and scoring is reliable, but it can promote guessing among test takers and recognizing of comprehension.

1.3 Short answer test

In short answer test, students supply sentences or missing words. The advantage is that it requires students to organize and synthesize about their thought in order to choose for key concepts to answer. On the other hand, it is difficult to score and lacks of scoring reliability due to its subjective nature of the test.

1.4 Essay test

In essay test, a test taker is required to generate wrong answers in forms of paragraph or a complete essay. This means that test takers have to be organized and to synthesize about their answers, and they need to evaluate what or what not to include in their essay. In contrast, normally, it is hard to write an essay and it is very subjective to raters of what good essay is.

There are other kinds of standardized/traditional tests used in present days such as vocabulary and cloze test (Farrell, 2009). For vocabulary test, Farrell

(2009) that vocabulary test may make test takers assume that learning vocabulary is the most important thing to do to achieve good reading. For cloze test, test designers usually delete 'nth' word or nothing word, so there is no variation to make the test valued. As a result, cloze test may not be valid or dependable test of reading comprehension because test takers need to be taught with suitable test-taking strategies to overcome this test. In addition, Irwin (2007) states that standardized/tradition test does not really reflect natural reading tasks.

2. Multi-context/informal/alternative assessment

Farrell (2009) states that this type of assessment is based on findings that learning is not linear. In language learning, this assessment focuses on meaning not form. It also gives teachers the abilities to draw conclusion on students' performance to type of reading materials, task characteristics, and others (Irwin, 2007). For example, student A may not score well on a standardized/traditional test, but he/she can read and comprehend in a text type that he/she is highly motivated. Multi-context assessment helps teachers consider students' comprehension skills in the whole context involved in each task. Irwin (2007) suggests that the best person for this type of assessment is the classroom teacher. This assessment has become more popular over the years due to dissatisfaction with standardized/traditional assessment. On the contrary, this alternative assessment is more time consuming, costlier, and less reliable in terms of consistency of scoring (Farrell, 2009). Test designers can administer this type of assessment simply by transforming standardized/traditional assessment to have higher-order questions and thinking. For example, in multiple-choice test, test takers have to justify their choice or why they reject certain answers.

3. Authentic reading assessment

Farrell (2009) suggests that it may be difficult to assess second language learners with traditional or alternative assessments because leaners operate in different level of proficiency with different languages. Farrell (2009) suggested 5 types of authentic reading assessment which are 1) portfolio, 2) peer assessment, 3) self-report, 4) anecdotal record, and 5) attitude scale.

2.7 Synthesis of Previous Related Research

There are many researchers who conducted the study about community-based education or learning in second language instruction. Each study about community-based second language instruction has its own characteristics and to serve a better understanding about a particular culture and knowledge to a particular community.

Schneider (2005) conducted a study on English language instruction lesson named 'Teaching Grammar through Community Issues'. The purposes of this study were 1) to enhance students' grammatical skills of using 'passive-voice' and 2) to raise students' awareness of critical issue and help understanding the world around their community. However, the strange thing about this study is that Schneider did not state any information about his subjects such as age and English proficiency level. He conducted this research by teaching English in a community-oriented manner by using several sources in community such as community newspapers. It can be said that Schneider's instructional materials were authentic texts available in his and his students' community. The other strange thing about this research is that Schneider did not report any result of this study. He only stated his motive of making this community-oriented instruction that it was the key to learn a language successfully when students found an issue or a related text that both relevant to students' community and rich enough for exploring a particular linguistic feature.

Goodkind (2005) did a study called 'Effectiveness of a Community-Based Advocacy and Learning Program for Hmong Refugees' which aimed to improve Hmong refugees in the U.S. The purpose of the study was to examine 5 aspects of Hmong refugees 1) psychological well-being, 2) quality of life, 3) access to resources, 4) English proficiency, and 5) knowledge for the U.S. citizenship exam. The participants in this study were 28 Hmong adults and 27 undergraduates. The study was divided into 2 phrases. First was learning circles which every participant met twice a week for 2 hours a session for cultural exchange and one-on-one learning with an undergraduate to learn the subjects related to the 5 aspects stated earlier. Second is advocacy component which was to match up with an undergraduate student by working closely with a Hmong adult and his/her Hmong family to identify specific

issues in each family, so the problems learned would be adapted in one-one-one learning session. The result was all of the 5 aspects examined earlier increased including English proficiency, and the level of distress decreased over the course of intervention. This suggests that participants' English proficiency probably increased because they studied second language in the context that related to their own culture and community.

This study was conducted in Chachoengsao Province, Eastern Region of Thailand, by Rattanaphumma (2006). The name of the study is 'A Development of Community-Based English Course to Enhance English Language Skills and Local Cultural Knowledge for Undergraduate Students'. Rattanaphumma (2006) developed English language course using community-based education as a framework, and a needs analysis was conducted prior to the course to select important social and cultural aspects to be in the course. The content of the course involved Chachoengsao Province's local culture such as local cuisine, product, and way of life. The course had been taught for 16 weeks, and a community-based instructional materials was developed to use in this course as well. The result was that the participants' posttest scores in English were higher significantly compared to the pretest scores as well as the participants' perceptions on their increased English proficiency. Moreover, the use of local culture instructional materials helped increase the participants' local culture knowledge. Overall, the course was found to be very effective in using community/local knowledge as contents and instructional materials of the English course.

The last study was conducted in 3 southern border provinces of Thailand by Arwae (2013). The study is 'Development of Reading Materials to Enhance English Reading Ability of Students in Three Southern Border Provinces of Thailand'. The objectives of this study were 1) to develop the English reading materials, 2) to investigate the effects of the English reading materials on the 3 southern border provinces students' English reading ability, and 3) to explore the opinions of the students toward the English reading materials. The samples of this study were 30 tenth grade students in Narathiwat Province and the experiment lasted for 12 weeks.

The results were 1) the students' English reading ability improved significantly and 2) the students showed positive opinions towards the English reading materials – they were more interested and motivated in learning English reading.

Even though there have been several studies conducted on community-based education, many of them were done in social science such as human right and social development. Second language instruction is considered to be one of the elements in these studies, not many were conducted directly about second language instruction like the one done by Rattanaphumma (2006). However, the study was conducted in Chachoengsao Province where, is a less developed province, has quite distinctive local culture and community of its own. There has never been any community-based study conducted in Bangkok due to the fading of local culture and characteristics and being an urban community where people are living in loose community. In the researcher's opinions, students in Bangkok area deserve to learn about their own community and English which relates to their local environment as well as students in other provinces.

จุฬาลงกรณ์มหาวิทยาลัย CHULALONGKORN UNIVERSITY

Chapter III

Research Methodology

In this chapter, the researcher describes the research methodology of the study. The details in this section include the context of the study, research design, and research procedure which is divided into 2 phases: 1) the materials development and 2) materials implementation and evaluation. Then, data collection, data analysis, and research timeline are presented.

The main objectives of this study are to investigate the needs of English reading content for upper secondary students at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School, to develop community-based materials, to enhance English reading ability, to enhance local cultural knowledge, and to evaluate the effectiveness of the developed community-based materials.

3.1 Context of the Study

This section provides the 3 areas of western side of Bangkok where most of the research participants live. The 3 areas are: 1) Thawi Watthana District (Bangkok), 2) Nong Khaem District (Bangkok), and 3) Phutthamonthon District (Nakhon Pathom Province).

Thawi Watthana District, Bangkok

Thawi Watthana District is located on the western side of Bangkok and on the west bank of Chao Phraya River. Originally, Thawi Watthana was a sub-district within Taling Chan District, Thonburi Province. Later on, the Ministry of Affair decided to merge Thonburi Province and Phra Nakhon Province (old Bangkok on the eastern side of Chao Phraya River) to be one province which became to be Bangkok in the present time. In 1999, due to the continuing growth of population, Thawi Watthana Sub-district was promoted to be a district separated from Taling

Chan District according to the Ministry of Affair's declaration. Now, Thawi Watthana District consists of 2 sub-districts: 1) Thawi Watthana and 2) Sala Thammasop. In addition, it has an area of 50.219 square kilometers with a population of 76,787 people according to the population survey in 2011 (Bangkok & Statistics, 2013).

Thawi Watthana is considered to be agricultural and residential area. In terms of agriculture, many locals owe and work in orchid, lotus, rice, and other vegetable farms, but the number of farming areas is declining due to the growing of hi-end private housing estates. In addition, the district is categorized as a green zone where no heavy industry is allowed to be set up by the law, and it is within a reasonably driving range with a ten-lane road to the center of Bangkok. Accordingly, there is a rapid growth of private housing estate groups buying large areas of land for both high and upper-middle class housing projects.

Nong Khaem District, Bangkok

Nong Khaem District is also located on the western side of Bangkok, on the west bank of Chao Phraya River. This district has a very long history. In 1902, Rama V wanted to decentralize the administrative authority, and he saw that Nong Khaem area was very aplenty where it could be used as a center of civil development on the western side of Chao Phraya River. As a result, he gave an order to establish Nong Khaem area to be a district. Now, Nong Khaem consists of 2 sub-districts: 1) Nong Khaem and 2) Nong Khang Phlu. It has an area of 35.8 square kilometers with the population of approximately 151,877 people (Bangkok & Statistics, 2013).

In the past, Nong Khaem District was agricultural and residential area. However, Nong Khaem District has been facing rapid transition especially in fast population boom due to the increase of medium-size industry which requires a large number of factory workers. Consequently, the agricultural area is declining because the increasing demands for low cost real estate and land to build factories and warehouses.

Phutthamonthon District, Nakhon Pathom Province

Phutthamonthon District is located in Nakhon Pathom Province which is next to Thawi Watthana District. Phutthamonthon District was founded in 1991. It has 3 sub-districts: 1) Salaya, 2) Khlong Yong, and 3) Maha Sawat. The district has an area of 52.3 square kilometers with the population of approximately 37,435 people (Nakhonpathomstat, 2013).

Most of the area in Phutthamonthon District is used for agricultural purposes. There are many rice fields, coconut, and pomelo plantations. However, in these recent years, many areas have been turned into housing projects and commercial areas such as department stores and sport clubs. Therefore, many farmers have given up their farmlands to outside investors due to the rapid increasing of land price.

Nawaminthrachinuthit Satriwitthaya Phutthamonthon School (Satriwit 3)

Nawaminthrachinuthit Satriwitthaya Phutthamonthon School or Satriwit 3 is situated in Thawi Watthana District, Bangkok. The school was founded in 1993 to celebrate Queen Sirikit sixty-year birthday anniversary. It has 6 levels from grade seven to twelve under the Ministry of Education's administration. Currently, the school has almost 3,000 students. Most of the students live in Thawi Watthana District, Nong Khaem District, Phtthamonthon District, and other districts within 10-15 kilometers of driving range to the school. Socio-economically, most students are from middle class families. The school and school classrooms are well-equipped with necessary instructional tools such as computer labs, learning resource centers, and Wi-Fi service throughout the school. Lastly, the school has been well-known for its academic prestigious; therefore, the number of grade 7 and 10 applicants is increasing every year.

3.2 Participants

There were 3 groups of participants in this study: local students, local English teachers, and local wisdoms which all of them were purposively selected.

The local students were selected due to their high motivation in learning. They were 44 twelfth grade students (8 males and 36 females) in science-math program in academic year 2014 at Satriwitthaya 3. The participants were at the average age of 18. Sixty-six percent of the participants was born in the areas. 73% of the participants was living in the areas. Lastly, 89% of the participants had studied English for more than 10 years.

The three local English teachers were selected on two conditions. First, the local teachers had to live in the area for more than 10 years. Second, the teachers had to teach English in the upper secondary level for more than 10 years at the school.

The three local wisdom participants were selected. Each of them was knowledgeable people in different fields who had been living in the areas for more than 10 years. The first local wisdom was the New Theory Agriculture School director who was born and still living in the area. The second local wisdom was an abbot at a local temple. Lastly, the third local wisdom was a bio-chemical farmer who was born farming in the area as well.

3.3 Research Design

In this study, a single group of pre-test and post-test of experiment design was conducted to investigate the effectiveness of English reading ability and local cultural knowledge before and after the implementation of community-based materials. The dependent variables are 1) English reading ability and 2) local cultural knowledge which were measured by the scores of English reading ability test and the scores local cultural knowledge test. The dependent variable was community-based materials which was developed by the researcher.

3.4 Research instruments

There were 3 research instruments in this study: 1) community-based questionnaire, 2) English reading ability test, and 3) local cultural knowledge test.

3.4.1 Community-based questionnaire

Community-based questionnaire was distributed to 3 groups of samples: 1) local students, 2) local English teachers, and 3) local wisdoms. All of the samples were purposively selected to answer the questionnaire. The purpose of this questionnaire was to investigate the needs and opinions of the participants toward community-based materials. As a result, the questionnaire is categorized into 3 groups which are 1) questionnaire for students, 2) questionnaire for local English teachers, and 3) questionnaire for local wisdoms (See Appendix A and B). The questionnaire has both open-ended and close-ended items. After the development, the questionnaire was validated by 3 experts from different fields to test the content validity using the Item-Objective Congruence Index (IOC index) which all of the items were passed (See Appendix P). Then, the questionnaire was piloted with 40 students, 3 local English teachers, and 3 local wisdoms.

3.4.2 English reading ability test

English reading ability test was designed to investigate the students' English reading ability before and after the implementation of community-based materials (see Appendix E). Moreover, the purpose of English reading ability test is to evaluate the students' English reading abilities such as the ability to identify main ideas, identify facts, make inference from the context, evaluate the information, and determine word meaning (See Appendix F). The test was comprised with 30 multiple-choice items divided into 6 reading topics. In order to make English reading ability test meaningful and motivating to twelfth grade students, the test was designed with a combination of reading passages from Ordinary National Education Test (O-NET), General Aptitude Test (GAT) and common-subject test developed by National Institute of Educational Testing Service (NIETS), and Chulalongkorn University Test

of English Proficiency (CU-TEP). They are the tests that every student will take before entering undergraduate level. The criterions of selecting the reading passages were, first, the reading passages must have appeared and were adapted in the tests mentioned earlier to make English reading ability test meaningful to the students. Second, each reading passage must fit in 1 out of the 3 conceptual themes (science, social science, and general knowledge) to make the test fair to all the test takers with different genders, background knowledge, and topic of interest. Third, the reading passages must have at least 100 words in order to be able to calculate for readability by ReadabilityFormulas (See Appendix Q) and it is an appropriate amount of words appeared in the reading passage for this level of students. Lastly, the reading passages must need the same reading strategies and reading comprehension skills taught in community-based materials. The test was validated by 3 experts from different fields with IOC index which all of the items were passed. Then, the test was piloted with 40 students. The reliability index used was Kuder-Richardson Formula 20 (KR-20). After the pilot, the test had KR-20 value of 0.86 which could be interpreted as reliable (See Appendix H).

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Table 1 Test construction of English reading ability test

Passage Reading ability Aspects		Item no.	
Passage 1	- Ability to identify main idea	5	
•	 Ability to identify facts 	2, 4	
(Social science)	 Ability to make inference 	1, 3	
	 Ability to evaluate information 	-	
	- Ability to determine word meaning	-	
Passage 2	- Ability to identify main idea	6	
	 Ability to identify facts 	8, 10	
(Social Science)	 Ability to make inference 	7, 9	
	 Ability to evaluate information 	-	
	- Ability to determine word meaning	-	
Passage 3	- Ability to identify main idea	11	
<u> </u>	 Ability to identify facts 	12	
(Science)	- Ability to make inference	13, 15	
	- Ability to evaluate information	<u>-</u>	
	- Ability to determine word meaning	14	
Passage 4	- Ability to identify main idea	20	
C	- Ability to identify facts	19	
(Science)	- Ability to make inference	16, 17, 18	
,	- Ability to evaluate information	-	
	- Ability to determine word meaning	-	
Passage 5	- Ability to identify main idea	_	
C	- Ability to identify facts	23	
(General	Ability to make inference	22, 25	
knowledge)	- Ability to evaluate information	21	
mio wiedge)	- Ability to determine word meaning	24	
Passage 6	- Ability to identify main idea	30	
Č	- Ability to identify facts	28	
(General	- Ability to make inference	26, 27, 29	
knowledge)	- Ability to evaluate information	- ·	
<i>C</i> /	- Ability to determine word meaning	-	

3.4.3 Local cultural knowledge test

Local cultural knowledge test was designed to investigate the students' local cultural knowledge before and after the implementation of community-based materials (See Appendix I). The test was administered in Thai. The purpose of local cultural knowledge test is to evaluate the students' local cultural knowledge in the areas which most of the students lived in. The test was in multiple-choice format. There are 25 items in 5 topics which attempt to evaluate the students' local cultural knowledge in 4 aspects which are 1) ability to recognize knowledge in a particular topic, 2) ability to understand and make inference in a certain reading topic, 3) the sense of appreciation toward the community's value, and 4) the sense of being active and good citizen toward the community (See Appendix J). The test was validated by 3 experts from different fields with IOC index which all of the items were passed. Then, the test was piloted with 40 students to find KR-20 value. After the pilot, the test had KR-20 value of 0.84 which could be interpreted as reliable.

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Table 2 Test construction of local cultural knowledge test

Local Cultural Knowledge Aspects				
Test Item	Ability to recognize knowledge	Ability to understand and make inference	The sense of appreciation toward community's value	The sense of being active and good citizen
1	X			
2	X			
3		X		
4			X	
5				X
6	X			
7	X			
8		X		
9			X	
10				X
11	X			
12	X			
13		\mathbf{X}		
14			X	
15				X
16	X			
17	X			
18		ราลงกรณ์ ^X หาวิทยา		
19			RSITY	
20				X
21	X			
22	X			
23		X		
24			X	
25				X

3. 5 Research Procedures

In this study, the processes were divided into 2 phases: 1) the Development of Community-based Materials and 2) the Implementation and Evaluation of Community-based Materials.

 Table 3 Research procedure of the study

the study	Steps to be applied	
Stage 1: Exploring Stage	Exploring and reviewing important concepts of materials development, community-based education, and reading instruction	
Stage 2: Needs Analysis	 Identifying population and samples Designing needs analysis questionnaires Validating the questionnaire by the experts Adjusting the questionnaire accordingly Colleting the data of needs analysis Analyzing the data of the needs analysis 	
Stage 3: The Design of Research Instruments	 8. Designing English reading ability test and local cultural knowledge test 9. Validating both tests by experts and adjust the tests accordingly 10. Piloting both tests with 40 students 11. Analyzing the data of both tests 12. Designing community-based materials 13. Validating the materials by the experts 14. Adjusting the materials accordingly 	
Stage 4: The Implementation of community- based materials	15. Administering pre-test of both tests in2 class periods in the first week16. Implementing community-based materials for 1 semester	
Stage 5: The Evaluation of effectiveness of the developed community- based Materials	 17. Evaluate the effectiveness of the community-based materials via the following instruments: Post-test of English reading ability test Post-test of local cultural knowledge test 	
	Stage 1: Exploring Stage Stage 2: Needs Analysis Stage 3: The Design of Research Instruments Stage 4: The Implementation of community- based materials Stage 5: The Evaluation of effectiveness of the developed community-	

3.5.1 Phase 1: The development of community-based materials

The first phase consisted of 3 stages to be applied.

Stage 1: Exploring Stage

Step 1: Exploring and reviewing important concepts of materials development, community-based education, and reading instruction

In the first stage, the researcher explored and reviewed the concept of materials development, community-based education, and reading instruction proposed by several scholars such as Tomlinson (2011), Grabe and Stoller (2014), and Melaville et al. (2006) respectively.

Stage 2: Needs analysis

Step 2: Identifying population and samples

Population and samples were identified. The population was 470 twelfth grade students at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in the academic year 2014, 12 local English teachers at the school, and 7 local wisdoms in the areas. The samples were 44 twelfth grade students in science-math program, 3 local English teachers, 3 local wisdoms.

Step 3: Designing needs analysis questionnaires

Community-based questionnaire was adapted from Rattanaphumma (2006) who conducted a community-based English course for undergraduate in Chachoengsao Province and Arwae (2013) who developed a reading materials using local cultural knowledge for upper secondary students in the 3 southern provinces of Thailand. The purpose of this questionnaire was to investigate the needs and opinions of the students, the local English teachers, and the local wisdoms toward the community-based materials. As a result, the questionnaire is categorized into 3 groups

which are 1) questionnaire for students, 2) questionnaire for local English teachers, and 3) questionnaire for local wisdoms. Details of the questionnaire for each group are described below: (See Appendix A for community-based questionnaire in English and see Appendix B for community-based questionnaire in Thai)

Group 1: Questionnaire for students

The questionnaire for students has 4 components as follows.

The first component is a coversheet which gives the directions, the purpose of this questionnaire, and definitions of terms.

The second component is questions to obtain the personal data such as names, education background, and current place of living. All questions are in checkbox and open-ended format.

The third component has 4 questions which aim to obtain the preferred reading topics from 4 themes (local attractions, local history, religion, and local knowledge) from the students to be included in community-based materials. This component is in checkbox and open-ended format.

The forth component is questions to obtain learners' needs, preference, and learning style. There are 5 questions which consist of 4-point Likert scale and one question in open-ended.

Group 2: Questionnaire for local English teachers

The components in this questionnaire are the same as the student's one. However, in the second and third component, they are going to be re-designed to investigate the preferable teaching styles, preferences, and reading instructions.

Group 3: Questionnaire for local wisdoms

For the local wisdoms, the forth component of the questionnaire was removed because it was not relevant to the local wisdoms. However, the other components remain the same.

The questionnaire was distributed to the community stakeholders mentioned earlier before developing community-based materials, and each stakeholder took approximately 15 minutes to complete the questionnaire. However, in order to be polite to some stakeholders (local wisdoms), the questions were read aloud to them to choose the answers.

Step 4: Validating the Questionnaire by the Experts

In terms of content validity, 3 experts in 3 different fields were asked to evaluate every item in the questionnaire (See Appendix C). The 3 experts would rate each item if it was congruent to the objective using the evaluation form adapted from Sophia Arwae (2013). Then the Item Objective Congruence (IOC) index would be calculated by assigning points to the answers as follows:

Accept
$$=$$
 1

Revise $=$ 0

Reject $=$ -1

The IOC index ranges from -1 to 1. If any item has an index lower than 0.5, it is going to be revised. After the experts' validation, the results of all items have to be rated higher than 0.5 of the IOC index in order to be accepted and considered congruent to the objective.

There were 3 experts in validating the questionnaire which were as follows:

- A university English professor who possess a doctoral degree in English language instruction or other related fields.
- 2. A university English professor who possess a doctoral degree in English language instruction or other related fields.
- A local English teacher who has been teaching and living in the community for more than 10 years and is responsible for teaching upper secondary school students.

In conclusion, panel of experts in this step were 2 experts from English language instruction or related field and a local English teacher teaching English at the school for more than 10 years (See Appendix P).

Step 5: Adjusting community-based questionnaire

In this step, the questionnaire was adjusted according to the 3 experts' recommendations before it was pilot tested on 40 grade twelfth students at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School. There was 1 item which was rejected by the experts. That item was...

Question	4	3	2	1
5. What is your preferred answering type?				
multiple-choice	VERSITY			
true-false				
fill in the blank				
short answer				
paragraph writing essay				
Others such as				

This item was suggested to be removed from the questionnaire by 2 experts. Therefore, the researcher took off this item before piloting with the pilot groups.

Step 6: Collecting data of needs analysis

Community-based questionnaire was pilot tested with 3 pilot groups of local stakeholders: 40 local students, 3 local English teachers, and 3 local wisdoms. The researcher first clarified the purpose and explained about the questionnaire's structure before giving 20 minutes to each pilot group to fill in the questionnaire. Then, the questionnaire was collected for further analysis.

Table 4 The pilot testing groups

Local stakeholder	Number	
Local students	40	
Local English teachers	3	
Local wisdoms	3	

Step 7: Analyzing the data of the needs analysis

According to the results of the questionnaire from the pilot study, the questionnaire was found to be responder-friendly as the responders could complete the questionnaire without difficulties and without confusions.

