

The Development of the English Content-  
Based Reading Materials for Buddhist Student Monks



Miss Phatchareporn Suphipat

บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR)  
เป็นแฟ้มข้อมูลของนิสิตเจ้าของวิทยานิพนธ์ ที่ส่งผ่านทางบัณฑิตวิทยาลัย

The abstract and full text of theses from the academic year 2011 in Chulalongkorn University Intellectual Repository (CUIR)  
are the thesis authors' files submitted through the University Graduate School.

A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Education Program in Teaching English as a Foreign  
Language  
Department of Curriculum and Instruction  
Faculty of Education  
Chulalongkorn University  
Academic Year 2017  
Copyright of Chulalongkorn University

การพัฒนาสื่อการอ่านภาษาอังกฤษตามการสอนแบบเน้นเนื้อหาสำหรับพระนิสิต



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาครุศาสตรมหาบัณฑิต  
สาขาวิชาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน

คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ปีการศึกษา 2560

ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย



พัชรินทร์ ศุภพิพัฒน์ : การพัฒนาสื่อการอ่านภาษาอังกฤษตามการสอนแบบเน้นเนื้อหา สำหรับพระนิสิต (The Development of the English Content-Based Reading Materials for Buddhist Student Monks) อ.ที่ปริกษาวิทยานิพนธ์หลัก: รศ. ดร. สุมาลี ชีโนกุล, 240 หน้า.

งานวิจัยนี้มีวัตถุประสงค์เพื่อ 1) พัฒนาสื่อการอ่านภาษาอังกฤษตามแนวการสอนแบบเน้นเนื้อหาสำหรับพระนิสิต 2) ศึกษาความคิดเห็นของพระนิสิตที่มีต่อคุณภาพสื่อการอ่านภาษาอังกฤษตามแนวการสอนแบบเน้นเนื้อหา 3) ศึกษาความคิดเห็นของครูผู้สอนที่มีต่อคุณภาพสื่อการอ่านภาษาอังกฤษตามแนวการสอนแบบเน้นเนื้อหา งานวิจัยนี้ประกอบด้วย 6 ขั้นตอน ตั้งแต่การระบุความต้องการในการพัฒนาสื่อการเรียนการสอนจนถึงการประเมินประสิทธิภาพ กลุ่มตัวอย่างในการวิจัย คือ พระนิสิตจำนวน 42 รูป และครูสอนภาษาอังกฤษจำนวน 3 คนจากสำนักการศึกษา วัดพระธรรมกาย ปีการศึกษา 2560 เครื่องมือที่ใช้ในการทดลอง ได้แก่ การสัมภาษณ์ แบบสอบถามความต้องการ และแบบประเมินผล ข้อมูลเชิงคุณภาพใช้การวิเคราะห์เนื้อหา สถิติที่ใช้ในการวิเคราะห์ข้อมูลเชิงปริมาณ ได้แก่ ค่าแจกแจงความถี่ ร้อยละ ค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน ผลการวิจัยพบว่า สื่อการอ่านภาษาอังกฤษตามแนวการสอนแบบเน้นเนื้อหาสามารถพัฒนาอย่างมีประสิทธิภาพโดยใช้กรอบแนวคิดการพัฒนาสื่อการเรียนการสอนของ Tomlinson (2011) ผสานกับแนวคิดแบบ Six T's ของ Stoller และ Grabe (2017) และพระนิสิตและครูผู้สอนมีความเห็นว่าคุณภาพของสื่อการอ่านภาษาอังกฤษตามแนวการสอนแบบเน้นเนื้อหา ประกอบด้วยคุณภาพด้านวิชาการและลักษณะทางกายภาพ และประสิทธิภาพในการเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจ ในส่วนคุณภาพด้านวิชาการและลักษณะทางกายภาพพระนิสิตมีความคิดเห็นที่ดีต่อเกณฑ์คุณภาพ 6 ประการ ได้แก่ เนื้อหา การจัดลำดับเนื้อหา การนำเสนอเนื้อหา ภาษา กิจกรรม การออกแบบรูปเล่ม ส่วนครูผู้สอนมีความคิดเห็นที่ดีต่อเกณฑ์คุณภาพ 7 ประการ ได้แก่ 6 เกณฑ์เช่นเดียวกับพระนิสิตและคู่มือครู งานวิจัยนี้ได้แสดงขั้นตอนเชิงทฤษฎีในการพัฒนาสื่อการเรียนการสอนให้มีคุณภาพอย่างชัดเจนและสามารถใช้เป็นตัวอย่างแก่ ครูผู้สอน ผู้พัฒนาสื่อ และนักวิจัยในเรื่องความเชื่อมโยงการพัฒนาสื่อการเรียนการสอนและงานวิจัยการสอนภาษาอังกฤษได้

ภาควิชา	หลักสูตรและการสอน	ลายมือชื่อ นิสิต .....
สาขาวิชา	การสอนภาษาอังกฤษเป็น ภาษาต่างประเทศ	ลายมือชื่อ อ.ที่ปริกษาหลัก .....

ปีการศึกษา 2560

# # 5883428827 : MAJOR TEACHING ENGLISH AS A FOREIGN LANGUAGE

KEYWORDS: CONTENT-BASED INSTRUCTION / STUDENT MONKS / ENGLISH READING MATERIALS / MATERIALS DEVELOPMENT

PHATCHAREPORN SUPPHIPAT: The Development of the English Content-Based Reading Materials for Buddhist Student Monks. ADVISOR: ASSOC. PROF. SUMALEE CHINOKUL, Ph.D., 240 pp.

The objectives of this study are 1) to develop the English content-based reading materials for Buddhist student monks, 2) to examine the attitude of student monks towards the quality of the English content-based reading materials, and 3) to examine the attitude of teachers towards the quality of the English content-based reading materials. The study was conducted in 6 stages starting from the identification of needs to create materials to the evaluation of the effectiveness of the developed materials. The participants of 42 student monks and 3 English teachers were purposefully selected from the Education Department of Wat Phra Dhammakaya in academic year 2017. Instruments used were semi-structured interview, needs analysis questionnaires, and evaluation questionnaires. The qualitative data was analyzed by the content analysis. The statistics used to analyze the quantitative data were frequency, percentage, mean, and standard deviation. The findings revealed that the English content-based reading materials for Buddhist monks were effectively developed by using material development framework of Tomlinson (2011) embedded with Six-T's approach of Stoller and Grabe (2017), and the quality was the academic and physical aspects and the effectiveness in enhancing reading comprehension. In terms of the quality of academic and physical aspects, student monks had positive attitude towards 6 criteria including content, organization of content, presentation of content, language use, activities applied, and layout and design, and teachers had positive attitude towards 7 criteria 6 of which were exactly the same as those of student monks plus the criterion of teachers' manual. This study clearly demonstrated theoretical processes of developing instructional materials of good quality and could be an example research to illustrate the connection between instructional materials developing and English language learning research for teachers, materials developers, and researchers in the field.

Department: Curriculum and Instruction      Student's Signature .....

Field of Study: Teaching English as a Foreign      Advisor's Signature .....  
Language

Academic Year: 2017

## ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the contribution from many people. First and foremost, I would like to thank my supervisor Assoc. Prof. Dr. Sumalee Chinokul for her constant encouragement, valuable guidance, and helpful advice at all stages of this research. I would also like to express my gratitude to the entire thesis committee members: Asst. Prof. Dr. Prannapha Modehiran and Assoc. Prof. Prakaikaew Opanon-Amata who provided critical feedbacks and fruitful comments essential for improving research quality.

I am highly indebted to all experts who were actively involved in the validation of the research instruments: Ven. Thana Tejadhammo, Dr. Apiraporn Vasavakul, Dr. Bunchird Chawarithruenglith, Dr. Rawiwan Bupphanhasamai, Dr. Rujapond Soontornpan, Dr. Suchada Srisethaworakul as well as Mrs. Sunisa Clapin who patiently and thoroughly edited my thesis within a time limit.

My respectful thanks go to Most Venerable Dr. Somchai Thanavuddho, Ven. Apichat Chanasupo, and Ven. Warot Kittipalo who kindly give me immeasurable opportunity to work with student monks for many years until I gain sufficient experience to conduct this research. In particular, I gratefully acknowledge partially financial supported by CU Graduate School Thesis Grant. In addition, I wish to express my sincere thanks to my friends, colleagues, and participant in my study for their invaluable assistance through the process of writing this thesis.

Last but not least, my deepest gratitude goes to my beloved family members, whose unconditional love and unfailing encouragement are with me in whatever I pursue.

## CONTENTS

	Page
THAI ABSTRACT .....	iv
ENGLISH ABSTRACT.....	v
ACKNOWLEDGEMENTS.....	vi
CONTENTS.....	vii
LIST OF TABLES .....	xi
LIST OF FIGURES .....	xii
CHAPTER 1 INTRODUCTION .....	1
1.1 Background of the Study .....	1
1.1.1 The importance of English reading and reading comprehension .....	1
1.1.2 The lack of appropriate reading instructional materials .....	4
1.2 Rationale for the Study .....	4
1.3 Research Questions.....	6
1.4 Objectives of the Study.....	7
1.5 Statements of Hypothesis .....	7
1.6 Definitions of Terms.....	7
1.7 Conceptual Framework.....	9
1.8 Scope of the Study.....	9
1.9 Significance of the Study.....	10
CHAPTER 2 LITERATURE REVIEW .....	12
2.1 Introduction.....	12
2.2 Buddhism in Thailand and Buddhist Monks .....	13
2.2.1 Buddhist monks' routine .....	13
2.2.2 Monastic education.....	14
2.2.3 English in Buddhism .....	15
2.3 Materials Development.....	19
2.3.1 Components of Writing Instructional Materials.....	28
2.4 Needs Analysis .....	30
2.4.1 Steps in conducting a needs analysis.....	33

	Page
2.4.2 Sources for a needs analysis .....	34
2.5 Content-Based Instruction (CBI) .....	36
2.5.1 CBI Models .....	37
2.5.2 Roles of CBI teachers .....	39
2.5.3 Six-T's approach .....	40
2.5.4 Applying Six-T's approach for developing materials .....	44
2.5.5 The use of Six-T's approach in Thailand .....	45
2.6 Reading .....	46
2.6.1 Definition of reading .....	46
2.6.2 Reading processes .....	47
2.6.2.1 Reading as a cognitive process .....	47
2.7 Reading Comprehension .....	50
2.7.1 Reading strategies for comprehension .....	50
2.7.2 Levels of reading comprehension .....	54
2.7.3 Explicit comprehension strategy instruction .....	56
2.8 The Present Study .....	58
<b>CHAPTER 3 RESEARCH METHODOLOGY .....</b>	<b>60</b>
3.1 Introduction .....	60
3.2 Population and Participants .....	60
3.2.1 Population .....	60
3.2.2 Participants .....	60
3.3 Research Instruments .....	62
3.3.1 Needs analysis questionnaires .....	62
3.3.2 Evaluation questionnaires .....	62
3.4 Research Procedures .....	65
3.5 Summary .....	87
<b>CHAPTER 4 RESEARCH FINDINGS .....</b>	<b>89</b>
4.1 Introduction .....	89
4.2 Results of Research Question 1 .....	89



	Page
4.3 Results of Research Question 2 .....	114
4.3.1 Results of research question 2.1 .....	114
4.3.2 Results of research question 2.2 .....	123
4.4 Summary .....	129
CHAPTER 5 SUMMARY DISCUSSION AND RECOMMENDATIONS .....	131
5.1 Introduction .....	131
5.2 Summary of the Study .....	131
5.2.1 Materials development .....	131
5.2.2 Materials implementation and evaluation .....	134
5.3 Findings .....	134
5.4 Discussion .....	136
5.4.1 The process of instructional materials development .....	136
5.4.2 The factors affecting on materials users' attitudes .....	137
5.5 Pedagogical Implication .....	140
5.6 Recommendation for Further Studies .....	142
REFERENCES .....	143
APPENDIX A Needs analysis questionnaire for student monks .....	151
APPENDIX B Needs analysis questionnaire for English teachers .....	157
APPENDIX C Needs analysis questionnaire for course administrators .....	163
APPENDIX D Whilst-use evaluation questionnaire for student monks .....	169
APPENDIX E Whilst-use evaluation questionnaire for teachers .....	171
APPENDIX F Post-use evaluation questionnaire for student monks .....	175
APPENDIX G Post-use evaluation questionnaire for teachers .....	178
APPENDIX H The experts' evaluation of the needs analysis questionnaires .....	181
APPENDIX I The experts' evaluation of the sample lesson units of student workbook .....	183
APPENDIX J The experts' evaluation of teachers' manual .....	185
APPENDIX K The experts' evaluation of the whilst-use evaluation questionnaire for student monks .....	188

	Page
APPENDIX L The experts' evaluation of the whilst-use evaluation questionnaire for English teachers.....	192
APPENDIX M The experts' evaluation of the post-use evaluation questionnaire for student monks.....	197
APPENDIX N The experts' evaluation of the post-use evaluation questionnaire for English teachers.....	200
APPENDIX O Personal preference towards the topics of English content-based reading materials.....	205
APPENDIX P Cover of students' workbook.....	208
APPENDIX Q Letter of permission from the publisher.....	209
APPENDIX R Exercises with answers provided in teachers' manual .....	210
APPENDIX S Lesson plan provided in teachers' manual.....	211
APPENDIX T Rubric provided in teachers' manual.....	220
APPENDIX U A sample lesson unit of the English content-based reading materials.....	221
VITA.....	240

## LIST OF TABLES

Table 2.1 Metaphors in Buddhism.....	18
Table 2.2 Distinguishing features of three content-based models .....	38
Table 2.3 Different sets of topics in a theme unit .....	42
Table 3.1 List of research instruments .....	63
Table 3.2 Research procedures .....	65
Table 3.3 The pilot testing group .....	70
Table 3.4 The number of respondents.....	71
Table 3.5 Flesch reading-ease test's score and interpretation.....	74
Table 3.6 The summary of pilot test .....	82
Table 4.1 Student monks' purposes of reading English .....	90
Table 4.2 Preferred physical aspects of teaching materials .....	91
Table 4.3 Preferred task types.....	92
Table 4.4 The most selected topics .....	97
Table 4.5 Criteria of passage selection and types of resources.....	98
Table 4.6 Sub-theme, topic, length, reading strategy, and grammar of Reading One and Reading Two .....	100
Table 4.7 Task phases and objectives of tasks in one unit.....	101
Table 4.8 The summary of Six-T's components.....	105
Table 4.9 The statistical results of student monks' whilst-use evaluation questionnaire .....	115
Table 4.10 Comparing means of whilst-use evaluation from 3 classes.....	117
Table 4.11 The statistical results of student monks' post-use evaluation questionnaire .....	119
Table 4.12 Comparing means of post-use evaluation from 3 classes .....	120
Table 4.13 The statistical results of teachers' whilst-use evaluation questionnaire ..	123
Table 4.14 The statistical results of teachers' post-use evaluation questionnaire .....	126

## LIST OF FIGURES

Figure 1.1 Conceptual framework of this study.....	9
Figure 2.1 A teacher's path through the production of new or adapted materials.....	25
Figure 2.2 Target needs and learning needs.....	31
Figure 2.3 A model of the parts of the curriculum design process .....	32
Figure 2.4 Critical features of explicit instruction.....	58
Figure 3.1 Revised questionnaire according to expert's suggestion.....	70
Figure 3.2 Revised sources .....	78
Figure 4.1 The unit basic structure .....	95
Figure 4.2 Before Closing of the topic 'Monks' Duties and Responsibilities' .....	102
Figure 4.3 Before You Read of the topic 'The Fruits of Ordination' .....	103
Figure 4.4 Before Closing task .....	104
Figure 4.5 The sample of using picture and subtitle to explain the idea of the middle way.....	109
Figure 4.6 The example of an example given before doing an exercise.....	110
Figure 4.7 The Example of a reading passage with beautiful decoration .....	111
Figure 4.8 Space for answers .....	112
Figure 4.9 Empty space to take note.....	113

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

#### 1.1.1 The importance of English reading and reading comprehension

Reading is clearly an essential skill for professional and academic achievement (Zimmerman, 2012), especially, in the 21st century, the importance of reading is increasing due to the growth of technology causing educated citizens to be equipped with stronger reading abilities. However, reading is probably the most difficult language skill to master due to the involvement of multiple abilities such as word recognition, meaning interpretation, cognitive skill engagement, etc.(Grabe & Stoller, 2014). In addition, the complexity of reading process in a foreign language is even greater for EFL students who have to study the subject areas in English since they require additional factors such as adequate language proficiency and adequate background knowledge. The former is needed for bottom-up processing and the latter for top-down processing (Al-Mahrooqi, 2014). Thus, it can be concluded that reading is a highly dynamic and complex process that serves as a predictor of professional and academic success for EFL learners.

The ultimate goal of reading is comprehension, which is an ability to extract and construct meaning from a text (Grabe, 2014) . For successful comprehension to occur, readers have to know how to employ appropriate and effective reading strategies. For EFL learners, reading strategies are crucial to be used as learning tools to enhance comprehension (Hussain, Javed, & Munshi, 2015). The impact of reading strategies on reading comprehension, especially for poor readers, was clearly emphasized by Grabe

(2009) "Acquisition of better reading strategies is apparently needed to crack the illusion of comprehension in readers who are settling for low standards of comprehension; They need to acquire and implement strategies to facilitate deeper levels of comprehension" (p. 449).

In context of EFL, reading difficulty is a persistent problem among EFL readers since they have not master reading strategies (Shang, 2015). Thailand, one of the countries where English is used as a foreign language, also encounters the problem of low level of reading proficiency nationwide (Kasemsap & Lee, 2015), and reading comprehension is where many Thai students have problems when doing reading tests (Chawwang, 2008). According to a report of the International Institute for Management Development (IMD), Thailand's TOEFL score in 2010 is undeniably poor specifically ranking 56<sup>th</sup> out of 60 countries, and Thais' level of proficiency is continually decreasing to ranking 57<sup>th</sup> in 2013 (Sawangsamutchai & Rattanavich, 2016). Moreover, with the low mean scores of TOEIC in reading section in 2015, Thailand was ranked 40<sup>th</sup> out of 46 countries. The scores of these two tests can be used to predict the success of education and professional domain of Thai learners as more than 9,000 colleges, agencies, and other institutions in over 130 countries accept TOEFL scores, including top universities in Australia, Canada, the UK and the US. In addition, since 1979, organizations around the world have used the TOEIC test to hire, place and promote employees (Educational Testing Service, 2017).

In the same way as Thai EFL learners, Thai Buddhist student monks are also confronting the same problems in having difficulties understanding texts. Low reading proficiency hinders them from comprehending a broad range of reading materials. Especially, in 2013, there was an attempt to promote Thailand as the World's Buddhist

Center of which roles are to internationally coordinate among Buddhist countries and to hold international Buddhist conferences, seminars, meetings and trainings (Li, 2013). Therefore, student monks need to be able to read authentic English texts extensively available in several reading formats such as newsletters, journals, conference abstract, newspapers, books, online materials, etc. to gain new information and to keep themselves updated to both world and religious knowledge (Duangchai, 2015).

Moreover, reading is essential for higher education in Thailand and other countries. In Thailand, the two prominent Buddhist public universities established by King Rama V, Mahachulalongkornrajavidyalaya University (MCU) and Mahamakut Buddhist University (MBU) provide international programs for post graduate students (Ai & Asavisanu, 2016). In other countries, Buddhist studies are available in many leading universities such as University of California, Berkeley, University of Toronto, University of Oxford, University of Sydney, etc. Dealing with a large body of instructional materials written in English, Thai student monks need to be proficient readers who are able to effectively use reading strategies to comprehend the specialist subject materials throughout their academic studies.

Due to the importance and the complex nature of reading, it is essential to improve and develop learners' reading comprehension by explicitly teaching reading strategies as suggested by many researchers (e.g. Abdelhalim, 2017; Duke & Pearson, 2008; Taylor, Stevens, & Asher, 2006) that the instruction of strategies with a focus on comprehension can help less successful EFL readers overcome their difficulties in reading (Kalua, 2012) and become better readers and 'comprehenders' (McNamara, 2009, p. 1).

### 1.1.2 The lack of appropriate reading instructional materials

The lack of appropriate reading instruction materials is another reason that hinders learners to use their background knowledge of the subject to bear upon the reading comprehension process (Peregoy & Boyle, 2000) and to facilitate in gaining language knowledge, particularly language use in context (Short & Echevarria, 2004).