Step 8: Designing English reading ability test and local cultural knowledge test

The researcher designed English reading ability test and local cultural knowledge test which would be validated by 3 experts and adjusted accordingly (See Appendix E and I) before being pilot tested with 40 twelfth grade students.

Step 9: Validating both tests by experts and adjust the tests accordingly

English reading ability test

In terms of validity, every test item was evaluated by 3 experts in the field of language teaching and language assessment. The experts were asked to give suggestions, comments, and rate the items where they were congruent to the test

objectives using the test evaluation form (See Appendix F). Then, the Item-Objective Congruence (IOC) Index were calculated by assigning scores to each item as follows:

Accept = 1

Revised = 0

Reject = -1

The IOC index ranges from -1 to 1. Any item which has an index lower than 0.5 would be revised. After revision, every item must be rated higher than 0.5 of the IOC index. This means that they are congruent with the objectives of the study.

Local cultural knowledge test

The content validity of the test items were evaluated by 3 experts in the field of language teaching and the locals who were living and familiar in education field of the local area and local aspects. The experts were asked to review and rate each test item whether it was congruent to the objective using the evaluation form constructed by the researcher (see Appendix J). Then, the Item-Objective Congruence was used to calculate by assigning scores to the answer as follows:

Accept = 1

Revised = 0

Reject = -1

The IOC index ranges from -1 to 1. Any item which has an index lower than 0.5 will be revised. Every item must be rated higher than 0.5 of the IOC index in order to be accepted and considered congruent with the objectives of the study.

There were 3 experts in validating English reading ability test and local cultural knowledge test which were as follows:

- An university English professor who possess a doctoral degree in English language instruction or language assessment
- 2. An university English professor who possess a doctoral degree in English language instruction and language assessment
- 3. A local English instructor who has been teaching and living in the community for more than 10 years and was responsible for teaching English reading and writing.

In conclusion, panel of experts in this step is 2 experts from English language instruction or related field and a local English teacher teaching English at the school for more than 10 years (See Appendix P).

After the experts' validation, there were only minor mistakes such as misspelling and distort format. Therefore, the researcher corrected those mistakes suggested and pilot tested both tests with 40 twelfth grade students.

Step 10: Piloting both tests with 40 students

English reading ability test

English reading ability test was pilot tested with 40 students who would study English for reading and writing as well as the main study group, and the number of students was similar to the main study group because the main study group had 44 students. English reading ability was administered in 1 class period which lasted for 50 minutes.

Local cultural knowledge test

Local cultural knowledge test was also pilot tested with 40 students as English reading ability test. Local cultural knowledge was administered in 1 class period which lasted for 50 minutes separated from English reading ability test. After the pilot tested was conducted, all of the 25 items were analyzed for difficulty and discrimination index of the test.

After finishing the pilot testing, English reading ability test and local cultural knowledge test would be analyzed for difficulty and index. The reliability of the overall test calculated by Kuder-Richardson-20 (KR-20) should be between 0.80 – 0.99 which means the high reliability of the test. The criteria of the difficulty and discrimination index are set as follows:

For the difficulty index (p):

p < 0.20	means	the item was difficult.
p = 0.20-0.80	means	the item was good in terms of its difficulty.
p= 0.81-0.94	means	the item was easy.
$p \ge 0.95$	means	the items was very easy.

For the discrimination index (r):

r = 0	means	the item had no discrimination ability.
r≥0.19	means	the item had a low discrimination ability.
r = 0.20 - 0.29	means	the item had a fair discrimination ability.
r = 0.30-0.39	means	the item had a high discrimination ability.
$r \ge 0.40$	means	the item had a very high discrimination ability.

Report the result of both the difficulty index and discrimination index

Step 11: Analyzing the data of both tests

After pilot testing English reading ability test and local cultural knowledge test, the researcher analyzed both tests using Kuder-Richardson 20 to find the tests' reliability.

For English reading ability test, KR-20 value is was 0.86 which could be interpreted as reasonable reliability of the test. Moreover, all of the 30 items were at satisfied satisfactory level (see Appendix H).

For local cultural knowledge test, KR-20 value was 0.84 which could be interpreted as reasonable reliability of the test. Moreover, all of the 25 items were at satisfied satisfactory level (see Appendix L).

Step 12: Designing community-based materials

Community-based materials was designed on 3 concepts of material development proposed by Tomlinson (2011), community-based education by Melaville et al. (2006), and reading instruction proposed by Grabe and Stoller (2014).

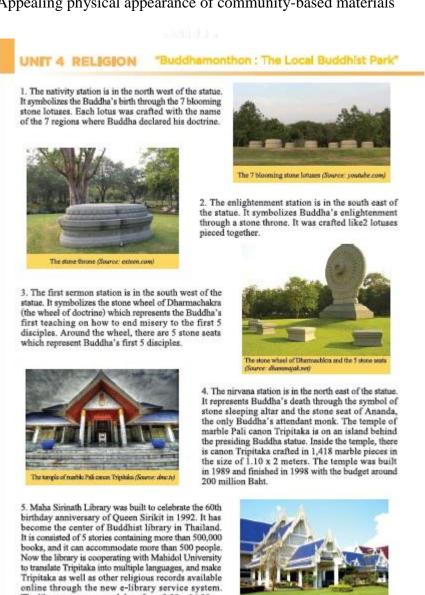
According to Tomlinson (2011), he states 5 steps in material writing as follows.

- 1. The researcher needed to identify the community's stakeholders (local students, local English teachers, and local wisdoms) to identify their needs in order to fix the community's problems.
- Community-based materials needed to make both content and language aspect related, so the students could utilize the content and language in real situation.
- 3. Community-based materials needed to achieve contextual realization, so the context was not alienated to the students. Therefore, the learners could comprehend both content and language aspect easier.
- 4. Community-based materials needed to achieve pedagogical realization by providing meaningful practice with clear exercises and activities. In

- this case, the materials needed to have exercises and activities which related to the students' local community.
- 5. Community-based materials needed to have physical appearances which boost the students' motivation and classroom effectiveness.

According to Tomlinson (2011), community-based materials needs to have appealing physical appearances in order to boost students' motivation as well as classroom effectiveness.

Figure 3 Appealing physical appearance of community-based materials



Malia Skinata Library (Source: maha

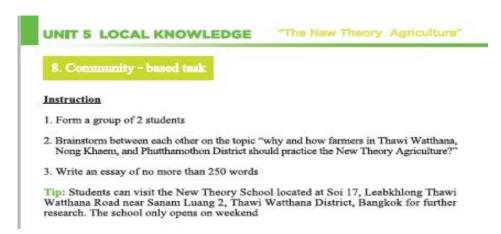
The library opens on weekdays from 8:30 - 16:30.

According to Melaville et al. (2006), they give 5 theoretical foundations of community-based education which will be applied in community-based materials stated as follows.

- 1. Knowledge comes from interactions between learners and local wisdoms. Therefore, community-based materials acted as a medium connecting local wisdoms' knowledge and experience to the learners.
- 2. Memory is influenced by experience, prior learning, and practice. Thereby, community-based materials had tasks for learners to explore and interact with local community first hand.
- 3. The motivation of learning comes from the perceived importance and attainability of the learning goals. As a result, community-based materials contains skills and practices which learners need to know to pursuit their academic goals, but they will learn those skills and practices through community-based content. Ultimately, they received skills, knowledge, and awareness toward their community.
- 4. Protective factors such as attentive cares and resources from various parties in the community can reduce barriers to learning. Accordingly, community-based materials was designed using community's resources such as community's history, local attractions, and local knowledge.
- 5. Home, school, and community must be connected to each other to achieve effective learning environment. The researcher had to request assistance from local stakeholders such as school to establish an English community-based course and local wisdoms to provide necessary content to produce the materials.

According to Melaville et al. (2006), students need to interact with local wisdoms in their community in order to gain real word experience. Therefore, community-based materials contains a community-based task at the end of each unit to encourage student interactions with local wisdoms.

Figure 4 Community-based task encouraging students to interact with local wisdoms



According to Grabe and Stoller (2014), they underline the 9 curricular principles on reading instruction for teaching English for academic purpose. Therefore, community-based materials must be designed on the concept of 9 curricular principles as follows.

- Community-based materials integrated extensive practice in various forms in every lesson. Thereby, students could have many opportunities to practice both language and reading comprehension skills.
- 2. Community-based materials was designed to be interesting and attractive with pictures which were relevant to the students' background knowledge.
- 3. Students had an opportunity to choose reading topics which they wanted to read through the community-based questionnaire.
- 4. Community-based materials introduced students' the necessary reading skills such as skimming and scanning and also provides practice for students to practice on each skill in each lesson.
- 5. Each reading topic was relevant to the students' background knowledge because the students choose it from the community-based questionnaire conducted earlier.
- 6. Community-based materials was structured in 3 stages which pre-, during, and post-reading.

- 7. Tasks in community-based materials were designed to suit with the students' language proficiency; as a result, the students could accomplish from doing tasks in the materials.
- 8. Students are expected to read extensively in every lesson in community-based materials.
- 9. Community-based materials promote word recognition, comprehension skills, and integrate both content- and language-learning goals.

According to Grabe and Stoller (2014), reading materials must introduce important reading strategies to learners in order to make them become strategic readers. As a result, community-based materials introduces essential reading strategies such as scanning, skimming, and identifying main ideas to make readers become more effective in reading.

Figure 5 Important reading strategies showing in table of content of the materials

Table of Contents

UNIT	NAME	PAGE	THEME	TEXT TYPE	READING STRATEGY	GRAMMAR
1	The Great Flood 2011	1 - 13	Local history	cause & effect	Scanning	Passive voice
2	Mahidol University: The wisdom of Salaya	14 - 24	Local attraction	descriptive	Skimming	Conjunction
3	Nawaminthrachinuthit Satriwitthaya Phutthamonthon: The 7 Years of Generation Gap	25 - 35	Local attraction	compare & contrast	Identifying the main idea	Past tense
4	Buddhamonthon: The Local Buddhitst Park	36 - 46	Riligion	descriptive	Understanding references	Preposition
5	The New Theory Agriculture: The Solution of Modern Farmers	47 - 56	Local knowledge	expository	Guessing meaning from context	Present tense

Step 13: Validating the materials by the experts

After developing 2 chapters, community-based materials based on the concept of Grabe and Stoller (2014) were validated by 3 experts as follows.

- 1. A university English professor who possess a doctoral degree in English language instruction or other related fields.
- 2. A university English professor who possess a doctoral degree in English language instruction or other related fields.
- 3. A local English teacher who has been teaching and living in the community for more than 10 years and is responsible for teaching upper secondary school students.

In conclusion, panel of experts in this step is 2 experts from English language instruction or related field and a local English teacher teaching English at the school for more than 10 years (See Appendix P).

Step 14: Adjusting the materials accordingly

After the experts' validation, the community-based materials was adjusted accordingly. Two of the experts suggested a change in the task sequence. The change is illustrated in table 5 below.

Table 5 The change of lesson structure in the materials

Before the experts' validation	After the experts' validation
1. Before reading about what's in	1. Before reading about what's in
your community	your community
2. Reading strategy	2. Reading strategy
3. Understand the language	3. <u>Practice some more</u>
4. Vocabulary note	4. Understand the language
5. Read about what's in your	5. Vocabulary note
community	6. Read about what's in your
6. Let's check your understanding	community

about what's in your community

- 7. Practice some more
- 8. Community-based task
- 7. Let's check your understanding about what's in your community
- 8. Community-based task

The table 5 indicates the change of lesson structure in 'task 7: Practice some more' to be 'task 3: Practice some more'.



Figure 6 Task order before experts' evaluation

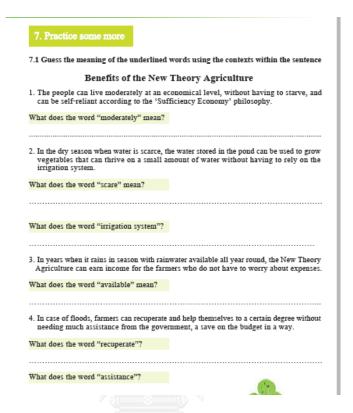
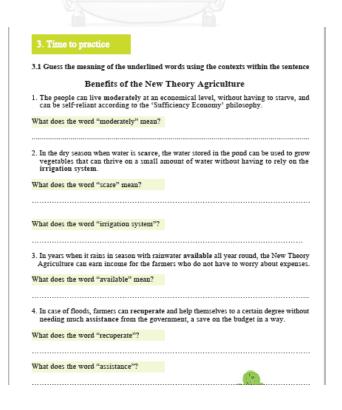


Figure 7 Task order after experts' evaluation



3.5.2 Phase 2: The implementation and evaluation of community-based materials

The second phase consisted of 2 stages to be applied.

Stage 4: The Implementation of community-based materials

Step 15: Administering pre-test of both tests in 2 class periods in the first week

The pre-tests of English reading ability test and local cultural knowledge test were administered in the first week of the semester in order to find the mean scores of both tests from the 44 local students.

Step 16: Implementing community-based materials for 1 semester

The researcher implemented community-based materials for 10 weeks, 2 periods a week, and each period had 50 minutes. However, due to many school activities, make-up classes were made in some weeks.

Stage 5: The Evaluation of effectiveness of the developed community-based

Materials

Step17: Evaluate the effectiveness of the community-based materials

At the 12th week of the semester, the post-tests of English reading ability test and local cultural knowledge test were administer to find the mean scores of the local students after the implementation of community-based materials.

Step 18: Write up the results and the findings

The researcher reported the results and findings of the study.

3.6 Data Collection

In this step, the data collection of this study was conducted between November 2014 to the middle of February 2015 which was in the second semester of academic year 2014. The data collection was divided into 3 phases: before, during, and after the experiment.

The entire experiment of implementing community-based materials lasted for 12 weeks. In phase 1 of the data collection, the course orientation was introduced to inform the students of the purpose and the overview of the course. Then, both English reading ability test and local cultural knowledge test were administered in 2 separated class-times within the first week of the semester. In phase 2 of the data collection, the developed community-based materials was implemented for 10 weeks. In phase 3 of the data collection, English reading ability test and local cultural knowledge test were administered to the students again as post-tests in order to examine the students' English reading ability and local cultural knowledge. The data collection outline is illustrated in Table 6.

Table 6 Timeline of data collection

Phase	Week	Procedure
Before the implementation of Community-based Materials	Week 1	 Pretest of English reading ability test Pretest of local cultural knowledge test
2. During the implementation of Community-based Materials	Week 2 - 11	The implementation of community-based materials
3. After the implementation of Community-based Materials	Week 12	 Posttest of English reading ability test Posttest of local cultural knowledge test

3.7 Data Analysis

Data Analysis for research question 1

Research question 1 is concerned with the needs from 3 groups of local stakeholders (local students, local English teachers, and local wisdoms) in the designing and developing of the community-based materials for upper secondary students. To respond to the question, a needs analysis questionnaire was designed to find the needs and opinions of the local stakeholders. Descriptive statistics was used to report mean and standard deviations. The results were used to design both physical aspects and content for the community-based materials of the course.

Data Analysis for research question 2

Research question 2 is concerned with the effectiveness of the community-based materials on the students' English reading ability. To respond to this question, both mean scores of pre and post-tests of English reading ability test were compared, and they were analyzed by using a paired sample t-test in order to find the difference between the mean scores between pre and post-tests of English reading ability score of the students. Lastly, Cohen's d was used to calculate the effect size of the treatment.

Data Analysis for research question 3

Research question 3 is concerned with the effectiveness of community-based materials on the students' local cultural knowledge. To respond to this question, both mean scores of pre and post-tests of the local cultural knowledge test were compared, and they were analyzed by using a paired sample t-test in order to find the difference between the mean scores between pre and post -tests of local cultural knowledge scores of the students. Lastly, Cohen's d was used to calculate the effect size of the treatment.

3.8 Research Timeline

This research was conducted through scientific research procedures. The researcher had conducted literature review from May to December 2013. Then, the researcher wrote research proposal from January to March 2014. Next, the researcher had constructed the research instruments then validated them from January to September 2014. After that, the researcher conducted the experiment, collect research data, and analyze the data from October 2014 until January 2015. Lastly, the research wrote and published the thesis from January to November 2015.

3.9 Summary

The main purpose of this study was to examine whether community-based materials improved the students' English reading ability and local cultural knowledge in Thawi Watthana District, Nong Khaem District (Bangkok Province), and Phutthamonthon District (Nakhon Pathom Province). The research had conducted with twelfth grade students at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School, Bangkok, for 12 weeks in the academic year of 2014. Community-based materials was based on the concept of materials development by Tomlinson (2011), reading instruction by Grabe and Stoller (2014) and communitybased education by Melaville et al. (2006). The research design for this study was a single-group pre-test and post-test experiment which compared the students' mean scores in English reading ability test and local cultural knowledge test of both before and after the implementation of community-based materials. The research also explored and gathered the needs and the opinions of 3 main stakeholders in the community (the students, the local English teacher, and the local wisdoms) in order to use as information to construct community-based materials through the questionnaire. Lastly, the data obtained from the questionnaire were calculated to find mean scores and standard deviations.

Chapter IV

Results

This chapter reports both quantitative results of the 3 research questions as follows. 1) What are the needs in developing community-based materials for upper secondary school students? The result of the first research question were acquired through community-based questionnaire investigating needs and preferences from the 3 main stakeholders (local students, local English teachers, and local wisdoms) As a result, each category of the stakeholders needed to answer questions in the questionnaire. 2) To what extent do community-based materials enhance English reading ability for upper secondary school students? The results of the second research question were analyzed from the mean score, standard deviation, and t-value of pre and post-test of English reading ability test. 3) To what extent do community-based materials enhance local cultural knowledge for upper secondary school students? The results of the third research question were analyzed from the mean score, standard deviation, and t-value of pre and post-test of local cultural knowledge test.

From the research questions, the analysis of the data is presented in 3 parts as follows. The first part is to answer the first research question. The second part is to answer the second research question. Lastly, the third part is to answer the third research question.

4.1 Results of the first research question

The first research question - What are the needs in developing community-based materials for upper secondary school students?

The first research question investigated the needs toward the community-based materials from the concerned stakeholders: the local students, the local English teachers, and the local wisdoms. Therefore, the questionnaire is categorized into 3 groups which are 1) questionnaire for the local students, 2) questionnaire for the local

English teachers, and 3) questionnaire for local wisdoms. The results of each stakeholder's questionnaire are presented respectively. Moreover, each category of questionnaire has 3 components: 1) personal information, 2) personal physical preference and task type toward community-based materials, and 3) personal preference toward community-based materials' reading topics.

4.1.1 The results of the questionnaire from the local students



 Table 7 Demographic data of the local students

Gender	number of students	percentage
male	8	18%
female	36	82%
total	44	100%
Age		
16	0	0
17	9	20%
18	34	77.8%
other	1	2.2%
total	44	100%
Former address		
Thawi Watthana, Bangkok	7	15.6%
Nong Khaem, Bangkok	17	37.8%
Phutthamonthon, Nakhon Pathom	6	13.3%
other	14	33.3%
total	44	100%
Current address		
Thawi Watthana, Bangkok	12	26.7%
Nong Khaem, Bangkok	15	33.3%
Phutthamonthon, Nakhon Pathom	6	13.3%
other	11	26.7%
total	44	100%
The duration of living in the current address		
1 - 5 years	3	6.7%
6 - 10 years	13	28.9%
more than 10 years	28	64.4%
total	44	100%
The duration of studying English		
1 - 5 years	1	2.2%
6 - 10 years	4	8.9%
more than 10 years	39	88.9%
total	44	100%

There were 44 twelfth grade student subjects (8 men and 36 women). Most of the subjects were at the age of 18. Sixty-six percent of the student subjects was born in Thawi Watthana, Nong Khaem, and Phutthamonthon Districts which is in

15 kilometers radius from the school where they were studying in. In addition, 73% of them was living in the areas by the time this study was being conducted. Lastly, 89% of the students has been studying English for more than 10 years.

Personal preferences for the materials

Table 8 Personal preferences for the materials of the local students

Question	strongly	agree	disagree	strongly
	agree			disagree
1. The purpose of reading English				
1.1 for daily life	23	19	2	0
1.2 for education	30	12	2	0
1.3 for entertainment	6	27	11	0
1.4 for future career	22	15	7	0
other	0	0	0	0
2. Preferred content type				
2.1 content and culture of native speakers	24	18	2	0
2.2 content and culture of learners	8	29	6	0
2.3 content and culture of other nations	23	19	2	0
other awnavnsaiwnii	ทย 0 ย	0	0	0
3. Preferred characteristics				
3.1 have enough empty space to take note	21	23	0	0
3.2 have enough answering space in exercise	13	28	3	0
3.3 have beautiful decoration	24	20	0	0
3.4 have related pictures and subtitles	21	22	1	0
3.5 have example before doing an exercise	20	16	6	2
other	0	0	0	0
4. Preferred task type				
4.1 individual task	19	16	7	2
4.2 pair task	24	29	1	0
4.3 group task	13	23	8	0
other	0	0	0	0

The purpose of reading English of the local students

- More than 90% of the student subjects responded that they studied English for their daily use.
- 96% of them strongly agreed or agreed that they studied English for academic purposes.
- 61% answered that they studied the language for recreational purposes while 25% disagreed.
- 82% of the students strongly agreed or agreed that they studied English for their future careers.

The preferred content type in the materials of the local students

The student subjects had mixed preferences on the materials' content and culture. They preferred to have native culture, their own culture, and other nations' cultures as their English materials' content.

- 96% strongly agreed or agreed to have English native culture as their materials' content.
- 92% strongly agreed or agreed to have their own culture.
- 82% strongly agreed or agreed to have other nations' cultures as their materials' content.

The preferred characteristics of the materials of the local students

- 52% of the subjects agreed that the materials should enough available space of taking note.
- 97% of the subjects strongly agreed or agreed that the materials should provide enough answering space in exercises.
- 91% strongly agreed or agreed that the materials should have beautiful decoration.
- 97% strongly agreed or agreed that the materials should have relevant pictures and subtitle in the materials.

 95% strongly agreed or agreed that the materials should provide an example on how to do each task.

The preferred task type of the materials of the local students

The student subjects preferred the mix of single, dual, and group tasks. The percentage of the students choosing each task was in insignificantly different: single task (79%), dual task (98%), and group task (82%).

4.1.2 The results of the questionnaire from the local English teachers

Personal information of the local English teachers

There were 3 local English teachers purposively selected to answer this questionnaire because they were living in the areas or in 15 kilometers radius from the school, and all of them have been teaching at the school for more than 10 years. Moreover, they were teaching in upper-secondary level during the time this study was being conducted.

Personal preferences for the materials

1. What is the purpose of teaching English?

All of the local English teachers responded to the question similarly that they taught English for daily-life use, educational purposes, and student's future career. However, all of the teachers rated teaching English for recreational purposes the least.

2. What is the preferred cultural content?

All of the local English teachers strongly agreed or agreed that they preferred to teach a mix of cultural content of western native culture, the students' own culture, and other nations' culture.

3. What are the preferred characteristics of the materials?

All of the local English teachers strongly agreed or agreed that the materials should have all of the characteristics mentioned in the questionnaire.

4. What are the preferred task types in the materials?

All of the local English teachers preferred the materials to have a mix of task types of single, dual, and group tasks. The percentage of chosen each task type was insignificant different.

4.1.3 The results of the questionnaire from the local wisdoms

Personal information of the local wisdoms

There were 3 local wisdoms purposively selected for this study. All of them were born or have been living in the area for more than 10 years, and they possess distinctive skills or specific knowledge about the community. Personal information of each local wisdom is stated as follows.

- 1. The first local wisdom was born and raised in Thawi Watthana District, Bangkok and the first director of Nawaminthrachinuthit Satriwitthaya Phutthamonthon School. Now, he is a local farmer and director of the New Theory Agriculture School. The school was established to be a learning and research center on his land of 25 rai.
- 2. The second local wisdom was an abbot of Komut Phutarungsee Temple which is in Thawi Watthana District, Bangkok. He was born in Ang Thong Province and has become a monk since he was only 9. Then he moved to be a reverend at the temple in 2002. Under his governance, the temple has become more well-known to outsiders through regular religious activities.
- 3. The last local wisdom is was born and raised in Thawi Watthana District, Bangkok. He has a farm of 12 rai conducting an organic farm

without the use of pesticide and chemical fertilizer and sells his products to several local markets.

4.1.4 Summarized results on reading topics of community-based questionnaire

The researcher summarizes the questionnaire results from all of the 3 stakeholders on personal preferences on reading topics for community-based materials. The summarized results on reading topics are shown in tables below.

Table 9 The results on Local attractions

Reading topic	Local	Local	Local	Range
	student	English	wisdom	
	(n=44)	teacher	(n=3)	
		(n=3)		
Mahidol University Salaya	29	1	1	1
Campus	(65.9%)	(33.3%)	(33.3%)	1
Khlong Maha Sawat	2	1	2	2
(Maha Sawat Canal)	(4.5%)	(33.3%)	(66.6%)	2
Axis Road (Utthayan Road)	4	1	0	3
	(9%)	(33.3%)	U	3
The House of Museum	4	0	0	4
	(9%)	<u> </u>		
Others	(6.8%)	0	0	5
Thai Film Museum	2 (4.5%)	ลัย 0	0	6
CHULALONG	(4.3%)	RSITY		

According to table 7, it shows that the majority (62%) of the respondents preferred 'Mahidol University Salaya Campus' as the reading topic for local attractions in community-based materials.

Table 10 The results on local history

Reading topic	Local student (n=44)	Local English teacher (n=3)	Local wisdom (n=3)	Range
History of the Great Flood 2011	22 (50%)	2 (66.6%)	3 (100%)	1
History of Nawaminthrachinuthit Satriwitthaya Phutthamonthon School (Satriwitthaya 3)	14 (31.8%)	0	0	2
Thai Film Museum	7 (15.9%)	0	0	3
History of Salaya Sub-district and Maha Sawat Canal	1 (2.2%)	1 (33.3%)	0	4

According to table 8, it shows that the majority (54%) of the respondents preferred 'History of the Great Flood 2011' as the reading topic for local history in community-based materials.

Table 11 The results on religion

Reading topic	Local student (n=44)	Local English teacher (n=3)	Local wisdom (n=3)	Range
Important religious symbols and	26	3	2	1
places in Buddhamonthon	(59%)	(100%)	(66.6%)	
The Presiding Buddha Statue of	12	O O	0	2
Buddhamonthon	(27.2%)	13111		
Visakha Bucha Day at	4	0	0	3
Buddhamonthon	(9%)			
An inauguration ceremony at	2	0	1	4
Puranawat Temple	(4.5%)		(33.3%)	

According to table 9, it shows that the majority (62%) of the respondents preferred 'Important religious symbols and places in Buddhamonthon' as the reading topic for religion in community-based materials.

Local Local Reading topic Local Range student English wisdom (n=44)teacher (n=3)(n=3)3 The New Theory Agriculture 23 1 2 (52.2%)(66.6%)(100%)Orchid plantation 2 11 (25%)(33.3%)Lotus farm 0 3 (18.1%)Maha Sawat Canal Tour 0 0 4 (4.5%)

Table 12 The results on local knowledge

According to table 10, it shows that the majority (56%) of the respondents preferred 'The New Theory Agriculture' as the reading topic for local knowledge in community-based materials.

4.2 Result of the second research question

The second research question - to what extent do community-based materials enhance English reading ability for upper secondary school students?

Hypothesis – the post-test mean score of English reading ability test will be higher than the pre-test mean score with a significant level of 0.05.

The purpose of the second research question is to find if community-based materials has improved the students' reading ability using English reading ability test. English reading ability test was used to evaluate reading ability taught in community-based materials such as ability to find main idea, ability to identify facts from the passage, ability to make inference from the passage, ability to evaluate the information, and ability to determine word meaning. The results of English reading ability test mean scores of pre and post-test, standard deviation, and t-values of the students are shown in table 11.

	\overline{x}	Min	Max	Mean difference	S.D.	T-value	df.	Sig.
Pre-test	10.34	3	16		2.74			
Post-test	19.63	10	29	9.29	4.66	-12.59	43	.00

Table 13 The statistical results of English reading ability test

The results of table 11 show the mean score of the post-test of English reading ability ($\bar{x}=19.63$) which is higher than the pre-test mean score ($\bar{x}=10.34$). The mean score of the post-test is higher than the mean score of the pre-test by 47.33%. The total score of English reading ability test is 30, and the mean difference is at 9.29. Moreover, the standard deviation of the pre-test is 2.44 and the post-test is 4.66. The T-value is -12.59 with a degree of freedom of 43 (n = 44). From the results, it can be concluded that there is a significant difference between the pre- and post-test mean score of English reading ability test at a significant level (p < .05). Therefore, the hypothesis is acceptable because the students' English reading ability has improved significantly after the implementation of community-based materials.

Furthermore, the researcher used Cohen's d to calculate the magnitude of the effect size of Fisher & Frey's gradual release of responsibility model on the students' English reading ability. According to Cohen (1998), the effect size value is classified as follows.

Table 14 The classification of effect size value by Cohen (1998)

d	Interpretation			
0.00 - 0.10	No effect			
0.20 - 0.40	Small effect			
0.50 - 0.70	Moderate effect			
$0.80 \ge 1.00$	Large effect			

The effect size of the pre and post of English reading ability test of the students was at 0.77. This could be that it had moderate effect according to Cohen (1998).

^{**} p < 0.05

4.3 Result of the third research question

The third research question - to what extent do community-based materials enhance local cultural knowledge for upper secondary school students?

Hypothesis – the post-test mean score of local cultural knowledge test will be higher than the pre-test mean score with a significant level of 0.05.

The purpose of the third research question is to find if community-based materials has improved the students' local cultural knowledge using local cultural knowledge test. Local cultural knowledge test was used to evaluate local cultural knowledge taught in community-based materials such as ability to recognize local knowledge, sense of appreciation toward community value, and sense of active and good citizenship. The results of local cultural knowledge mean score of pre and post-test, standard deviation, and t-values of the students are shown in table 13.

Table 15 The statistical results of local cultural knowledge test

	\overline{x}	Min	Max	Mean difference	S.D.	T-value	df.	Sig.
Pre-test	12.97	9	18	4.14	2.31	-16.3	43	.00
Post-test	17.11	13	22		2.30			

^{**} p < 0.05

The results of table 13 show the mean score of the post-test of local cultural knowledge ($\bar{x}=17.11$) which is higher than the pre-test mean score ($\bar{x}=12.97$). The mean score of the post-test is higher than the mean score of the pre-test by 24.20%. The total score of local cultural knowledge test is 25, and the mean difference is at 4.14. Moreover, the standard deviation of the pre-test is 2.31 and the post-test is 2.30. The T-value is -16.3 with a degree of freedom of 43 (n = 44). In addition, it has the effect size of 0.66 which, according to Cohen (1988), has medium effect size. From the results, it can be concluded that there is a significant difference between the pre-and post-test mean score of local cultural knowledge test at a significant level (p < .05). Therefore, the hypothesis is acceptable because the students' local cultural

knowledge has improved significantly after the implementation of community-based materials.

Similar to English reading ability test, the researcher used Cohen's d to calculate the magnitude of the effect size of Fisher & Frey's gradual release of responsibility model on the students' local cultural knowledge test.

The effect size of the pre and post of local cultural knowledge test of the students was at 0.66. This could be that it had moderate effect according to Cohen (1998).

4.4 Summary

This chapter reports the findings acquired from the 3 research questions concerning with community-based materials development, the students' improvement on English reading ability, and on local cultural knowledge.

For the finding of the first research question, the principles of materials development of Tomlinson (2011) and reading instruction of Grabe and Stoller (2014) were used to design community-based materials according to the results from the community-based questionnaire. For the purpose of studying/teaching English, the students wanted to study English for academic purpose the most while the teacher preferred to teach English for daily-life use. Therefore, community-based materials must contain skills needed for the students to pursuit their academic goals but also need to have authentic language found in the daily life. For preferred characteristics, the materials should contain all of the characteristics mentioned in the questionnaire such as enough answering space, beautiful decoration, relevant pictures and subtitle, and example prior to the task. For preferred task type, the students preferred dual task type while the teachers preferred a mix of task types. In terms of preferred content, there are 4 reading topics from each reading theme selected from the majority of the stakeholders according to the summarized results from community-based questionnaire. The 5 results of selected reading topics are shown as follows.

- 1. Local attraction Mahidol University Salaya Campus (62%)
- 2. Local history History of Nawaminthrachinuthit Satriwitthaya Phutthamonthon School*
- 3. Local history The Great Flood 2011 (54%)
- 4. Religion The important religious symbols and places in Buddhamonthon (62%)
- 5. Local knowledge The New Theory Agriculture (56%)

*Remark: With a request from local English teachers, the researcher put 'History of Nawaminthrachinuthit Satriwitthaya Phutthamonthon School' as an extra unit.

For the findings of the second research question, the results were obtained by using English reading ability test and were statistically analyzed to test the hypothesis. The results of the hypothesis concern with the effects on the improvement of the grade 12 students' reading ability at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in Bangkok. Since the students' post-test mean score of English reading ability test was significantly higher (47.33% higher) than the pre-test mean score, the hypothesis is acceptable.

For the findings of the third research question, the results were obtained by using local cultural knowledge test and were statistically analyzed to test the hypothesis. The results of the hypothesis concern with the effects on the improvement of the grade 12 students' ability to recognize local knowledge, sense of appreciation toward community value, and sense of active and good citizenship at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in Bangkok. Since the students' post-test mean score of local cultural knowledge test was significantly higher (24.20% higher) than the pre-test mean score, the hypothesis is acceptable.

In conclusion, it can be concluded that community-based materials could improve the students' English reading ability and local cultural knowledge due to 3 reasons. First, the students were more motivated to learn because their needs were taken into the account in terms of the materials' aspects, task type, and content. Second, the materials contains necessary reading strategies and practices to help them

comprehend English reading better. Lastly, the materials has local cultural knowledge which help them understand their community better including increase their awareness as well as enhance them to be better citizens toward the community.



Chapter V

Conclusion, Discussion, and Recommendation

This chapter summarizes this study in 4 parts. The first part is a brief summary of the study. It reviews the objectives, the research question, the research design, and the research methodology. The second part is discussion reviewing community-based materials development, English reading ability, and local cultural knowledge. The third part talks about pedagogical implication. The last part provides recommendation for the further study.

5.1 Summary of the study

The objectives of the study are to investigate 1) the needs for developing community-based materials for upper secondary school students, 2) the effectiveness of community-based materials on enhancing English reading ability for upper secondary school students, and 3) the effectiveness of community-based materials on enhancing local cultural knowledge for upper secondary school students in the western part of Bangkok (Thawi Watthana, Nong Khaem, and Phutthamonthon District).

Therefore, the study investigates the results from the following research questions.

- 1. What are the needs in developing community-based materials for upper secondary school students?
- 2. To what extent do community-based materials enhance English reading ability for upper secondary school students?
- 3. To what extent do community-based materials enhance local cultural knowledge for upper secondary school students?

The research design of the study is a single group of pre-test and post-test of experiment design was conducted. Community-based questionnaire, English reading ability test, and local cultural knowledge test were used to obtain information to determine English reading ability and local cultural knowledge of the students in twelfth grade in science program at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School. The study is the comparison between the mean scores of English reading ability test and local cultural knowledge before and after the implementation of community-based materials. The sample in this study was 44 twelfth grade students in science program at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School, and 3 local English teachers at the school, and 3 local wisdoms in the areas.

The research procedure in this study was designed into 2 phases: 1) The Development of Community-based materials and 2) The Implementation and Evaluation of Community-based Materials. Within the 2 phases, there are 5 stages and 18 steps.

5.1.1 Phase 1: The Development of Community-based Materials

To address this phase of developing community-based materials, 3 stages were conducted as follows.

- 1. Exploring Stage
- 2. Needs Analysis
- 3. The Design of Research Instruments

Stage 1: Exploring Stage

There are 3 areas that need to be explored which are materials development, community-based education, and reading instruction. For materials development, Tomlinson (2011) was explored. For community-based education, Melaville, Berg, and Blank (2006) were analyzed. For reading instruction, Grabe and Stoller (2014) were reviewed.

Stage 2: Needs Analysis

The researcher identified population and samples of this study. The population was 470 twelfth grade students at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in academic year 2014. The samples were 44 twelfth grade students in science program. For local English teachers, 3 local English teachers teaching at the school were purposively chosen to answer the questionnaire. For local wisdom, 3 local wisdoms living in the areas were purposively picked due to their roles and knowledge about the community.

The community-based questionnaire was revised from Ratchaporn Rattanaphumma (2006) and Sophia Arwae (2013). The purpose of the questionnaire was to investigate the opinions and needs toward community-based materials from 3 local stakeholders (local students, local English teachers, and local wisdoms).

After developing community-based questionnaire, it was validated by 3 experts from 3 different fields (2 university English professors and 1 local English teacher). After the validation, the questionnaire was re-adjusted according to the experts' suggestions before piloting with 40 students, 3 local English teachers, and 3 local wisdoms.

Stage 3: The Design of Research Instruments

English reading ability test and local cultural knowledge test were designed to be administered before and after the implementation of community-based materials to assess reading ability and local cultural knowledge.

After both tests were developed, they were validated by 3 experts and re-adjusted accordingly before they were pilot tested with 40 twelfth grade students.

After the pilot testing, both tests were calculated for reliability using Kuder-Richardson 20 (KR-20) which proven both tests to be reliable. English

reading ability test had KR-20 value at 0.86 which could be interpreted as reliable, and all of the 30 test items were at satisfactory level. Local cultural knowledge test had KR-20 value at 0.84 which could be interpreted as reliable, and all of the 25 test items were at satisfactory level.

Community-based materials was designed using data obtained from community-based questionnaire. The researcher developed 2 chapters and submitted them to 3 experts for validation. After experts' validation, there were some minor changed to the materials. Then, the researcher continued develop a complete community-based materials which contained 5 chapters.

5.1.2 Phase 2: The Implementation and Evaluation of Community-based Materials

Stage 4: The Implementation of community-based materials

Community-based materials was implemented with 44 twelfth grade students in science program at Nawaminthrachinuthit Satriwitthaya Phutthamonthon School in the second semester of academic year 2014. During the first week of the semester, English reading ability test and local cultural knowledge test were pre-tested in different class periods in order to find the mean scores of both tests. The pre-test mean score of English reading ability test was at 10.34 out of 30, and local cultural knowledge test was at 12.97 out of 25.

For 10 weeks of the materials' implementation, the researcher witnessed that many of the students actively participated in sharing their opinions and discussing matters in some of the topics during the class because they had direct experiences with some of the matter. For example, most of the students were affected directly by the Great Flood in 2011. Accordingly, this implies that community-based materials encouraged the students' participation in the class due to the direct relation with students' experiences. However, since community-based materials was implemented in the second semester, there were many school activities and many

universities entrance examinations. As a result, some classes had to be cancelled, but the students were willing to have make-up classes.

Stage 5: The Evaluation of effectiveness of community-based Materials

Community-based materials was evaluated its effectiveness through 2 instruments: English reading ability test and local cultural knowledge test. Both tests were administered at the end of the semester in different class periods. The mean score of post-test of English reading ability is at 19.63 out of 30 which was an effective value and can be interpreted as 47.33% higher than the mean-score of the pre-test (10.34). Therefore, it can be concluded that community-based materials had significantly improved the students' English reading ability after the implementation of the materials.

The post-test mean score of local cultural knowledge test was at 17.11 out of 25 which was an effective value and can be interpreted as 24.20% higher than the pre-test (12.97). Thereby, it can be concluded that community-based materials had improved the students' local cultural knowledge after the implementation of the materials.

In conclusion, the findings indicate that community-based materials could improve the students' English reading ability and local cultural knowledge. As a result, they could read more effectively using reading strategies practices during the implementation of community-based materials. Furthermore, the students knew better about their community's history and knowledge, have better sense of appreciation, and have more sense of good and active citizenship toward their community.

5.2 Discussion

According to the findings, they are discussed based on 3 main factors which are 1) needs analysis, 2) English reading ability, and 3) local cultural knowledge.

5.2.1 Needs analysis

Tomlinson (2011), Grabe and Stoller (2014), and Melaville et al. (2006) emphasize on conducting a needs analysis to fulfill learners' and other stakeholders' needs accurately because each stakeholder has different needs, especially in this study. For example, the students wanted to improve their English solely for academic purposes, but the teachers and the local wisdoms also wanted the students to be more aware and appreciate about their community's value and history. Therefore, the needs analysis was conducted to all of the 3 local stakeholders. As a result, the students were more motivated to learn English reading through communitybased materials because their needs and opinions were taken into account in terms of physical aspects, task type, and content. Accordingly, the students felt more familiar and less anxious because they chose their own materials. More importantly, they were connected to the content because of similar their background knowledge to the content. The local teachers would feel more comfortable to use the materials because they were involved in the materials' development process. Lastly, the local wisdoms had selected important local history and local knowledge for the students to learn in order to benefit the students' community as a whole.

5.2.2 English reading ability

The post-test mean score of English reading ability test was higher. This might be because the materials were carefully designed according to the 9 principles of teaching English reading proposed by Grabe and Stoller (2014) and following the results of the needs analysis conducted earlier.

1. The materials integrated various kinds of practices in every lesson such as background-knowledge stimulations, grammatical practices, and

- comprehension practices. Therefore, the students became more competent in both language and content after each practice.
- 2. Community-based materials was designed to be interesting and attractive with pictures which were relevant to the students' background knowledge. This increased students' motivation because having attractive decoration, relevant pictures, and subtitles helped them comprehend both language and content easier. They used those characteristics as clues in their comprehension process.
- 3. Students had some choices of what they want to read. Therefore, the questionnaires were distributed to the students to investigate the needs and opinions of them toward the materials' physical aspects, task type, and content. The students felt less anxious and more motivated toward the materials because they were connected to it.
- 4. Community-based materials introduced students' the necessary reading skills such as skimming and scanning and also provides practice for students to practice on each skill in each lesson. Thereby, each reading strategy was introduced and explained explicitly. Moreover, a small reading practice was structured after the introduction of each reading strategy, so the students had the chance to practice the strategy instantly.
- 5. Most of the reading passages were connected to the students because they chose their own reading topic from the questionnaire. This helped them utilize reading strategies and comprehend the texts better because of their background knowledge.
- 6. Reading lesson was structured in 3 stages pre-, during, and post-reading tasks. Therefore, the students learnt every lesson systematically with sufficient knowledge of background information, reading strategies, and language aspect.
- 7. Students experienced comprehension success. Accordingly, tasks in community-based materials were designed to suit with the students' language proficiency; as a result, the students could accomplish from doing tasks in the materials.

- 8. Students should be expected to read in every class. Therefore, there were 5 chapters in the materials to be learned in 10 weeks, so the students had to reading in every class.
- 9. The materials should facilitate the development of reading abilities such word recognition, reading fluency, and motivation to students to read. Consequently, the students learned both language and content which gave them language knowledge, critical thinking skills, and knowledge and awareness about their community. This made them become more strategic readers.

There are studies from Schneider (2005), Rattanaphumma (2006), and Arwae (2013) suggesting that using community-based materials containing authentic language and content related to students and their community can improve English proficiency especially in reading ability because the 3 researchers mentioned earlier used community-based materials as one of their instructional mediums. Moreover, it was found by Arwae (2013) that using content related to students' background knowledge and community could improve students' motivation in learning English reading.

The concept of new literacies was integrated in community-based materials to enhance the students' language proficiency as well as local cultural knowledge. In unit 5 (The New Theory Agriculture: The Solution for Modern Farmers), a video clip link was attached in the unit where the students could enter the link and see a video about the new theory agriculture to have background knowledge before continuing to the next task. As a result, the students could better comprehend the concept of the new theory agriculture because they could see both video and sound related to the content. Even though most of the students did not have direct background knowledge about farming, they could understand better about farming using the new theory agriculture through the video clip. In addition, they could learn related vocabulary from the video as well.

Figure 8 The integration of new literacies in the materials

"The New Theory Agriculture: The Solution of Modern Farmers"

LOCAL KNOWLEDGE

Text type : expository
Reading skills : Prediction from visual materials and guessing meaning from contexts

A. Look at the pictures. What can you guess about The New Theory Agriculture? Read the sentences. Write T (true) or F (false).

Viewing Using pictures to predict

Pictures can help you make predictions about what the vied is about. Look at the pictures for clues.





- 1. The New Theory Agriculture was a research project conducted by Thailand's Ministry of Agriculture.
 - 2. The New Theory Agriculture is suitable for famers with a small amount of land.
- 3. The New Theory Agriculture relies on growing a single crop.
- 4. Having water storage in farmland is the key of success for the New Theory Agriculture.
- 5. There is a variety of agricultural activities in farms where practicing the New Theory Agriculture

B. Watch the online video in Youtube. Were your predictions correct?

- 1. Go to Youtube.com
- 2. Type "His Majestys New Theory on Managing Agricultural land" in the search box
- 3. Watch it!!!!!

5.2.3 Local cultural knowledge

The students' post-test mean score of local cultural knowledge were higher because community-based materials included local cultural knowledge and local community as the materials' content which was suggested by Mckay (2003).

According to the concept of community-based education by Melaville et al. (2006), they suggest that knowledge comes from social interaction between learners and local wisdoms. However, due to the school's policy on student safety, the lesson must only be conducted inside the school. Therefore, community-based materials acted as a medium connecting the students and the local wisdoms together because the content was from many local wisdoms' experience and knowledge from different fields. As a result, the students received local history and knowledge from the local wisdoms through text. Moreover, at the end of each chapter in the materials, there is a community-based task where the students needed to conduct extra research, think critically, and interact both directly and indirectly with sources of information in order to finish the task. In the end, they would become active citizens who take the best interest for their community as a priority (See Appendix R).

Melaville et al. (2006) also states that memory is influenced by experience, prior learning, and practice. Community-based materials provided local history and knowledge from major events happened in the community and experience from the local wisdoms. In addition, there are community-based tasks in the materials for the students to achieve by researching and interacting with the community through various activities such as express their opinions critically to improve their community or researching from local wisdoms for information.

5.3 Limitation of the study

There were 3 limitations of the study: 1) lost of subject, 2) duration of the study, and 3) financial constraint.

5.3.1 Lost of subject

When the researcher was trying to identify local wisdoms for the study, the researcher found a very knowledgeable local wisdom who was willing to participate in the study. He was a local farmer who was born and owed a large lotus farm exporting lotuses to many parts of Thailand. Unfortunately, 3 weeks after an informal interview, he had an accident which he was found dead at the scene. Therefore, in an actual research, the researcher had to find another local wisdom to replace the lost one.

5.3.2 Duration of the study

The study was conducted in the second semester in academic year 2015. Normally, in the second semester, there are many school activities, holidays, and university entrance examinations such as sport days, new-year holidays, and Ordinary National Examination Test (O-NET) for 12 grade students. Therefore, some classes were interrupted with these events. That was the reason why the researcher chose 6/1 students to be the samples because they were willing to have make-up classes for the time lost. As a result, make-up classes were held after the school finish for an hour for 3 times.

5.3.3 Financial constraint

The actual community-based materials was printed in color, and there were approximately 60 pages including front and back covers. Each materials costed 670 baht which was not practical to be distribute to 44 students. Thereby, the researcher printed and copied the materials in black and white A4 papers to save the cost. However, the students had the full-version of materials in PDF file which was uploaded by the researcher, so the students could view the materials in color.