It is common to see Buddhist student monks spend many years in learning subjects related to Buddhist doctrines and principles in their first language, concurrently, learning English as a separate subject from commercial textbooks of which contents usually talk about laypeople's lifestyle or activities mostly different from monastic life. Consequently, after spending many years of learning English, many Buddhist monks with high knowledge in Buddhist area are unable to use their background knowledge to understand when performing reading activities in English due to the lack of tailored-made reading materials providing meaningful and relevant contents of what student monks have already learned in Thai. In short, the irrelevant and meaningless content of the commercial textbooks does not convince learners' interest and language acquisition (Tomlinson, 2011)

## **1.2 Rationale for the Study**

To solve the problems of English reading failure and the lack of suitable reading materials, it is crucial to provide student monks reading materials, which explicitly teach reading strategies and simultaneously provide meaningful and relevant contents of their background knowledge. Thus, in this research, the researcher is trying to create the content-based reading materials as a rich source of learning input for Buddhist student monks at university level based on the framework of materials development by



Tomlinson (2011) and Six-T's approach by Stoller and Grabe (2017) with the aim to enhance reading comprehension of Buddhist student monks.

Tomlinson's materials development framework is used as a guideline to design the effective content-based reading materials through six stages: 1) identification needs to create materials or problems to solve by the creation of the materials, 2) exploration needs or problems 3) contextual realization, 4) pedagogical realization, 5) physical production, and 6) evaluation of materials. The dynamic and self-adjusting process starting from the identification of needs to the evaluation of materials concerning the physical and academic aspects ensures that these newly developed materials help solve the existing problems, and the needs of the student monks will be satisfactorily fulfilled. Stoller and Grabe's Six-T's components consisting of themes, topics, texts, tasks, transitions, and threads are integrated in some steps of Tomlinson's framework to encourage the creation of content coherence which is an effective means to promote language, content, and strategies learning (Snow & Brinton, 2017).

The familiar contents, the selection of high interest topic, and the meaningful and relevant texts activating student monks' schema full of background knowledge would not only enhance reading comprehension as proved by several studies (e.g. Deshpande, 2016; Nguyen, 2012; Wallace, 2010), but also make student monks feel that the contents in English are not too difficult to learn, and the real-life language are useful. As a consequent, they will have motivation and engagement in meaningful and long-lasting content and language learning (Abdelhalim, 2017; Klauda & Guthrie, 2015).

Importantly, three cognitive reading strategies of Anderson (1991) are selected to be included. They include 1) predicting the content of an upcoming passage or

section of the text, 2) guessing the meaning of unfamiliar words or phrases, and 3) writing a short summary to help understand the main ideas. Although these selected strategies are commonly used by laity readers when reading any types of texts, they will greatly help facilitate student monks in achieving reading comprehension. Authentic religious texts are rich with distinct characteristics in the lexical, phrasal, and discourse levels and these reading strategies promote them to use their solid background knowledge of Buddhism before reading, during reading, and after reading, consecutively. Moreover, they allow student monks to make link of what they have learned and new information such as vocabulary, terminology, discourse, or sentence structures specifically use in religious contexts.

In conclusion, the newly English developed content-based reading materials based on Tomlinson's materials development framework (2011) and Stoller and Grabe's Six-T's approach (2017), along with the explicit teaching of Anderson's cognitive reading strategies (1991) will help student monks achieve literal comprehension and interpretive comprehension. Eventually, they become strategic readers who are able to take advantage of their background knowledge to fully comprehend the text.

### **1.3 Research Questions**

The study attempts to answer the following questions:

1. How can the English content-based reading materials be developed for Buddhist student monks?

2. What is the quality of the English content-based reading materials?

2.1 What is the attitude of student monks towards the quality of the English content-based reading materials?

2.2 What is the attitude of teachers towards the quality of the English content-based reading materials?

#### **1.4 Objectives of the Study**

The objectives of this study are as follows:

1. To develop the English content-based reading materials for Buddhist student monks.
2. To explore the quality of the English content-based reading materials by examining the attitude of student monks.
3. To explore the quality of the English content-based reading materials by examining the attitude of English teachers.

#### **1.5 Statements of Hypothesis**

The researcher address the following hypotheses tested in this study as follows:

1. The student monks have positive attitude towards the quality of the content-based reading materials against the criteria.
2. The teachers have positive attitude towards the quality of the content-based reading materials against the criteria.

#### **1.6 Definitions of Terms**

The key terms employed in this study are defined as follows:

##### **1. English content-based reading materials**

English content-based reading materials refer to workbook and teachers' manual of which religious content and physical aspects are developed based on the framework of materials development of Tomlinson (2011) integrated with Six-T's approach of Stoller and Grabe (2017). The familiar and meaningful theme is the central

idea from which the topics of nine thematic units derived. Texts are selected from a broad range of authentic resources such as books, VDO clips, websites, etc. and tasks aim to elicit student monks' background knowledge for deeper language learning. The developed English content-based reading materials also offer explicit teaching of selected cognitive reading strategies that student monks apply before, during, and after reading, respectively. They include 1) predicting the content of an upcoming passage or section of the text, 2) guessing the meaning of unfamiliar words or phrases, and 3) writing a short summary to understand the main ideas.

## **2. Quality of the English content-based reading materials**

The quality of the English content-based reading materials refers to the academic and physical aspects and the effectiveness in enhancing reading comprehension. In this study, the quality is measured by student monks and English teachers who are the materials users. The quality of academic and physical aspects is measured during the implementation of the English content-based reading materials using the whilst-use evaluation questionnaires. The quality of the effectiveness in enhancing reading comprehension is measured after the implementation of the English content-based reading materials using the post-use evaluation questionnaires.

## **3. Buddhist student monks**

Buddhist student monks in this study refer to novices and monks who are students at the Education Department of Wat Phra Dhammakaya in the academic year 2017. They graduated from high school and attend unofficial courses equivalent to university level ranging from Year1 to Year4 to broaden academic knowledge.

### 1.7 Conceptual Framework

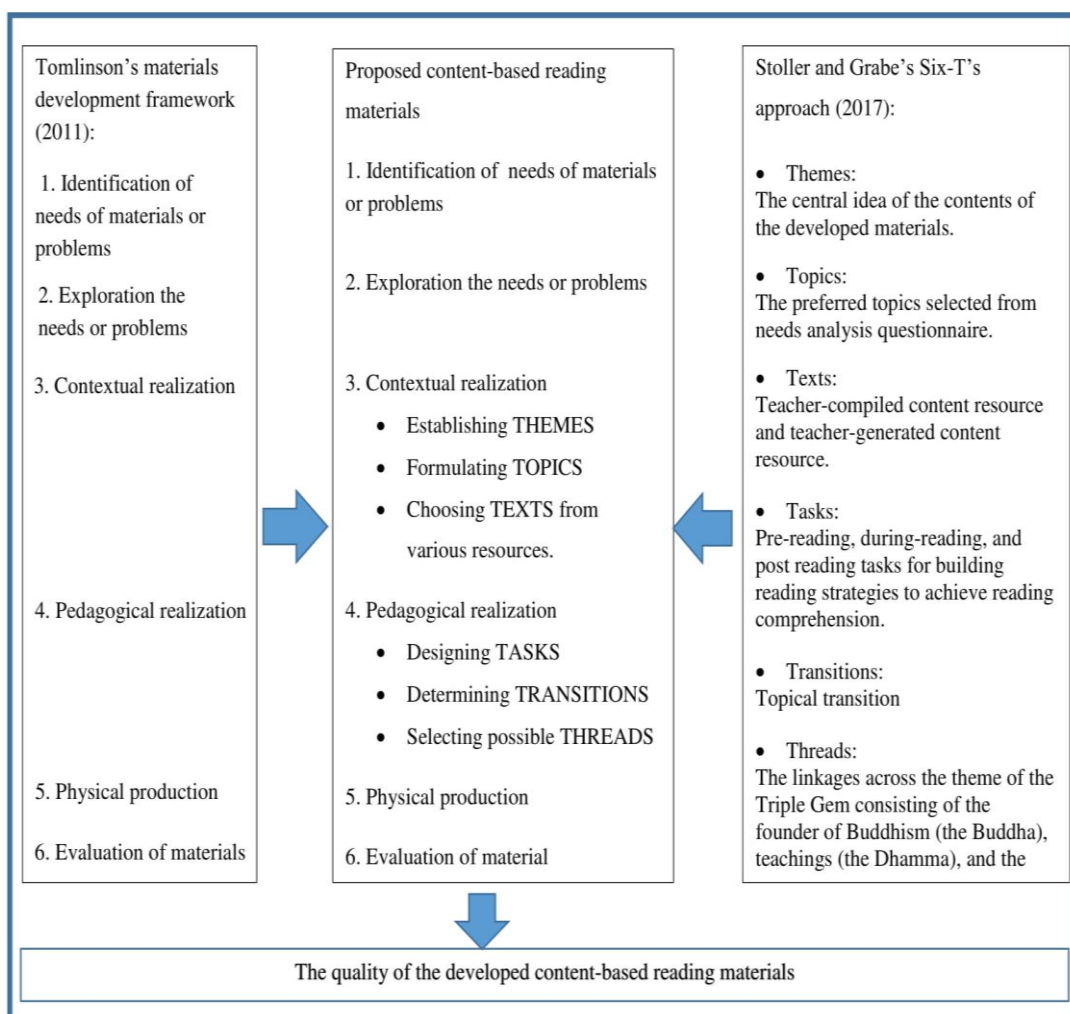


Figure 1.1 Conceptual framework of this study

### 1.8 Scope of the Study

Participants and variables in the study are as follows:

#### 1. Participants

- The population of the study is 153 Buddhist student monks ranging from the first year to the fourth year, 12 English teachers, and 10 course administrators. All are at the Education Department of Wat Phra Dhammakaya in academic year 2017.

- Participants are divided into 2 phases: needs analysis and English content-based reading materials implementation.

### *Needs Analysis*

Participants consist of 138 Buddhist student monks ranging from the first year to the fourth, 6 English teachers, and 10 course administrators.

### *English content-based reading materials implementation*

Participants consist of 42 Buddhist student monks and 3 English teachers.

## **2. Variables**

The independent variable is the developed English content-based reading materials using Tomlinson's materials development framework and Stoller and Grabe's Six-T's approach. The dependent variable is the quality of the developed English content-based reading materials in terms of academic and physical aspects and the effectiveness in enhancing reading comprehension.

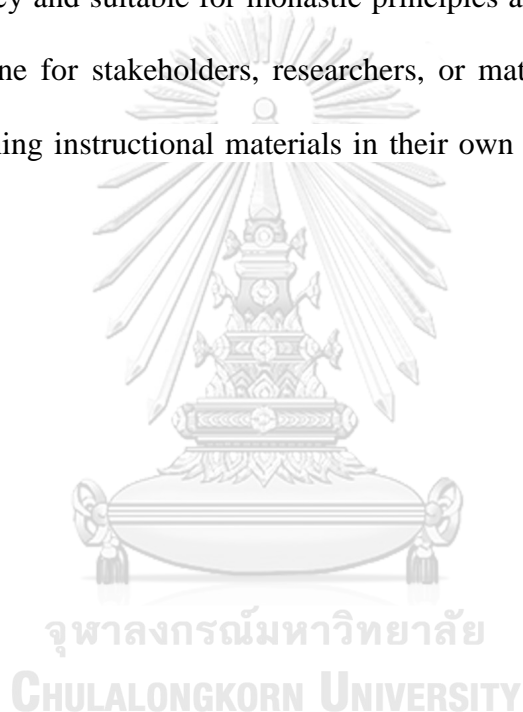
### **1.9 Significance of the Study**

This study will reflect some aspects of content-based theories, in which the Six T's approach is applicable to develop CBI course materials through the deliberate selection of themes, topics, texts, tasks, transitions, and threads, for specific group of learners who are Buddhist student monks. Since most of the previous studies related to the development of content-based materials are focusing on the content providing for secular education, the content suitable for monastic education is rarely explored.

For the pedagogical benefit, the findings of this study provide the insightful aspect of materials design process from the needs analysis to the evaluation of the effectiveness after the materials implementation with the specific group of students.

The development of instructional materials can be adapted and applied by stakeholders, researchers, or material developers who are interested in creating tailor-made instructional materials for specific group of students.

Lastly, this study yields the practical benefit by demonstrating the concept of employing theories and principles into practice in developing and designing the content-based instructional materials which is response to the Sangha Supreme Council of Thailand's policy and suitable for monastic principles and practices. Hence, it can serve as a guideline for stakeholders, researchers, or materials developers who are involved in designing instructional materials in their own monastic institutions or in similar context.



## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This section offers the reviews of the existing theories that are particularly significant and relevant to the development of the English content-based reading materials for Buddhist student monks. The review firstly covers the topic of Buddhism in Thailand and Buddhist monks to give the overview of the religious context in the country and Buddhist monks' routine, monastic education, and the characteristic of language used in Buddhism. Second topic talks about materials development including characteristics of qualified materials, the framework of materials development proposed by Tomlinson (2011), tools used for the evaluation of the effectiveness, and components of writing instructional materials. Next, the third topic of the needs analysis provides an overall understanding, steps and sources in conducting needs analysis to explore the needs or problems that can be solved by the creation of the proposed reading materials. Then the content-based instruction and Six-T's approach introduced by Stoller and Grabe (2017) give a foundation to establish the coherence and consistency of the religious content through the deliberate selection of the six components: themes, topics, texts, tasks, transitions, and threads.

Moreover, various reading processes are presented to see how readers achieve reading comprehension in different ways. Finally, reading comprehension including reading strategies for comprehension, level of comprehension, and explicit



comprehension strategy instruction are covered to demonstrate ‘what’ and ‘how’ the comprehension strategies will be effectively included in the developed English content-based reading materials for the student monks to achieve the goals of reading comprehension.

## **2.2 Buddhism in Thailand and Buddhist Monks**

### **2.2.1 Buddhist monks’ routine**

Theravada Buddhism has been predominant religion in Thailand. According to the National Statistical Office (2012), almost 95% of Thai population claim themselves as Buddhist, and approximately 264,000 monks of two main schools of Theravada: Maha Nikaya and Dhammayutti Nikaya (National Office of Buddhism [NOB], 2015) reside in 38,640 temples located in different parts of the country (NOB, 2013). The fundamental focus that all Buddhists both lay followers and those who lead a monastic life (monks, novices, and nuns) take refuge is Triple Gem consisting of the Buddha, the Dhamma, and the Sangha.

Traditionally, in Thailand, when a male reaches the age of 20, he will be ordained as a Buddhist monk. No matter how long he wishes to remain in monkhood, after being ordained, he will lead a monastic life, a life of detachment, observing 227 strict precepts or rules of conduct called the Vinaya preserved in Vinaya-Pitaka, one of the three “baskets” of Tipitaka. He also has to strictly comply with the monastic rules and regulations set up to establish harmony, discipline, order and pleasant relationships among the members living in the same monastery (Hays, 2014). However, if he wishes to undertake monastic life when he is less than 20 years of age, he can become a novice observing only 10 precepts in his daily life (Fry, Nieminen, & Smith, 2013).

Buddhist monks' daily routine varies from temple to temple but in general, there is not much difference. In the early morning, monks will wake up to do meditation and morning chanting before going for the alms round. Before noon, they will have lunch which is the last solid food of the day the code of conduct (Vinaya) allows them to have until at dawn of the following morning. In the afternoon, they will perform their religious missions such as teaching Dhamma or giving meditation class, and for monks who are still studying, they will attend class inside or outside of the temple. In the evening, they will do meditation and evening chanting together before retiring to do their personal activities.

Besides this routine, all monks have to take good care of their personal effects and are normally assigned to take responsibility for maintenance of temple properties, for instance, cleaning their residence, repairing the buildings, or arranging rituals or ceremonies. The Vinaya, monastic rules, regulation, and activities encourage Buddhist monks to achieve the ultimate goal of a Buddhist monk's life which is the attainment of liberation from suffering through self-discipline and by following the path of the Lord Buddha (O'Brien, 2017).

### 2.2.2 Monastic education

With the aim to prepare student monks to be well-educated religious members of the Order, the Sangha Education Council, who has responsibility to control and support monastic education for monks, has to maintain the traditional system of education system, Parian Curriculum and at the same time provides common secular subjects (Dhammhaso, 2010). Therefore, nowadays Thai monastic education provides 1) *Paliseuksa* teaching Pali language, liturgy, and texts 2) *Dhammaseuksa* teaching

ethics, general Buddhist history and Buddha's teachings and 3) *Samanaseuksa* teaching common secular subjects such as History, Mathematics, Science, Social Studies, Languages, etc. (Ai & Asavisanu, 2016).

In many Pariyatidhamma secondary schools, English language appears to be one of the significant subjects being taught. Although Pali language has been widely and historically studied as sacred language of extant literature of Buddhism for more than two thousand years, at present time, English language has been extensively taught because of its role as a global language used for communication, education, and dissemination among Buddhist monks from different Theravada countries (Chimroylarp, 2006).

### 2.2.3 English in Buddhism

Extensive research has been carried out on English language used in several contexts of English for Specific Purposes (ESP), however English language used in religious context did not capture much of attention as mentioned by Varghese and Johnston (2007) who addressed that the empirical research on the connection among English teaching, religious beliefs, and missionary work was scarce.

One study was conducted in Chinese Buddhist Temple located in Los Angeles, California by Chih-Yang Liu (2007) who claimed that his study, *A Descriptive Study of How English is Used and Learned Linguistically and Culturally in a Taiwanese Buddhist Monastery in Los Angeles*, was the 'first research' investigating English for Religious Purposes (ERP) (p. 9), specifically in the case of Buddhism. Collecting data from the interview, in-class observation, and the English transcriptions of Buddhism lectures, he concluded that English for Religious Purposes was 'a completely new branch of ESP' (p. 60) that did not exist in any classifications of current ESP study.

Although this research was based on Mahayana Buddhism, the findings greatly share the common features of Theravada Buddhism in many aspects.

Based on the findings, it can be concluded that English in Buddhism has distinct characteristics in the lexical, phrasal, and discourse levels as follows:

### **1. Lexical and phrasal features**

The vocabulary and phrases of Buddhism English are divided into three categories 1) the ultra-specialized vocabulary and phrase, 2) Sanskrit and Pali loanwords in Buddhism English, and 3) the general English vocabulary

#### *The ultra specialized vocabulary and phrase*

The words or phrases in this category are the unique terminologies that are widely used among Buddhists. They were simply created by using existing general English words which non-Buddhists can read every single word without having difficulty; however, it is unlikely for them to make sense of the profound meaning and teaching behind these terminologies. Usually, these words or phrases involve the teachings of the Lord Buddha, for example, Four Noble Truth, Noble Eightfold Path or the six realms of existence (Liu, 2007). This might be because all religious groups have developed their own terminologies which may serve to distinguish their members from others (Dow, 1991). Therefore, it seems impossible for those who are not members of Buddhist communities to understand these subtle terminologies exclusively used in Buddhism.

Besides the difficulty in understanding existing general English words, another feature of ultra specialized vocabulary and phrase is that some existing English words do not describe all senses of a profound definition in Buddhism. In other words, it is impossible to translate the origin of Pali word into one single English word as the

semantic meaning is missing through the translation. For example, the Pali word “Avijja” is translated into the word “ignorance” in English. Cambridge Dictionary Online gives the definition of ignorance as “lack of knowledge, understanding, or information about something, however, in Buddhism, Avijja refers specifically to ignorance about the workings of karma, the Four Noble Truths, and the Three Jewels. It is the cause of suffering.

### *Sanskrit and Pali loanwords in Buddhism English*

According to Liu’s study (2007) this second type of terminology was solely Sanskrit loanwords in Buddhism English as his work was done under the context of Mahayana Buddhism in which Sanskrit is used as the means of language of transmission. In contrast, in context of Theravada Buddhism, the teachings of the Lord Buddha have been transmitted through Pali language since the Buddha’s time until present. As a result, terminology of Theravada Buddhism English has a great influence from Pali language. Therefore, this type of terminology refers to both Sanskrit and Pali loanwords in Buddhism English.

These loanwords have been gradually adopted from Sanskrit and Pali and incorporated into English until they have become part of English lexicon widely used. Eventually, they have not been perceived as loanwords anymore. The definitions of some loanwords presented in regular English dictionaries such as Cambridge Dictionary or Oxford Dictionary are Arhat, Buddha, Dharma, Karma, Nirvana, Pali, Samadhai, Samsara, Sangha, Theravada, Tripitaka, etc.

Another phenomena of loanwords is the word formation in which new words are derived from the original Sanskrit or Pali forms such as Arhatship (Arhat+ship), Buddhahood (Buddha+hood), Dharmic (Dharma+ic), or Nirvanic (Nirvana+ic).

*The general English vocabulary*

The third type of lexicons is the words that do exist and are used in general English communication; however, they are frequently used in Buddhist teachings, philosophy, and practice. Liu (2007) discovered that many words, for instance, nonduality/duality, self/non-self, attachment/detachment or non-attachment, self-realization, or self-awakening were regularly used when talking about the concept of True Mind.