5.4 Pedagogical implication

The results of this study led the researcher to the following suggestions with regards to the development of community-based materials.

First, for materials developers and language teachers, materials' content and learning tasks should be relevant to the students' interests, background knowledge, and local culture because it was found that those factors could improve the students' English reading ability and local cultural knowledge significantly. Therefore, a needs analysis should be conducted toward local stakeholders in the students' community such as local teachers and local wisdoms before writing the materials.

Second, teachers should teach reading abilities explicitly, so students can have clearer view of how to apply the reading abilities in the real situation (Grabe & Stoller, 2014). Moreover, Li and Wilhelm (2008) stresses that teaching reading strategies explicitly helps learners develop metacognitive awareness of how to use those strategies. As a result, learners have better chances of gain deep reading comprehension.

Third, materials developers and teachers should structure a small reading exercise to practice using a reading ability after an introduction of the reading ability.

Fourth, materials developers should provide relevant images to stimulate students' background knowledge as well as providing a subtitle under the picture as a clue referring to the results of community-based questionnaire.

Fifth, materials developers should design a variety of community-based task to promote students to become active learners by encouraging them to engage with local resources and local environment such as talking to local wisdoms or researching in local attractions. As a result, they will have more sense of appreciation and sense of active citizenship toward their community.

Sixth, materials developers and teachers should make their own communitybased materials to suit with their learners and local area by using this materials as a platform.

Seventh, local administrators should encourage more on developing community-based materials to suit with local stakeholders' needs and local culture in order to improve both English proficiency and preserve local cultural knowledge in their areas.

5.5 Recommendations for further studies

According to the research results discussed earlier, there are 3 suggestions proposed for further research.

First, since the findings of this study are relevant to furthest western side of Bangkok, it is hard to generalize the results with students in other parts of Bangkok. Therefore, a further research should be expanded in terms of population and areas, so it can be generalized with students in other parts of Bangkok. It may be possible to develop a community-based materials using content of whole Bangkok.

Second, a further research should include qualitative data such as interviewing the local stakeholders such as local students, local teachers, and local wisdoms in order to acquire more in-depth information and triangulate with quantitative data.

Third, since this community-based materials emphasizes more on existing culture and local knowledge in the community, a further study should include the community's transition in terms of demographic aspect, economic aspect, landmarks, and local way of life.

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APPENDICES



จุฬาลงกรณ์มหาวิทยาลัย Chulalongkorn University

Appendix A: Community-based materials in English

Questionnaire for Local Student

A DEVELOPMENT OF COMMUNITY-BASED MATERIALS TO ENHANCE THE ENGLISH READING ABILITY AND LOCAL CULTURAL KNOWLEDGE OF UPPER SECONDARY SCHOOL STUDENTS

Direction: The participants for this questionnaire are Nawamintharachinathit Satriwitaya Phutthamonthon grade 12 students. The questionnaire is divided into 3 parts as follows.

- Part 1 Questionnaire to acquire personal information
- Part 2 Questionnaire to acquire preferred activities, task types, and personal preference for materials development
- Part 3 Questionnaire on preferred learning topics in community-based materials

The researcher would like to express his gratitude for you kindness for giving your opinions and comments in this research to develop a teaching materials for English subject. The objective of this research is to enhance English reading ability and local cultural knowledge of the upper secondary school students. Therefore, it is essential to complete this questionnaire. Lastly, your comments and opinions will only be used for this research, and they will not affect your score in English subject which you are in.

จุฬาลงกรณีมหาวิทยาลัย Chulalongkorn University

Part 1: Personal information of the participant

Direction: Please fill out the information about the partic

1.	Age	$\Box 16$	$\Box 17$	$\Box 18$	\Box others
2.	Sex	\square Male		\Box Female	
3.	Former address	District			
	Province				
4.	Current address	District			
	Province				
5.	How long have you l	ived in yo	our current addre	SS	
	$\Box 1 - 5$ years		$\Box 6 - 10$ years	\square more than	10 years
6.	How long have you s	studied Ei	nglish?		
	$\Box 1 - 5$ years		$\Box 6 - 10$ years	\square more than	10 years

Part 2 Questionnaire on preferred learning topics in the community-based materials (Please select only 1 choice that you are interested in each conceptual theme)

theme)	
1. Loca	l attraction and educational place
	☐ Khlong Maha Sawat (Maha Sawat Canal)
	□Utthayan Road
	☐ Mahidol University Salaya Campus
	☐ Museum House
	□Thai Movie Museum
	Others such as
	Please specify your reason
2. Loca	l history and important historical event
	☐ History of Satriwit 3 School
	☐ History of Salaya Sub-district and Khlong Maha Sawat (Maha Sawat Canal)
	☐ History of Thawi Watthana District and Nong Khaem District
	☐ History of the Great Flood 2011
	Others such as
	Please specify your reason
3. Relig	gion and local religious event
	☐ The presiding Buddha statue of Phutthamonthon
	☐ Significant religious symbols and places inside Phutthamonthon
	☐ Vaisakh Bucha Day event in Phutthamonthon
	☐ The burying of Loknimit at Komut Phutarangsee Temple
	☐ Others such as
	Please specify your reason
4. Profe	ession and local knowledge ARM LMMERSHY
	□Orchid growing
	□New Theory Agriculture
	☐ Maha Sawat Chanel Tour
	□Lotus farm
	Others such as
	Please specify your reason

Part 3: Questionnaire to acquire preferred activities, task types, and personal preference for materials development

Direction: Please make / under the number which you prefer. The number is divided into 4 levels

4	means	strongly agree/ like very much
3	means	agree/ like
2	means	disagree/ dislike
1	means	strongly disagree/ dislike very much

Question	4	3	2	1
1. What is your purpose of reading English				
for daily life				
for education				
for entertainment				
For future career				
Others such as				
2. How much do you like each content type in English teaching materials?				
Content and culture of native speakers				
Content and culture of learners				
Content and culture of other nations				
Others such as				
3. How much do you think each characteristic a teaching materials should have?				
Have enough empty space to take note				
Have enough answering space in exercises				
Have beautiful decoration				
Have related pictures and subtitles				
Have an example before doing an exercise				
Others such as				
4. How much do you like to complete each kind of task?				
To complete individually				
To complete in pair				
To complete in group				
Others such as				

Suggestion

Questionnaire for Local English Teacher

A DEVELOPMENT OF COMMUNITY-BASED MATERIALS TO ENHANCE THE ENGLISH READING ABILITY AND LOCAL CULTURAL KNOWLEDGE OF UPPER SECONDARY SCHOOL STUDENTS

Direction: The participants for this questionnaire are Nawamintharachinathit Satriwitaya Phutthamonthon English teacher. The questionnaire is divided into 3 parts as follows.

- Part 1 Questionnaire to acquire personal information
- Part 2 Questionnaire to acquire preferred activities, task types, and personal preference for materials development
- Part 3 Questionnaire on preferred teaching topics in community-based materials

The researcher would like to express his gratitude for you kindness for giving your opinions and comments in this research to develop a teaching materials for English subject. The objective of this research is to enhance English reading ability and local cultural knowledge of the upper secondary school students. Therefore, it is essential to complete this questionnaire. Lastly, your comments and opinions will only be used for this research.

จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

Part 1: Personal information of the participant

Direction: Please fill out the information about the participant

1. 2.			
3.		District	
4.	Province	ived in your current address	
	$\Box 1 - 5$ years	$\Box 6 - 10$ years	☐more than 10 years
5.	How long have you to	aught English?	
	$\Box 1 - 5$ years	\Box 6 – 10 years	☐more than 10 years

Part 2 Questionnaire on preferred teaching topics in the community-based materials (Please select only 1 choice that you are interested in each conceptual theme)

1 T	
1. L0	cal attraction
	☐ Khlong Maha Sawat (Maha Sawat Canal)
	Utthayan Road
	☐ Mahidol University Salaya Campus
	☐Museum House
	☐Thai Movie Museum
	Others such as
	Please specify your reason
2. Lo	cal history
	☐ History of Satriwit 3 School
	☐ History of Salaya Sub-district and Khlong Maha Sawat (Maha Sawat Canal)
	☐ History of Thawi Watthana District and Nong Khaem District
	☐ History of the Great Flood 2011
	Others such as
	Please specify your reason
3. Re	ligion and local religious event
	☐ The presiding Buddha statue of Phutthamonthon
	☐ Significant religious symbols and places inside Phutthamonthon
	☐ Vaisakh Bucha Day event in Phutthamonthon
	☐ The burying of Loknimit at Komut Phutarangsee Temple
	☐ Others such as
	Please specify your reason
4. Pro	ofession and local knowledge
., ,	□Orchid growing
	□ New Theory Agriculture
	☐ Maha Sawat Chanel Tour
	□Lotus farm
	□ Others such as
	— 2 2
	Please specify your reason

Part 3: Questionnaire to acquire preferred activities, task types, and personal preference for materials development

Direction: Please make / under the number which you prefer. The number is divided into 4 levels

4	means	strongly agree/ like very much
3	means	agree/ like
2	means	disagree/ dislike
1	means	strongly disagree/ dislike very much

Question	4	3	2	1
1. What is your purpose of teaching English reading				
for daily life				
for education				
for entertainment				
For future career				
Others such as				
2. How much do you like teaching each content type in English teaching materials?				
Content and culture of native speakers				
Content and culture of learners				
Content and culture of other nations				
Others such as				
3. How much do you think each characteristic a teaching materials should have?				
Have enough empty space to take note				
Have enough answering space in exercises				
Have beautiful decoration				
Have related pictures and subtitles				
Have an example before doing an exercise				
Others such as				
4. How much do you like your students to complete each kind of task?		,		
and or man.				
To complete individually				
To complete in pair				
To complete in group				
Others such as				

Suggestion

Questionnaire for Local Wisdom

A DEVELOPMENT OF COMMUNITY-BASED MATERIALS TO ENHANCE THE ENGLISH READING ABILITY AND LOCAL CULTURAL KNOWLEDGE OF UPPER SECONDARY SCHOOL STUDENTS

Direction: The participants for this questionnaire are Nawamintharachinathit Satriwitaya Phutthamonthon English teacher. The questionnaire is divided into 2 parts as follows.

Part 1 Questionnaire to acquire personal information

Part 2 Questionnaire on preferred teaching topics in community-based materials

The researcher would like to express his gratitude for you kindness for giving your opinions and comments in this research to develop a teaching materials for English subject. The objective of this research is to enhance English reading ability and local cultural knowledge of the upper secondary school students. Therefore, it is essential to complete this questionnaire. Lastly, your comments and opinions will only be used for this research.

จุฬาลงกรณ์มหาวิทยาลัย Chulalongkorn University

Part 1: Personal information of the participant

Direction: Please fill out the information about the participant

1.	Age			
2.	Sex	□Male	□Female	
3.	Former address	District		
	Province			
4.	Current address	District		
	Province		•••••	
5.	How long have you li	ved in your current address		
	$\Box 1 - 5$ years	$\Box 6 - 10$ years	\square more than 10 years	
6.	Level of education			
	\Box below back	nelor degree		
	☐ bachelor de	egree		
	\square above bach			
7.	7. What is your current occupation? (If you have a business, please skip to			
	question 9)		, 1 1	
	1 /			
		/.///?==°		
8.	Organization			
	Position			
9.	Please explain your ro	ole or position toward your con	mmunity	
		11		
		าสงแรมมั่มหาวิทยาสัย		
		ALONOVORU HUMPROTES		
		alliniskiikii.liniveksily		

Part 2 Questionnaire on preferred reading topics in the community-based materials (Please select only 1 choice that you are interested in each conceptual theme)

1. Local attraction	
☐Khlong Maha Sawa	t (Maha Sawat Canal)
□Utthayan Road	
☐ Mahidol University	Salaya Campus
☐Museum House	, 1
☐Thai Movie Museum	n
Others such as	
Please specify your rea	ason
2. Local history	
☐ History of Satriwit 3	3 School
☐History of Salaya Su	ub-district and Khlong Maha Sawat (Maha Sawat Canal)
☐History of Thawi W	atthana District and Nong Khaem District
☐ History of the Great	Flood 2011
Please specify your rea	ason
3. Religion and local religiou	is event
☐ The presiding Budd	lha statue of Phutthamonthon
☐ Significant religiou	s symbols and places inside Phutthamonthon
Vaisakh Bucha Day	v event in Phutthamonthon
☐The burying of Loki	nimit at Komut Phutarangsee Temple
☐ Others such as	
Please specify your rea	ason
4. Profession and local know	ledge CORN UNIVERSITY
☐Orchid growing	
□New Theory Agricu	lture
☐Maha Sawat Chanel	Tour
□Lotus farm	
☐Others such as	
Please specify your rea	ason

Appendix B: Community-based questionnaire in Thai

<u>แบบสอบถามนักเรียน</u>

เรื่อง

การพัฒนาสื่อการสอนวิชาภาษาอังกฤษโดยใช้ชุมชนเป็นฐานเพื่อเสริมสร้างทักษะการอ่าน ภาษาอังกฤษและความรู้วัฒนธรรมท้องถิ่นสำหรับนักเรียนชั้นมัธยมศึกษาตอนปลาย

คำชี้แจง ผู้ตอบแบบสอบถามนี้คือ นักเรียนชั้นมัธยมศึกษาปีที่ ๖ โรงเรียนนวมินทราชินูทิศ สตรีวิทยา พุทธมณฑล คำถามถูกแบ่งออกเป็น ๓ ส่วนดังนี้

ส่วนที่ ๑ เป็นแบบสอบถามเกี่ยวกับสถานภาพของผู้ตอบ

ส่วนที่ ๒ เป็นแบบสอบถามเกี่ยวกับการจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการของ ผู้เรียน

ส่วนที่ ๓ เป็นแบบสอบถามเกี่ยวกับหัวข้อเนื้อหาในสื่อการสอน

ในฐานะที่ท่านกรุณาให้ความอนุเคราะห์ในการประเมินและให้ข้อคิดเห็นในงานวิจัยเพื่อ พัฒนาสื่อการสอนวิชาภาษาอังกฤษ โดยมีจุดมุ่งหมายเพื่อเสริมสร้างทักษะการอ่านภาษาอังกฤษและ ความรู้วัฒนธรรมท้องถิ่นของนักเรียนระดับชั้นมัธยมศึกษาตอนปลาย ขอความกรุณาให้ท่านตอบ แบบสอบถามทุกข้อ ทั้งนี้ความเห็นของท่านจะนำไปใช้ในการประมวลเพื่อการวิจัยครั้งนี้เท่านั้นและ การตอบแบบสอบถามครั้งนี้จะไม่ส่งผลต่อคะแนนในวิชาภาษาอังกฤษที่ผู้ตอบกำลังศึกษาอยู่

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ส่วนที่ ๑. สถานภาพของผู้ตอบ			
คำชี้แจง โปรดเติมข้อความในช่อ	งว่างตามสภาพที่เป็นจริ	รงเกี่ยวกับตัวท่าน	
๑. อายุ 🗆 ๑๖ ปี	\square on $\mathbb{1}$		ี่⊋ ปี □อื่นๆ
๒. เพศ 🔲 ชาย	่□หญิง		
 ภูมิลำเนาเดิม เขต/อำเภอ 		•••••	จังหวัด
๔. ที่อยู่ปัจจุบัน เขต/อำเภอ			จังหวัด
๕. พักอยู่ที่อยู่ปัจจุบันเป็นเวลา		่ ๒-๑๐ ปี	🗆 มากกว่า ๑๐ ปี
 คุณเรียนภาษาอังกฤษมาแล้ว 	่ ๑-๕ ปี	่ ๖-๑๐ ปี่	🗌 มากกว่า ๑๐ ปี

ส่วนที่ ๒ เนื้อหาในสื่อการสอน (โปรดเลือก ๑ ตัวเลือกที่นักเรียน<u>สนใจ</u>ในแต่ละหัวข้อ) ๑. สถานที่ท่องเที่ยวและแหล่งเรียนรู้ □ถนนอักษะ ่ ่ มหาวิทยาลัยมหิดล วิทยาเขต ศาลายา ท่านพิพิสภัณฑ์ 🗌 พิพิธภัณฑ์หนังไทย อื่นๆ เช่น..... โปรดระบุเหตุผลในการเลือก ๒. ประวัติศาสตร์และเหตุการณ์สำคัญ 🗆 ประวัติโรงเรียนสตรีวิทย์ ๓ ประวัติตำบลศาลายาและคลองมหาสวัสดิ์ ประวัติเขตทวีวัฒนาและเขตหนองแขม 🗌 ประวัติมหาอุทกภัยปี ๒๕๕๔ อื่นๆ เช่น..... โปรดระบุเหตุผลในการเลือก ๓. ศาสนาและเหตุการณ์สำคัญทางศาสนาในชุมชน 🗆 องค์พระประธานพุทธมณฑล สัญลักษณ์ที่สำคัญทางศาสนาและสถานที่และสัญลักษณ์ทางศาสนาในพุทธมณฑล 🗆 งานวันวิสาขบูชาที่พุทธมณฑล 🗆 การฝังลูกนิมิตที่วัดโกมุทพุทธรังศี อื่นๆ เช่น..... โปรดระบุเหตุผลในการเลือก ๔. อาชีพและภูมิปัญญาในท้องถิ่น ่ □การปลูกกล้วยไม้ ่ การทำเกษตรกรรมทฤษฎีใหม่ การท่องเที่ยวคลองมหาสวัสดิ์ ุ □การทำนาขัว 🗌 อื่นๆ

โปรดระบุเหตุผลในการเลือก



ส่วนที่ ๓. การจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการของผู้เรียน คำชี้แจง โปรดใส่เครื่องหมาย / ใต้ตัวเลขที่ตรงกับความเห็นของท่านแบ่งออกเป็น ๔ ระดับ ดังนี้

4	หมายถึง	เห็นด้วยอย่างยิ่ง/ชอบมาก
3	หมายถึง	เห็นด้วย/ชอบ
2	หมายถึง	ไม่เห็นด้วย/ไม่ชอบ
1	หมายถึง	ไม่เห็นด้วยอย่างยิ่ง/ไม่ชอบมาก

คำถาม	4	3	2	1
๑. คุณอ่านภาษาอังกฤษเพื่อ				
ใช้ในชีวิตประจำวัน				
การศึกษา				
ความบันเทิง				
การทำงานในอนาคต				
อื่นๆ เช่น				
๒. คุณชอบเนื้อหาในสอนวิชาภาษาอังกฤษแต่ละประเภทมาก/น้อยเพียงใด				
เนื้อหาและวัฒนธรรมของเจ้าของภาษา				
เนื้อหาและวัฒนธรรมของผู้เรียน				
เนื้อหาและวัฒนธรรมของชนชาติอื่นๆในโลก				
อื่นๆ เช่น				
๓. คุณคิดว่าลักษณะสื่อการสอนที่ดีควรจะมีลักษณะแต่ละแบบมาก/น้อยเพียงใด				
มีพื้นที่ว่างมากพอสำหรับจดสิ่งต่างๆ				
มีพื้นที่มากพอสำหรับคำตอบในแบบฝึกหัด				
มีการตกแต่งที่สวยงาม				
มีภาพประกอบและมีคำบรรยายใต้ภาพ				
มีตัวอย่างคำตอบในการทำแบบฝึกหัด				
อื่นๆ เช่น				
๔. คุณชอบการทำแบบฝึกหัดแต่ละประเภทมาก/น้อยเพียงใด				
แบบทำคนเดียว				
แบบทำเป็นคู่				
แบบทำเป็นกลุ่ม				
อื่นๆ เช่น				

แบบสอบถามอาจารย์

เรื่อง

การพัฒนาสื่อการสอนวิชาภาษาอังกฤษโดยใช้ชุมชนเป็นฐานเพื่อเสริมสร้างทักษะการอ่าน ภาษาอังกฤษและความรู้วัฒนธรรมท้องถิ่นสำหรับนักเรียนชั้นมัธยมศึกษาตอนปลาย

คำชี้แจง ผู้ตอบแบบสอบถามนี้คือ อาจารย์สอนภาษาอังกฤษ โรงเรียนนวมินทราชินูทิศ สตรีวิทยา พุทธมณฑล คำถามถูกแบ่งออกเป็น ๓ ส่วนดังนี้

ส่วนที่ ๑ เป็นแบบสอบถามเกี่ยวกับสถานภาพของผู้ตอบ

ส่วนที่ ๒ เป็นแบบสอบถามเกี่ยวกับการจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการของ ผู้เรียน

ส่วนที่ ๓ เป็นแบบสอบถามเกี่ยวกับหัวข้อเนื้อหาในสื่อการสอน

ในฐานะที่ท่านกรุณาให้ความอนุเคราะห์ในการประเมินและให้ข้อคิดเห็นในงานวิจัยเพื่อ พัฒนาสื่อการสอนวิชาภาษาอังกฤษ โดยมีจุดมุ่งหมายเพื่อเสริมสร้างทักษะการอ่านภาษาอังกฤษและ ความรู้วัฒนธรรมท้องถิ่นของนักเรียนระดับชั้นมัธยมศึกษาตอนปลาย ขอความกรุณาให้ท่านตอบ แบบสอบถามทุกข้อ ทั้งนี้ความเห็นของท่านจะนำไปใช้ในการประมวลเพื่อการวิจัยครั้งนี้เท่านั้น

> จุฬาลงกรณ์มหาวิทยาลัย Chulalongkorn University

ส่วนที่ ๑	. สถานภาพของผู้ตอบ
คำชี้แจง	โปรดเติมข้อความในช่องว่างตามสภาพที่เป็นจริงเกี่ยวกับตัวท่าน

๑. อายุ ปี			
๒. ภูมิลำเนาเดิม เขต/อำเภอ			
จังหวัด		••	
๓. ที่อยู่ปัจจุบัน เขต/อำเภอ			
จังหวัด			
๔. พักอยู่ที่อยู่ปัจจุบันเป็นเวลา		☐ b-@0 ปี	🗆 มากกว่า ๑๐ ปี
๕. ท่านเป็นอาจารย์ภาษาอังกถษรวมเวลาทั้	้งสิ้น П๑-๕ ปี	่ โล-๑๐ ขึ่	่ ∏มากกว่า ๑๐ ขึ่



ส่วนที่ ๒. การจัดการเรียนการสอน กิจกรรม ความถนัดของผู้สอน คำชี้แจง โปรดใส่เครื่องหมาย / ใต้ตัวเลขใต้ระดับความเห็นของท่านแบ่งออกเป็น 4 ระดับ ดังนี้

4	หมายถึง	เห็นด้วยอย่างยิ่ง
3	หมายถึง	เห็นด้วย
2	หมายถึง	ไม่เห็นด้วย

1 หมายถึง ไม่เห็นด้วยอย่างยิ่ง

I NY IORIA PYRNIKA 9000 IVOA				
คำถาม	4	3	2	1
๑. คุณสอนการอ่านภาษาอังกฤษเพื่อ				
ใช้ในชีวิตประจำวัน				
การศึกษา				
ความบันเทิง				
การทำงานในอนาคต				
อื่นๆ เช่น				
๒. คุณชอบสอนเนื้อหาในวิชาภาษาอังกฤษแต่ละประเภทมาก/น้อยเพียงใด				
เนื้อหาและวัฒนธรรมของเจ้าของภาษา				
เนื้อหาและวัฒนธรรมของผู้เรียน				
เนื้อหาและวัฒนธรรมของชนชาติอื่นๆในโลก				
อื่นๆ เช่น				
m. คุณคิดว่าลักษณะสื่อการสอนที่ดีควรจะมีลักษณะแต่ละแบบมาก/น้อยเพียงใด				
มีพื้นที่ว่างมากพอสำหรับจดสิ่งต่างๆ				
มีพื้นที่มากพอสำหรับคำตอบในแบบฝึกหัด				
มีการตกแต่งที่สวยงาม				
มีภาพประกอบและมีคำบรรยายใต้ภาพ				
มีตัวอย่างคำตอบในการทำแบบฝึกหัด				
อื่นๆ เช่น				
๔. คุณชอบให้นักเรียนทำแบบฝึกหัดแต่ละประเภทมาก/น้อยเพียงใด				
แบบทำคนเดียว				
แบบทำเป็นคู่				
แบบทำเป็นกลุ่ม				
อื่นๆ เช่น				