**2. Discourse features**

The unique characteristics of Buddhist discourse are the use of quotations from the Buddha himself (recorded in the early canon, the “Suttas”) and the application of metaphors to explicate complicated concepts in Buddhism. In the Buddha’s history, the use of quotation is presented throughout his lifetime since the first day he was born until the last day he attained nirvana. According to Dhammakaya Foundation (2014) The most well-known quotation upon his birth known as the words of grandeur is *“I am the supreme being. I am the most advanced being in the world. I am the most sublime being in the world. This is my final rebirth.”* and his final advice is *“Behold, monks, now I wish to remind all of you that it is normal for all compounded things to undergo deterioration and come to an end. Let all of you apply heedfulness in finishing the tasks that will benefit you and others.”* (p.247). The use of metaphors is categorized into eight themes as shown in Table 2.1.

Table 2.1 Metaphors in Buddhism

<b>Categories</b>	<b>Metaphors</b>
1. Mind	thief, animals, master and servant, artist, space, lighting and thunder, war, spring, cataract, sun and moon, fertile soil, mirror, ocean, mountain

2. Cause and effect	plant cultivation, water, fire, rock, wheel
3. Birth and rebirth	wheel, sea
4. The dharma	wheel, stream, ocean
5. The world	burning house
6. The universe	net
7. Emptiness	space, gold, water or waves
8. Compassion	medicine, nectar, ferry, light, shelter, companion

### 2.3 Materials Development

Generally, when people think about language-learning materials, they tend to associate this term with course books for their experience of using this type of materials. Actually, this term refers to a broad range of resources such as literature, CDs, VDO clips, websites, etc. that are used as tools to ease, encourage, improve and promote teaching and learning activities in any process of instruction. The materials development indicates a systematic way of designing, carrying out and employing the total process of learning and communication and employing resources to bring out a more meaningful and effective instruction (Ololube, Kpolovie, & Makewa, 2015).

Hidalgo, Hall, and Jacobs (1995) discussed the principles of materials development as “underpin everything we do in planning and writing our materials” (p.8) including the need to communicate, the need for long-term goals, the need for authenticity, and the need for student-centeredness.

Tomlinson (2011), views materials development as ‘a field of study’ and ‘a practical undertaking’ (p. 2). The former refers to the principles and procedures required to design, implement and evaluate language-teaching materials, and the latter refers to the sources of language input designed by writers, teachers or learners to promote effective language learning. According to his viewpoint, the basic principles of second language acquisition related to language instructional materials development are:

1. Materials should provide novelty, variety, attractive presentation, appealing content, and achievable challenge to make impact on learners. The novelty can be achieved through the selection of unusual topics, illustration and activities. The variety can be attained by using texts gathered from different types of sources. The attractive presentation can be accomplished by incorporating nice and colorful photographs. The appealing content can be designed by using topics of interest to the target learners or something new to them. The achievable challenge can be achieved by designing tasks challenging learners to think. However, the impact of one variable might work well in one setting but the same impact might not occur in different setting.
2. Materials should put learners at ease by many ways such as:
  - Materials with lots of white space make learners feel more comfortable than those with squeezed or crammed activities on one single page.
  - Materials with text and illustrations relevant to learners' culture make learner more at ease than those with alien text and illustrations.
  - Materials which support and encourage learning makes learners feel more relaxed than those which always test them.
3. Materials should boost learners' confidence by pushing learners slightly beyond their current proficiency or existing skills through problematic tasks.
4. Materials should provide relevant and useful contents. Unlike, General English materials, ESP materials are significantly meaningful for learners. The ESP materials writer normally try to increase learners' perception by providing them choices or topics of learners' interest, so that the learners bear in mind the



relatedness, meaningfulness, and integrity of the materials for their real-life use in the future which eventually leading to long term language acquisition.

5. Materials should require and facilitate learner self-investment by providing learners with choices of focus and activities and involving them in learner-centered discovery (Sharwood Smith & Rutherford, 1988).
6. Materials should create situations requiring learners to be ready to acquire the points being taught. The concept of readiness were discussed by many theorists. Some claimed that language teaching should follow the natural order of language acquisition, otherwise the premature instruction might cause negative effects (e.g. Hyltenstam & Pienemann, 1985; Meisel, Clahsen, & Pienemann, 1981). On the other hand, Krashen (1985) argued that learners would be ready to learn from the comprehensible input of what they are already familiar with. Based on this different viewpoints, materials can achieve readiness by creating situation requiring features not previously taught, by ensuring learners have already gained mastery over features prior to introducing new one, or by providing the input slightly beyond learners' current proficiency.
7. Materials should increase learners' exposure to authentic language use. The strong claim made by Krashen (1985) said that the comprehensible input was necessary and sufficient for language acquisition. This claim received minimal support from researchers since most of them agreed with the claim that exposure to authentic use was necessary but insufficient for language acquisition because learner should know how to use the target language for the communicative purpose. Therefore, materials should provide learners with rich and varied comprehensible authentic input along with the instruction of how to use target

language for general communication. In this way, the materials would promote learners to be active learners rather than passive ones.

8. Materials should draw learners' attention to linguistic features of the input. Many researchers seem to agree that paying attention to the linguistic features of authentic input helps learners acquire some of those consciously and subconsciously.
9. Materials should provide opportunities for learners to use the target language to achieve communicative purposes. There seems to be an agreement amongst many researchers that the opportunities to use language for real communication should be given to learners rather than only the practice of controlled situation restricted by the teachers or materials. In this case, materials should facilitate learners interaction in both 'planned' and 'unplanned' discourse (Ellis, 2005, p. 9) which can be achieved through, for instance, post-reading activities using the information from read passages.
10. Materials should take into consideration that usually the positive outcomes of instruction are delayed. Most learners need sufficient time, instruction and exposure to the language feature before being able to use them correctly since language acquisition is the result from the gradual and dynamic process. Therefore, the materials should recycle instruction, and provide frequent exposure to the language features.
11. Materials should take into account that learners' learning styles are different. Some learners might prefer studial learning in which knowledge is gained from explicit teaching, while the other might prefer experiential learning in which knowledge is gained from implicit teaching. As a result, it is important that the

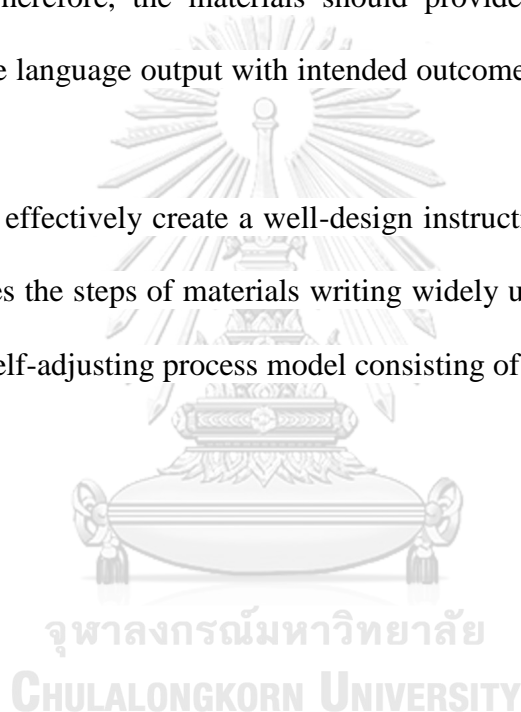
materials writing cater different preferred learning styles in the materials including visual, auditory, kinesthetic, studial, experiential, analytic, global, dependent, and independent.

12. Materials should take into account that learners' affective attitudes are different. Their motivations, emotions, and attitudes have an influence on learning rates and results (Dulay, 1982). To serve the variety of cognitive styles, materials should as much as possible provide diversity language instructions (Larsen-Freeman & Long, 2014) such as diverse types of topics, texts, and activities.
13. Materials should permit a silent period at the beginning of instruction meaning that learners should not force premature speaking of L2. In the early phases of language instruction, learners should be given an opportunity to remain silent and start talking in L2 when they feel ready, or materials can start by introducing new vocabulary or new language features which the learners can respond using L1 (Dulay, 1982).
14. Materials should maximize learning potential by encouraging intellectual, aesthetic and emotional involvement that stimulates both right-brained and left-brained activities. The right side of brain handles activities creatively and visually. The left side of brain, on the other hand, handles activities logically and verbally.
15. Materials should not rely too much on controlled practice since it yields little effect on long accuracy (Ellis, 1990) and fluency (Ellis & Rathbone, 1987) when learners perform the use of new language features. Practically, Tomlinson's analysis revealed that 90% of low-level textbooks provide more controlled practice than language use meaning that nowadays learners waste

their time on drilling, and repeating dialogues. Thus, the newly develop materials should contain more opportunity for language use.

16. Materials should provide opportunities for outcome feedback. The output will become a valuable and powerful source of input for language learners if the feedback given is emphasized on the effectiveness of the outcome rather than the accuracy. The evaluation then should relate to a particular communicative purpose. Therefore, the materials should provide activities for learners to produce the language output with intended outcome rather than just practicing language.

In order to effectively create a well-design instructional materials, Tomlinson (2011), summarizes the steps of materials writing widely used by materials writers in the dynamic and self-adjusting process model consisting of 6 steps as shown in Figure 2.1.



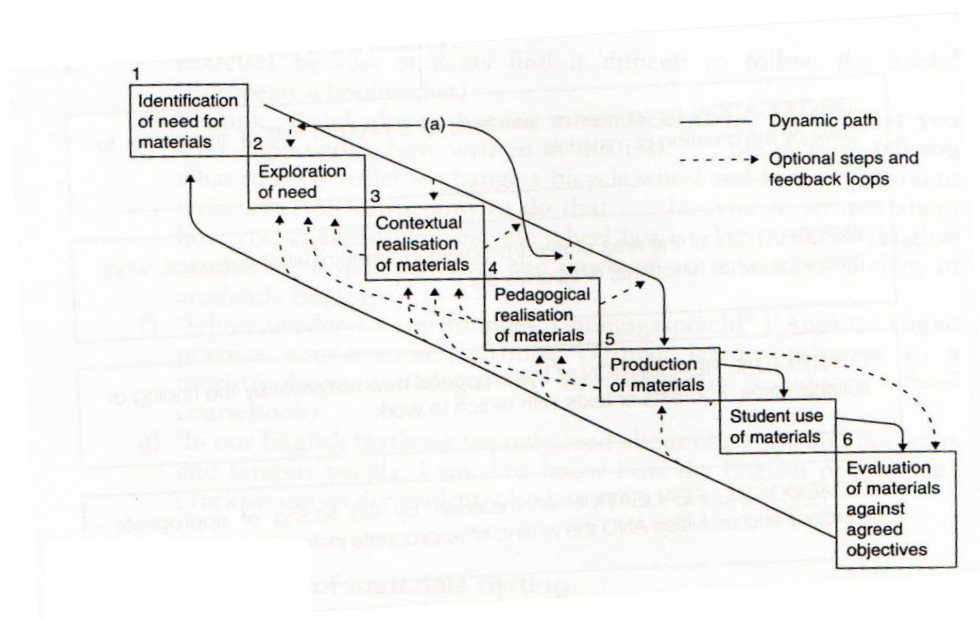


Figure 2.1 A teacher's path through the production of new or adapted materials (Tomlinson, 2011, p. 113)

1. **Identification of needs for materials:** despite the availability of language-learning publication, some teachers encounter that the available materials do not fulfil the needs of students or teachers for many reasons, for example, the lack of meaningful content, the insufficiency of authentic text, the unfamiliarity of the context, or the complexity of language use. This is why they need to have new materials precisely designed to fit with their needs and to solve difficulty in learning and teaching using those available materials.
2. **Exploration of needs:** once identified, the materials-writer has to conduct research of how language both content and linguistics aspect are used in real situation.
3. **Contextual realization of materials:** realizing the context is the fundamental of well-designed materials, especially, the socio-cultural

context (Holliday, 1994) or religious ideas (McDonough & Shaw, 2012) which have great influence on how to appropriately shape the content. Because some languages normally used in a particular context might sound alien or offended to people from different context. For example, the passage about snow or making wine in an EFL textbook seems inappropriate for a teacher to teach students in hot countries where many Muslims live, or the story about opera is completely unfamiliar to Iraqi students (Tomlinson, 2011). Indeed, in this stage, the materials writers should examine and select ideas, contents, or texts in locally meaningful way. Additionally, they should integrate language needs with students' topic of interest and try to balance language needs, learning style, and cultural awareness (Jolly & Bolitho, 2011).

4. **Pedagogical realization of materials:** the materials writer should examine and select appropriate and meaningful exercises and activities together with clear instructions.
5. **Production of materials:** this step involves the consideration of the physical and academic aspects to be included in the materials. The physical aspect include several elements such as font, size, layout, length, visuals, etc. The academic aspect, specifically content-based instructional materials, include but not limited to content and language.
6. **Evaluation of materials against agreed objectives:** to investigate whether the newly developed instructional materials are effective or not, the evaluation of materials against objectives should be done. Tomlinson and Masuhara (2004) classify materials evaluations into 3 types as follows:

1. Pre-use evaluation helps predict the potential value of materials for their users. This can be done by two or more evaluators evaluating the materials independently based on the criterion set. This type of evaluation is not reliable as it is purely based on prediction.

2. Whilst-use evaluation measures the value of materials while the materials are being used. Compared with the pre-use evaluation, this type of evaluation has more reliability. The aspects that can be measured are the clarity of instruction and layout, comprehensibility of texts, achievability of tasks, flexibility of the materials, appeal of the materials, and motivating power of the materials.

3. Post-use evaluation measures the materials' effects on the users after the materials have been implemented. Among the three types of evaluation, post-use evaluation is the most valuable as it provides data that are essential to examine whether the objectives of the use of these materials have been achieved or not and whether the materials have to be revised, thrown away or used again with a similar group of learners. Tools that can be used to collect data are tests, interviews, questionnaires, post-course diaries or report, etc. The questions that can be asked are about the ability the materials users cannot do before the use of materials, the knowledge the materials users gain after using the materials, the knowledge the materials users still lack even after using the materials, or the knowledge the materials provide for the users' future use (Tomlinson & Masuhara, 2004).

In Tomlinson's model, the needs of a particular group of learner is again a crucial variable for materials developers to produce the most effective materials. In other words, the most effective materials are those which are developed based on the understanding of learners' needs. This implies that the materials writing is a learning-

centered approach rather than a subject-driven or syllabus-driven approaches. Hence, the teachers who are responsible for the materials development act as the researchers in understanding, responding to the learners' needs, producing materials, collecting feedback after the materials implementation, and improving the materials accordingly to reach the learners' needs and expectation based learning objective (Tomlinson, 2011).

### 2.3.1 Components of Writing Instructional Materials

When writing instructional materials, Hutchinson and Waters suggested that materials writers should take into account four elements including input, content focus, language focus, tasks (Hutchinson, 1987) .

#### ***Input***

The input derived from a wide range of sources serves a number of things: stimulus materials for activities; new language items; correct models of language use; a topic for communication; learners' opportunities to use information processing skills; learners' opportunities to use their background knowledge of language and subject matter.

#### ***Content focus***

Content focus can be linguistic content or non-linguistic content. Linguistic content is a means of conveying information and feelings about something while non-linguistic content is a means of generating meaningful communication in the classroom.

#### ***Language focus***

Language focus is about learners' opportunities to study and practice the use of language in different levels: lexis, structures, and discourse. In the lexical level, learners will learn many significant vocabulary items: subject-specific words of the topic, sub-



technical words in a particular field as well as many common core words. In the structural level, learners have opportunity to generate language awareness and refresh their memory of the learned grammatical structures. Lastly, in the discourse level, the learners are enabled to improve their reading comprehension through the text along with clear captions, coherent paragraph and sentence, cohesion of lexical collocation, and substitution. (Chen, 2015).

### ***Tasks***

Tasks are activities in classroom that involve learners in bringing their comprehension of the target language to express meaning and to communicate in the real world (Chetsadanuwat, 2012). Task completion involves integrated skills around one primary skill. An example given by Chen (2015) indicates that, in the Reading and Understanding section, although reading is a primary skill, the partial involvement of speaking and writing skills are inevitable. Speaking skill is involved when the learners are asked to have discussion with their peers and to give answer verbally. Writing skill is involved when the learners fill answers in tables, give written comments, or write summary. Tasks design can be divided into 3 phases: pre-tasks, during-tasks, and post-tasks.

### ***Pre-task design***

The pre-task phase is the preparation for learners to perform the tasks that promote the acquisition of both language and content. The basic consideration in designing pre-task is to make use of learners' previous linguistic and subject's knowledge.

### ***During-task design***

During-tasks design could cover three aspects: reading and understanding, learning vocabulary and language awareness. First, tasks for reading and understanding aim at enhancing reading skills, e.g., predicting, skimming, and scanning; developing comprehension by identifying, inferring; and recognizing cohesion. Next, tasks for learning vocabulary emphasize on building up vocabulary skills such as identifying word formation. Finally, tasks for language awareness focus on arising learners' awareness of learned structural items particularly used in their subject specialization.

### ***Post-task design***

Johns and Davies (1983) viewed post-task as follow-up activity to the reading of a text. They classified post-task activities into 4 categories: 1) transfer of information in a text to other forms, 2) application or explanation of information, using what is learned from a text to carry out tasks, 3) extension of information, and 4) application of techniques.

## **2.4 Needs Analysis**

The needs analysis has been determined as the starting point for course design by Munby (1978) and Yalden (1987), as the most characteristic feature of ESP course design by Hutchinson and Waters (1987), and as central to the processes by which relevant content for specialized language courses by Richards and Rodgers (1987).

Hutchinson and Waters (1987) classify needs into target needs (what the learner needs to do in the target situation) and learning needs (what the learners needs to do in order to learn) (1987:58). The target need is further analyzed as three types of needs: necessities, lacks, and want as shown in Figure 2.2.

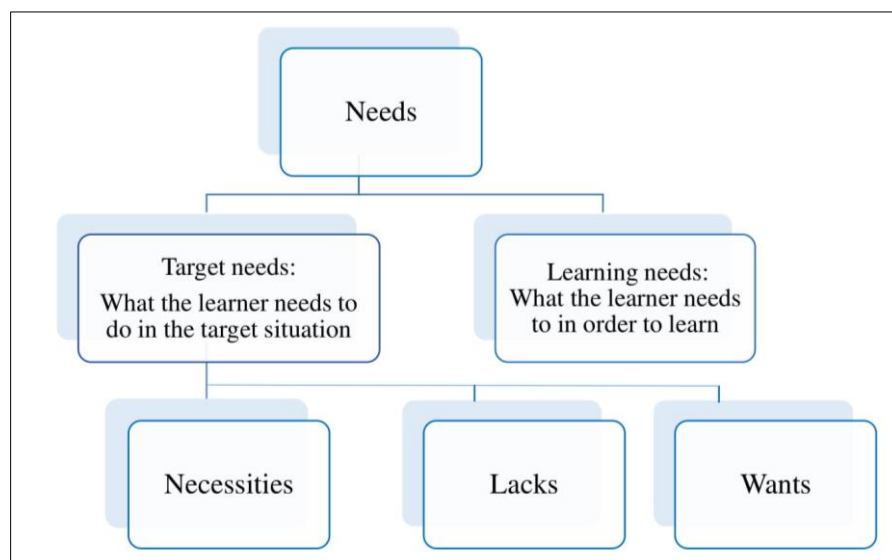


Figure 2.2 Target needs and learning needs

Necessities are analyzed as what the learners have to know to effectively use the language in the target situation and are referred to required knowledge. Lacks are described as in what is called a deficiency analysis where what a learner already knows is set against necessities (Allwright & Allwright, 1977) and are referred to present knowledge. Wants then are what learners wish to learn in order to operate in a target situation and are called subjective needs. The subjective needs are discovered through learner self-assessments, whereas the objective needs can be collected by using questionnaire, interview, observation, or tests.

Nation and Macalister (2010) mentioned that needs are one of the key factors in curriculum design process model. Shown in Figure 2.3, needs section is located in the outer circle linking to the inner circles divided into three parts. The first part is the content and sequencing representing the items provided in the course and the sequence they will be used. The second part is the format and presentation representing the format of the lesson including the techniques and activities used in class. The last inner circle

is the monitoring and assessing representing the outcome of learning. The three outer circles are needs, principles, and environment. All factors of inner and outer circles are connected and lead to the goal of the process of curriculum design. Thus, this model emphasizes the importance of needs analysis as one factor to achieve the ultimate goal of the curriculum design.