ส่วนที่ ๓ เนื้อหาในสื่อการสอนการอ่านวิชาภาษาอังกฤษ (โปรดเลือก ๑ ตัวเลือกที่อาจารย์<u>สนใจ</u> ในแต่ละหัวข้อ)

෧.	สถานที่ท่องเที่ยวและแหล่งเรียนรู้
	คลองมหาสวัสดิ์
	🗆 ถนนอักษะ
	🗆 มหาวิทยาลัยมหิดล วิทยาเขต ศาลายา
	□ บ้านพิพิธภัณฑ์
	พิพิธภัณฑ์หนังไทย
	อื่นๆ เช่น
	โปรดระบุเหตุผลในการเลือก
ඟ.	ประวัติศาสตร์และเหตุการณ์สำคัญ
	🗆 ประวัติโรงเรียนสตรีวิทย์ ๓
	🗆 ประวัติตำบลศาลายาและคลองมหาสวัสดิ์
	🗌 ประวัติเขตทวีวัฒนาและเขตหนองแขม
	🗆 ประวัติมหาอุทกภัยปี ๒๕๕๔
	อื่นๆ เช่น
	โปรดระบุเหตุผลในการเลือก
ഩ.	ศาสนาและเหตุการณ์สำคัญทางศาสนาในชุมชน
	🗆 องค์พระประธานพุทธมณฑล 💮 💮 💮 💮
	🗆 สัญลักษณ์ที่สำคัญทางศาสนาและสถานที่และสัญลักษณ์ทางศาสนาในพุทธมณฑล
	🗆 งานวันวิสาขบูชาที่พุทธมณฑล
	🗆 การฝังลูกนิมิตที่วัดโกมุทพุทธรังศี
	อื่นๆ เช่น
๔.	อาชีพและภูมิปัญญาในท้องถิ่น
	🗆 การปลูกกล้วยไม้
	🗆 การทำเกษตรกรรมทฤษฎีใหม่
	🗆 การท่องเที่ยวคลองมหาสวัสดิ์
	่□การทำนาบัว
	่⊓ลื่นๆ

โปรดระบุเหตุผลในการเลือก



แบบสอบถามปราชญ์ชาวบ้าน

เรื่อง

การพัฒนาสื่อการสอนวิชาภาษาอังกฤษโดยใช้ชุมชนเป็นฐานเพื่อเสริมสร้างทักษะการอ่าน ภาษาอังกฤษและความรู้วัฒนธรรมท้องถิ่นสำหรับนักเรียนชั้นมัธยมศึกษาตอนปลาย

คำชี้แจง ผู้ตอบแบบสอบถามนี้คือ ปราชญ์ชาวบ้านที่ปัจจุบันทำงานและอาศัยอยู่ในเขตทวีวัฒนา หนองแขม และศาลายา และเป็นบุคคลที่เป็นตัวแทนของวัฒนธรรมในสาขาต่างๆ คำถามถูกแบ่ง ออกเป็น ๒ ส่วนดังนี้

ส่วนที่ ๑ เป็นแบบสอบถามเกี่ยวกับสถานภาพของผู้ตอบ

ส่วนที่ ๒ เป็นแบบสอบถามเกี่ยวกับหัวข้อเนื้อหาในสื่อการสอน

ในฐานะที่ท่านกรุณาให้ความอนุเคราะห์ในการประเมินและให้ข้อคิดเห็นในงานวิจัยเพื่อ พัฒนาสื่อการสอนวิชาภาษาอังกฤษ โดยมีจุดมุ่งหมายเพื่อเสริมสร้างทักษะการอ่านภาษาอังกฤษและ ความรู้วัฒนธรรมท้องถิ่นของนักเรียนระดับชั้นมัธยมศึกษาตอนปลาย ขอความกรุณาให้ท่านตอบ แบบสอบถามทุกข้อ ทั้งนี้ความเห็นของท่านจะนำไปใช้ในการประมวลเพื่อการวิจัยครั้งนี้เท่านั้น

> จุฬาลงกรณ์มหาวิทยาลัย Chulalongkorn University

ส่วนที่ ๑. สถานภาพของผู้ตอบ คำชี้แจง โปรดเติมข้อความในช่องว่างตามสภาพที่เป็นจริงเกี่ยวกับตัวท่าน ๑. อายุ ปี ่ □หญิง ี ชาย โด โฟฟ ๕. พักอยู่ที่อยู่ปัจจุบันเป็นเวลา น้อยกว่า ๑๐ ปี 🔲 ๑๑ - ๒๐ ปี 🔲 ๒๑ - ๓๐ ปี 🔲 อื่นๆ ๖. การศึกษาสูงสุด ☐ ต่ำกว่าปริญญาตรี ่ ปริญญาตรี ☐ สูงกว่าปริญญาตรี ๘. สังกัดหน่วยงาน..... ตำแหน่ง..... ๙. อธิบายบทบาทหรืออาชีพของท่านต่อชุมชน ๑๐. ท่านมีความเชี่ยวชาญหรือความรู้ด้านใดที่เกี่ยวข้องกับชุมชน

ส่วนที่ ๒ เนื้อหาในสื่อการสอนการอ่านวิชาภาษาอังกฤษ (โปรดเลือก ๑ ตัวเลือกที่ท่าน<u>สนใจ</u>ใน แต่ละหัวข้อ)

෧.	สถานที่ท่องเที่ยวและแหล่งเรียนรู้
	คลองมหาสวัสดิ์
	🗆 ถนนอักษะ
	🗆 มหาวิทยาลัยมหิดล วิทยาเขต ศาลายา
	่□บ้านพิพิธภัณฑ์
	🗌 พิพิธภัณฑ์หนังไทย
	อื่นๆ เช่น
	โปรดระบุเหตุผลในการเลือก
ඟ.	ประวัติศาสตร์และเหตุการณ์สำคัญ
	🗆 ประวัติโรงเรียนสตรีวิทย์ ๓
	🗆 ประวัติตำบลศาลายาและคลองมหาสวัสดิ์
	☐ประวัติเขตทวีวัฒนาและเขตหนองแขม
	🗆 ประวัติมหาอุทกภัยปี ๒๕๕๔
	อื่นๆ เช่น
	โปรดระบุเหตุผลในการเลือก
ഩ.	ศาสนาและเหตุการณ์สำคัญทางศาสนาในชุมชน
	🗆 องค์พระประธานพุทธมณฑล 📉 🖽 🖽 ERSEN
	🗆 สัญลักษณ์ที่สำคัญทางศาสนาและสถานที่และสัญลักษณ์ทางศาสนาในพุทธมณฑล
	🗆 งานวันวิสาขบูชาที่พุทธมณฑล
	🗆 การฝังลูกนิมิตที่วัดโกมุทพุทธรังศี
	อื่นๆ เช่น
	โปรดระบุเหตุผลในการเลือก
๔.	อาชีพและภูมิปัญญาในท้องถิ่น
	่ □การปลูกกล้วยไม้
	่ การทำเกษตรกรรมทฤษฎีใหม่
	🗆 การท่องเที่ยวคลองมหาสวัสดิ์
	่□การทำนาบัว

🗌 อื่นๆ	
์ โปรดระบุเหตุผลในการเลือก	



Appendix C: Community-based questionnaire (experts' evaluation form)

Notes to expert

- 1. The index of item-objective congruence (IOC) is used for evaluating content validity at the item development stage of the questionnaire to assess the needs of upper secondary school students to develop a community-based English reading materials
- 2. Please see the brief research proposal attached for more details about the study
- 3. Please review this IOC form. If any further qualification is needed, the expert can contact the researcher directly via telephone and e-mail written above.

This IOC form consists of 2 parts: 6 pages as follows.

Part 1: Personal Information of the experts

Part 2: Item-objective congruence (IOC) of items of question used in the questionnaire

Attached Document(s): The form of questionnaire to assess the needs of English reading ability to develop a community-based English reading materials for upper secondary school students

secondary school students		
Part 1: Personal Information of	of the expert	
Position		
Workplace		
Education background		
□undergraduate level	□graduate level	□others

Part 2: Item-objective congruence (IOC) of items of question used in the questionnaire

Please rate the appropriateness of each item listed by marking " $\sqrt{}$ " in \square provided as follows:

+1 = the item is appropriate to be used;

0 = I am not sure; and

-1 = the item is not appropriate to be used.

(In case -1 is marked, please give any comments and/or suggestions)

	Items to be rated		level of appropriateness				
No.			0	-1	Comments and/or Suggestions		
1	Objectives of the questionnaire (Please see the attached document)						
	ความเหมาะสมของจุดประสงค์ของแบบสอบถามนี้						
2	The congruence of participant's personal data to be obtained (part 1, page 2, 7, and 13)						
	ความเหมาะสมของข้อมูลของผู้เข้าร่วมงานวิจัย						
	(ตอนที่ 1 หน้า 2, 7 และ 13)						
	2.1 Age (อายุ)						
	2.2 Gender (เพศ)						
	2.3 Hometown (ภูมิลำเนาเดิม))					
	2.4 Current location (ที่อยู่ปัจจุบัน)						
	2.5 Length of living in the current location (พักที่อยู่ปัจจุบันเป็นเวลา)	(8)					
	2.6 Length of studying/teaching English (คุณเรียนหรือสอนภาษาอังกฤษเป็นเวลา)	SITY					
	2.7 Education background (ระดับการศึกษา)						
	2.8 - 2.11 please see part 1 of local wisdom questionnaire, page 14						
	2.8 Current occupation (อาชีพปัจจุบัน)						
	2.9 Current agency and position (หน่วยงาน						
	และตำแหน่งปัจจุบันที่ดำรงอยู่)						
	2.10 Current role in the local community (บทบาทปัจจุบันในชุมชน)						
	2.11 Possessed knowledge or skills related to the community (ความรู้หรือทักษะที่เกี่ยวข้อง						
	กับชุมชน)						

3	The content, activity, and the needs in developing the materials (Please see part 2, page 3, 8, and 14) เนื้อหา กิจกรรม และความต้องของผู้เรียนและผู้สอน ในการพัฒนาสื่อการสอน (โปรคคู ตอนที่ 2 หน้า 3 และ 9) 3.1 the objective of learning and teaching English (object 1 page 3 and 9)			
	ความเหมาะสมของประเด็นที่เกี่ยวข้องกับ			
	วัตถุประสงค์ของการเรียนหรือสอนภาษา			
	ภาษาอังกฤษ			
	3.2 Preferred content type in the materials (object 2 page 3 and 9)			
	ความเหมาะสมของประเด็นในประเภทเนื้อหาในสื่อ			
	การสอน			
	3.3 Preferred physical aspects in the materials (object 3 page 3 and 9)			
	ความเหมาะสมของประเด็นเกี่ยวกับลักษณะทาง			
	กายภาพของสื่อการสอน			
	3.4 Preferred task type in the materials (object 4 page 4 and 10)			
	ความเหมาะสมของประเด็นเกี่ยวกับประเภทของ	,		
	กิจกรรมในสื่อการสอน	٤		
	3.5 Preferred answering type in the materials (object 5 page 4 and 10) ความเหมาะสมของประเด็นเกี่ยวกับการตอบคำถาม	SITY		
4	ในสื่อการสอน			
4	The reading topics in each conceptual theme (part 3, page 5, 11, and 15)			
	เนื้อหาในสื่อการสอน (ตอนที่ 3 หน้า 5, 11 และ			
	15)			
	4.1 Local attractions and educational places (สถานที่ท่องเที่ยวและแหล่งเรียนรู้)			
	4.2 History (ประวัติศาสตร์และเหตุการณ์สำคัญ)			
	4.3 Religion and local religious events			
	(ศาสนาและเหตุการณ์สำคัญทางศาสนา)			
	4.4 Local knowledge, skills, and occupation			

	in the community (อาชีพและภูมิปัญญาใน ท้องถิ่น)			
5	Criteria of rating the needs and/or wants the use of four-points Likert's scales in part 2 of the questionnaire and the associated meanings are as follows: หลักเกณฑ์ในการประเมินความต้องการโดยการใช้			
	Likert's scales แบบ 4 ลำดับในตอนที่ 2 ของ			
	แบบสอบถามและการให้ความหมายที่เกี่ยวข้อง			
	4 = strongly agree (เห็นด้วยอย่างยิ่ง)			
	3 = agree (เห็นด้วย)			
	2 = disagree (ไม่เห็นด้วย)			
	1 = strongly disagree (ไม่เห็นด้วยอย่างยิ่ง)			
6	Criteria of rating the needs and/or wants the use of checkbox and open-ended format in part 3 of the questionnaire หลักเกณฑ์ในการประเมินความต้องการโดยการใช้ กล่องตัวเลือกและการตอบแบบปลายเปิดในตอนที่ 3 ในแบบสอบถาม	J TY		

Appendix D: The item-Objective Congruence Index of community-based questionnaire

	Itama to be noted	level of appropriateness				
	Items to be rated	Expert 1	Expert 2	Expert 3	Total	Meaning
1	Objectives of the questionnaire (Please see the attached document) กวามเหมาะสมของจุดประสงค์ของ แบบสอบถามนี้	0	1	1	0.66	accept
2	The congruence of participant's personal data to be obtained (part 1, page 2, 7, and 13) 2.1 Age (อายุ) 2.2 Gender (เพศ) 2.3 Hometown (ภูมิลำเนาเดิม) 2.4 Current location (ที่อยู่ ปัจจุบัน) 2.5 Length of living in the current location (พักที่อยู่ปัจจุบัน เป็นเวลา) 2.6 Length of studying/teaching English (คุณเรียนหรือสอน	1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 0.66	accept accept accept accept accept accept accept
	ภาษาอังกฤษเป็นเวลา) 2.7 Education background (ระดับ การศึกษา) ***2.8 - 2.11 please see to part 1 of local wisdom, page 14*** 2.8 Current occupation (อาชีพ	1	0	1	0.66	accept accept
	ปัจจุบัน) 2.9 Current agency and position (หน่วยงานและตำแหน่งปัจจุบันที่	1	1	1	1	accept
	คำรงอยู่) 2.10 Current role in the local community (บทบาทปัจจุบันใน	1	1	1	1	accept

ชุมชน)			
2.11 Possessed knowledge or skills related to the community (ความรู้หรือทักษะที่เกี่ยวข้องกับชุมชน)			



	Itama to be noted	level of appropriateness				
	Items to be rated	Expert 1	Expert 2	Expert 3	Total	Meaning
3	The content, activity, and the needs in developing the materials (Please see part 2, page 3, 8, and 14) เนื้อหา กิจกรรม และความต้องของ					
	ผู้เรียนและผู้สอนในการพัฒนาสื่อการ					
	สอน (โปรคดู ตอนที่ 2 หน้า 3 และ 9)	1	1	1	1	accept
	3.1 the objective of learning and teaching English (please see object 1 page 3 and 9)	11/2				
	ความเหมาะสมของประเด็นที่					accept
	เกี่ยวข้องกับวัตถุประสงค์ของการ	1	1	1	1	_
	เรียนหรือสอนภาษาภาษาอังกฤษ 3.2 Preferred content type in the materials (please see object 2 page 3 and 9)					
	ความเหมาะสมของประเด็นใน	1	1	1	1	accept
	ประเภทเนื้อหาในสื่อการสอน					
	3.3 Preferred physical aspects in the materials (please see object 3 page 3 and 9) ความเหมาะสมของประเด็นเกี่ยวกับ	เหาวิทย RN UNIV 1	าลัย ERSITY 1	1	1	accept
	ลักษณะทางกายภาพของสื่อการสอน					
	3.4 Preferred answering type in the materials (please see object 5 page 4 and 10)ความเหมาะสมของประเด็นเกี่ยวกับ	-1	1	-1	-0.33	reject
	การตอบคำถามในสื่อการสอน					
	3.5 Preferred task type in the materials (please see object 4 page 4 and 10)					
	ความเหมาะสมของประเด็นเกี่ยวกับ					
	ประเภทของกิจกรรมในสื่อการสอน					

	Items to be rated	level of appropriateness				
	items to be fated	Expert 1	Expert 2	Expert 3	Total	Meaning
4	The reading topics in each conceptual theme (part 3, page 5, 11, and 15) เนื้อหาในสื่อการสอน (ตอนที่ 3 หน้า					
	5, 11 และ 15) 4.1 Local attractions and educational places (สถานที่	1	1	1	1	accept
	ท่องเที่ยวและแหล่งเรียนรู้) 4.2 History (ประวัติศาสตร์และ	11/1/2	1	1	1	accept
	เหตุการณ์สำคัญ) 4.3 Religion and local religious	1	1	1	1	accept
	events (ศาสนาและเหตุการณ์สำคัญ ทางศาสนา)	1	1	1	1	accept
	4.4 Local knowledge, skills, and occupation in the community (อาชีพและภูมิปัญญาในท้องถิ่น)					
5	Criteria of rating the needs and/or wants the use of four-points Likert's scales in part 2 of the questionnaire and the associated meanings are as follows: หลักเกณฑ์ในการประเมินความ	1 มหาวิทย เพพ	าลัย ERSITY	1	1	accept
	ต้องการโดยการใช้ Likert's scales					
	แบบ 4 ลำดับในตอนที่ 2 ของ แบบสอบถามและการให้ความหมาย ที่เกี่ยวข้อง					
	4 = strongly agree (เห็นด้วย อย่างยิ่ง)					
	3 = agree (เห็นด้วย) 2 = disagree (ไม่เห็นด้วย) 1 = strongly disagree (ไม่เห็นด้วยย่างยิ่ง)					

	Items to be rated		level of	appropri	ateness	
	items to be rated	Expert	Expert	Expert	Total	Meaning
		1	2	3		
6	Criteria of rating the needs	0	1	1	0.66	accept
	and/or wants the use of					
	checkbox and open-ended					
	format in part 3 of the					
	questionnaire					
	หลักเกณฑ์ในการประเมินความ					
	ต้องการ โดยการใช้กล่องตัวเลือกและ					
	การตอบแบบปลายเปิดในตอนที่ 3					
	ในแบบสอบถาม	111112				



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Appendix E: Sample of English reading ability test

Type: Social Science

Words: 305 Read level: fairly difficult to read

Mahidol University Direct Entrance Examination

When any problem becomes serious, politics will be involved. The present food crisis

is no exception. Food is one of the most awesome weapons and the control of food makes

possible the grabbing and manipulation of power.

For the last two or three decades world food production has steadily increased.

Population has also increased, and there is no doubt that the two are related. Probably

increasing food supplies stimulated population growth. The world's population has been

growing at a rate such that it is now doubling every 30 years. However, in the last few years

food prices have risen and stocks of food have dwindled. There seems to be little hope of

increasing food supplies with population continuing to multiply. Nearly half a billion people

are suffering from hunger. Famine conditions are present in Africa and some parts of South

Asia.

There are people who see opportunities to make money or increase their political

power or reputation. In Bangladesh, for example, local politicians have held up shipments of

food aid in order to force the farmers to sell their crops early at a lower price. In India both

local and national government officials have manipulated grain shipments and storage to their

own advantage, while businessmen hoard grains starvation conditions worsen.

Several nations have tried to hide the seriousness of the problem to avoid international

pressure requiring them to take action. In most cases where death from starvation has

occurred food has been available, but distribution has been the problem.

Some analysts of the situation predict that the shortage of food worldwide will lead to

widespread violence and will align the poor nations against the rich. Since the poor and food

deficient nations can pressure the rich only by terrorism, it will probably only prompt the rich

to become isolationists and thus aggravate the already serious problem.

1.	The pr	resent food crisis
	a.	has nothing to do with politics.
	b.	is known as a fearful weapon.
	c.	has caused a steady increase of population.
	d.	has made political decision-making important.
2.	Farme	rs in Bangladesh have to sell their crops at a lower price because
	a.	they are afraid their crops will not be shipped
	b.	their crops will be spoiled, if they wait too long
	c.	local politicians promised to give them some aid
	d.	local politicians have delayed food supplies sent from abroad
3.	The go	overnments of many countries
	a.	are forced to relieve the people from starvation
	b.	are not aware of the seriousness of food shortage
	c.	have done very little to solve the problem of food shortage
	d.	apply outside pressure when the problem becomes more serious
4.	Even t	hough food aid can be obtained,
	a.	it is difficult to distribute it
	b.	it has caused many to die from starvation
	c.	it is not sufficient for the needs of every person
	d.	the government of several nations have not asked for it
5.	The m	ain idea of this passage is that
	a.	food can be used for political purposes
	b.	the food crisis is the most important problem at present
	c.	the increasing population has caused serious food shortage
	d.	the food crisis enables the poor nations to pressure the rich

Type: social science Words: 279 Read level: fairly difficult to read

CU-TEP

Culture is learned. At the moment of birth, the human being lacks a culture-a system of beliefs, knowledge, patterns of customary behavior. But from that moment until we die, each of us participates in a kind of universal schooling that teaches us our native culture. Laughing and smiling are genetic responses, but the infant soon learns when to smile, when to laugh, and even how to cry. Cry is an inborn behavior, but every infant soon learns the rules for crying in a particular culture.

During the first few years of life, cultural learning proceeds at an intense and rapid rate. Informally, without thinking about it, children in every society learn their native language, kinship terms, family structure, how and when to eat, etiquette for everyday life, what goals are worth achieving, and hundreds of other things. Culture is a kind of social heredity; passed on from one generation to the next, it is acquired through learning.

The customs we acquire as members of a society have a curious effect on us. Though we find them hard to learn, with practice we conform and eventually we come to feel that these customs are right and natural. In time, the explicit rules for customary behavior fade from awareness. Most people are not conscious of the culture that guides their behavior. Conformity is effortless; it feels comfortable and secure. For example, each of us speaks a native language fluently, yet we are usually unable to state the rules of its grammar. Similarly, people abide by the rest of their culture with confidence, yet they lack a knowledge of its structure. We say then that culture has a tacit, taken-for-granted quality.

- 6. What does the passage mainly discuss?
 - a. Rules for a particular culture
 - b. Culture and its structure
 - c. Why we learn culture so slowly
 - d. How we acquire culture

- 7. Which of the following is NOT mentioned as a part of culture?
 - a. Geography
 - b. Manners
 - c. Personal goals
 - d. Language
- 8. According to the passage, why do we accept our own culture so effortlessly?
 - a. Because it is a genetic response
 - b. Because we learn it informally from society
 - c. Because it is unique
 - d. Because we are curious
- 9. The author implies that when people feel comfortable in their culture, they____.
 - a. feel no need for etiquette
 - b. rarely conform to culture expectations
 - c. usually cannot explain the culture structure
 - d. advance socially at a fast pace
- 10. How long does a person participate in the learning of his/her native culture, according to the passage?
 - a. Throughout infancy
 - b. Until middle age
 - c. All his/her life
 - d. During childhood

OUNTERPORT OF THE PROPERTY OF

Type: science Words: 159 Read level: fairly difficult to read

<u>7</u> วิชาสามัญ

A four-year study conducted by the Infant Testing Center in San Francisco, California, suggests that babies feel more comfortable around other babies than with strange adults. According to the study, babies benefit by being with their fellow infants daily. Whereas a baby might show fear of an adult stranger, he is likely to smile and reach out for an unfamiliar infant. By the time babies are one year old, they have begun to form friendships of a sort. The above findings, based on observation of 100 babies aged three months to three years, might prove interesting to working parents who have to find day-care for their babies. Family care in a private home, with several babies together, is probably the ideal way to care for babies under three. Dr. Benjamin Spock, a well-known pediatrician and author of books about babies, supports the idea. He says the family day-care is sounder in theory than hiring a housekeeper or a babysitter.