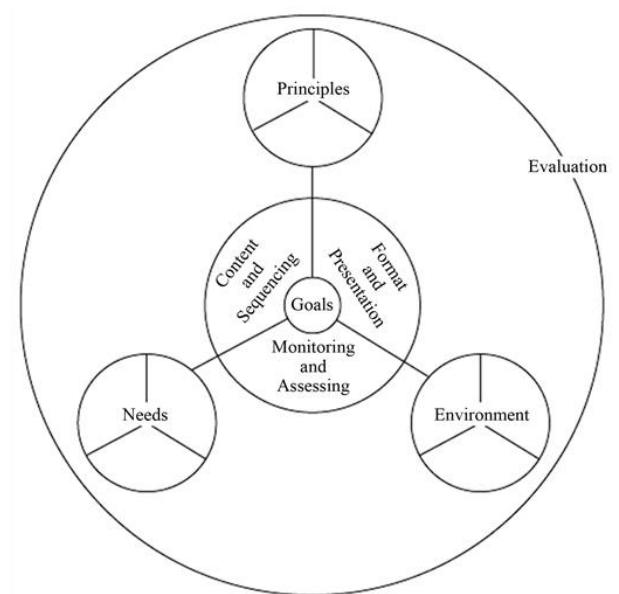


Figure 2.3 A model of the parts of the curriculum design process  
(Nation & Macalister, 2010, p.3)

Specifically in ESP, Brown (2016) delimits needs or ‘needs viewpoints’ (p.13) into 4 different categories: the democratic view, discrepancy view, analytic view, and diagnostic view. Democratic view refers to whatever element of the ESP students and all stakeholder groups want and discrepancy view of needs refers to whatever is missing between the current ability of the learners and the ability they should do. These two views should go hand in hand when needs analysis is conducted because considering only the want is insufficient but the current ability and the expected outcome ability should be taken into consideration as well. The third view is the analytic view related

to the hierarchy process of language learning in which learners have specific order of acquiring the language based on SLA theories, therefore the needs view will look at the logic order that comes after the learners' actual stage of learning. Lastly, the diagnostic view focuses on the learners' necessities, essentials, and prerequisites without which can do harm to the learners.

#### 2.4.1 Steps in conducting a needs analysis

Several sources identified steps in conducting an educational needs assessment in a very similar way. The university of Idaho identifies these following 7 steps (McCawley, 2009):

1. Write objective: researchers identify what they want to learn from the needs assessment.
2. Select audience: researchers think of the target audience, whose needs they are measuring, and to whom will the researchers will give the required information.
3. Collect data: researchers select the needs assessment tools to collect data that they want to know.
4. Select audience samples: researchers use sampling methods to select samples of respondents who represent the population.
5. Pick an instrument: researchers employ appropriate instruments and techniques to collect data.
6. Analyze data: researchers think of how collected data will be analyzed.
7. Follow up: researchers proceed with the information gained and make use of the result in decision making.

#### 2.4.2 Sources for a needs analysis

Brown (2016) classifies sources for a needs analysis into eight categories: existing information, tests, observations, interviews, meetings, questionnaires, target language analyses, and intuition. Among eight of them, the most common ones are interviews, meetings, and questionnaires.

##### *Interview*

Interview can be either individual interview or group interview. The individual interviews are conducted with single individual at a time because the exchanged information might be confidential or the interviewee is the key person in charge. The advantage of this kind of interview is that the information gained is likely to be more revealing and useful, and the disadvantage is that it is hard to set up and time-consuming. The group interviews are conducted with groups of stakeholders. The information is not confidential and the arrangement is less-time consuming than the previous one.

There are three types of individual and group interviews: structure interviews, semi-structured interviews, and unstructured interviews. In structured interview, the sequence of the questions is prearranged. During the process of the interview, the interviewer verbally communicate each question to each participant in the same order. Unlike the structured interview, semi-structured interview does not limit respondents to prearranged questions. During the process, the interviewer can combine prearranged set of open questions with the opportunity to further explore particular themes or responses meaning that the questions can be changed, omitted or added. In unstructured interview, the questions are not prearranged. During the process of the interview, the interviewer uses open and free discussion to understand a predefined topic or research

in depth. Among these three types, semi-structured interview is the most common interview type in educational research (Griffie, 2012).

### ***Meeting***

Meetings and group interviews are different in nature of people's involvement. In group interviews, a single person asks questions and the rest answers those questions, while in meetings everybody involves more give-and-take. Everyone can ask questions, answer questions, raise issues, complain, or even joke. They are several types of meeting such as advisory meetings and previewing meeting.

Advisory meetings are the meeting that set up to get advice from the stakeholders. They could give help in designing interview questions or items for the questionnaire. The previewing meetings of which agenda designed to get the group of stakeholders to review, give feedback, or revise something. For example, a researcher can present a draft questionnaire in the preview meetings for the stakeholders' review, revision, and approval.

### ***Questionnaires***

Questionnaires are the most common research tools in ELT research because they generate data that can be analyzed quickly and easily, so they are very useful and quick to implement (Coombe & Davidson, 2015). The questionnaire items are divided into five categories: 1) bio data items seeking respondents' background information, 2) opinion survey seeking respondents' ideas, views, values, or opinions, 3) self-ratings seeking respondents' abilities, knowledge, or skills, 4) judgmental ratings seeking respondents' feedback on program or other specific aspects, and 5) Q sort asking respondents to rank or prioritize something.

## 2.5 Content-Based Instruction (CBI)

One approach for building a coherent and effective reading curriculum is the combination of an emphasis on content learning and language learning known as Content-Based Instruction (CBI) (Grabe, 2014). This term was defined by Snow (2014) as “... an umbrella term for a multifaceted approach to SFL teaching that differs in terms of factors such as educational setting, program objectives, and target population but shares a common point of departure- the integration of language teaching aims with content instruction.” (p.439).

Under this CBI umbrella term are various models of instructions which vary based on the degree of integration between content-driven or language-driven (Stoller, 2008). The programs are conceptualized differently. Some researchers describe the relationship between language and content as a continuum integration in which the language is the vehicle to learn the content (e.g. Lyster & Ballinger, 2011; Met, 1998). Differently, some researchers refer the degree of content and language to ‘weak’ and ‘strong’ depending on the program objective - the weak objective refers to program focusing on language more than content and strong objective refers to program focusing on content more than language-(e.g. H. D. Brown, 2001; Paran, 2013). In addition, some researchers see some language driven models specifically drawing on workplace contexts to develop occupation-specific language skills (Henze, Katz, Snow, & Brinton, 1997) labeled as the Academic Purposes (EAP), English for Specific Purposes (ESP), or English for Occupational Purposes (EOP).



### 2.5.1 CBI Models

Originally, the “prototype” (p.2) models of CBI can be divided into three models according to Snow and Brinton (2017): theme-based language instruction, sheltered content instruction, and adjunct language instruction.

Among the three different models, the theme-based language instruction is the most widespread model. Aiming to develop academic language skills for non-native students, the topic selection of this model are drawn from the content. Most of selected topics are based on students’ interest. In this model, language teachers have responsibility for language and content instruction. One of the appropriate samples of theme-based instruction is English for Academic Purposes (EAP) in a university (H. D. Brown, 2001).

The second model is the sheltered content instruction in which the content is simplified to suit with the limited level of L2 language capacities. The primary purpose aims to help non-native students achieve mastery of content. The content teachers using this model have responsibility for giving content instruction in which students incidentally learn the language.

The last model is the adjunct language instruction. In this model, native and non-native students require to simultaneously enroll in linked content and language classes but are separated into different sections and taught by different instructors focusing on different aspects. The aim of the content course is to equip students with content knowledge, while that of the language course is to improve students’ language skills. In order to effectively attain objectives of both the content and the language, the collaborative work between content and language teachers is essential (Snow & Brinton, 2017).

Table 2.2 presents the summary of three prototype models on the primary purpose (s), instructional format, instructional responsibilities, student population, and focus of evaluation.

Table 2.2 Distinguishing features of three content-based models

	<b>Theme-based</b>	<b>Sheltered</b>	<b>Adjunct</b>
<b>Primary purpose(s)</b>	- Developing students' L2 competence within specific topic areas	- Developing students' mastery of content materials	- Developing students' mastery of content materials - Introducing L2 academic discourse and developing transferable academic skills
<b>Instructional format</b>	- ESL course	- Content course	- Linked content and ESL courses
<b>Instructional responsibilities</b>	- Language teacher gives language and content instruction	- Content teacher gives content instruction in which incidental language learning occurs	- Language and content teachers collaboratively work together
<b>Student population</b>	- Nonnative speakers	- Nonnative speakers	- Nonnative & native speakers integrated for content instruction - Nonnative speakers separated for language instruction
<b>Focus of evaluation</b>	-Language skills and functions	- Content mastery	- Content mastery (in content class) - Language skills and functions in content class)

Over the past three-and-a-half decade after the original three prototype models of CBI was introduced in 1989, the CBI has spread throughout the world in the ESL

and EFL contexts. As a result, many new variant models of CBI have emerged to respond to local contexts and student needs such as Sustained Content Language Teaching (SCLT), Content and Language Integrated Learning (CLIL), and English-Medium Instruction (EMI).

The emergence of these hybrid models might be based of these following benefits of CBI as mentioned by Genesee and Lindholm-Leary (2013): 1) L2 learners are encouraged to develop language skills along with social and cognitive skills through CBI. 2) CBI motivates L2 learning by emphasizing on providing meaningful and relevant academic content and promoting opportunities for purposeful communication. 3) L2 learners are enable to map new language onto meaning and thought when they are exposed to content. 4) CBI provides L2 learners with the language exposure in authentic use. 5) CBI allows learners to establish the linkage between prior knowledge and new knowledge for deeper learning.

#### 2.5.2 Roles of CBI teachers

In class where the content-based instructional approach implemented, the language teachers are expected to perform these following roles: 1) Teachers have to let the content dictate the selection and sequence of language items to be taught in class. 2) Teachers should use content as the point of departure. 3) Teachers have to commit themselves to materials adaptation and development. 4) Teachers have to put a greater effort in creating content-based materials around the learners' needs (Stoller & Grabe, 1997). Moreover, during the lesson, teacher should highlight language features, which are vocabulary and grammar, and give feedback on students' use of these features (Lightbown, 2014).

In conclusion, there is a range of CBI approaches which have different orientations in theory and practice, however all of them uniformly share common perspective that language is utilized as a medium for non-native students to learn content, and content are a resource for them to learn language. The content plays an important role for CBI teachers when select or sequence the language and it is teachers' responsibility to create materials to fulfill the learners' needs. The CBI prototype models are classified into theme-based, sheltered, and adjunct among which theme-based is the most widely used in language courses of college or university level.

### 2.5.3 Six-T's approach

In order to develop the effective and meaningful materials to specifically suit with the needs of particular group of learners, it is important that the materials developers wisely select an approach with which to use. *Six-T's approach to language and content instruction* is one of the effective approaches suggested by Stoller and Grabe (1997, p. 4) emphasizing on the integration of language and content instruction for students who learn English as a second language like other CBI approaches. This approach addresses the importance of coherence as “an effective means to promote students' language, content, and strategies learning” (Stoller & Grabe, 2017, p. 54). The three basic goals of Six-T's Approach are as follows:

1. The specification of theme-based instruction as central to all CBI models.
2. The extension of CBI to support a wide range contexts of the language-learning including both when the teachers have control over the content or vice versa.
3. The organization of coherent content as a source for learning and the purposeful and meaningful language as a medium for learning content.

The underlying principles of this approach is that the theme-based instruction is the fundamental of all CBI models in which the six curricular components: themes, topics, texts, tasks, transitions, and threads are decided based on students' needs and goals, institutional expectations, available resources, teachers' abilities, and final outcomes.

### ***Themes***

Themes are the central ideas of unit organization and are the primary sources of curriculum planning selected to appropriately suit with the needs and interests of students, the abilities and interest of teachers, the expectation of institution, and the sources of the program. They are divided into three categories: topical themes, conceptual themes, and problematic themes (Stoller & Grabe, 1997). The selection of themes is important as it has an effect on the learning outcomes. The selected theme that serves coherently linked language and content activities can help increase the engagement of students in meaningful and long-lasting language and content learning.

Besides selecting appropriate theme, during the period of materials implementation, designers, planners or teachers need to determine the number of theme units to be explored and the duration to be spent on each theme unit and topics within. Theme units of one semester can be intensively devoted for one to three weeks or less intensively for four to ten weeks largely depend on the constraints.

### ***Topics***

Topics are considered as the subunits of content which explore aspects of theme in depth. Generally, they should be organized to establish theme unit coherence, to provide opportunities to explore content and language, and to develop the knowledge of academic vocabulary. Some keywords or phrases from the topics stimulate the

learners' mind to activate a knowledge schema allowing them to relate incoming information to already known information (Cook, 1989) and store it in long-term memory (Widdowson, 1983).

The theme selections may be constrained by the institution, teachers, and/or content resources. However, specific topic selection may be left for students to make decision since it is expected that the student interest will be stimulated by preferred sets of topics with coherence (Stoller & Grabe, 1997). Therefore, the same theme can carry different topics based on the preferable choices of learners. For example, the theme of Native America might evolve different topics of exploration: the exploring of diverse tribes, or the examination of tensions existing in communities as shown in Table 2.3.

Table 2.3 Different sets of topics in a theme unit

<b>Theme</b>	<b>1# set of sample topics</b>	<b>2# set of sample topics</b>
Native Americans	the Navajo	Rural vs. urban living
	the Hopi	Traditional vs. contemporary religious
	the Apache	The values of young and older generation

### ***Texts***

After themes and topics are initially specified, appropriate texts will be gathered and selected from varied and plentiful number of resources, e.g., magazine, newspaper, videos, documentary newspaper, fieldtrips, charts and graphs. The variety of relevant and interesting texts provides opportunities to use language, strategy, and content for meaningful communicative purposes (Stoller & Grabe, 1997). Thus, texts serve as a vehicle for teaching language structure and vocabulary in that they make language key

features visible repeatedly and in case learners specifically learn the language through reading, selected texts can be used to develop reading strategies.

Based on content resources, there are four specific types of texts: instructor-complied content resources, instructor-generated content resources, task-generated content resources, and external content resources. The primary criterion for determining text selection includes learners' interest, relevance, and instructional appropriateness and some samples of secondary criterion are format, length, accessibility, or availability. Besides these criteria, the sophistication and obscurity of texts are factors that have to be taken into consideration when selecting texts because highly sophisticated or obscure texts will hinder learners from establishing the linkage between the new information and their prior knowledge.

### ***Tasks***

Tasks are the instructional activities and techniques used for content, language, and strategies instruction designed in accordance with the selected texts and sequenced within and across themes. Probably, tasks used in the first theme unit might not be complicated but as learners make progress throughout the academic year from one theme unit to the next, tasks should be recycled and revisited with higher levels of complexity. They can be in the form of series which require learners to employ various tasks in the theme unit to successfully complete the final culminating activities which require them to go through content information, synthesize, and apply content and language learned throughout the unit. Eventually, learners will successfully develop skills essential in particular content-area courses that they have learned from the entire unit.

### ***Transitions***

Transitions are planned actions that provide additional linkages across topics, tasks, and texts to establish the coherence across topics in a theme unit and across tasks within topics, and to contribute to the overall coherence of the theme unit. The two major types of tasks, topical transitions and task transitions, are crucial components that help students experience the logical and systematic progression from one topic to the next or from one task to the next. It is suggested that teachers should take advantage of emerging classroom situations for the creation of meaningful transition rather than over specify the transitions in advance. The duration of transitional activities could be from just a minute long to the long complex activities. Samples of activities are the prediction of new topics, the discussion of the prior task, the brainstorming of additional concepts, or the consideration about the issues the prior tasks missing.

### ***Threads***

Threads, unlike transitions, are linkage across themes that creates more curricular coherence and seamlessness. They help smoothly move from the finished theme to other new themes that look disparate on the surface. They also provide opportunities to integrate information and view language and content in new cohesive perspectives, to review and recycle important language and content across themes, and to revisit some learning strategies.

#### 2.5.4 Applying Six-T's approach for developing materials

When the materials developers implement Six-T's approach to create meaningful and coherent content-based instructional materials, practically they involve with the fluid and interactive procedure divided in several steps. In each step, it is important for materials designers to take into consideration that each context imposes its own constraints on, and opportunity for variation and adaptation. For example, in



Chetsadanuwat's study, the step-by-step procedures for implementing Six T-s' approach play role in organizing the materials' content and activities divided into 8 steps as follows (Chetsadanuwat, 2012).

Step 1: Establishing the content to be used through theme determination, text selection, and topic designation.

Step 2: Establishing themes emerging from final theme, text and topic designation

Step 3: Choosing text from various resources

Step 4: Formulating topics

Step 5: Selecting possible threads to create the coherence inside the lesson unit

Step 6: Sequencing the content largely based on the content availability, task difficulty, cognitive demand, and the instructional orientation from more teacher-centered to more student-centered.

Step 7: Designing tasks to develop students' language learning, facilitate the content learning, and model strategies for language and content learning.

Step 8: Determining transitions across topics and across tasks to facilitate a natural and systematic flow of content and tasks before moving to the next unit.

#### 2.5.5 The use of Six-T's approach in Thailand

In Thailand, there have been attempts to use Six-T's approach as parts of the development of instructional model or instructional materials. Thipwajana (2010) used Six-T's approach to design course materials about local cultures in Banphue to investigate the effectiveness of content-based English lessons incorporating form-focused tasks on eleventh grade students' content and grammatical knowledge. The findings revealed the positive effect. In 2011, Six-T's approach was employed to select

contents for undergraduate engineering students in Ritthikuksithichai's study (2011) in which the instructional model based on the content-based and task-based instruction was developed to enhance English reading. The findings also yielded positive results.

Another attempt in applying Six-T's approach for writing instructional materials can be found in Chetsadanuwat's study (2012) in which Six-T's approach was applied to develop the self-instructional materials (SIMS) to enhance English listening skills for student nurses. The findings showed the effectiveness of the developed materials and the satisfaction of student nurses at a good level. These examples show the positive impact of using Six-T's approach in developing language skills and content knowledge in Thai school and university level.

## **2.6 Reading**

### **2.6.1 Definition of reading**

In daily life, people have different purposes of reading, some may read for surviving, some for learning, or some for pleasure, but no matter what purposes the readers have in their mind, the ultimate goal of reading is comprehension (Kasemsap & Lee, 2015). Therefore, when identify the meaning of these physical activities, the consideration of the set of circumstances must be involved since different situational contexts yield different senses of meanings. Reading can be viewed as decoding, recognizing, perceiving or interpreting the written text.

Among various senses, Nunan (2000) referred reading to a matter of decoding a series of written symbols. Similarly, Lenz (2005) mentioned reading involves decoding the writer's words and using reader's background knowledge. While Sheng (2000) defined reading as the process of recognizing, interpreting and perceiving. Grabe and Stoller (2002)(2002)(2002) offered definition of reading as the ability to draw text

meaning and interpret the information appropriately. In a similar way, Wallace (2010) used the final sense of interpreting to refer to reading. For her, reading is seen as the readers' attempt to construct the meaning, so called 'discourse' (p.14), by drawing both the existing knowledge of linguistic and schematic together with the input provided by the written text as the piece of information. In this sense, reading is a dynamic process incorporating social and individual perspectives.

### 2.6.2 Reading processes

Over the past 60 years, the views of reading processes have changed dramatically. In early studies, the concept of top-down was widely acknowledged in reading research as seen in reading as a unitary and selective process. Later on, the availability of advanced eye tracking technology had an effect on the shifting view to the bottom-up model. Lately, many researchers uniformly agree that reading is a cognitive process of text meaning construction that involves many variables such as prior knowledge, linguistic knowledge, and text information, etc. (Muljani, Koda, & Moates, 1998) as cited in *Reading in a Second Language: Cognitive and Psycholinguistic Issues* by X. Chen, Dronjic, and Helms-Park (2016). The latest view is discussed in detail below.

#### 2.6.2.1 Reading as a cognitive process

Recently, it is widely accepted that reading is a cognitive process that occurs through the interaction between reader and text. Reading are classified into two models: the process model and the componential model. First, in the process model, reading is viewed as a series of a cognitive activity taking place in readers' mind. Four approaches of this model include bottom-up, top-down, interactive, and interactive-compensatory approaches (Urquhart & Weir, 2014).

Bottom-up approach is stimulus-driven or text-driven (Anderson & Cheng, 1999). The readers start looking at the smallest units of the language before trying to fit them into the larger understanding as the whole text. In teaching reading, reading for gist and main idea in which students often use skimming, and making prediction of the passage content from the topics, titles or images, are the activities teachers can use to encourage students to use bottom-up processing to see an overall picture of the text they are reading. It can be seen that, in this model, students' background knowledge has great influence on reading comprehension.

In contrast to bottom-up, top-down approach is reader-driven where readers' expectation are brought to the text. This is in line with Gascoigne (2005) saying that the force of reading is the readers' world knowledge and interest. As a result, even different readers read the same text, due to different force, experience, background knowledge, expectation, they might interpret it differently (Goodman, 1967). In teaching reading, instead of starting from the word level decoding, in top-down, the teachers introduce students to literature as a whole and students should have opportunity to select reading materials based on their own interest instead of one book for an entire class.