- 11. What is the passage mainly about?
 - a. Parents and children

b. Choosing a pediatrician

c. How to test infants

- d. Day-care for babies
- 12. What is a baby likely to feel more at ease with?
 - a. A housekeeper

b. An infant

c. An adult stranger

- d. Teenage children
- 13. What do we learn from the passage about Dr. Benjamin Spock?
 - a. He recommends babysitters.
 - b. He writes books on various subjects.
 - c. He conducts studies on infants.
 - d. He directs an infant testing center.

- 14. What is a pediatrician?
 - a. A child specialist
 - b. An advisor of day care centers
 - c. An author of children's books
 - d. A theorist of children's behaviors
- 15. According to the passage, what should working parents do to provide care for their babies?
 - a. Find a private home with other infants
 - b. Take their babies with them to work
 - c. Hire an adult to babysit their babies
 - d. Bring up babies themselves at home

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Appendix F: English reading ability test (experts' evaluation form)

Notes to expert

- The index of item-objective congruence (IOC) is used for evaluating content validity at the item development stage of the English reading ability test to assess the reading ability of upper secondary school students before and after the implementation of a community-based English reading materials
- 2. Please see the brief research proposal attached for more details about the study
- 3. Please review this IOC form. If any further clarification is needed, the expert can contact the researcher directly via telephone and e-mail written above.

This IOC form consists of 2 parts: 4 pages as follows.

Part 1: Personal Information of the experts

Part 2: Item-objective congruence (IOC) of items of question used in the questionnaire

Attached Document(s): The form of English reading ability test to assess the reading ability of English reading ability before and after the implementation of a community-based materials for upper secondary school students

Part 1: Personal Information of the expert

Name		
Position		
Workplace		
Education background		
\Box undergraduate level	☐ graduate level	\Box others

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Part 2: Item-objective congruence (IOC) of items of test construction used in the English reading ability test

Please rate the appropriateness of each item listed by marking " $\sqrt{}$ " in \square provided as follows:

+1 = the item is appropriate to be used;

0 = I am not sure; and

-1 = the item is not appropriate to be used.

(In case -1 is marked, please give any comments and/or suggestions)

	Reading Ability Aspects	Level of appropriateness				
Items					comment and/or	
		+1	0	-1	suggestion	
Passage 1	(ข้อสอบรับตรงมหาวิทยาลัยมหิดล) Type:	Socia	ıl Sci	ence	e, 305 words, Level:	
fairly diffi	icult to read					
Does the i	tem evaluate:					
1	Identifying facts in the test					
2	Making inference from the content					
3	Making inference from the content					
4	Identifying facts in the test	1				
5	Identifying main idea	2				
Passage 2	(CU-TEP) Type: Social Science, 279	word	s, Le	evel:	fairly difficult to read	
Does the i	tem evaluate:					
6	Identifying main idea					
7	Making inference from the content	200				
8	Identifying facts in the test	1610				
9	Making inference from the content	ERSI	Y			
10	Identifying facts in the test					
Passage 3	(common-subject test) Type: Science	, 159	word	ls, L	evel: fairly difficult to	
read						
Does the i	tem evaluate:					
11	Identifying main idea					
12	Identifying facts in the test					
13	Making inference from the content					
14	Determining word meaning				_	
15	Making inference from the content					

		Level of appropriateness				
Items	Reading Ability Aspects				comment and/or	
		+1	0	-1	suggestion	
_	(General Aptitude Test) Type: Science	e, 28	2 wo	rds,	Level: fairly difficult	
to read						
Does the i	tem evaluate:	I	1	ı	Г	
16	Evaluating the information					
17	Making inference from the content					
18	Making inference from the content					
19	Identifying facts in the test					
20	Identifying main idea					
Passage 5	(common-subject test) Type: general	know	ledg	e, 26	3 words, Level: fairly	
difficult to	o read					
Does the i	tem evaluate:					
21	Evaluating the information	>				
22	Making inference from the content					
23	Identifying facts in the test					
24	Determining word meaning					
25	Making inference from the content					
Passage 6	(Ordinary National Examination Test	t) Typ	e: ge	enera	ıl knowledge, 164	
words, Re	ead level: standard/average	. • 1				
Does the i	tem evaluate:					
26	Making inference from the content					
27	Making inference from the content	MIL.				
28	Identifying facts in the test	าลัย				
29	Evaluating the information	EDOU				
30	Making inference from the content	LIIOI				

Appendix G: The Item-Objective Congruence Index of English reading ability test

		level of appropriateness				
	Items to be rated	Expert 1	Expert 2	Expert 3	Total	Meaning
Pass	age 1 (Mahidol University entra	nce exam	ination)	Гуре: Ѕос	ial Scien	ce, 305
wor	ds, Level: fairly difficult to read					
	s the item evaluate:					
1	Making inference from the					
1	content	1	1	1	1	Accept
2	Identifying facts in the test	1100	1	1	1	Accept
3	Making inference from the		2			
3	content	71	a 1	1	1	Accept
4	Identifying facts in the test	1	_1	1	1	Accept
5	Identifying main idea	1	1	1	1	Accept
	age 2 (CU-TEP) Type: Social S	cience, 27	9 words,	Level: fa	irly diffi	cult to
read		MAY (I
Doe	s the item evaluate:					
6	Identifying main idea	< 3 ∞1∞()	1	1	1	Accept
7	Making inference from the content	1	1	1	1	Accept
8	Identifying facts in the test	1	- 1	1	1	Accept
9	Making inference from the content	เ์มห _า วิท	ยาจัย	1	1	Accept
10	Identifying facts in the test	orn1Un	VERSITY	1	1	Accept
Pass	age 3 (common-subject test) Ty	ne: Scienc	re 159 w	ords Lev	el· fairly	
to re		pe. Beien	.c, 137 w	ords, Lev	ci. ruirry	difficult
Doe	s the item evaluate:					
11	Identifying main idea	1	1	1	1	Accept
12	Identifying facts in the test	1	1	1	1	Accept
13	Making inference from the					•
13	content	1	1	1	1	Accept
14	Determining word meaning	1	1	1	1	Accept
15	Making inference from the	1	1	1	1	Accent
	content	1	1	1	1	Accept

		level of appropriateness				
	Items to be rated	Expert 1	Expert 2	Expert 3	Total	Meaning
Pass	sage 4 (General Aptitude Test) T	ype: Scie	nce, 282 v	words, Le	vel: fairly	y difficult
to re	ead	T			ı	
Doe	s the item evaluate:					
16	Making inference from the					
10	content	1	0	1	0.67	Accept
17	Making inference from the					
1 /	content	1	1	1	1	Accept
18	Making inference from the					
10	content	1	1	1	1	Accept
19	Identifying facts in the test	11/1	0	1	0.67	Accept
20	Identifying main idea	1	1	1	1	Accept
Pass	sage 5 (common-subject test) Typ	ne: genera	ıl knowled	dge, 263 v	vords. Le	evel:
						. ,
	y difficult to read				<u> </u>	
-	s the item evaluate:				4	
21	Evaluating the information	1	1	1	1	Accept
22	Making inference from the	12/A1/A 27/C 100 4 A.A.				
	content	1	1	1	1	Accept
23	Identifying facts in the test	· (3 » 1» ()	1	1	1	Accept
24	Determining word meaning	12	1	1	1	Accept
25	Making inference from the					
	content	1	- 1	1	1	Accept
	sage 6 (Ordinary National Exami	nation Te	st) Type:	general k	nowledge	e, 164
wor	•					
	d level: standard/average	ORN UN	VERSITY		ı	T
Doe	s the item evaluate:					
26	Making inference from the				0.666	
20	content	0	1	1	67	Accept
27	Making inference from the					
21	content	1	1	1	1	Accept
28	Identifying facts in the test	1	1	1	1	Accept
29	Making inference from the					
29	content	1	1	1	1	Accept
30	Identifying main idea	1	1	1	1	Accept

Appendix H: Item analysis of English reading ability test (pilot study)

Item No.	Difficulty Index	Discrimination Index
1	0.20	0.24
2	0.31	0.32
3	0.31	0.35
4	0.45	0.40
5	0.25	0.24
6	0.40	0.35
7	0.54	0.37
8	0.60	0.60
9	0.65	0.29
10	0.34	0.36
11	0.57	0.46
12	0.65	0.42
13	0.57	0.43
14	0.57	0.56
15	0.60	0.74
16	0.28	0.28
17	0.45	0.53
18	0.28	0.28
19	0.34	0.36
20	0.40	0.45
21	0.45	0.13
22	0.60	0.47
23	0.37	0.40
24	0.42	0.49
25	0.20	0.22
26	0.48	0.31
27	0.51	0.35
28	0.68	0.60
29	0.74	0.68
30	0.54	0.26
Reliability (KR-20) = 0	0.86	

Appendix I: Sample of local cultural knowledge test

โรงเรียนนวมินทราชินูทิศ สตรีวิทยา พูทธมณฑล (สตรีวิทย์ ๓)

- ๑. โรงเรียนนวมินทราชินูทิศ สตรีวิทยา พุทธมณฑล ก่อตั้งขึ้นเพื่อเฉลิมฉลองในวโรกาสใด
 - ก. ครบรอบ ๖๐ ปีของการอภิเษกสมรส
 - ข. สมเด็จพระนางเจ้าสิริกิติ์มีพระชนมายุครบรอบ ๖๐ พรรษา
 - ค. พระบาทสมเด็จพระเจ้าอยู่หัวครองราชสมบัติครบ ๖๐ ปี
 - ง. พระบาทสมเด็จพระเจ้าอยู่หัวมีพระชนมายุครบรอบ ๖๐ พรรษา
- ๒. ข้อใดคือวิสัยทัศน์ของโรงเรียนนวมินทราชินูทิศ สตรีวิทยา พุทธมณฑล ในปัจจุบัน
 - ก. เสริมสร้างความรู้ควบคู่คุณธรรมเพื่อการศึกษาต่อในระดับอุดมศึกษา
 - ข. เสริมสร้างความรู้ควบคู่คุณธรรมเพื่อการศึกษาต่อและการอาชีพ
 - ค. เสริมสร้างความรู้ควบคู่คุณธรรมเพื่อให้เป็นพลเมืองที่ดีในสังคม
 - ง. เสริมสร้างความรู้ควบคู่คุณธรรมเพื่อการประกอบอาชีพในอนาคต
- ๓. ข้อใดเป็นเหตุผลที่ทำให้โรงเรียนนวมินทราชินูทิศ สตรีวิทยา พุทธมณฑล มีจำนวนนักเรียน แค่ ๑๘๓ คนใน<u>ปีการศึกษาแรก</u>
 - ก. โรงเรียนยังไม่เป็นที่รู้จักในพื้นที่
 - ข. มีนักเรียนในพื้นที่บริการน้อย
 - ค. การขาดเงินทุนประชาสัมพันธ์
 - ง. การยังไม่มีอาคารเรียนถาวร
- ๔. การที่มีโรงเรียนนวมินทราชินูทิศ สตรีวิทยา พุทธมณฑล ส่ง**ผลดี**ด้านใดในพื้นที่ชุมชนมาก ที่สุด
 - ก. ทำให้ชุมชนเป็นที่รู้จักจากชื่อเสียงด้านวิชาการที่โรงเรียนสร้าง
 - ข. เป็นแหล่งเรียนรู้ให้กับผู้ที่อยู่ในชุมชนใกล้โรงเรียน
 - ค. นักเรียนในพื้นที่บริการไม่ต้องไปเรียนพื้นที่ไกลที่พัก
 - ง. เป็นแหล่งจัดกิจกรรมนั้นทนาการต่างๆในชุมชน

- ๕. นักเรียนคนใดถือได้ว่าเป็นนักเรียนที่ดีอย่างครบถ้วนของโรงเรียนสตรีวิทย์ ๓
 - ก. สมชายทำคะแนนวิชาคณิตศาสตร์ได้ ๑๐๐ คะแนนเต็ม
 - ข. สมหมายสามารถนำความรู้จากงานช่างไปใช้ในชีวิตจริง
 - ค. สมปองสามารถสอบเข้าไปในสถาบันอุดมศึกษาที่มีชื่อเสียง
 - สมศรีนำความรู้ภาษาอังกฤษไปสอนชาวบ้านในชุมชน

มหาอุทกภัย พ.ศ. ๒๕๕๔

- ๖. ปัจจัยใด<u>ไม่ใช่</u>สาเหตุของมหาอุทกภัยปี ๒๕๕๔
 - ก. สภาพที่ตั้งทางภูมิศาสตร์ของประเทศไทย
 - ข. ประเทศไทยเผชิญกับพายุขนาดใหญ่หลายลูก
 - ค. นโยบายกักเก็บน้ำเพื่อการเกษตรของรัฐบาล
 - ง. ปริมาณน้ำฝนสะสมมากกว่าปีก่อนๆ
- ๗. ข้อใดเป็นหนึ่งในสาเหตุหลักของการเสียชีวิตของผู้ประสบภัยน้ำท่วมปี ๒๕๕๔
 - ก. การถูกไฟฟ้าดูด
 - ข. การฆ่าตัวตาย
 - ค. การติดโรคระบาด
 - ง. การถูกสัตว์มีพิษกัดต่อย
- ๘. ข้อใดคือผลกระทบที่ใหญ่ที่สุดจากเหตุมหาอุทกภัยปี ๒๕๕๔ ต่อเขตทวีวัฒนา เขตหนองแขม และอำเภอพุทธมณฑล
 - ก. บ้านเรือนและทรัพย์สินของผู้อาศัยในพื้นที่เสียหายเป็นจำนวนมาก
 - ข. โรงงานและพื้นที่ทางการเกษตรเสียหายอย่างหนักส่งต่อเศรษฐกิจในชุมชน
 - ค. อาชญากรรมและโรคระบาดที่เกิดขึ้นในพื้นที่ช่วงเกิดอุทกภัย
 - ผู้เสียชีวิตจำนวนมากจากกระแสน้ำหลากเข้าท่วมในพื้นที่

- ๙. จากเหตุการณ์มหาอุทกภัยปี ๒๕๕๔ ข้อใดทำให้เห็นว่าคนในพื้นที่เขตทวีวัฒนา หนองแขม และพุทธมณฑล มีจิตใจสาธารณะมากที่สุด
 - ก. การที่คนในชุมชนพยายามป้องกันพุทธมณฑลไม่ให้ถูกน้ำท่วม
 - ข. การที่มหาวิทยาลัยมหิดลเปิดศูนย์บรรเทาทุกข์ให้แก่ผู้ประสบภัย
 - ค. ประชาชนบริจาคเครื่องอุปโภคบริโภคให้กับศูนย์บรรเทาทุกข์ในพื้นที่
 - ประชาชนช่วยกันสร้างเขื่อนกั้นน้ำท่วมบริเวณวัดปุรณาวาส
- ๑๐. นักเรียนสามารถมีส่วนช่วยเหลือชุมชนในกรณีน้ำท่วมได้อย่างเหมาะสมที่สุดได้อย่างไร
 - ก. บริจาคเงินให้กับกองทุนผู้ประสบภัยน้ำท่วม
 - ข. ช่วยนำถุงยังชีพไปแจกจ่ายให้กับผู้ประสบภัยในพื้นที่
 - ค. ซ่อมบ้านเรือนผู้ประสบภัยที่เสียหายจากน้ำท่วม
 - ดูแลผู้ที่ไม่สามารถช่วยเหลือตัวเองได้ในศูนย์บรรเทาทุกข์

มหาวิทยาลัยมหิดล วิทยาเขตศาลายา

๑๑. คำว่า มหิดล มีความหมายว่าอย่างไร

- ก. ผืนแผ่นดิน
- ข. แผ่นดินไทย
- ค. พลังแผ่นดิน
- ง. แผ่นดินทอง

๑๒.มหาวิทยาลัยมหิดลมีที่มาจากการก่อตั้งโรงพยาบาลใด

- ก. โรงพยาบาลรามาธิบดี
- ข. โรงพยาบาลศิริราช
- ค. โรงพยาบาลวชิระ
- ง. โรงพยาบาลพญาไท

๑๓. มหาวิทยาลัยมหิดล วิทยาเขตศาลายา ส่งผลต่อชุมชนและพื้นที่โดยรอบของมหาวิทยาลัย อย่างไรมากที่สุด

- ก. การเจริญเติบโตของอสังหาริมทรัพย์ประเภทบ้านเดี่ยว
- ข. การขยายถนนบรมราชชนนีให้มีช่องทางเพิ่มขึ้น
- ค. การเจริญเติบโตของอสังหาริมทรัพย์ในเชิงพานิชย์
- ง. การสร้างศูนย์การค้าขนาดใหญ่เพื่อรองรับนักศึกษา

๑๔.มหาวิทยาลัยมหิดล วิทยาเขตศาลายา ส่ง**ผลดี**ต่อชุมชนในด้านใดมากที่สุด

- ก. เป็นแหล่งการเรียนรู้ในชุมชนจากกิจกรรมที่ทางมหาวิทยาลัยจัดขึ้น
- ข. เป็นสถานศึกษาระดับอุดมศึกษาที่รองรับนักศึกษาในพื้นที่
- ค. กระตุ้นเศรษฐกิจในชุมชนจากการเข้ามาพักของนักศึกษาจำนวนมาก
- การสร้างศูนย์การค้าขนาดใหญ่เพื่อรองรับนักศึกษาจำนวนมาก

๑๕.ถ้านักเรียนได้เป็นนักศึกษามหาวิทยาลัยมหิดล วิทยาเขต ศาลายา กิจกรรมของมหาวิทยาลัย แบบใดที่ส่ง<u>ผลดี</u>ต่อชุมชนมากที่สุด

- ก. การทำกิจกรรมแนะแนวศึกษาต่อให้กับเยาวชนในพื้นที่
- ข. การทำกิจกรรมรับนักศึกษาใหม่ของมหาวิทยาลัย
- ค. การทำกิจกรรมเพื่อรักษาสิ่งแวดล้อมรอบมหาวิทยาลัย
- ง. การทำกิจกรรมทางศาสนาที่มหาวิทยาลัยจัดขึ้น

<u>พุทธมณฑล</u>

๑๖.พุทธมณฑลได้ก่อตั้งขึ้นในวันสำคัญทางพุทธศาสนาวันใดในปี พ.ศ. ๒๕๓๕

- ก. วันวิสาขบูชา
- ข. วันอาสาฬหบูชา
- ค. วันมาฆบูชา
- ง. วันเข้าพรรษา

๑๗. ใครเป็นผู้ออกแบบพระประธานพุทธมณฑล

- ก. อาจารย์เฉลิมชัย โฆษิตพิพัฒน์
- ข. ศาสตราจารย์วิโชด มุกดามณี
- ค. ศาสตราจารย์ศิลป์ พีระศรี
- ง. อาจารย์ป่วย อึ๊งภากรณ์

ഒ๘.การที่พุทธมณฑลมีพื้นที่ถึง ๒,๕๐๐ ไร่ นั้นน่าจะมีความเกี่ยวข้องกับเหตุผลใดมากที่สุด

- ก. กรมการศาสนาได้รับบริจาคที่ดินเป็นจำนวน ๒,๕๐๐ ไร่
- ข. เพื่อเฉลิมฉลองวาระกึ่งพุทธกาล ๒,๕๐๐ ปี
- ค. เพื่อคราวสมโภชกรุงรัตนโกสินทร์ครบ ๒๐๐ ปีในพ.ศ. ๒๕๐๐
- ง. เพื่อฉลองการขึ้นศัตวรรษใหม่ในปี พ.ศ. ๒๕๐๐

๑๙. ข้อใดเป็นประโยชน์**สูงสุด**ของพุทธมณฑลต่อชุมชนในพื้นที่

- ก. เป็นแหล่งศึกษาเรียนรู้เกี่ยวกับพระพุทธศาสนา
- ข. เป็นสถานที่พักผ่อนและจัดกิจกรรมทางศาสนา
- ค. เป็นแหล่งรายได้จากการท่องเที่ยวให้กับคนในพื้นที่
- ง. เป็นแหล่งศึกษาระบบนิเวศวิทยาในชุมชน 🧪

๒๐.นักเรียนสามารถช่วยกันรักษาสภาพสิ่งแวดล้อมในพุทธมณฑลได้อย่างไร

- ก. การให้อาหารปลาในพุทธมณฑลด้วยอาหารปลาที่มีสีสัน
- ข. การนำเต่าและปลาไปปล่อยเพื่อรักษาระบบนิเวศวิทยา
- ค. การเข้าร่วมกิจกรรมทางศาสนาที่จัดขึ้นในพุทธมณฑล
- ง. การเข้าร่วมกิจกรรมประจำปีทำความสะอาดพุทธมณฑล

<u>เกษตรทฤษฎีใหม่</u>

๒๑.เกษตรทฤษฎีใหม่มีชื่อเดิมว่าอะไร

- ก. เกษตรแนวคิดใหม่
- ข. ทฤษฏีใหม่
- ค. เกษตรพอเพียง
- ง. เกษตรพอเพียงใหม่

๒๒. ปัจจัยใดเป็นปัจจัย<u>สำคัญที่สุด</u>ของเกษตรทฤษฏีใหม่

- ก. การทำแหล่งน้ำในพื้นที่ของตัวเอง
- ข. การไม่ใช้สารเคมีในการเพาะปลูก
- ค. การปลูกผักหลากหลายชนิดในพื้นที่
- ง. การรวมตัวกันของเกษตรกรในชุมชน

๒๓. ข้อใดคือหัวใจสำคัญของแนวคิดเกษตรทฤษฎีใหม่

- ก. การลดรายจ่ายด้านการซื้ออาหารภายในครัวเรือน
- ข. การลดการพึ่งพาทางการเงินจากเอกชนและรัฐบาล
- ค. การเพิ่มความสามารถในการผลิตเพื่อการแข่งขัน
- ง. การรวมตัวกันของเกษตรในชุมชนเพื่อสร้างอำนาจต่อรอง

๒๔. เขตทวีวัฒนาและหนองแขมเหมาะแก่การนำเกษตรทฤษฎีใหม่มาประยุกต์ใช้เพราะเหตุใด

- ก. เพราะผลผลิตทางการเกษตรในพื้นที่ตกต่ำเพราะปัญหาอุทกภัย
- ข. เพราะเกษตรกรส่วนใหญ่เป็นรายย่อยจึงไม่มีพื้นที่ทำกินขนาดใหญ่
- ค. เพราะเกษตรกรต้องพึ่งพาปัจจัยด้านการผลิตจากนอกชุมชน
- ง. เพราะเกษตรกรในพื้นที่ไม่ได้รวมตัวกันอย่างเข็มแข็งเพื่อต่อรอง

๒๕. นักเรียนสามารถช่วยสนับสนุนเกษตรกรที่ทำเกษตรทฤษฎีใหม่ในพื้นที่ได้อย่างไร

- ก. ซื้อผลผลิตทางการเกษตรจากตลาดในชุมชน
- ข. ซื้อผลผลิตทางการเกษตรจากห้างสรรพสินค้าในชุมชน
- ค. ศึกษาข้อมูลการทำเกษตรทฤษฎีใหม่แล้วนำไปปฏิบัติเอง
- ง. ทำสื่อสารสนเทศเกี่ยวกับเกษตรทฤษฎีใหม่แล้วนำไปเผยแพร่



Appendix J: Local cultural knowledge test (Experts' evaluation form)

Notes to expert

- 1. The index of item-objective congruence (IOC) is used for evaluating content validity at the item development stage of the community-based knowledge test to assess local culture and knowledge of Thawi Watthana District, Nong Khaem District, and Phutthamonthon District in 4 areas (history, local attraction, religion, and local knowledge) of upper secondary school students before and after the implementation of community-based materials
- 2. In the pre-test and post-test stage, local knowledge test will be given to the participants without reading the passages on 4 areas in order to test how much the participants know about their community before and after the implementation of community-based materials.
- 3. Please see the brief research proposal attached for more details about the study
- 4. Please note that local cultural knowledge test aims to assess the participants' knowledge on local culture and knowledge not language ability. Therefore, the test is administered in Thai.