Interactive approach is the combination of bottom-up and top-down approaches developed by Rumelhart (1994). It is considered as the most practical and effective one (e.g. W. Grabe, 1991; Silberstein, 1993). In reading classroom setting, each individual is encouraged to use his or her own ways to solve the problem occurring during reading activity. For example, when two students encounter an unknown word, one student might find it easier to use word-level knowledge to decode the meaning, while the other

might use the knowledge of sentence structure to figure out the meaning of the word. In short, different readers employ different approaches either bottom-up or top-down.

Interactive-compensatory approach was developed by Stanovich (1984) to explain developmental and individual differences in the use of context that help readers recognize words while they are reading. In general, each reader has different weaknesses and strengths and it is believed that to comprehend the text the weakness in one area can be compensated for by strength in another area.

Second, cognitive process viewed reading as the ability called componential models divided into the two-component models and the three-component models (Tunmer & Hoover, 1993). The first model is the simple view in which reading consists of only two components of word recognition and linguistic comprehension. In short, to understand a text, the ability to read and competence in the language of the text are necessary. The simplicity of this model is accepted by many researchers, however, some aspects were questioned. Therefore, some researchers have tried to propose alternative models consisting of three components. For example, Coody (1979) described that conceptual abilities, process strategies, and background knowledge are three components of reading. While Bernhardt's model (1991) includes language, literacy, and world knowledge as the three variables.

In summary, the latest view sees reading as a cognitive process categorized into process model and the componential model. First, the process model includes top-down, bottom-up, interactive, and interactive-compensatory approaches. Among four of them, the most practical and effective one is the interactive approach. Second, the componential model includes the two-component models and the three-component

models. The variation of the components depends on what seem to be essential for reader to comprehend text.

## **2.7 Reading Comprehension**

### **2.7.1 Reading strategies for comprehension**

King (2008) mentioned reading strategies as the single most important factor for reading because appropriately utilizing them can differentiate between good and bad learners of a second language. Similarly, McNamara (2009) agreed that strategies are essential to overcome reading problem, to achieve reading comprehension, and to become a better 'reader' as well as 'comprehender' (p. 35). In addition, McNamara emphasized the benefit of reading strategy instruction technique called Self-explanation Reading Training (SERT) in which readers are given training on six reading strategies: comprehension monitoring, paraphrasing, elaboration, logic or common sense, predictions, and bridging to help them improve their use of reading strategies for deep-level of text comprehension through 'induce overt active processing' (p. 34).

In line with King and McNamara, Brown (2001) said that reading comprehension can be achieved if students know how to employ appropriate and effective reading strategies. The samples of reading strategies are identifying the purpose in reading, using graphemic rules and patterns to aid in bottom-up reading, using silent reading techniques for relatively rapid reading, skimming the text for main ideas, scanning the text for specific information, using semantic mapping or clustering, guessing when you aren't certain, analyzing vocabulary, distinguishing between literal and implied meanings, and capitalizing on discourse markers to process relationships.

There are many other definitions of reading strategies and extensive proposed reading strategies. The most comprehensive description of reading strategies called

‘The Reading Strategies Checklist’ is proposed by Anderson (Yaemtui, 2015). It is divided into 3 main categories: cognitive reading strategies, metacognitive reading strategies, and compensating reading strategies. The Reading Strategies Checklist relating to cognitive reading strategies includes the following items:

1. Predicting the content of an upcoming passage or section of the text.
2. Concentrating on grammar to help you understand unfamiliar constructions.
3. Understanding the main idea to help you comprehend the entire reading.
4. Expanding your vocabulary and grammar to help you increase your reading.
5. Guessing the meaning of unfamiliar words or phrases to let you use what you already know about English.
6. Analyzing theme, style, and connections to improve your comprehension.
7. Distinguishing between opinions and facts in your reading.
8. Breaking down larger phrases into smaller parts to help you understand a difficult passage.
9. Linking what you know in your first language with words in English.
10. Creating a map or drawing related ideas to enable you to understand the relationship between words and ideas.
11. Writing a short summary of what you read to help you understand the main ideas.

Metacognitive strategies, on the other hand, involve two dimensions: knowledge of cognition and regulation of cognition. In terms of knowledge of cognition, this dimension comprises of declarative knowledge, procedural knowledge, and conditional knowledge. In reading, knowing what reading strategies are is the declarative knowledge, knowing ‘what’ and ‘how’ to use those strategies is the

procedural knowledge, and knowing ‘when’, ‘where’ and ‘why’ to use particular strategies plus assessing their effectiveness is the conditional knowledge (Jacobs & Paris, 1987; Paris, Lipson, & Wixson, 1983; Schraw & Moshman, 1995).

In terms of knowledge of regulation, in reading field, this dimension includes planning, monitoring, testing, revising, and evaluating strategies (Baker & Brown, 1984). Many research revealed a strong connection between metacognitive strategies and reading proficiency, in that, the frequency of strategies use of successful readers appeared to be higher than that of less successful readers, and also the number of strategies used by successful readers tended to be higher than that used by less successful readers (Afflerbach, Pearson, & Paris, 2008; Baker & Brown, 1984). Introduced by (Anderson, 1991), the Reading Strategies Checklist relating to metacognitive reading strategies includes these following items:

- Setting goals for yourself to help you improve areas that are important to you.
- Making a list of relevant vocabulary to prepare for new reading.
- Working with a classmate to help you develop your reading skills.
- Taking opportunities to practice what you already know to keep your progress steady.
- Evaluating what you have learned and how well you are doing to help you focus on your reading.

Lastly, compensating reading strategies are used when readers encounter unknown words while reading. Usually, when readers have difficulties in understanding words or sections of text, they just continue reading and return to where the problem occurs. This is because they employ other skills as the compensation skills to help



construct the understanding. Developed by Anderson (1999), the Reading Strategies Checklist relating to compensating reading strategies includes the following items:

- Relying on what you already know to improve your reading comprehension.
- Taking notes to help you recall important details.
- Trying to remember what you understand from a reading to help you develop better comprehension skills.
- Reviewing the purpose and tone of a reading passage so you can remember more effectively.
- Picturing scenes in your mind to help you remember and understanding your reading.
- Reviewing key ideas and details to help you remember.
- Using physical action to help you remember information you have read.
- Clarifying words into meaningful groups to help you remember them more clearly.

In this study, only 3 cognitive strategies of Anderson that help promote the use of background knowledge for pre-reading, during-reading, and post-reading are selected to be included in the developed English content-based reading materials. Firstly, predicting the content of an upcoming passage or section of the text is the pre-reading strategy that activates readers' background knowledge before reading (Campbell & Cuba, 2015). Secondly, guessing the meaning of unfamiliar words or phrases is the during reading strategy that readers can employ their background knowledge to help construct meaning of the text (Alsaawi, 2013). Lastly, writing a short summary is the post-reading strategy that readers make use of their background

knowledge to summarize the main ideas in their own words. (Tarchi, 2015). The selection of these 3 strategies was in accordance with some strategies for comprehension suggested by Grabe (2014). Each strategy will be explicitly instructed in each unit and revisited in the following units. Consequently, student monks will gain mastery in employing reading strategies for better comprehension.

### 2.7.2 Levels of reading comprehension

When readers interact with written texts, different levels of their mental processing are involved causing different levels of comprehension (Grabe & Stoller, 2014), therefore various taxonomies of levels of reading comprehension have been proposed by several researchers (Ruddell, 2011). Barrett and Smith (1979), adapted Bloom's taxonomy to classify reading into four categories: literal meaning, inference, evaluation, and appreciation.

In 2005, influenced by the work of Pearson and Johnson (1972) and Nuttall (1996) together with experiences in teaching reading and developing materials, Day and Park (2005) proposed the six types of comprehension: 1) Literal comprehension refers to an understanding of explicit meaning of the text which reader can directly or easily found from the text. 2) Reorganizing comprehension is the level that the readers have to use information from various parts of text to answer the question. 3) Inference comprehension refers to an understanding of implicit meaning of text which require readers to combine their literal understanding with their own knowledge. 4) Prediction is the type of comprehension that the readers have to employ both their understanding of the passage and their own knowledge of the topic in a systematic way to determine the incoming information. 5) Evaluation requires readers to contribute a global or

comprehensive judgment or opinion about the text. 6) Personal response requires readers to use their feelings to answer the question (Day & Jeong-suk, 2005).

In 2006, the three-level type of reading comprehension was introduced by Nor Hashimah Hashim and Yahya Che Lah (cited in Lah & Hashim, 2014) divided into literal, inferential, and critical creative. First, the literal comprehension requires reader's memorization of facts that are explicitly shown in the text or excerpts. The focus skills for this lowest level of comprehension are identifying meaning of a word, a phrase, or a sentence; identifying the main idea; identifying the important point; making comparison; identifying the cause-effect; identifying the sequence of ideas/events. Second, the inferential comprehension refers to reader's ability to interpret, summarize, generalize, predict, and make a conclusion, and make a prediction. Third, the critical-creative comprehension requires reader to evaluate, make a conclusion, internalize, and identify the moral of the story.

Although taxonomies with various levels of comprehension have been offered, the most common levels of reading comprehension are classified into three levels. All proposed three-level taxonomies seem to have remarkably similarity of descriptions and for teaching reading content. However, Herber's taxonomy was claimed be the 'most comfortable' one (Ruddell, 2011, p. 68).

Relating the reading comprehension level to Bloom's taxonomy, in 1978, Herber proposed three levels of reading comprehension: literal comprehension, interpretive comprehension, and applied comprehension (Herber, 1978) which Ruddell further defined as 'reading the lines', 'reading between the lines', and 'reading beyond the lines', respectively (2011, p. 68).

- Literal comprehension level requires reader's little thought or understanding since readers can easily recall and directly find the answer from information explicitly presented in text. The meaning is derived from reading the lines. The questions of this level are who, what, when, and where questions.
- Interpretive comprehension level requires readers to imply meaning from the text which is not directly stated by the authors. The meaning is derived by reading between the lines. The questions of this level may include, what if, why, and how question including questions ask for a paraphrase, explanation, inference, conclusion, or summary.
- Applied comprehension level requires readers to use their background knowledge to be able to evaluate, elaborate, predict, or solve problems based on implicit information in the text. The meaning is derived by reading beyond the lines.

### 2.7.3 Explicit comprehension strategy instruction

Reading comprehension can be significantly improved by using effective and focused reading instruction (Grabe, 2014). In the past, many research reports have revealed the success and effectiveness of the explicit instruction model on a teaching children to read (Chall, 2000; Pearson & Dole, 1987; Roller, 2001) but recently the use of explicit instruction has been consistently recommended as effective means for teaching a wide variety of reading skills and strategies (Archer & Hughes, 2011; Coyne et al., 2009; Lenz, 2005; Shanahan et al., 2010).

Explicit instruction is characterized by a series of teachers' supports or scaffolds, whereby teachers guide students through the learning process with clear statements about the objective of learning a new skill or strategy, clear explanations and presentation of the instructional target, and supported practice with feedback until

students master the skill and can perform the work independently. Usually, teachers introduce one or two strategies at a time and should revisit them on a regular basis (Grabe, 2014). In other words, in explicit instruction, teachers have full responsibility for student learning but gradually and systematically reduce this responsibility to students when they gain skill mastery.

Keith Lenz (2005) mentioned that the most successful way to reach comprehension strategies could be achieved by the use of very direct and explicit instruction of which key principles are responsive, systematic, and intensive. Based on the examination of instructions mostly cited, a list of 7 effective strategy instruction is proposed including: 1) orient students to key concepts, assess, and ask students to make a commitment to learn, 2) describe the purpose of the strategy, the potential benefits, and the steps of the strategy, 3) model (thinking aloud) the behavioral and cognitive steps/actions involved in using the strategy, 4) lead verbal practice and elaboration of the key information and steps related to the strategy, 5) provide for guided and controlled practice of the strategy with detailed feedback from the teacher and/or knowledgeable peers, 6) gradually move to more independent and advanced practice of the strategy with feedback from the teacher and/or knowledgeable peers, and 7) posttest application of the strategy, and help students make commitments to generalize its use.

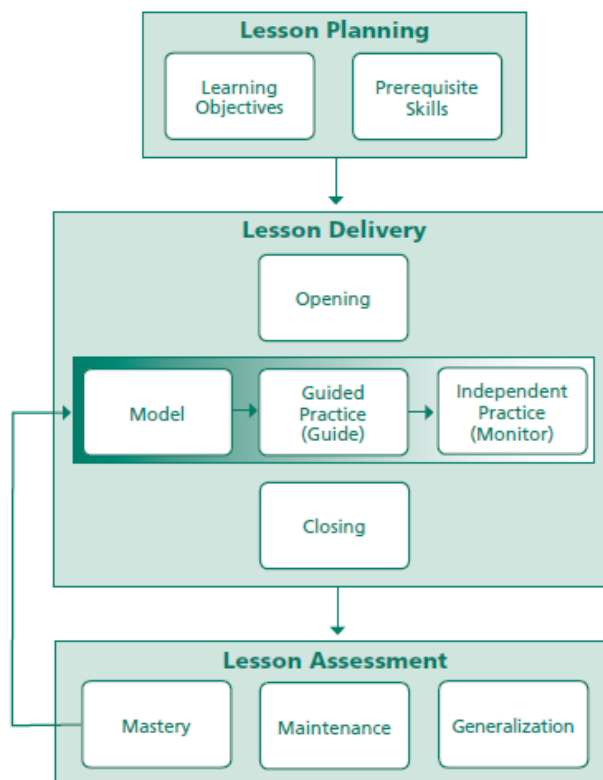


Figure 2.4 Critical features of explicit instruction  
(Marchand-Martella & Martella, 2013)

Therefore, it can be concluded that to effectively instruct the effective comprehension strategies, the instructions should be developed based on the explicit instruction feature. Initially, teachers give systematic instruction, model and controlled practice before increasing students' independence when they gain mastery of language skills.

## 2.8 The Present Study

In order to develop the effective English content-based reading materials, the researcher used the materials development framework introduced by Tomlinson (2011) as the guideline from the initial stage of identification of needs or problems until the evaluation of effectiveness of the materials. The needs analysis tools used to initially investigate the target needs according to Hutchinson & Water (1987)

were semi-structured interview and the needs analysis questionnaires. The research instruments used to investigate the effectiveness of the developed materials in the final stage were the whilst-use evaluation questionnaires and the post-use evaluation questionnaires.

This study portrayed the concept of theme-based instruction of CBI in which the language teacher played role in developing content-based materials for Buddhist monks, who were non-native speaker, through the deliberate selection of the six components: themes, topics, texts, tasks, transitions, and threads, based on Six-T's approach introduced by Stoller and Grabe (2017). Themes were selected based on the suggestion from the interview, topics would selected according to the results of needs analysis questionnaire survey, texts would be selected from authentic sources, tasks were designed to promote the content and language learning, transitions were established for smooth flow before moving from one unit to the next, and threads were used to make entire units coherent.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research methodology of the study. The description covers population and participants, research instruments, research procedures, for each stage of the study together with methods of data collection and data analysis.

The main objectives of the present study are to develop the English content-based reading materials for Buddhist student monks, to explore the attitude of student monks towards the quality of the English content-based reading materials, and to explore the attitude of teachers towards the quality of the English content-based reading materials.

#### **3.2 Population and Participants**

##### **3.2.1 Population**

The population of the study consisted of 153 Buddhist student monks at the Education Department of Wat Phra Dhammakaya in academic year 2017, 12 English teachers conducting courses, and 10 course administrators who were in charge of English course management.

##### **3.2.2 Participants**

In this study, the sampling methods were used in 2 stages: 1) in the needs analysis stage, a purposeful sampling and stratified samplings were used and 2) in the English content-based reading materials implementation stage, a purposeful sampling was used.



## ***1. Needs Analysis Stage***

### *Interview*

A purposeful sampling was used to obtain three stakeholders for the semi-constructed interview. According to Griffee (2012), purposeful sampling is a technique where the researcher selects the participants who are knowledgeable and available to participate the study. They could be the advisor, the instructor, or the student. In this study, the researcher conducted individual (face-to-face) interview with 1 student monk, 1 English teacher, and 1 course administrator.

### *Needs analysis questionnaires*

A purposeful sampling was used to obtain 6 English teachers and 10 course administrators to complete the needs analysis questionnaires. For the student monk group, the stratified random sampling method was employed to obtain subjects. According to Griffee (2012) this sampling method is used when the population consists of heterogeneous groups of unequal size. They are divided into units called strata. Then members of each stratum are randomly sampled. In this study, the student monks were from year 1 to year 4 and each group was unequal in size. After student monks were divided into 4 strata, the researcher randomly selected them to have the sample size calculated based on the common confidential level of 95% and the margin of error of 5%.

## ***2. English content-Based Reading Materials Implementation Stage***

To evaluate the effectiveness of the developed content-based materials during and after the implementation, 42 student monks and 3 English teachers were purposefully selected. The student monks were divided into 3 classes based on their level of English proficiency: 17 low English proficiency student monks in class I, 15

medium English proficiency student monks in class II, and 10 high English proficiency student monks in class III.

Each class was taught by 1 English teacher throughout the period of 15 weeks and in the last 3 weeks, the English content-based reading materials were implemented. The implementation in every class was conducted concurrently. The assignment of the responsible sub-themes was based on readability scores of the reading passages. The more proficiency the student monks had, the more difficult the reading passages were. Class I teacher was responsible for unit 1-3 teaching, Class II for unit 4-6 teaching, and Class III for unit 7-9 teaching. In the second and third weeks of the implementation, the researcher administered the whilst-use evaluation questionnaires and post-use evaluation, respectively, to student monks and teachers.

### **3.3 Research Instruments**

#### **3.3.1 Needs analysis questionnaires**

Three sets of questionnaires were distributed to 3 groups of participants: 1) student monks (See Appendix A), 2) English teachers (See Appendix B), and 3) course administrators (See Appendix C). The purpose of these questionnaires was to investigate the needs and opinions of the participants towards topics and physical aspect of the English content-based reading materials. After the development, the questionnaires were validated by 3 experts from different fields to test the content validity using the Item-Objective Congruence Index (IOC). After the revision, the questionnaires were piloted with 3 student monks, 1 English teacher, and 1 course administrator.

#### **3.3.2 Evaluation questionnaires**

The evaluation questionnaires consisted of 4 sets of questionnaires as follows:

- Whilst-use evaluation questionnaire for student monks (See Appendix D),
- Whilst-use evaluation questionnaire for teachers (See Appendix E),
- Post-use evaluation questionnaire for student monks (See Appendix F),
- Post-use evaluation questionnaire for teachers (See Appendix G).

The purpose of the whilst-use evaluation questionnaires was to explore the attitude of student monks and teachers towards the quality of the English content-based reading materials in terms of academic and physical aspects, whereas the post-use evaluation questionnaires was to explore the attitude of student monks and teachers towards the quality of the English content-based reading materials in terms of effectiveness in enhancing student monks' reading comprehension. After the development, all sets of questionnaires were validated by 3 experts from different fields to test the content validity using the Item-Objective Congruence Index (IOC). After the revision, the questionnaires were piloted with 6 student monks and 1 teacher. All instruments used in this study were illustrated in Table 3.1.

Table 3.1 List of research instruments

Research Questions	Instruments	Purposes	Data Analysis
Q1	Interview	To identify problems to be solved by the creation of developed materials and to construct the content of the proposed materials	Content analysis revealing the difficulty in reading comprehension and lack of appropriate reading materials
Q1	Document study	To obtain information about reading comprehension, materials development, and content-based instruction	Content analysis synthesizing materials development, Six-T's approach, reading strategies, and reading comprehension to be employed as research conceptual framework of this study.
Q1	Needs analysis questionnaire	To investigate needs of the topics and physical aspect	Mean & standard deviation of the format and layout of the materials. Frequency &

	for student monks		percentage of the topic selected for the content of the materials
Q1	needs analysis questionnaire for English teachers	To investigate needs of the topics and physical aspect	Mean & standard deviation of the format and layout of the materials. Frequency & percentage of the topic selected for the content of the materials
Q1	Needs analysis for course administrators	To investigate needs of the topics and physical aspect	Mean & standard deviation of the format and layout of the materials. Frequency & percentage of the topic selected for the content of the materials
Q2	Whilst-use evaluation questionnaire for student monks	To explore student monks' attitude towards the quality of the developed content-based materials in terms of academic and physical aspects	Mean score and standard deviation
Q2	Post-use evaluation questionnaire for student monks	To explore student monks' attitude towards the quality of the developed content-based materials in terms of the effectiveness in enhancing reading comprehension	Mean score and standard deviation
Q3	Whilst-use evaluation questionnaire for English teachers	To explore English teachers' attitude towards the quality of the developed content-based materials in terms of academic and physical aspects	Mean score and standard deviation
Q3	Post-use evaluation questionnaire for student monks	To explore English teachers' attitude towards the quality of the developed content-based materials in terms of the effectiveness in enhancing reading comprehension	Mean score and standard deviation
Q1-3	Checklist for experts to validate the questionnaires and the developed English content-based reading materials	To evaluate the questionnaires and the developed English content-based reading materials	Descriptive statistic (IOC) for content validity of the research instrument and the developed materials

### 3.4 Research Procedures

In this study, the processes of developing the English content-based reading materials using the framework of materials development of Tomlinson (2011) embedded with Six-T's approach of Stoller and Grabe (2017) were divided into 6 stages as illustrated as the research procedures in Table 3.2.