This IOC form consists of 2 parts: 4 pages as follows.

Part 1: Personal Information of the experts

Part 2: Item-objective congruence (IOC) of items of question used in the questionnaire

Attached Document(s): The form of English reading ability test to assess the reading ability of English reading ability before and after the implementation of a community-based English reading materials for upper secondary school students

Part 1: Personal Information of the expert

Name		
Position		
Workplace		
Education background		
□ undergraduate level	☐ graduate level	\Box others



Part 2: Item-objective congruence (IOC) of items of test construction used in the local knowledge test ${\bf r}$

Please rate the appropriateness of each item listed by marking " $\sqrt{}$ " in \Box provided as follows:

+1 = the item is appropriate to be used;

0 = I am not sure; and

-1 = the item is not appropriate to be used.

(In case -1 is marked, please give any comments and/or suggestions)

	(In case -1 is marked, please give any comments and/or suggestion						
Items Reading Ability Aspects		Level of appropriateness					
		+1	0	-1	comment and/or suggestion		
	e 1 refers to "Nawaminthrarachi Tears of Generation Gap"	nuthi	t Sat	riwi	tthaya Phutthamonthon School:		
	e item evaluate:						
1	Ability to recognize fact	11					
2	Ability to recognize fact		2	\ .			
3	Ability to make inference from fact						
4	Appreciation toward community value						
5	Sense of active and good citizenship						
Passage	2 refers to "Mahidol Universit	y: Wi	sdor	n of	Salaya"		
Does th	e item evaluate:	-10000001.(() 4				
6	Ability to recognize fact	1000		(6)			
7	Ability to recognize fact		1				
8	Ability to make inference from fact	หาวิ	ทยา	า ลัย			
9	Appreciation toward community value	RN U	VIVE	RSI	Υ		
10	Sense of active and good citizenship						
Passage	2 refers to "The Great Flood 2	011"					
Does th	e item evaluate:	1	1	,	,		
11	Ability to recognize fact						
12	Ability to recognize fact						
13	Ability to make inference from fact						
14	Appreciation toward community value						
15	Sense of active and good citizenship						

T.	Reading Ability Aspects			Lev	rel of appropriateness
Items		+1	0	-1	comment and/or suggestion
Passage					
Does th	e item evaluate:				
16	Ability to recognize fact				
17	Ability to recognize fact				
18	Ability to make inference from fact				
19	Appreciation toward community value				
20	Sense of active and good citizenship				
Passage Farmers	e 5 refers to "The New Theory As"	Agricu	ıltur	e: th	e Solution for Modern
Does th	e item evaluate:				
21	Ability to recognize fact				
22	Ability to recognize fact			63	
23	Ability to make inference from fact			9	
24	Appreciation toward community value			9	
25	Sense of active and good citizenship		*	(A)	

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Appendix K: The Item-Objective Congruence Index of local cultural knowledge test

		Level of appropriateness						
	Items to be rated	Expert 1	Expert 2	Expert 3	Total	Meaning		
Pas	sage 1 refers to 'Nawaminthrac	hinuthit S	atriwitthay	ya Phuttha	monthor	n:		
the	7 Years of Generation Gap'							
Doe	es the item evaluate							
1	Knowledge of the fact	1	1	1	1	accept		
2	Knowledge of the fact	1	1	1	1	accept		
3	Ability to tell inference from the fact	1//	z 1	1	1	accept		
4	Appreciation toward community value	1		1	1	accept		
5	Sense of active and good citizenship	1	1	1	1	accept		
Pas	sage 2 refers to 'The Great Floo	od 2011'.						
Do	es the item evaluate	A1A14 4 (6) = (0.8)				accept		
6	Knowledge of the fact	1	1	1	1	accept		
7	Knowledge of the fact	1	1	1	1	accept		
8	Ability to tell inference from the fact	1		1	1	accept		
9	Appreciation toward community value	ะกับในกลิ	0	1	0.67	accept		
10	Sense of active and good citizenship	korn U	IIVERSIT	1	1	accept		
Pas	sage 3 refers to 'Mahidol Unive	ersity: The	Wisdom	of Salaya		1		
Do	es the item evaluate							
11	Knowledge of the fact	1	1	1	1	accept		
12	Knowledge of the fact	1	1	1	1	accept		
13	Ability to tell inference from the fact	1	1	1	1	accept		
14	Appreciation toward community value	1	1	1	1	accept		
15	Sense of active and good citizenship	1	1	1	1	accept		

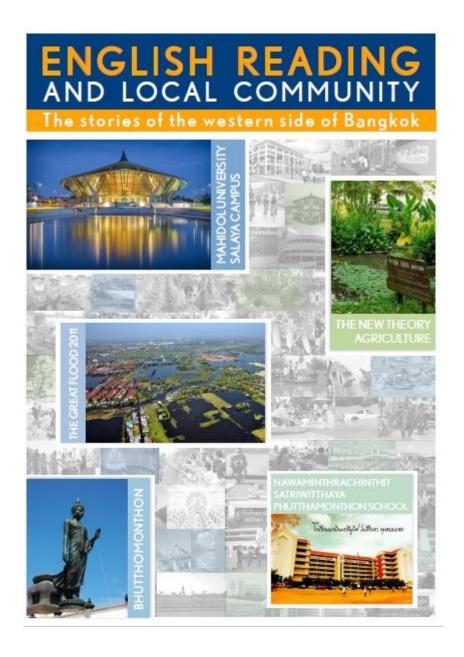
			Level of appropriateness						
	Items to be rated	Expert 1	Expert 2	Expert 3	Total	Meaning			
Pas	sage 4 refers to 'Buddhamontl	non'.							
Do	es the item evaluate								
16	Knowledge of the fact	1	1	1	1	accept			
17	Knowledge of the fact	1	1	1	1	accept			
18	Ability to tell inference from the fact	1	1	1	1	accept			
19	Appreciation toward community value	1	0	1	0.67	accept			
20	Sense of active and good citizenship	1	0	1	0.67	accept			
	sage 5 refers to 'The New The mers'.	ory Agricu	lture: The	Solution	of Mode	rn			
Do	es the item evaluate	8 8							
21	Knowledge of the fact	1/// 1	1	1	1	accept			
22	Knowledge of the fact	1	1	1	1	accept			
23	Ability to tell inference from the fact	0	1	1	0.67	accept			
24	Appreciation toward community value	0	1	1	0.67	accept			
25	Sense of active and good citizenship	1	1	1	1	accept			

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Appendix L: Item analysis of local cultural knowledge test (pilot study)

Item No.	Difficulty Index	Discrimination Index
1	0.65	0.28
2	0.31	0.34
3	0.31	0.42
4	0.45	0.25
5	0.25	0.28
6	0.40	0.26
7	0.54	0.29
8	0.60	0.58
9	0.65	0.12
10	0.34	0.42
11	0.57	0.29
12	0.65	0.51
13	0.57	0.41
14	0.57	0.54
15	0.60	0.70
16	0.28	0.33
17	0.45	0.48
18	0.28	0.25
19	0.34	0.37
20	0.40	0.39
21 gw1	0.45	0.25
22	0.60	0.40
23	0.37	0.36
24	0.42	0.55
25	0.20	0.27
Reliability (KR-20) = 0	.84	•

Appendix M: The sample of community-based materials



"Mahidol University The Wisdom of Salaya"

UNIT 2

LOCAL ATTRACTION

Text type : descrip Reading skills : preview	tive v pictures and captions, and scann	ning						
1. Before reading	1. Before reading about what's in your community							
- Where is Mahidol University Salaya Campus?								
- Do you know anyo University Salaya Ca	ne who are studying in or hampus?	ave graduated	from Mahidol					
Label the pictures								
auditorium	university's logo	cafeteria	library					
	1/2	-						









UNIT 2 LOCAL ATTRATION

2. Reading strategy

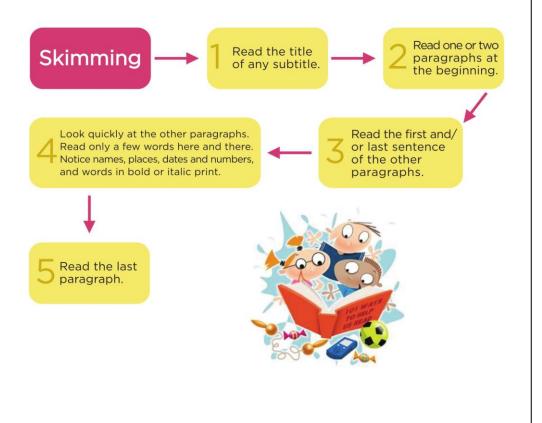
Skimming

2.1 What is skimming?

Skimming is moving your eyes over a text as you read quickly. You skim when you want to get a general idea about the information in the text but do not need to know all of the details.

2.2 What is the usefulness of skimming?

Skimming is a good way to preview a text. It also helps you save time. For example, you skim when you want to see if the full text is something you want to read or if it will have the information you need.



UNIT 2 LOCAL ATTRATION

3. Practice some more

Auditorium

Mahidol University's auditorium, also known as the Prince Mahidol Hall is a five-story structure providing an additional two stories of underground parking while offering a total floor-space of 31,400 m2. The building can facilitate a wide-range of national and international events such as ceremonies, academic conferences and exhibitions and



contains a main stage and orchestra pit, separate VIP sections for royalty and exhibition rehearsal and performance rooms.

The Prince Mahidol Hall's architecture is inspired by the physical structure of humans and plants, particularly that of the symbolic plant of Mahidol University KanphaiMahidol (Afgekiamahidoliae B. L. Burtt&Chermsir), which was named to commemorate the late Princess Mother, SomdejPhra Sri NakarindraBoromarajjonnani (then Princess SrisangwanMahidol). It also acknowledges Mahidol University's background in medicine

Source: http://www.mahidol.ac.th/en/facilities.html

Skim the passage above in 3 minutes or less. Then answer the following questions 1. What is the topic of the passage?
2. What is the main idea of this passage?
3. According to the main idea of this passage, what kind of information will the writer give ? Name at least 3 things.
4. What is the main idea of the first paragraph?

UNIT 2 LOCAL ATTRATION

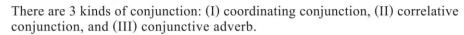
4. Understand the language

Conjunction

3.1 What is conjunction?

- A conjunction is a word used to connect:
 - I. words, phrases, or clauses within sentences
 - II. one sentence to another sentences
- It is also known as "a connector".
- It is a part of speech.

3.2 Kinds of conjunction



I. Coordinating conjunction (FANBOYS)

- There are 7 coordinating conjunctions which are commonly referred as 'FANBOYS'for, and, nor, but, or, yet, and so.
- Coordinating conjunction is used to join equal words to words, phrases to phrases, and clauses to clauses. For example, ...
 - Most SW3 students are cute and smart. (word to word)
 - The sport day will start in the end of December this year or at the beginning of January next year. (phrase to phrase)
 - What the student president says and what the student president does are 2 different things. (clause to clause)
- Coordinating conjunctions are used to join **between** items, **not** at the beginning or end.

Incorrect: But I don't like the new football field, I like the school's new canteen. Correct: I like the school's new canteen, **but** I don't like the new football field.

II. Correlative conjunction

either...or both...and

neither...nor not only...but also

These pairs of conjunctions require equal (parallel) structures after each other.

Correct: Somsri wants not only **good university** but also **good future.**Correct: Somsri not only **wants good university** but also **wants good future.**Incorrect: Somsri not only **wants good university** but also **good future.**



UNIT 2 LOCAL ATTRATION

Correct: Mana is **neither** good looking **nor** smart. Incorrect: Mana is **neither** good looking **or** smart.

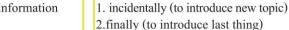
Conjunctive adverb

These conjunctions join independent clauses (a c;ause that can stand by itself)together.

- * To introduce/add new information which support earlier information
- 1. also
- 2. besides
- 3. furthermore
- 4. in addition
- 5. moreover
- 6. likewise



- * To introduce the logical result from the earlier information
- 1. thus
- 2. therefore
- 3. thereby
- 4. consequently
- 5. accordingly
- 6. as a result
- To introduce/add new information which contradict with earlier information
- 1. hence
- 2. however
- 3. still
- 4. nevertheless
- 5. nonetheless
- 6. on the contrary
- 7. on the other hand

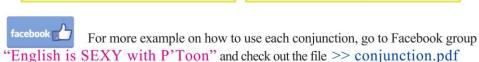




- 3. indeed (to emphasize positive statement)
- 4. in fact (to emphasize positive statement)
- 5. for example (to give example)
- 6. for instance (to give example)
- 7. after all (to conclude)

* Other conjunctive adverbs

8. in other word (to explain)



3.3 Time to practice on conjunction

Instruction: fill in the	blanks with conjunctions	provided (some conjunctions	will not be used

and or so but either...or neither...nor therefore finally however moreover in other word

- 1. Sompong has got grade A from Englishshe fails mathematics.
- 2. Somsak canjoin football clubmartial art club. He cannot join both.
- 3. She did well on O-NET., she is likely to be accepted by well-known universities.
- 4. After studying at SW3 for 7 years, Somchai hasgraduated.
- 6. My house was completely destroyed by the flood, I had to moved to other area.
- 7., he was not accepted in a medical science program. He still wants to apply next year.

UNIT 2 LOCAL ATTRATION

5. Vocabulary note

- 1) success (noun) the fact that you have achieved something that you want and have been trying to do or get; the fact of becoming rich or famous or of getting a high social position
- 2) application (noun) the practical use of something, especially a theory, discovery, etc
- 3) benefit (noun/verb) to be useful to somebody or improve their life in some way
- 4) mankind (noun) all humans, thought about as one large group; the human race
- 5) derive (verb) to come or develop from something
- 6) undergraduate (noun) a university or college student who is studying for their first degree
- 7) autonomous (adjective) able to govern itself or control its own affairs
- 8) institution (noun) a large important organization that has a particular purpose, for example, a university or bank
- 9) annually (adverb) once a year
- 10) freshman (noun) a student who is in his or her first year at a university or college, or in the ninth grade at school
- 11) facilitate (verb) to make an action or a process possible or easier
- 12) eco-friendly (adjective) not harmful to the environment
- 13) laboratory (noun) a room or building used for scientific research, experiments, testing, etc
- 14) laboratory (noun) a room or building used for scientific research, experiments, testing, etc
- 15) tram (noun) a vehicle driven by electricity, that runs on rails along the streets of a town and carries passengers

UNIT 2 LOCAL ATTRATION

5. Read about what's in your community

Mahidol University: Wisdom of Salaya

"True success is not in the learning, but in its application to the benefit of mankind"

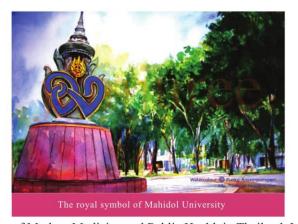
H.R.H. Prince Mahidol of Songkla

The word "Mahidol" is derived from Pali and Sanskrit-Mahitala. Mahi means "land" and tala means "ground, level". Therefore, Mahitala can be translated as "the ground of the earth". Moreover, Mahidol is also the personal name of His Majesty the King Bhumibol Adulyadei's father, His Royal Highness Prince Mahidol of Songkla. Now, Mahidol University has 7 campuses in total – 4 campuses in Bangkok and 3 provincial campuses. With continuing expansion



His Royal Highness Prince Mahidol of Songkla (Source: thaichamber.org)

across Thailand, in 2014, Mahidol University now has approximately 24,000 students with 15,500 undergraduates and 8,300 **postgraduates**. In addition, there are more than 25,000 staff in teaching, researching, and administration.



In the past, Mahidol University had its route from the establishment of Siriraj Hospital in 1888 by His Majesty King Chulalongkorn (Rama V). The Sirirahj Hospital's medical school is the oldest higher learning **institution** in Thailand, and later it became the University of Medical Sciences in 1943. In 1969, the University was renamed by King Bhumibol after his father, H.R.H. Prince Mahidol of Songkla, who is well-known as the Father

of Modern Medicine and Public Health in Thailand. In October 2007, Mahidol University was approved to be an autonomous institution. As a result, this transformation gave the university's flexibility efficiency and ability

transformation gave the university's flexibility, efficiency, and ability to enhance its standard to compete with other world-class universities.



Mahidol University's student pin



UNIT 2 LOCAL ATTRATION

Mahidol University Salaya Campus is located in Phutthamonthon District, Nakhon Pathom Province and was opened in 1982. The campus accommodates more than 30 offices, centers, faculties, and colleges. Salaya Campus welcomes roughly 5,000 new students annually. Some students study in Salaya only in their freshman year before continuing their core studies in other campuses while many spend their entire studies here.



Students are facilitated with a pleasant learning environment. They are taught by professional instructors; many of them are world-class researchers. In addition, students can learn beyond theories from experimentation in a wide range of laboratories, and do extra research via Mahidol University Library and Knowledge Center (MULKC) containing more than 1 million of books, journals, and research articles available both online and in hard-copies. Not only does Mahidol Salaya have a great learning environment, but students can also relax in a safe, clean, eco-friendly environment in 800 rai of wetland. Aside from studying, students can join various kinds of student activities such as sports, music, and volunteer clubs. Moreover, students can benefit from connection with students from different faculties. Students can travel around the campus by university tram service free-of-charge. Combining many factors such as professional lecturers, advanced facilities, and great learning environment makes Mahidol University Salaya Campus one the greatest higher learning institutions in Thailand.



Prince Mahidol Hall is located in Mahidol University Salaya Campus. It was constructed for multi-purpose use such as commencement ceremony and music exhibition.

UNIT 2 LOCAL ATTRATION

6. Let's check your understandind about what's in your community

6.1 Read the passage "Mahidol University The Wisdom of Salaya" and choose the best choice to answer each question

1. According to Prince Mahidol of Songkla's motto in the passage, what can be inferred about him?

- a. He is close-minded.
- b. He is open-minded.
- c. He is very kind.
- d. He is visionary.

2. According to the passage, who is King Bhuminol Adulyadej?

- a. He is Prince Mahidol's son.
- b. He is Prince Mahidol's father.
- c. He is Prince Mahidol's grandson.
- d. He is Prince Mahidol's grandfather.

3. Who are postgraduates in paragraph 1 line 9?

- a. Students who graduate with bachelor degree.
- b. Students who conduct research for universities.
- c. People who further their studies beyond their bachelor level.
- d. People who work for their universities after their graduation.

4. The word 'institution' in paragraph 2 line 3 can be best replaced by...

- a. Company
- b. Academy
- c. Organization
- d. Business

5. Mahidol University was founded......

- a. by Rama V
- b. from Siriraj Hospital
- c. from a medical school
- d. by Prince Mahidol of Songkla



UNIT 2 LOCAL ATTRATION

- 6. Which of the following statements is NOT true about Mahidol University Salaya Campus?
 - a. It is located outside Bangkok.
 - b. It was established more than 30 years ago.
 - c. It accommodates freshmen from all faculties.
 - d. Some students study here until their graduation.
- 7. According to the passage, what is NOT the reason which makes Mahidol University Salaya Campus a good higher learning institution?
 - a. It has many talented students.
 - b. There are many kinds of laboratories.
 - c. It has many professional lecturers
 - d. It has relaxing learning atmosphere.

8. What can be concluded about Mahidol University Salaya Campus?

- a. The students are likely to be successful academically.
- b. The students are likely to have good careers in the future.
- c. The students are likely to have quality undergraduate lives.
- d. The students are likely to achieve in academic and social aspect.



UNIT 2 LOCAL ATTRATION

8. Community - based task

Instruction

- 1. Form a group of 4-5 students
- 2. Enter www.muic.mahidol.ac.th > student life > student activities
- 3. Write a small project of no more than 100—125 words on a topic "If you were a MUIC student, which student activity would you join (gives reasons) to benefit local community around Mahidol University Salaya Campus

Appendix N: Community-based materials (Experts' evaluation form)

Notes to expert

- 1. The index of item-objective congruence (IOC) is used for evaluating content validity at the item development stage of the community-based materials before implementing with upper secondary school students for one semester.
- 2. Please see the brief research proposal attached for more details about the study
- 3. Please review this IOC form. If any further clarification is needed, the expert can contact the researcher directly via telephone and e-mail written above.

This IOC form consists of 2 parts: 4 pages as follows.

Part 1: Personal Information of the experts

Part 2: Item-objective congruence (IOC) of aspects included in the community-based materials

Attached Document(s): The form of community-based materials before implementing with upper secondary school students for one semester

Part 1: Personal Information of	the expert	
	.axaUmrexa	•••••
	Workplac	ce
Education background		
□undergraduate level	□graduate level	□others

Part 2: Item-objective congruence (IOC) of aspects included in the community-based materials ${\bf r}$

Please rate the appropriateness of each item listed by marking " $\sqrt{}$ " in \square provided as follows:

- +1 = the item is appropriate to be used;
- 0 = I am not sure; and
- -1 = the item is not appropriate to be used.

(In case -1 is marked, please give any comments and/or suggestions)



C	Materials		OC	:	D 1.0	
Concept			0	1	Recommendation	
layout	 The layout and design are appropriate and clear. The textbook is organized effectively. 					
and design	3. An adequate vocabulary list or glossary is included.					
	4. Adequate review section and exercise are included.					
	5. The text book provides a balance of activities (Ex. There is an even distribution of free vs. controlled exercises and tasks that on both fluent and accurate.) 6. The activities encourage					
	sufficient communicative and meaningful practice 7. The activities incorporate individual, pair, and group work.					
Activities	8. The grammar points and vocabulary items are introduced in motivating and realistic contexts.9. The activities promote creative,	8)				
	original, and independent response. 10. The tasks promote the students to see the value of knowledge and culture in their local community. 11. The tasks promote students to	O I Y				
	be active and good citizens toward their local community.					

C	Madaniala	I	00	•	D
Concept	Materials	-1	0	1	Recommendation
	13. The language used in the textbook is authentic.				
Language	14. The language used is at the right level for my students' current English proficiency.				
type	15. The grammar point presented with brief and easy examples and explanations.				
	16. The language functions exemplify English that my students will be likely to use in the future.				
Communit y-based content	17. The community-based content of the textbook is relevant to my stakeholders' (students, local English teachers, and local wisdoms) needs according to the result of the needs analysis. 18. The community-based content of the textbook is generally realistic. 19. The community-based content of the textbook is interesting, challenging, and motivating. 20. There is sufficient variety in the community-based content of the textbook. 21. The materials is not culturally bias and it does not portray any	i TY			
conclusion	negative stereotypes. 22. The textbook is appropriate for the language learning aims of my community-based course. 23. The textbook is suitable for grade 12 secondary school students. 24. The textbook raises my students' interest in future English language study. 25. The textbook raises my students' awareness and good citizenship toward their local community.				