Table 3.2 Research procedures

Stages of Procedures	Steps to be Applied
<b>Stage 1:</b> Identification of needs of materials or problems to be solved by the creation of the materials:	1.1 Interviewing stakeholders to identify problems to be solved by the developed materials and to construct the content of the proposed materials.
	1.2 Designing needs analysis questionnaires to investigate needs of the topics and physical aspect.
<b>Stage 2:</b> Exploration the needs or problems by identifying language, functions, skills that should be included in the developed materials:	2. Conducting document study, literature review, and theory review about materials development, Six-T's approach, reading strategies, and explicit instruction of reading strategy.
<b>Stage 3:</b> Contextual realization by examining and selecting ideas, contents, or texts that provide familiarity and appropriateness to the learners' context:	3.1 Establishing THEMES.
	3.2 Formulating TOPICS.
	3.3 Choosing TEXTS from various resources.
	3.4 Sequencing the content.
<b>Stage 4:</b> Pedagogical realization by examining and selecting meaningful exercises	4.1 Designing TASKS to develop students' language learning, facilitate the content learning, and

and activities with clear explanation:	<p>model strategies for language and content learning.</p> <p>4.2 Determining TRANSITIONS.</p> <p>4.3 Selecting possible THREADS to create the coherence among themes.</p>
<b>Stage 5:</b> Materials production concerning the physical and academic aspects of the developed materials:	<p>5. Analyzing the results from the needs analysis questionnaires and physically designing the reading content-based materials.</p>
<b>Stage 6:</b> Evaluation of the effectiveness of the developed materials:	<p>6.1 Before implementing the developed English content-based reading materials.</p> <p>6.1.1 Designing whilst-use and post-use evaluation questionnaires</p> <p>6.1.2 Conducting teachers' training</p> <p>6.2 While implementing the developed English content-based reading materials.</p> <p>6.2.1 Implementing the developed English content-based reading materials.</p> <p>6.2.2 Administering whilst-use evaluation questionnaires</p> <p>6.2.3 Administering post-use evaluation questionnaires</p> <p>6.3 After implementing the developed English content-based reading materials.</p> <p>6.3.1 Writing up the results and the findings.</p>

### **Stage 1: Identification of needs of materials or problems to be solved by the creation of the materials**

To obtain information essential for developing suitable English content-based reading materials particularly for Buddhist student monks, in the initial stage, the researcher conducted semi-structured interview followed by designing needs analysis questionnaires.

### **1.1 Interviewing stakeholders to identify problems to be solved by the developed materials and to construct the content of the proposed materials.**

During 12 -19 June 2016, the researcher individually conducted semi-structured interview with 3 purposefully selected stakeholders including 1 student monk, 1 English teacher, and 1 course administrator to identify the problems of English reading to be solved. The interview data were used to construct the topics to be included in the reading materials. The prearranged open-ended questions were used in the semi-structured interview. The samples of questions were as follows:

- What are the general background of student monks (e.g. number of students, age, educational background, subjects provided for student monks, activities)?
- Why do student monks need to learn to read English?
- What kinds of reading materials student monks use in class?
- What difficulties do you find when you use commercially available reading materials to teach student monks? (for teacher)
- What difficulties do you find when you learn reading from provided English reading materials? (for student monks)
- What are student monks' difficulties in reading English?
- Why do you think the creation of new materials for reading class is essential?
- To what extent would these developed reading materials help solve student monks' reading difficulty?
- What should be included in these developed materials (e.g. grammar, vocabulary)?
- What topics should be included in these developed materials? and Why?

## **1.2 Designing needs analysis questionnaires to investigate needs of the topics and physical aspect**

After the interview, the researcher constructed needs analysis questionnaires. In the fourth part of the needs analysis questionnaires asking about the preferred topics, the researcher incorporated several topics as mentioned by the stakeholders in the interview. The purpose of these questionnaires was to investigate the needs and attitude of student monks, English teachers, and course administrators towards the topics and physical aspect of the developed English content-based reading materials. As a result, they were designed for 3 different groups of respondents who were 1) student monks, 2) English teachers, and 3) course administrators. Details of the questionnaires are described below:

### **1.2.1 Components of the needs analysis questionnaires**

The needs analysis questionnaires for every group were divided into four sessions as follows:

The first session was the coversheet describing the directions and objective of this questionnaire.

The second session was the preliminary questionnaire addressing personal information of the respondents. All questions were in checkbox and open-ended format.

The third session had questions aiming to obtain purposes of reading, needs of academic and physical aspects, and preferred task types. There were 3 questions consisting of 4-Likert scale and a question in open-ended.

The fourth session had questions divided into 3 sub-themes (the Buddha, the Dhamma, and the Sangha). They aimed to obtain preferred reading topics to be included



in the English content-based reading materials. This component was in checkbox and open-ended format.

### 1.2.2 Validity of the needs analysis questionnaires

In terms of content validity, during 1 – 10 July 2016, 3 experts were asked to validate and evaluate each item of the questionnaires by rating their opinions towards the congruence of the content and the objective based on these criteria: 1 = accept, 0 = revise, and -1 = reject.

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

1. One Buddhist monk with Pali level 6-9, who has experience in teaching or organizing course for Buddhist student monks for more than 5 years.
2. Two teachers with a doctoral degree in Buddhist Studies, who have experience in teaching student monks for more than 5 years.

In conclusion, panel of experts in this step were Buddhist monk and lay teachers with strong knowledge of Buddhism and more than 5 years of experience in teaching Buddhist monks.

After that, the researcher calculated the points of the Item Objective Congruence (IOC) index. The items of questions that received  $\geq 0.5$  were accepted, whereas the items which received  $< 0.5$  were revised or rejected. The value of IOC for needs analysis questionnaire was illustrated in Appendix H. The results indicated that 100% of the items were rated higher than 0.5 of the IOC index, meaning that they were acceptably congruent with the objectives. However, one expert suggested that in Part II, the purpose of reading should not include ‘for entertainment’ as it contradicted the way of monastic life. Thus, the researcher decided to remove it from the questionnaires as shown in Figure 3.1.

Question	4	3	2	1
1. What is your purpose of reading?				
For daily life				
For education				
For dissemination				
Others such as .....				

Figure 3.1 Revised questionnaire according to expert's suggestion

On 11-13 July 2016, the revised needs analysis questionnaires were pilot tested on 3 student monks, 1 English teacher, and 1 course administrator. According to the results of the questionnaire from the pilot study, three sets of the questionnaires appeared to be responder-friendly as within 15 minutes, the responders could answer all questions without confusion and none of them asked researcher to clarify any unclear statement. Table 3.3 shows the summary of the pilot testing group.

Table 3.3 The pilot testing group

Group	Number
Student monks	3
English teacher	1
Course administrator	1

### 1.2.3 Data collection of the needs analysis

During 18 – 29 July 2016, the researcher distributed needs analysis questionnaires to 138 student monks, 6 English teachers, and 10 course administrators.

The participants were selected by employing different sampling methods. While English teachers and course administrator were purposefully selected, student monks were selected using, stratified random sampling method which divided the population of student monks into four groups: year1, year2, year3, and year4. The population of student monks of each year was 40, 44, 38, and 31, respectively. Then the researcher

determined the sample size from Krejcie and Morgan's formula (1970) as shown below:

$$S = \frac{X^2NP(1-P)}{d^2(N-1) + X^2P(1-P)}$$

Where: S = Required sample size

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population size

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50%))

d = Degree of accuracy (5%), expressed as a proportion (.05); It is margin of error

The sample size of each year with 95% of confidential level and 5% of margin of error was 36, 39, 34, and 29, respectively. The participants from English teacher group and course administrator group were selected using the purposeful sample. Table 3.4 presents the number of respondents.

Table 3.4 The number of respondents

Group	Number
Student monks	138
English teachers	6
Course administrators	10

Prior or to the distribution of previously validated questionnaire to each group of respondents, the researcher clarified the purpose and explained the instruction, purposes, and components of the questionnaire.

For student monk group, the researcher asked for permission from subject teachers to distribute and administer the needs analysis questionnaires to the student

monks after the classes finished. They had 15 minutes to complete and return the questionnaire paper to the researcher.

For English teacher group, the researcher had the questionnaire completed with the assistance of an English course coordinator who was in charge of taking care all English teachers. He helped arrange time for the researcher to meet with each English teacher either before or after class. The researcher explained the instruction, purposes, and components of the questionnaire, and left the questionnaire papers to 6 English teachers. They took them home and returned them to the course coordinator next time they came to teach. After the English course coordinator received all completed questionnaires, the researcher went to collect them.

For course administrator group, the researcher made an appointment before going to see them at their office. They completed the questionnaires in 15 minutes and returned them to the researcher. Only couple of them were inconvenient to complete the questionnaire in the meeting, the research left the questionnaire paper and went back to collect it on the agreed date and time.

#### **1.2.4 Data analysis of the needs analysis**

After all copies of the needs analysis questionnaires were returned, each item was descriptively analyzed using SPSS program. Mean and standard deviation were used to analyze data regarding student monks' purposes of reading, needs of academic and physical aspects and preferred task types. The results were compared using the following criteria:

3.50-4.00	means	strongly agree
2.50-3.49	means	agree
1.50-2.49	means	disagree

1.00-1.49 means strongly disagree

Frequency and percentage were used to analyze data regarding preferred topics. The items of largest percentage of selection by any groups of respondent would be included in the developed English content-based reading materials.

**Stage 2: Exploration the needs or problems by identifying language, functions, skills that should be included in the developed materials**

After exploring problems and needs, the researcher conducted document study, literature review, and theory review mainly on 4 areas: the framework of materials development, Six-T's approach, cognitive reading strategies, and explicit instruction of reading strategy to find ways to solve existing problems by these newly developed reading materials, and to identify language student monks needed in their context.

**Stage 3: Contextual realization by examining and selecting ideas, contents, or texts that provide familiarity and appropriateness to the learners' context**

To construct the appropriate content to be included in the materials, the researcher considered student monks' context such as English proficiency, religious knowledge, and purposes of reading, collected from the interview and needs analysis questionnaires for the integration of 6 components as follows:

**3.1 Establishing THEMES**

The suggestion from interview and the conclusion of the preferred topics were used to establish themes serving as the central idea from which topics of each unit of the developed English content-based reading materials derived.

**3.2 Formulating TOPICS**

According to the results of need analysis questionnaires, items of largest percentage of selection by any groups of respondent would be included as topic of each unit of the developed English content-based reading materials.

### 3.3 Choosing TEXTS from various resources

Once the topics of interest were identified, researcher examined and selects texts from a number of authentic resources (e.g. textbooks, books, video excerpt, and online materials). The criteria of the selection of reading passages were, first, each reading passage must fit with sub-themes and topics. Second, the reading passages must require student monks to use the reading strategy being taught in that unit. Third, the selected passages were between 600-800 words. Fourth, score of complexity of the passage based on Flesch reading-ease test's score should be at a minimal level of 70.0-60.0 and at a maximum level of 50.0-30.0 (Flesch, 1979). Flesch's formula is considered to be one of the most accurate readability formulas and is best applicable to access the difficulty of a written in the English language (Lewis, 2016). Scores can be interpreted as shown in the table 3.5.

Table 3.5 Flesch reading-ease test's score and interpretation

Score	Interpretation
70.0 – 60.0	Plain English.
60.0 – 50.0	Fairy difficult to read
50.0 – 30.0	Difficult to read

### 3.4 Sequencing the content

The order of topics as shown on the needs analysis questionnaires were rearranged in logic sequence, primarily based on reading strategies the passages

applicably provide and secondarily the occurrence or timing of events in the passages for easy understanding.

In terms of reading strategies, the most practical and straightforward way to sequence the order of reading strategies is instructing the before reading strategy, during reading strategy, and lastly after reading strategy, consecutively (Lenz, 2005). In terms of occurrence or timing of events, ideally the passage of precedent event would be placed prior to that of antecedent, however for easy understanding, the placement can be swapped around.

#### **Stage 4: Pedagogical realization by examining and selecting meaningful exercises and activities with clear explanation**

##### **4.1 Designing TASKS to develop students' language learning, facilitate the content learning, and model strategies for language and content learning.**

Preferred types of task obtained from the results of needs analysis questionnaires would be used when designing 3 phases of tasks: pre-reading, during-reading, and post-reading. In every phase, the researcher included meaningful tasks that activated background knowledge, simultaneously require student monks to employ reading strategies, vocabulary, and grammar they had already learned from that unit to accomplish the tasks. Also, the clear understandable instruction would be given. Importantly, when designing tasks, the researcher had to bear in mind that some kinds of tasks that normally could be done by lay students might be inappropriate for student monks such as clapping hands, singing or running. As a consequent, tasks selection had to be clear and easy to follow and comply with religious disciplines and principles.

##### **4.2 Determining transitions across topics and across tasks to facilitate a natural and systematic flow of content and tasks before moving to the next unit.**

With the intention to make the transition smooth and seamless, the researcher designed one of the post-reading tasks as a preparation for student monks before starting next unit. To achieve this, the researcher used topical transition merging current topic and next unit's new topic in the task, so that the student monks could relate what they had learned from the lesson with upcoming content.

#### **4.3 Selecting possible threads to create the coherence among themes.**

Thread acts as the linkages across sub-themes which establish the coherence within the lesson unit. For the threads, according to Buddhism the sub-themes of the Buddha, the Dhamma, and the Sangha already make good linkage among themselves as they are interwoven under the main theme of the Triple Gem. The Buddha is the founder of Buddhism, the Dhamma is his teachings, and the Sangha is the community of monks who seek guidance from the teachings of the Buddha and have duty in spreading Dhamma to the followers or anyone who is interested. However, the coherence was intensified through the selection of reading passages and the design of tasks.

#### **Stage 5: Materials production concerning the physical and academic aspects of the developed materials**

The information from previous stages, were used to develop 3 sample units of the content-based materials including workbook and teachers' manual. They were validated and revised according to experts' suggestions and comments.

##### **5.1 Validity of the English content-based reading materials**

To check the validity of the English content-based reading materials both physical and academic aspects, after developing the first 3 units, the researcher had the preliminary workbook and teachers' manual checked for validity by three experts using



evaluation form adapted from Chetsadanuwat (2012) and Arwae (2013). Three scales (+1 means “accept”, 0 means “revise”, and -1 means “reject”) were used. The items of questions that received  $\geq 0.5$  were accepted, whereas the items which received  $< 0.5$  were revised or rejected according to the suggestions of the experts. List of three experts in validating the English content-based reading materials was as follows:

1. One university English professor who possesses a doctoral degree in English language instruction or other related fields and has experience in teaching student monks for more than 5 years.

2. One university English professor who possess a doctoral degree in English language instruction or other related fields and have experience in teaching for more than 5 years.

3. One bilingual person who has experience in writing and editing Buddhist materials in English for more than 5 years.

In conclusion, panel of experts in this step were two English teachers with doctoral degree and more than five years of experience in teaching and one content specialist with more than five years of experience in producing Buddhist materials in English.

The value of IOC for the content-based materials for workbook was illustrated in Appendix I and that for teachers’ manual was illustrated in Appendix J. Results indicated that 100% of the items were rated higher than 0.5 of the IOC index, meaning that they were acceptably congruent with the objectives. However, experts’ comments were used to revise and redesign the content-based materials as follows:

It was suggested that besides the references where Reading One and Reading Two were synthesized from, those for grammar should also be provided for further study. Thus, the sources were changed as shown in Figure 3.2:

### G. Sources

- Reading One and Reading Two were synthesized from:
  - Foundation, D. (2009). *The Lord Buddha's history: His Birth, his self-enlightenment, and his attainment of complete nibbana*. Bangkok, Thailand: Rungsilp Printing.
  - Foundation, D. (2014). *The history of Gotama Buddha*. Bangkok, Thailand: OS Printing.
- Grammar was synthesized from:
  - Past Perfect Tense
  - <https://www.englishpage.com/verbpage/pastperfect.html>
  - Past Simple Tense
  - <https://www.englishpage.com/verbpage/simplepast.html>

Figure 3.2 Revised sources

Two experts provided additional comments for revising unit 2's topic to be a noun phrase form to keep it consistent with those of other units. It was changed as follows:

**Changed** People to Have the Right View



**Changing** People to Have the Right View

After experts' validation, a pilot study was carried out before undertaking the main study. The purpose of the pilot study was to confirm that the preliminary version of the English content-based reading materials comprising of workbook and teachers' manual were applicable to the present study and assure the accuracy. In case any errors

occurred, the researcher would have time to make some changes and revise them thoroughly prior to the main study.

Hence, the thorough revision of three units of the English content-based reading materials were piloted on 6 year 1 student monks. Two of them were the representatives of students with high, medium and low English proficiency based on the score of English subject of previous semester. They also shared same characteristics in terms of background knowledge in Buddhism and educational background. The pilot study of unit 1, 2, and 3 was conducted on 3, 8, and 10 November 2017, respectively. Each class lasted 2 hours. The information obtained from the pilot study was used as a guideline to adjust 3 sample units and continue developing 6 more units until the completion of the 9 unit English content-based reading materials. To ensure the accuracy of all 9 units, an expert carefully checked the entire units. Finally, the final version of English content-based reading materials was published and ready for the implementation lasting for 3 weeks.

## **Stage 6: Evaluation of the effectiveness of the developed materials**

This stage was divided mainly into 3 steps: before the implementation, during the implementation, and after the implementation.

### **6.1. Before implementing the developed English content-based reading materials**

#### **6.1.1 Designing the evaluation questionnaires**

These following evaluation questionnaires were designed.

- Whilst-use evaluation questionnaire for student monks,
- Whilst-use evaluation questionnaire for teachers,
- Post-use evaluation questionnaire for student monks,

- Post-use evaluation questionnaire for teachers.

#### **6.1.1.1 Components of the evaluation questionnaires**

Whilst-use evaluation questionnaires for student monks and teachers were adapted from Chetsadanuwat (2012) who developed self-instructional materials (SIMS) to enhance English listening skills for student nurses and Arwae (2013) who developed reading materials to enhance English reading ability of students in three southern border provinces of Thailand. They were designed and contained similar items of materials evaluation form. The whilst-use evaluation for student monks and teachers used Likert's scale from 4 (strongly agree) to 1 (strongly disagree) in which respondents were asked to rate their satisfactions on six criteria consisting of the content, the organization of content, the presentation of content, the language use, the activities applied, and the layout and design. For the whilst-use evaluation for teachers, apart from those six mentioned criteria, another criterion of teachers' manual was included for teachers to rate their satisfaction. Both whilst-used questionnaire for student monks and teachers had one question in open-ended for respondents to provide additional comments and suggestions.

Post-used questionnaires for student monks and teachers were designed and contained items based on Masuhara and Tomlinson (2008) who mentioned that post-use evaluation measures the materials' effects on the users after the implementation of the materials. There were several suggested questions that could be asked about, for instance, the ability the materials users cannot do before the use of materials, the knowledge the materials users gain after using the materials, the knowledge the materials users still lack even after using the materials, or the knowledge the materials provide for the users' future use. Thus, the researcher designed the post-used

questionnaires which the respondents were asked to rate the level of their satisfaction of 15 items on scales from 4 (strongly agree) to 1 (strongly disagree) and write additional comments or suggestions in one question in open-ended.

#### **6.1.1.2 Validation process of the evaluation questionnaires**

The checklists for the experts to validate the questionnaire forms were used to analyze all items on whilst-use evaluation questionnaire for student monks, whilst-use evaluation questionnaire for teachers, post-use evaluation questionnaire for student monks, and post-use evaluation questionnaire for teachers. Three experts were asked to validate and evaluate each item of the questionnaires by rating their opinions towards the congruence of the content and the objective based on these criteria: 1 = accept, 0 = revise, and -1 = reject.

List of three experts in validating the questionnaires was as follows:

1. One university English professor who possesses a doctoral degree in English language instruction or other related fields and have experience in teaching for more than 5 years.

2. Two university English professors who possess a doctoral degree in English language instruction or other related fields and have experience in teaching student monks for more than 5 years.

In conclusion, panel of experts in this step were three English teachers with doctoral degree and more than five years of experience in teaching.

Then the researcher calculated the points of the Item Objective Congruence (IOC) index. The items of questions that receive  $\geq 0.5$  were accepted, whereas the items which received  $< 0.5$  were revised or rejected. The value of IOC for whilst-use evaluation questionnaire for student monks and teachers was illustrated in Appendix K

and L, and that for post-use evaluation questionnaire for student monks and teachers was illustrated in Appendix M and N. Results indicated that all items on all 4 sets of questionnaires were rated higher than 0.5 of the IOC index, meaning that they were acceptably congruent with the objective.