Appendix O: The Item-Objective Congruence Index of community-based materials

			Level of appropriateness					
Concept	Materials	Expert 1	Expert 2	Expert 3	Total	Meaning		
	1. The layout and design are appropriate and clear.	0	1	1	0.67	accept		
layout	2. The textbook is organized effectively.	0	1	1	0.67	accept		
and design	3. An adequate vocabulary list or glossary is included.	0	1	1	0.67	accept		
	4. Adequate review section and exercise are included.	0	1	1	0.67	accept		
	5. The text book provides a balance of activities (Ex. There is an even distribution of free vs. controlled exercises and tasks that on both fluent and accurate.)	1	1	1	1	accept		
	6.The activities encourage sufficient communicative and meaningful practice	1	1	1	1	accept		
	7. The activities incorporate individual, pair, and group work.	n Tane	ERSITY	1	1	accept		
Activities	8. The grammar points and vocabulary items are introduced in motivating and realistic contexts.	0	1	1	0.67	accept		
	9. The activities promote creative, original, and independent response.	1	1	1	1	accept		
	10. The tasks promote the students to see the value of knowledge and culture in their local community.	1	1	1	1	accept		
	11. The tasks promote students to be active and good citizens toward their local community.	1	1	1	1	accept		

			Level o	f appropriateness			
Concept	Materials	Expert 1	Expert 2	Expert 3	Total	Meaning	
Skills	12. The materials include and focus on the reading ability than my students need to practice.	0	1	1	0.67	accept	
	13. The language used in the textbook is authentic.	0	1	1	0.67	accept	
	14. The language used is at the right level for my students' current English proficiency.	0	1	1	0.67	accept	
Language type	15. The grammar point presented with brief and easy examples and explanations.	0	1	1	0.67	accept	
	16. The language funtions exemplify English that my students will be likely to use in the future.	1	1	1	1	accept	
	17. The content of the textbook is relevant to my stakeholders' needs according to the result of the needs analysis.	1	1	1	1	accept	
	18. The content of the textbook is generally realistic.	หาวิทย เ Univ	าลัย ERSITY	1	1	accept	
content	19. The content of the textbook is interesting, challenging, and motivating.	1	1	1	1	accept	
	20. There is sufficient variety in the content of the textbook.	1	1	1	1	accept	
	21. The materials is not culturally bias and it does not portray any negative stereotypes.	1	1	1	1	accept	

	Materials	Level of appropriateness				
Concept		Expert 1	Expert 2	Expert 3	Total	Meaning
	22. The textbook is appropriate for the language learning aims of my community-based course.	1	1	1	1	accept
	23. The textbook is suitable for grade 12 secondary school students.	0	1	1	0.67	accept
conclusion	24. The textbook raises my students' interest in future English language study.		1	1	1	accept
	25. The textbook raises my students' awareness and good citizenship toward their local community.	1	1	1	1	accept

จุฬาลงกรณ์มหาวิทยาลัย Chulalongkorn University

Appendix P: List of experts

1. Experts validating community-based questionnaire

- a. Tanyaporn Arya, PhD.
- b. Pramarn Subphadoongchone, PhD.
- c. Mrs. Kantana Sutthikorn

2. Experts validating english reading ability test

- a. Tanyaporn Arya, PhD.
- b. Pramarn Subphadoongchone, PhD.
- c. Mrs. Kantana Sutthikorn

3. Experts validating local cultural knowledge test

- a. Tanyaporn Arya, PhD.
- b. Pramarn Subphadoongchone, PhD.
- c. Mrs. Kantana Sutthikorn

4. Experts validating community-based materials

- a. Chansongklod Gajaseni, Assistant Professor Dr.
- **b.** Pornpimol Sukavatee, Ph.D.
- c. Mrs. Kantana Sutthikorn

5. Local wisdoms

- a. Mr. Warin Keawsaard.
- **b.** Father Pitakphol Kesaro
- c. Mr. Chuchai Buangam.

Appendix Q: The sample of ReadabilityFormulas

Your Results:

Your text: A four-year study conducted by the Infant Testing ...(show all text)
Center in San Francisco, California, suggests that babies feel more comfortable around other babies than with strange adults. According to the study, babies benefit by being with their fellow infants daily. Whereas a baby might show fear of an adult stranger, he is likely to smile and reach out for an unfamiliar infant. By the time babies are one year old, they have begun to form friendships of a sort. The above findings, based on observation of 100 babies aged three months to three year, might prove interesting to working parents who have to find day-care for their babies. Family care in a private home, with several babies together, is probably the ideal way to care for babies under three. Dr. Benjamin Spock, a well-known pediatrician and author of books about babies, supports the idea. He says the family day-care is sounder in theory than hiring a housekeeper or a babysitter.

Flesch Reading Ease score: 56.6 (text scale)

Flesch Reading Ease scored your text: fairly difficult to read.

[f] [a] [r]

Gunning Fog: 10.9 (text scale)

Gunning Fog scored your text: hard to read.

[f] [a] [r]

Flesch-Kincaid Grade Level: 9.9

Grade level: Tenth Grade.

[f] [a] [r]

The Coleman-Liau Index: 9

Grade level: Nineth Grade

[f] [a] [r]

The SMOG Index: 8.3 Grade level: Eighth grade

[f] [a] [r]

Automated Readability Index: 9.4

Grade level: 13-15 yrs. old (Eighth and Ninth graders)

[f] [a] [r]

Linsear Write Formula: 11.1 Grade level: Eleventh Grade.

[f] [a] [r]

Readability Consensus

Based on 8 readability formulas, we have scored your text: Grade Level: 9

Reading Level: fairly difficult to read.

Reader's Age: 13-15 yrs. old (Eighth and Ninth graders)

Appendix R: The sample of students' community-based task

1.	Miss Pemika Uunsamai	number 16
2.	Rinrada Sor-jarernchai	number 24
3.	Oratai Naksean	number 30
4.	Yaneenat Rodphotong	number 44

Write a small project of no more than 100—125 words on a topic "If you were a MUIC student, which student activity would you join (gives reasons) to benefit local community around Mahidol University Salaya Campus

If I were a MUIC student, I would join Volunteer Club. I want to help poor people. If I am in Volunteer Clue at MUIC, I want start English teaching program for local community around Mahidol University Salaya Campus because Thai students are not good in English. They will have problems in AEC because we cannot speak English very good. If students in Salaya are good in English, they can compete with foreigners better in AEC and they can go to good university like Chulalongkorn University or Mahidol University. Salaya will have more educate people and Salaya will be a better place. There will be no crime if people are educate. Salaya will be a better place to live because safe and educate people.

CHULALONGKORN UNIVERSITY

1. Kanyamon Petchsrisom number 36

2. Chattamon Sertdilok number 37

Instruction

- 1. Form a group of 2 students
- 2. Brainstorm between each other on the topic "why and how farmers in Thawi Watthana, Nong Khaem, and Phutthamothon District should practice the New Theory Agriculture?"
- 3. Write an essay of no more than 250 words

We visited the New Theory Agricultural School on 10th January 2015. We saw many good things why farmers should practice the new agricultural theory in Thawi Watthana, Nong Khaem, and Phutthamonthon District. The first thing is the new theory agriculture is good for farmer have farm no more than 25 rais. And most farmers in area do not have large farmland. So it is suitable for farmers in area. The second thing is the new agriculture theory want farmers to grow many things so they can sell many products all year. They can be richer from practicing the new theory agriculture. The third thing is farmers will have water all the time because the new theory agriculture want farmers to build water storage so farmers can have water to grow plants. In drought season, farmers still have water for trees. The forth thing is the farmers in the area can be stronger because they united as agricultural cooperative. So they can bargain better with businessmen. The last thing is farmer can be stronger because they join with banks to get loans to further their business. In the end, farmers in Thawi Watthana, Nong Khaem, and Phutthamothon District should practice the New Theory Agriculture.

Appendix S: Sample of community-based materials' manual

Community-based materials

Rationale

Developments of English instructional materials using a framework of community-based education have been conducted in several local educational institutions (e.g. Rajabhat Rajanagarindra University in Chachoengsao Province and Matthayom Sunguipadee School in Narathiwat Province), or by local English instructors for specific course use only (e.g. the development of English reading materials for three southern border provinces of Thailand). Despite the fact that community-based English instructional materials have been conducted in many parts of Thailand, there has been not much effort to do similarly in Bangkok. Bangkok has been ignored, possibly, due to the nature of being a loose and urban community. English language curriculums in governmental secondary education in Thailand, normally, use international commercialized English instructional textbooks to teach English reading ability. International commercialized English instructional textbooks may be contextually and culturally alienated to many Thai students because they are mostly about Western culture and lifestyle such as places, cuisine, and human interactions which many Thai students are not familiar with and have only little intercultural background knowledge to comprehend them. As a result, this affects on Thai students' ability to improve English reading ability due to the lack of schema both culturally and contextually. Moreover, an effort to develop an English reading materials using community-based in Bangkok has never been done. There are needs from several stakeholders in Bangkok, specifically Nawaminthrachinuthit Satriwitthaya Phutthamonthon School (SW 3), for community-based English instructional materials to be developed and used in a school English elective course for reading and writing in upper secondary level.

Bangkok and its identities

Bangkok was founded as a new capital city of the Kingdom of Thailand in 1782 by Rama I. Currently, the city has 50 districts with 5.7 million Bangkok local citizens. However, the total population (locals and immigrants) in Bangkok is 10.4 million people (Bangkok & Statistics, 2013). This statistic suggests that Bangkok is facing the rapid transition in terms of population growth, housing expansion, and business development in order to accommodate both locals and immigrants. As a result, there are many parts of Bangkok where their communities' identities have gone missing or are about to disappear. In order to reverse of the situation, several stakeholders both in national level and community level such as the government of Thailand, local educational institutions, and local citizens feel the necessity to preserve local communities' identities in Bangkok. In the national level, the Ministry of Education of Thailand states in the Basic Education Core Curriculum B.E. 2551 (A.D. 2008) that the key to success in implementing the core curriculum is to have the concerted efforts of all the concerned parties at all level – individual, family, community, and national. All of the parties need to work on a systematic and continuous basis on planning, promoting, and supporting the teaching and learning (Education, 2008). As stated earlier, there is an attempt to include community in order to respond to the individuals' needs in the community and solve the community's problem as a whole. Consequently, every governmental school should integrate local community and community knowledge as a part of the school's curriculum. Particularly in Nawaminthrachinuthit Satriwitthaya Phutthamonthon School, a governmental school located in Thawi Watthana District, where the school and its area are the context of the study, has a subject on local community taught by the local teachers in the school. However, there has been no attempt to promote the local community and its knowledge as a part of curriculum in foreign language subjects particularly English despite the fact that the school has some flexibility to manage its curriculum.

English textbooks in Thailand

It is very common to see Thai secondary schools both governmental and private select global English language commercial textbooks as their preferred English instructional materials. Normal global commercial textbooks contain content mainly about Western cultures and lifestyle such as places, cuisine, and human interaction. This creates difficulties to non-Western students because they do not have sufficient inter cultural background knowledge to comprehend the content. Therefore, many times, local English language instructors would customize some aspects, parts, or lessons of their English courses to suit more with the instructors' needs, students' needs, and their background knowledge of both teachers and students. However, customized local English instructional materials for a full course are hardly done and supported. Mckay (2002) recommended that educators should recognize the importance of adding content relates to learners' local culture and support the selection of appropriate teaching methodology that is suitable to the local educational context. In addition, Rattanaphumma (2006) stated "the carrier content of English teaching should concern Thai and local culture and issues or general and scientific knowledge". In conclusion, there are strong supports for local culture content in English language instruction which indicate that it can help promote and enhance English language skills and a learner's knowledge of own culture.

The importance of English reading

Many of us take reading as something for granted because reading appears to consume little effort and little planning. According to Grabe (2009), more than 80 percent of the world's population is able to read in some extent. Despite long human history, reading text is considered to be a relatively recent human activity. It has been being around for about 5,000 years. Through text, writers can communicate with others at great distances. In academic context, Nunan (2003a) estimates that more than 50% of academic publications is in English each year, and the percentage continues to grow gradually year by year. In a more recent study, Weifen (2012) conducted a research of language preference for academic publication in various languages such as English, German, and Spanish. He found that research published in

English tend to be related to the 'harder' Physical and Life Sciences (i.e. Physics, Engineering, and Material Science). On the contrary, researchers who publish their works in other languages such as Dutch, French, Italian, Spanish, and Portuguese have their works in 'softer' sciences such as Health Sciences, Social Sciences, and Humanities. This suggests that one of the main factors to be able to accomplish in academic and professional life is to be capable in communicating in English, especially in reading. As a result, one needs to acquire good reading skills to obtain knowledge and learning new information. Mckay (2002) stated that, to access higher education in many countries, it is depended on the knowledge of English as one of the essential elements. This implies to Thai students intending to pursuit in higher education both domestically and abroad that they need to have good command in English, specifically in reading because a wild range of academic sources are available in English. However, Sripangen (2008) wrote that English reading comprehension skills of students at the upper secondary level in Thailand are below the 80% criterion which is considered to be quite low. This problem is going to make a massive impact toward Thailand's young workforce in the future. According to Rattanaphumma (2006), almost every field of knowledge is available in English, and many well-paid jobs in private and public sectors require their employees to have a reasonably decent skill in English language communication. Not long ago, many government agencies, local businesses, and transnational corporations in Thailand require their applicants to have a minimum certain score of TOEIC exam (Test of English for International Communication). Moreover, some agencies and corporation use their current employees' TOEIC score for their employees' promotion. In Thailand, the TOEIC test available is Listening and Reading test which the test construction is divided into 2 parts equally: 100 listening questions and 100 reading questions. Therefore, those who have low proficient in reading ability are likely to struggle in both their academic and professional lives.

The Government of Thailand formed 'The Basic Education Core Curriculum B.E. 2551 (A.D. 2008) which all of the governmental schools in Thailand must follow. In this policy, there are 4 main objectives in learning foreign language: 1) language for communication, 2) language and culture, 3) language and relationship

with other learning areas, and 4) language and relationship with community and the world. The policy also states the learner's quality for grade 12 graduates that they should be able to utilize the foreign language that they learn in 4 different skills in the real world situation both inside and outside the classroom. The students should be able to respond well to various types of instructional tools such as news, advertisements, poems, announcements, and skits which they have read and are able to identify the main idea, express their opinions, and conclude after reading the materials and other instructional tools. Lastly, the students should be able to communicate with everything around them using the amount of vocabulary of 3,600 – 3,750 words with different levels of usage (Education (2008).

The context of community-based materials

This section provides the 3 areas of western side of Bangkok where most of the research participants live. The 3 areas are: 1) Thawi Watthana District (Bangkok), 2) Nong Khaem District (Bangkok), and 3) Phutthamonthon District (Nakhon Pathom Province).

Thawi Watthana District, Bangkok

Thawi Watthana District is located on the western side of Bangkok and on the west bank of Chao Phraya River. Originally, Thawi Watthana was a sub-district within Taling Chan District, Thonburi Province. Later on, the Ministry of Affair decided to merge Thonburi Province and Phra Nakhon Province (old Bangkok on the eastern side of Chao Phraya River) to be one province which became to be Bangkok in the present time. In 1999, due to the continuing growth of population, Thawi Watthana Sub-district was promoted to be a district separated from Taling Chan District according to the Ministry of Affair's declaration. Now, Thawi Watthana District consists of 2 sub-districts: 1) Thawi Watthana and 2) Sala Thammasop. In addition, it has an area of 50.219 square kilometers with a population of 76,787 people according to the population survey in 2011 (Bangkok & Statistics, 2013).

Thawi Watthana is considered to be agricultural and residential area. In terms of agriculture, many locals owe and work in orchid, lotus, rice, and other vegetable farms, but the number of farming areas is declining due to the growing of hi-end private housing estates. In addition, the district is categorized as a green zone where no heavy industry is allowed to be set up by the law, and it is within a reasonably driving range with a ten-lane road to the center of Bangkok. Accordingly, there is a rapid growth of private housing estate groups buying large areas of land for both high and upper-middle class housing projects.

Nong Khaem District, Bangkok

Nong Khaem District is also located on the western side of Bangkok, on the west bank of Chao Phraya River. This district has a very long history. In 1902, Rama V wanted to decentralize the administrative authority, and he saw that Nong Khaem area was very aplenty where it could be used as a center of civil development on the western side of Chao Phraya River. As a result, he gave an order to establish Nong Khaem area to be a district. Now, Nong Khaem consists of 2 sub-districts: 1) Nong Khaem and 2) Nong Khang Phlu. It has an area of 35.8 square kilometers with the population of approximately 151,877 people (Bangkok & Statistics, 2013).

In the past, Nong Khaem District was agricultural and residential area. However, Nong Khaem District has been facing rapid transition especially in fast population boom due to the increase of medium-size industry which requires a large number of factory workers. Consequently, the agricultural area is declining because the increasing demands for low cost real estate and land to build factories and warehouses.

Phutthamonthon District, Nakhon Pathom Province

Phutthamonthon District is located in Nakhon Pathom Province which is next to Thawi Watthana District. Phutthamonthon District was founded in 1991. It has 3 sub-districts: 1) Salaya, 2) Khlong Yong, and 3) Maha Sawat. The district has

an area of 52.3 square kilometers with the population of approximately 37,435 people (Nakhonpathomstat, 2013).

Most of the area in Phutthamonthon District is used for agricultural purposes. There are many rice fields, coconut, and pomelo plantations. However, in these recent years, many areas have been turned into housing projects and commercial areas such as department stores and sport clubs. Therefore, many farmers have given up their farmlands to outside investors due to the rapid increasing of land price.

Nawaminthrachinuthit Satriwitthaya Phutthamonthon School (Satriwit 3)

Nawaminthrachinuthit Satriwitthaya Phutthamonthon School or Satriwit 3 is situated in Thawi Watthana District, Bangkok. The school was founded in 1993 to celebrate Queen Sirikit sixty-year birthday anniversary. It has 6 levels from grade seven to twelve under the Ministry of Education's administration. Currently, the school has almost 3,000 students. Most of the students live in Thawi Watthana District, Nong Khaem District, Phtthamonthon District, and other districts within 10-15 kilometers of driving range to the school. Socio-economically, most students are from middle class families. The school and school classrooms are well-equipped with necessary instructional tools such as computer labs, learning resource centers, and Wi-Fi service throughout the school. Lastly, the school has been well-known for its academic prestigious; therefore, the number of grade 7 and 10 applicants is increasing every year.

Objectives of the materials

- 1. Students' English reading ability will improve after the implementation of community-based materials.
- 2. Students' local cultural knowledge will improve after the implementation of community-based materials.

Scope and sequence of the materials

There are 4 conceptual themes and 5 reading topics as follows.

Conceptual theme	Reading topic
1. Local history	1. The Great Flood 2011
2. Local attraction	Mahidol University: The Wisdom of Salaya Nawaminthrachinuthit Satriwitthaya Phutthamonthon (CW 2)
3. Religion	(SW 3) 4. Buddhamonthon: The Local Buddhist Park
4. Local knowledge	5. The New Theory Agriculture: The Solution of Modern
	Farmers

Community-based materials structure

Name	Community-based materials
Student level	upper secondary, grade 11 – 12, intermediate
Number of contact hours	3 hours per unit
Number of hours for extra	2 hours per unit
reading and practice	
Number of hours for	4 hours per unit
community-based task	
Total hours:	45 hours for the whole materials

Materials description

Community-based materials is an integration of teaching English reading ability and local cultural knowledge to enhance local students in both aspects. It was found that using local cultural knowledge can enhance the students' English reading

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ability as well as local history, sense of appreciation, and sense of active citizenship

toward their local community.

Learners' roles

Students are expected to be active learners. They are required to conduct

reading before and during each class. Moreover, they are also required to think

critically and interact with both local wisdoms and local resources to complete a

community-based task at the end of each unit.

Teachers' roles

Teacher's roles can be organizer, facilitator, coach, advisor, and student's

partner.

Unit 1: The Great Flood 2011

Number of hours:

3 hours

Text type:

cause & effect

Reading skills:

preview pictures and caption, and scanning

Rationale

Thawi Watthana, Nong Khaem, and Phutthamonthon District were affected by

the Great Flood in 2011 badly. The 3 areas were completely flooded; therefore, it is

essential for local students to know about the causes and effects of the flood in 2011.

In addition, These 3 areas are likely to encounter massive flood like this again. As a

result, if a similar event happens in the future, students can be prepared to lessen

effects from any floods. Moreover, this could benefit local students' families and their

local community.

Objectives of the unit

- 1. Students will learn about scanning as one of the reading strategies.
- 2. Students will practice scanning as one of the reading strategies.
- 3. Students will understand Active Passive Voice.
- 4. Students will learn important related vocabulary.
- 5. Students will understand the causes and effects of the Great Flood 2011 through the reading passage.
- 6. Students will practice their comprehension about the text.
- 7. Students will conduct a community-based task by expressing their opinion of how to minimize effects from a major flood.

Project assignment

Students will conduct an individual task by writing a small essay about their opinion to minimize effects from a major flood in his/her community.

There are 4 steps as follows.

- 1. Every student needs to join a facebook page provided in the materials.
- 2. Students read documents uploaded in the page to study more in detail about flooding and how to handle floods.
- 3. Students should outline of what they want to write.
- 4. Students write a 100-word essay in the materials.

Answer keys for unit 1

- o Page 3: Time to practice
 - 1. It happens along the west coast of South America.
 - 2. El Nino
 - 3. It comes from Spanish.
 - 4. El Nino is characterized by warm ocean temperatures but La Nina is characterized by cool ocean temperatures.

- o Page 5: Time to practice on Passive Voice
 - 1. Refreshments will be served by someone.
 - 2. These flowers were made in the factory by them.
 - 3. This building is being pulled down by them.
 - 4. The patient was not taken to hospital by them in an ambulance.
 - 5. Your money will be repaid within 2 weeks.
 - 6. Your house can be found without difficulty.
 - 7. Their project should be started soon.
 - 8. The building where we keep horses is called "a stable".
- Page 9 10: Let's check your understanding
 - 1. c
 - 2. b
 - 3. b
 - 4. d
 - 5. c
 - 6. a
 - 7. b
 - 8. d
 - 9. c
 - 10. a

Unit 2: Mahidol University: The Wisdom of Salaya

Number of hours: 3 hours

Text type: descriptive

Reading skills: preview pictures and caption, and scanning

Rationale

Mahidol University is one of the best and prestigious universities in Thailand. The university was established in 1988. Now, it accommodates more than 24,000 students in both undergraduate and graduate levels. In 1982, Mahidol University built a new campus in Salaya sub-district, Phutthamonthon district, Nakhon Pathom province, and it is considered to be the biggest campus in Mahidol University. Many local students want to pursue higher education at Mahidol University Salaya Campus because its excellent educational reputation as well as close distance to local communities in the areas. Therefore, it is very beneficial for local students to have general information about Mahidol University Salaya Campus, so they can have better judgement whether they want to pursue their higher education at the university or not.

Objectives of the unit

- 1. Students will learn about skimming as one of the reading strategies.
- 2. Students will practice skimming as one of the reading strategies.
- 3. Students will understand conjunction.
- 4. Students will learn important related vocabulary.
- 5. Students will learn about the history and current situation of Mahidol University and Mahidol University Salaya Campus through the reading passage.
- 6. Students will practice their comprehension about the text.
- 7. Students will conduct a community-based task by researching in Mahidol University International College's website and share their critical thinking and opinion of how to improve local community around the campus.

Project assignment

Students will conduct a group task by researching and writing a small essay about joining Mahidol University International College's clubs to improve local community around the campus.

There are 4 steps as follows.

- 1. Students need to enter www.muic.mahidol.ac.th go to 'student life' then go to 'student activities'.
- 2. Students pretend to be a MUIC student then choose to be a member of one of the student clubs available in the website.
- 3. Students brainstorm and outline with their group members of what they want to write.
- 4. Students write a 100-125-word essay in the materials.

Answer keys for unit 2

- Page 16: Practice some more
 - 1. Auditorium
 - 2. Mahidol University's auditorium
 - 1) Mahidol University's auditorium is also known as the Prince Mahidol Hall.
 2) Mahidol University's auditorium is a fivestory structure.
 3) The auditorium can facilitate many kinds of events.
 - 4. General detail about Mahidol University's auditorium
- o Page 18: Time to practice on conjunction
 - 1. but
 - 2. either...or
 - 3. Therefore
 - 4. finally
 - 5. and
 - 6. so

- 7. However,
- o Page 22 -23: Let's check your understanding
 - 1. d
 - 2. a
 - 3. c
 - 4. b
 - 5. d
 - 6. c
 - 7. a
 - 8. b



VITA

Paripat Salubsee was born on the 13rd October 1988 in Bangkok, Thailand. In 2011, he graduated with a Bachelor of Arts majoring in Social Science at Mahidol University International College. He continued his Master's degree in English as an International Language, graduate school, Chulalongkorn University in the year of 2012. After that, he has taught at Rajamangala University of Technology Phra Nakhon as a part-time English lecturer. Currently, he works as a part-time university English lecturer, English tutor, and entrepreneur.