Next, the whilst-use evaluation questionnaires and post-use evaluation questionnaires were pilot tested on 6 student monks and 1 English teacher in the second week and the third week of the pilot test of the English content-based reading materials, consecutively. Every time, the researcher first clarified the purposes and explained about the questionnaire's structure before giving 15 minutes to each pilot group to fill in the evaluation questionnaires. Then they were collected for further analysis. According to the results of the evaluation questionnaire from the pilot study, all sets were found to be responder-friendly as within specific time, the responders could answer all questions without confusion and none of them asked researcher to clarify any unclear statement. Table 3.6 shows the summary of pilot test.

Table 3.6 The summary of pilot test

Group	No.	Evaluation questionnaires	Timeline
Student monks	6	whilst-use evaluation questionnaire	2# week of the pilot test
		post-use evaluation questionnaires	3# week of the pilot test
English teacher	1	whilst-use evaluation questionnaire	2# week of the pilot test
		post-use evaluation questionnaires	3# week of the pilot test

### 6.1.2 Conducting teachers' training

The developed content-based materials were concurrently implemented in three different English reading classes each of which was conducted by one English teacher. The researcher assigned one sub-theme consisting of three units to each English teacher based on English proficiency of student monks. Although they had the responsibility to teach only one sub-theme to their own class, the thematic units designed in these English developed content-based reading materials allowed them to concurrently conduct teaching. This was because all three sub-themes were inseparable and all units shared the same basic unit structure covering all three reading strategies in each sub-theme.

The first units of every sub-theme (unit 1, 4, and 7) were designed to teach the pre-reading strategy of predicting the content of an upcoming passage or section of the text. The second units of every sub-theme (unit 2, 5, and 8) were designed to teach the during-reading strategy of guessing the meaning of unfamiliar words or phrases. The third units of every sub-theme (unit 3, 6, and 9) were designed to teach the post-reading strategy of writing a short summary. In addition, the Buddhist terminologies, vocabulary, and grammar of one sub-theme were recycled and revisited in the others.

One week before the implementation, the researcher gave three English teachers a training on how to use workbook and teachers' manual. Although English teachers who were in charge of three units of each sub-theme were unable to participate the training at the same time, the researcher conducted the training separately and pointed out the overall thematic units. The training lasted approximately 90-120 minutes. There were two main objectives of the training. First, to make all English teachers have the

same view of the content of the entire English content-based reading materials of both workbook and teachers' manual that they were going to use. Second, to assure them that teaching any sub-theme first would not have any impacts on the student monks' comprehension because the student monks had already equipped with a solid background of the Triple Gem which was the core focus of Buddhism, and most importantly, the three components of the Buddha, the Dhamma, and the Sangha were inseparable.

The researcher covered these following points in the training:

- The introduction of workbook and teachers' manual
- The objective of the content-based materials
- The sub-themes and components of each unit
- The basic unit structure
- The steps of effective strategic instruction
- How to use lesson plan
- How to teach cognitive reading strategies, grammar, and vocabulary
- How to prioritize and deal with tasks
- How to evaluate the student monks' reading performance

## **6.2 While implementing the developed English content-based reading materials**

In this step, the researcher implemented the English developed English content-based reading materials and administered whilst-use and post use evaluation questionnaires. The actions taken during 3 weeks of the implementation were as follows:

### **6.2.1 Implementing the developed English content-based reading materials**



In the first week of the implementation on 6 December 2017, hard copies of workbook were offered to student monks in three classes. There were there were 17 student monks with low English proficiency in class I, 15 student monks with medium English proficiency in class II, and 10 with high English proficiency in class III. The sub-theme for class I, class II, and class III was the Lord Buddha, the Dhamma, and the Sangha, respectively. The duration of the implementation was 3 weeks. Each unit lasted for 1 period of 120 minutes.

After student monks received workbook, teachers initially introduced the objectives, themes, components, basic unit structure, and content of 9 units. As a result, student monks in every class could see that the overall content-based materials contained in total of 9 units under 3 different sub-themes, however, they were going to learn only 3 units of just one sub-theme. For class I conducted by the first teacher, the teaching would cover unit 1-3 under the sub-theme of the Lord Buddha. For class II conducted by the second teacher, the teaching would cover unit 4-6 under the theme of the Dhamma. For class III conducted by the third teacher, the teaching would cover unit 7-9 under the sub-theme of the Sangha.

When the introduction was done, teachers started teaching the first unit of each sub-theme focusing on the pre-reading strategy of predicting the content of an upcoming passage or section of the text.

### **6.2.2 Administering whilst-use evaluation questionnaires**

In the second week of the implementation on 13 December 2017, all teachers taught the second unit of each sub-theme focusing on the during-reading strategy of guessing the meaning of unfamiliar words or phrases. After the classes finished, the researcher administered whilst-use evaluation questionnaires to 42 student monks and

3 English teachers to check the quality of the English content-based reading materials in terms of content and the physical aspects. They had 15 minutes to fill in the questionnaires.

### **6.2.3 Administering post-use evaluation questionnaires**

In the third week of the implementation on 20 December 2017, all teachers taught the third unit of responsible sub-theme focusing on the post-reading strategy of writing a short summary to help understand the main ideas. After the classes finished, the researcher administered post-use evaluation questionnaires to 42 student monks and 3 English teachers to check the quality of the English content-based reading materials in terms of effectiveness in enhancing student monks' reading comprehension. They had 15 minutes to fill in the questionnaires.

### **6.2.4 Data analysis of the evaluation questionnaires**

To evaluate their attitude towards the quality of the English content-based reading materials, statistics were used to calculate the mean and standard deviation using the four-point rating scale on the questionnaires.

The student monks and teachers were asked to rate English content-based reading materials on scale from 1 to 4 depending on their agreement with the statements. Then the results of the evaluation were calculated into mean and standard deviation and finally compared using the following criteria:

3.50-4.00	means	strongly agree
2.50-3.49	means	agree
1.50-2.49	means	disagree
1.00-1.49	means	strongly disagree

### **6.3 After implementing the developed English content-based reading materials**

#### **6.3.1 Writing up the results and the findings**

Finally, after the evaluation questionnaires were completed by the teachers and student monks, the researcher wrote up the results and the findings which presented in Chapter IV.

### **3.5 Summary**

The main objectives of the present study were to develop the English content-based reading materials for Buddhist student monks, and to explore the attitude of student monks and teachers towards the English content-based reading materials.

*To answer the first research question*, ‘How can the English content-based reading materials be developed for Buddhist student monks?’ the process of materials development was divided into six stages starting from the identification of needs to create materials to the evaluation of the effectiveness of the developed materials. In the initial steps, an interview and needs analysis questionnaires were used to identify problems, academic and physical aspects, and preferred topics. Later on, content analysis was used to analyze the data from the interview, whereas descriptive statistics were used to analyze data gained from the questionnaires. Then in the fourth and fifth stages, data would be used to identify themes, topics, texts, tasks, threads, and transitions which created the content coherence. In the final step, the effectiveness of the English content-based reading materials was evaluated using the whilst-use evaluation questionnaires and post-use evaluation questionnaires.

*To answer the second research question, ‘What is the quality of the English content-based reading materials?’* the whilst-use evaluation questionnaire and post-use evaluation questionnaire were used to measure the attitude of 42 student monks and 3 English teachers. The whilst-use evaluation questionnaires measured their attitude towards the developed content-based materials’ quality in terms of academic and physical aspects, and the post-use evaluation questionnaire measured their attitude towards the developed content-based materials’ quality in terms of effectiveness in enhancing reading comprehension. All sets of questionnaires were validated and evaluated by three experts. They were adjusted response to the experts’ comment and feedbacks from the pilot study. The descriptive statistics were used to analyze data gained from the questionnaires.

The research results and findings for each research question are presented in Chapter IV.

## **CHAPTER 4**

### **RESEARCH FINDINGS**

#### **4.1 Introduction**

This chapter reports results based on two main research questions. The first question was: How can the English content-based reading materials be developed for Buddhist student monks? The second question was: What is the quality of the English content-based reading materials? The results of student monks' attitude were analyzed from the whilst-use evaluation questionnaire and post-use evaluation questionnaire designed for student monks. The results of teachers' attitude were analyzed from the whilst-use evaluation questionnaire and post-use evaluation questionnaire designed for English teachers.

According to the research questions, the analysis of the data is presented in two parts. The first part is to answer the research question 1. The second part is to answer the research question 2, which asked about the attitude of student monks and English teachers towards the quality of the English content-based reading materials?

#### **4.2 Results of Research Question 1**

The first research question investigates how English content-based reading materials are developed for Buddhist student monks. To address this research question, 6 stages of framework of materials development of Tomlinson (2011) were integrated with Six-T's approach of Stoller and Grabe (2017) as follows.

**Stage 1: Identification of needs of materials or problems to be solved by the creation of the materials**

Data collected from semi-structured interview and needs analysis questionnaires yielded main findings as listed below:

1. It is obvious that the lack of tailor-made reading materials was the main reason for student monks' reading difficulty. Since the commercial instructional materials being used failed to offer meaningful content relevant to monastic life which enable student monks to use their background knowledge to learn new language such as vocabulary, terminologies, and grammar, and to be exposed to authentic religious texts. Consequently, student monks lost interest as they could not understand texts used in real situation.

2. In terms of background knowledge, majority of student monks had been studying English for more than 10 years but their English proficiency was weak. They received advanced level of Dhamma scholar and level 1-2 of Pali scholar. In other words, they had strong background knowledge of Buddhism but weak English proficiency.

3. For student monks' purposes of reading English, the needs analysis questionnaire results of 3 groups shown in Table 4.1 shows that means of all purposes of every group range between 3.10 and 3.80. This indicates that three groups of respondent agreed or strongly agreed that student monks' purposes of reading are for dissemination ( $\bar{x} = 3.58$ ), education ( $\bar{x} = 3.50$ ), and daily life ( $\bar{x} = 3.37$ ).

Table 4.1 Student monks' purposes of reading English

Questions	Student Monks (n = 138)	English Teachers (n = 6)	Course Administrators (n = 10)	Total (n = 154)
<b>1. What are student monks' purposes of reading?</b>				
For daily life	3.39	3.50	3.10	3.37
For education	3.47	3.67	3.80	3.50
For dissemination	3.59	3.17	3.70	3.58

4. Concerning preferred physical aspects of teaching materials, the needs analysis questionnaire results of 3 groups shown in Table 4.2 shows that all aspects were rated  $\bar{x} > 2.50$ . The needed aspects ranging from the most needed aspect to the least needed were to have related pictures and subtitle ( $\bar{x} = 3.64$ ), an example before doing an exercise ( $\bar{x} = 3.56$ ), beautiful decoration ( $\bar{x} = 3.27$ ), enough answering space in exercise ( $\bar{x} = 3.26$ ), and enough empty space to take note ( $\bar{x} = 3.19$ ), respectively.

Table 4.2 Preferred physical aspects of teaching materials

Questions	Student Monks (n = 138)	English Teachers (n = 6)	Course Administrators (n = 10)	Total (n = 154)
<b>How much do you think each characteristic the teaching materials should have?</b>				
Have beautiful decoration	3.25	3.33	3.40	3.27
Have related pictures and subtitle	3.64	3.50	3.60	3.64
Have an example before doing an exercise	3.56	3.33	3.70	3.56
Have enough answering space in exercise	3.25	3.67	3.20	3.26
Have enough empty space to take note	3.17	3.50	3.20	3.19

5. In terms of preferred task types, the needs analysis questionnaire results of 3 groups shown in Table 4.3 shows that all three groups of respondents agreed that student monks should complete tasks in group ( $\bar{x} = 3.43$ ), in pair ( $\bar{x} = 3.08$ ), and individually ( $\bar{x} = 2.70$ ).

Table 4.3 Preferred task types

Questions	Student Monks (n = 138)	English Teachers (n = 6)	Course Administrators (n = 10)	Total (n = 154)
<b>How much do you like student monks to complete each type of task?</b>				
To complete individually	2.67	2.67	3.30	2.70
To complete in pair	3.07	3.17	3.20	3.08
To complete in group	3.43	3.50	3.40	3.43

6. Regarding topics of interest, three groups of respondents selected the same 7 preferred topics out of 9 topics except topics of fruits of good deeds and fruits of bad deeds that the preference of student monks was different from those of English teachers and course administrators (See Appendix O).

It is, therefore, necessary to develop tailor-made reading materials offering meaningful and familiar content. The selection of themes, topics, and texts should enhance reading ability so that student monks could achieve reading purposes. Task designing should elicit and use their background knowledge about Buddhism to make connection to what they were reading in English for deeper learning. Moreover, the preferred physical aspects needed to be incorporated to meet all parties' needs.

**Stage 2: Exploration the needs or problems by identifying language, functions, skills that should be included in the developed materials**

The theory review on content-based language teaching revealed that vocabulary and grammar should be highlighted and the feedback on students' use of these features should be offered (Lightbown, 2014). This was consistent to the comments collected from the interview that religious terms and grammar use in context should be given in the materials. Moreover, the literature review on effective instruction of reading



strategies for reading comprehension gave the guideline to select essential reading strategies and steps of instruction as suggested by Lenz (2005). Using the results collected from theory and literature review and the suggestion from the interview, the researcher identified 4 features to be included in the newly developed English content-based reading materials as follows.

### ***Vocabulary***

The English content-based reading materials would include prior to reading passage ‘Vocabulary Box’ which provide definitions of words for general English communication and words frequently used in Buddhist teaching, philosophy, and practice. For general English vocabulary, the concise and best-explained definitions were obtained from three well-known dictionaries including Cambridge Dictionary, Oxford Dictionary, and Merriam-Webster Dictionary. For English for Buddhism, the definitions obtained from other sources such as Buddhist Dictionaries or books were clearly marked with ‘(In Buddhism)’ to indicate that these definitions exclusively used in religious field. The words appeared in the Vocabulary box were set in boldface in reading passages for easy recognition.

### ***Grammar***

Besides Vocabulary Box, prior to reading passage, ‘Grammar Focus’ with examples mainly retrieved from reading passages of the unit would be provided. It aimed to construct knowledge of grammar by practicing it as part of reading religious texts and to bring grammar knowledge student monks had leaned over many years to real use in religious context. Moreover, at the end of the unit, ‘Sources’ where grammar was synthesized from were available for student monks’ further study.

### ***Reading strategies***

Three cognitive reading strategies of Anderson (1991) would be instructed so that student monks would have tool to comprehend texts. There were 1) predicting the content of an upcoming passage or section of the text, 2) guessing the meaning of unfamiliar words or phrases, and 3) writing a short summary to help understand the main ideas. The purposes, benefits, and steps of using each strategies were included in ‘Reading strategies Focus’.

### ***Reading strategy instruction***

In order to instruct selected reading strategies, 7 steps of effective strategy instructions suggested by Lenz (2005) were adapted and modified as follows:

Step 1: introduce key concepts, assess, and gain students’ learning commitment

Step 2: explain purposes, benefits, and steps of the strategy

Step 3: model how to use the strategy

Step 4: give practice in steps

Step 5: provide guided and controlled practice with feedback

Step 6: gradually reduce teachers’ role and increase students’ independent practice

Step 7: conduct posttest and help students to transfer the strategy to different situations

They were used as the guideline to determine basic structure and components of each unit as shown in Figure 4.1.

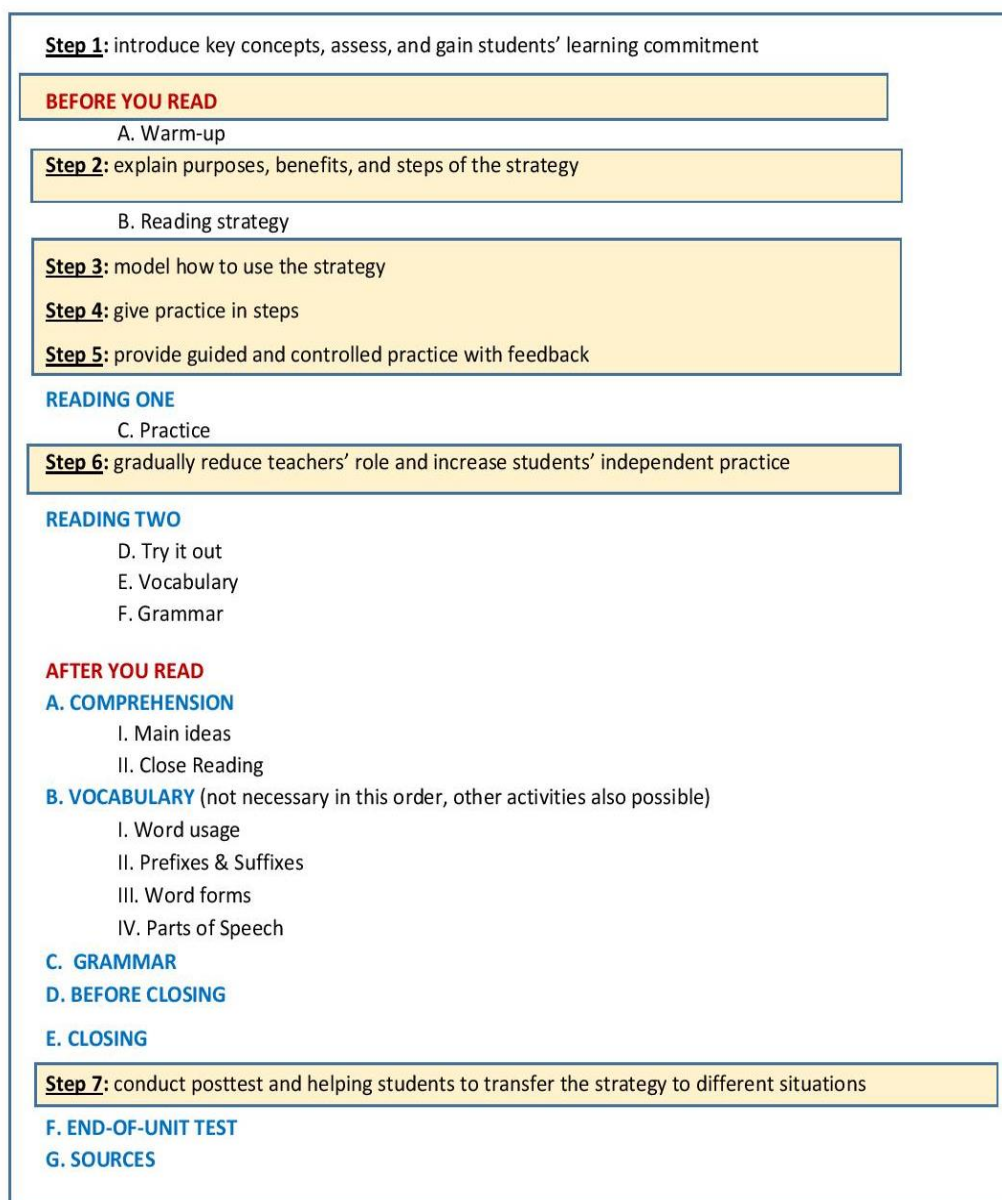


Figure 4.1 The unit basic structure

**Stage 3: Contextual realization by examining and selecting ideas, contents, or texts that provide familiarity and appropriateness to the learners' context**

The results from needs analysis questionnaires plus the identification of features and basic unit structures to be included in the newly developed English content-based reading materials have provided some critical issues from which the researcher could

effectively integrate six components to provide familiar and appropriate overall content to student monks' context.

### **3.1 Establishing THEMES**

The theme of the Triple Gem divided into 3 sub-themes of the Lord Buddha, the Dhamma, and the Sangha was established as the central ideas which later became the nine-thematically-related units. Although student monks themselves were actually part of the Triple Gem, contextual realization helped confirm that they still had interest in reading this familiar theme in English for the purposes of dissemination, education, and daily life. The theme familiarity would also increase student monks' motivation in reading.

Since this main theme was to be used to instruct reading strategies for reading comprehension, the researcher concluded the title of the newly developed content-based materials as, *The Triple Gem (English Reading Materials for Building Effective Reading Strategies)*, showing on the front cover (See Appendix P).

### **3.2 Formulating TOPICS**

After themes were established, to study each sub-theme in depth, topics of reading passages were obtained from the results of the needs analysis questionnaires collected in stage 1. The items of largest percentage of selection by any groups of respondent would be included as topic of each unit of the developed English content-based reading materials as shown in Table 4.4.

Table 4.4 The most selected topics

Reading Topics	Preferred Topics	Percentage	Group
The Lord Gotama Buddha's Biography	The first Dhamma lecture	50.0%	English teacher
The Ten Jataka Tales: Ten birth stories of the Buddha	Mahosatha Jataka	60.0%	Course administrator
The important events in the Buddha's time	The Lord Buddha turned people to have the right view	70.0%	Course administrator
The important teachings	Dhammacakkappavattana Sutta	83.3%	English teacher
Fruits of good deeds	Fruits of meditation	50.0%	English teacher
Fruits of bad deeds	Fruits of not giving	40.0%	Course administrator
Duties and responsibilities for Buddhist monks	General practice	80.0%	Course administrator
The fruits of monkhood	Low fruits of true monkhood	80.0%	Course administrator
Monks in the Lord Buddha's time	Ananda	66.7%	English teacher

### 3.3 Choosing TEXTS from various resources

The researchers consulted various types of authentic resources and selected 9 passages based on 4 criteria: sub-themes and topics, reading strategies, length, and readability score. Some of the sources needed to be synthesized to meet the criteria.

Table 4.5 presents the summary of four criteria and types of resources of each passage.

Table 4.5 Criteria of passage selection and types of resources

Sub-theme	Topic	Reading Passages' Title	Reading Strategy	Length (words)	Readability	Resources
The Lord Buddha	Life of the Lord Buddha	The First Dhamma Lecture	Pre-reading	663	59.6 (Fairy difficult)	Books
	His Previous Existences	Mahosatha Jataka: Perfecting the Virtue of Wisdom	During or Post-reading	696	63.3 (Plain English)	Book & VDO clip
	Changing People to Have the Right View	The Lord Buddha Saved the Brutal Murderer Angulimala	During or Post-reading	603	60.2 (Plain English)	Books
The Dhamma	The Basic Teachings of Buddhism	Dhammacakkappavattana Sutta	Pre-reading	671	48.9 (Difficult)	Book & Website
	The Fruits of Good Deeds	Benefits of Meditation in Buddhism	During-reading	719	41.9 (Difficult)	E-Textbook
	The Fruits of Bad Deeds	The Hereafter of a Miserly Millionaire	Post-reading	747	62.8 (Plain English)	E-Textbook
The Sangha	Monks' Duties and Responsibilities	Primary Duties and Responsibilities for Monks	During-reading	768	57.0 (Fairy difficult)	E-Book
	The Fruits of Ordination	Elementary Fruits of True Monkhood	Post-reading	696	42.3 (Difficult)	E-Textbook
	Monks in the Lord Buddha's Time	The Life of Ananda: A Disciple of the Buddha	Pre-reading	776	50.5 (Fairy difficult)	Weblog

### 3.4 Sequencing the content

Reading passages of the selected topics were used as the core reading passages of the unit called 'Reading Two'. Topic order as shown on need analysis questionnaire was rearranged in logic sequence, primarily based on reading strategies the passages applicably provide and secondarily the occurrence or timing of events in the passages for easy understanding.

For making prediction (pre-reading strategy), the reading passages should provide essential clues such as title, headings, keywords, illustrations, graphs, etc. For guessing meaning of unfamiliar words or phrases (during-reading strategy), the reading passages should have words or phrases that promote the use of context clues, prefixes, suffixes, and words roots. For writing a short summary (post-reading strategy), the reading passages should have elements that help answer the 5 W's (who, what, when, where, and why) and 1 H (how) questions as they are essential for steps of summarizing.

In addition, to serve 7 steps to explicitly instruct reading strategies, another nine short reading passages called 'Reading One' were selected by the researcher so that teachers would use Reading One to model and prepare student monks before they could independently work with Reading Two by themselves. The criteria of Reading One selection were that the passages should have sub-themes, topics, reading strategies, grammar in accordance with those of Reading Two of the same unit with the length of 100-250 words. Table 4.6 presents criteria of Reading One and Reading Two of all 9 units in good sequence.

Table 4.6 Sub-theme, topic, length, reading strategy, and grammar of Reading One and Reading Two

Unit & Sub-theme	Topic/ Title of the Passage	Length (words)	Reading Strategy	Grammar
<b>Unit1: The Buddha</b>	<b>Life of the Lord Buddha</b>		Predicting	Past Simple Tense & Past Perfect Tense
Reading One	The Gotama Buddha's Biography	209		
Reading Two	The First Dhamma Lecture	663		
<b>Unit2: The Buddha</b>	<b>Changing People to Have the Right View</b>		Guessing the meaning	Relative pronouns
Reading One	The Lord Buddha Tamed the Yakka	109		
Reading Two	The Lord Buddha Saved the Brutal Murderer Angulimala	603		
<b>Unit3: The Buddha</b>	<b>His Previous Existences</b>		Writing summary	Comparative forms (as ... as / than)
Reading One	Nimi Jataka: Perfecting the Virtue of Resolution	232		
Reading Two	Mahosatha Jataka: Perfecting the Virtue of Wisdom	696		
<b>Unit4: The Dhamma</b>	<b>The Basic Teachings of Buddhism</b>		Predicting	Relative pronouns
Reading One	The Four Types of Lotus	244		
Reading Two	Dhammacakkappavattana Sutta	671		
<b>Unit5: The Dhamma</b>	<b>The Fruits of Good Deeds</b>		Guessing the meaning	Adverbs
Reading One	The Story of Magha	149		
Reading Two	Benefits of Meditation in Buddhism	719		
<b>Unit6: The Dhamma</b>	<b>The Fruits of Bad Deeds</b>		Writing summary	Past Simple Tense & Past Perfect Tense
Reading One	The Story of Those Who Suffered from Their Evil Deeds	176		
Reading Two	The Hereafter of a Miserly Millionaire	747		
<b>Unit7: The Sangha</b>	<b>Monks in the Lord Buddha's Time</b>		Predicting	Passive voice
Reading One	The First Buddhist Monk	188		
Reading Two	The Life of Ananda: A Disciple of the Buddha	776		
<b>Unit8: The Sangha</b>	<b>Monks' Duties and Responsibilities</b>		Guessing the meaning	Should and Must
Reading One	The Ordination	174		
Reading Two	Primary Duties and Responsibilities for Monks	768		
<b>Unit9: The Sangha</b>	<b>The Fruits of Ordination</b>		Writing summary	Conditional sentences / If clauses
Reading One	The Fruits of Being a Monk	196		
Reading Two	Elementary Fruits of True Monkhood	696		



#### **Stage 4: Pedagogical realization by examining and selecting meaningful exercises and activities with clear explanation**

##### **4.1 Designing TASKS to develop students' language learning, facilitate the content learning, and model strategies for language and content learning.**

According to the main findings from needs analysis questionnaires, three types of tasks were needed. Therefore, the researcher incorporated all task types into pre-reading, during-reading, and post-reading tasks which facilitated 7 steps of explicit strategic instruction and simultaneously promoted the learning of vocabulary and grammar thru content. In general, pre-reading tasks were questions asked to elicit student monks' prior knowledge and practice the use of reading strategies, during-reading tasks were independence practices, and post-reading were comprehension, vocabulary, and grammar use and assessment. The objectives of tasks of each phase in detail are shown in Table 4.7.

Table 4.7 Task phases and objectives of tasks in one unit

<b>Task Phases</b>	<b>Tasks</b>	<b>Objectives of Tasks</b>
Pre-reading	Before You Read	To introduce key concepts of the reading passages, and to gain student monks' learning commitment.
	Warm-up	To present discussion questions that activate student monks' prior knowledge.
	Practice	To model student monks how to use the strategy, give practice in steps, and provide guided and controlled practice with teacher's feedback.
During-reading	Try it out	To increase student monks' independent practice of how to use the reading strategy by themselves.
Post-reading	Comprehension	To help student monks understand literal and interpretive comprehension.
	Vocabulary	To develop knowledge of general English and English in Buddhism.


Grammar	To develop knowledge of grammar used in context.
Before Closing	To provide additional linkages across topics in a theme unit and/or across tasks within topics.
Closing	To conclude what student monks have learned from the unit.
End-of-Unit Test	To assess student monks' understanding of how to use the reading strategy for reading comprehension

#### 4.2 Determining TRANSITIONS across topics and across tasks to facilitate a natural and systematic flow of content and tasks before moving to the next unit.


Topical transition was used to establish the smooth move between the units under the same sub-theme and across sub-themes. Mainly, topic transition was included in the 'Before Closing', which was the post-task of previous unit, and additionally in the 'Before You Read', which was the pre-task of following unit. For instance, under the sub-theme of the Sangha, Before Closing of unit 8 shown in Figure 4.2 aimed to prepare student monks before moving from the topic of 'Monks' Duties and Responsibilities' to the new topic of 'The Fruits of Ordination'.

**D. Before Closing**


In small group of 3-4 persons, select one of the pictures below and discuss the benefits of practicing it.




Chanting



Confession



Moderation in eating



Meditation

*Note.* From *Monastic Lifestyle* (pp. 8, 9, 15, 21), by Dhammakaya Open University, (n.d). Adapted with permission of the author (See Appendix Q)

Figure 4.2 Before Closing of the topic 'Monks' Duties and Responsibilities'

In addition, the Before You Read of unit 9 illustrated in Figure 4.3 was designed to refer back to previous topic to emphasize the transition between two topics.

**BEFORE YOU READ**

**Discuss with your partner whether these following characteristics of a monk are good or bad. Write 'good' or 'bad' in front of each statement.**

- \_\_\_\_\_ A monk ordains with the aim to train himself to be a good person.
- \_\_\_\_\_ A monk devotes himself to spread teachings of the Lord Buddha.
- \_\_\_\_\_ A monk does not take care of temple property.
- \_\_\_\_\_ A monk encourages laypeople to cultivate good and purify their minds.
- \_\_\_\_\_ A monk ordains simply to avoid the hard work of earning a living.
- \_\_\_\_\_ A monk explains and teaches Buddhism in a way that deviates from the Dhammavinaya.

Figure 4.3 Before You Read of the topic 'The Fruits of Ordination'

#### **4.3 Selecting possible THREADS to create the coherence among themes.**

Despite a good linkage across interwoven sub-themes of the Lord Buddha, the Dhamma, and the Sangha, sub-theme coherence was strengthened through the selection of reading passages and the design of tasks.

The example of the selection of reading passages was the selection of Reading One of unit 7. As the first unit under the sub-theme of the Buddha (unit 1) the preferred topic was the first Dhamma lecture and the first unit under the sub-theme of the Dhamma (unit 4) the preferred topic was Dhammacakkappavattana Sutta. Actually, first unit of both sub-themes talked about the same things but focus on different aspects. While unit 1 focused on the moment the Lord Buddha delivering the first Dhamma lecture, unit 4 focused on its content.

#### **4.3 Selecting possible THREADS to create the coherence among themes.**

Despite a good linkage across interwoven sub-themes of the Lord Buddha, the Dhamma, and the Sangha, sub-theme coherence was strengthened through the selection of reading passages and the design of tasks.

The example of the selection of reading passages was the selection of Reading One of unit 7. As the first unit under the sub-theme of the Buddha (unit 1) the preferred topic was the first Dhamma lecture and the first unit under the sub-theme of the Dhamma (unit 4) the preferred topic was Dhammacakkappavattana Sutta. Actually, first unit of both sub-themes talked about the same things but focus on different aspects. While unit 1 focused on the moment the Lord Buddha delivering the first Dhamma lecture, unit 4 focused on its content.

**D. Before Closing**

**Look at the verse below think of any topics of Dhamma of the Lord Buddha you think are useful to yourself as a Buddhist monk to avoid doing bad deeds.**

*“So long as an evil deed has not ripened, the fool thinks it as sweet as honey. But when the evil deed ripens, the fool comes to grief.”*

(Dhammapada, Vagga 5, Verse 69)

Source: ("Balavagga: The Fool" (Dhp V), translated from the Pali by Acharya Buddharakkhita. Access to Insight (Legacy Edition), 27 September 2017, <http://www.accesstoinsight.org/tipitaka/kn/dhp/dhp.05.budd.html>.)

Figure 4.4 Before Closing task

In sum, the selection of reading passages and the design of task emphasize the linkage that the Lord Buddha is the founder of Buddhism, the Dhamma is his teachings, and the Sangha is the community of monks who seek guidance from the teachings of the Buddha and have duty in disseminating Dhamma to anyone who is interested. Table 4.8 illustrates the summary of Six-T's components.

Table 4.8 The summary of Six-T's components

Unit No.	Sub-Themes	Topics	Texts	Tasks	Transitions	Threads
1.	The Buddha	Life of the Lord Buddha	Books	-Functions: using pre-reading strategy of predicting the content -Vocabulary: Lord Buddha's biography related terms -Grammar: Past Simple Tense and Past Perfect Tense	The Buddha's teachings that make people have the Right View and free from suffering.	The founder of Buddhism
2.	The Buddha	Changing People to Have the Right View	Books	-Functions: using during-reading strategy of guessing the meaning of unfamiliar words or phrases -Vocabulary: good and bad actions related terms / prefixes and suffixes -Grammar: relative pronouns (who, which, and where)	The Buddha's previous life when he changed people to have the Right View.	The founder of Buddhism
3.	The Buddha	His Previous Existences	Book & VDO clip	-Functions: using post-reading strategy of writing a short summary.	Topic of Dhamma to be a good monk.	The founder of Buddhism

				<p>-Vocabulary: Lord Buddha's virtues/suffix</p> <p>-Grammar: Comparative Forms (as ... as/ than)</p>		
4.	The Dhamma	The Basic Teachings of Buddhism	Book & Website	<p>-Functions: using pre-reading strategy of predicting the content</p> <p>-Vocabulary: basic teachings of Buddhism related terms</p> <p>-Grammar: Relative Pronoun – Who, Whom, Which, &amp; That</p>	Good results of practicing one Dhamma topic.	The teaching of founder
5.	The Dhamma	The Fruits of Good Deeds	E-Textbook	<p>-Functions: using during-reading strategy of guessing the meaning of unfamiliar words or phrases</p> <p>-Vocabulary: definition of Pali terms in English, synonyms, and negative prefixes</p> <p>-Grammar: kinds of adverbs: adverbs of manner, adverbs of place, adverbs of frequency, adverbs of time, and adverbs of purpose</p>	Fruits of bad deeds in contrast with those of the good deeds.	The teaching of founder
6.	The Dhamma	The Fruits of Bad Deeds	E-Textbook	<p>-Functions: using post-reading strategy of writing a short summary.</p>	What bad deeds monks should avoid to be reborn	The teaching of founder

				-Vocabulary: hereafter related words -Grammar: Past Simple Tense and Past Perfect Tense	in the state of happiness.	
7.	The Sangha	Monks in the Lord Buddha's Time	Weblog	-Functions: using pre-reading strategy of predicting the content -Vocabulary: parts of speech and synonyms -Grammar: Passive voice	Duties of monks in the past and those of monks at present .	Community of monks who seek guidance from the teachings of the Buddha
8.	The Sangha	Monks' Duties and Responsibilities	E-Book	-Functions: using during-reading strategy of guessing the meaning of unfamiliar words or phrases. -Vocabulary: Buddhist monks' possessions, duties, and responsibilities related terms/ noun, adjective, verb, and adverb suffixes -Grammar: Should and Must	Benefits of performing monastic practices.	Community of monks who seek guidance from the teachings of the Buddha
9.	The Sangha	The Fruits of Ordination	E-Textbook	-Functions: using post-reading strategy of writing a short summary -Vocabulary: Lord Buddha's virtues/ suffix -Grammar: Conditional sentences / If clauses	Qualification monks should follow based on the teaching of the Buddha.	Community of monks who seek guidance from the teachings of the Buddha

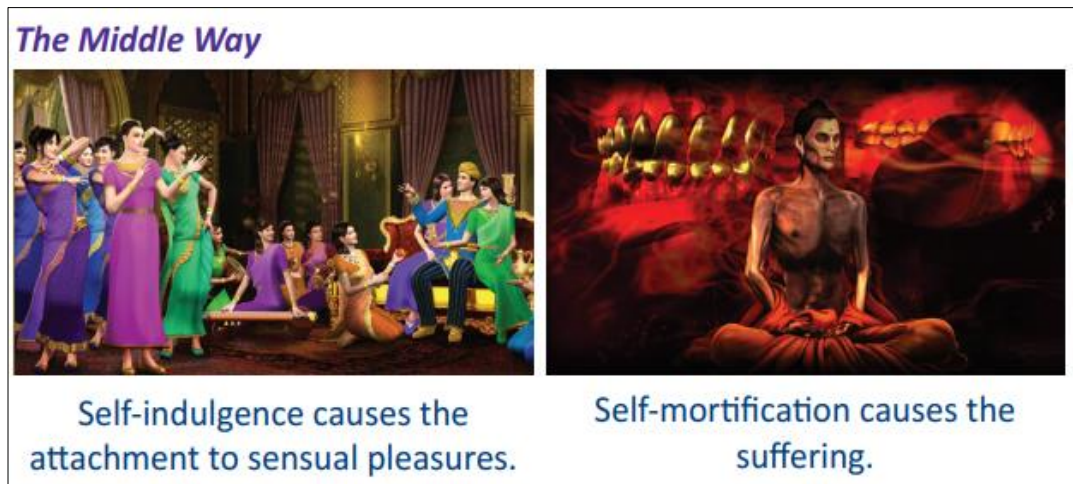
The deliberate selection of six components as shown in the Table 4.8 together with the findings regarding physical aspects collected from needs analysis questionnaires in stage 1 were used to develop 3 sample units of the content-based materials including workbook and teachers' manual. Both contained the same components, except teachers' manual provided key answer (See Appendix R), lesson plan (See Appendix S), and rubrics for assessment (See Appendix T).

Based on the findings, five aspects needed to be included when physically developing the English content-based reading materials were pictures and subtitle, example before doing an exercise, beautiful decoration, answering space, and empty space to take note.

#### ***Pictures and subtitle***

Pictures relevant to student monks' culture were used to help student monks visualize the abstract concepts of Buddhist teachings, especially when the words or phrases were the unique terminologies that are widely used among Buddhists or when the metaphor was involved. Subtitle or explanation was also incorporated to explain the pictures for student monks to easily draw on their background knowledge. Figure 4.5 is the example of using picture and subtitle to explain the idea of the middle way which a moderate part between self-indulgence and self-mortification.





Note. DMC.TV (2010). Buddha's biography [Digital visualization] Retrieved from [https://www.dmc.tv/articles/buddha\\_biography.html](https://www.dmc.tv/articles/buddha_biography.html). Adapted with permission of the author.

Figure 4.5 The sample of using picture and subtitle to explain the idea of the middle way

***Example before doing an exercise***

Although clear understandable instructions were given, examples before doing an exercise were also provided. This would be beneficial for student monks to follow the instructions without confusion and to form clear picture of what they were expected to do especially if they had to do that activity for the first time. Figure 4.6 is the example of an example given before doing an exercise.

**C. Practice**

Look at Reading One. Read each sentence and determine the meaning of the word using cross sentence clues or your prior knowledge. Then, explain what clues in the sentence help you determine the word meaning.

■ **1. Nasty:**  
 Reckoned that the **nasty** Yakka (demon) Alavaka, would achieve attainment soon, the Enlightened One went to Alavi.  
**Definition:** *Bad or evil*  
 What clues lead you to your definition?  
*'Yakka' and 'demon' (immediate context)*

■ **2. Abode:**  
 The Enlightened One went to Alavi, the forest where the Yakka was residing. Upon entering his **abode**, the Lord Buddha was welcomed by various weapons.  
**Definition:** \_\_\_\_\_  
 What clues lead you to your definition?  
 \_\_\_\_\_

Figure 4.6 The example of an example given before doing an exercise

### ***Beautiful decoration***

The beauty and decoration of the content-based materials were achieved by using various features such as nice and colorful pictures, graphic elements, clear page and paragraph numbers for easy reference, consistent font size and line spacing, and good layout, etc. Figure 4.7 is the example of a reading passage with beautiful decoration.

### Reading Two

## The First Dhamma Lecture



The Self-Mortification	The Self-Enlightenment	The Journey to the Deer Park	The First Dhamma Lecture	The First Buddhist Monk
------------------------	------------------------	------------------------------	--------------------------	-------------------------


1. Our Lord Buddha is the Supreme Teacher. His boundless **compassion** moves Him to teach **sentient** beings to end **suffering** and attain the everlasting bliss of Nirvana. He chooses a particular Dhamma lecture to give to each person so that the person can attain the Dhamma easily. He knew that the Five Ascetics were ready for Enlightenment; therefore, he set out for the Deer Park in order to save them.
2. The Lord Buddha trekked past different places until he arrived at the Deer Park in Vanasri where the Pancavaggiya Ascetics were living. They saw Him coming from a distance because of the **glorious** brightness of His personage. They had no idea about His **self-enlightenment** but thought that since the Lord Buddha no longer practiced **self-mortification**, they would not welcome Him. They would not get up to greet Him. They would not take His alms-bowl and His robe. And they would merely prepare a seat for Him.
3. But once the Lord Buddha approached, all five of them forgot their previous agreement. They got up to greet Him, took His alms-bowl and robe as they used to do in the past. However, they still addressed Him using an **inappropriate** term of "**Avuso**", which means a younger person or a junior person.

Note. DMC.TV (2010). Buddha's biography [Digital visualization] Retrieved from [https://www.dmc.tv/articles/buddha\\_biography.html](https://www.dmc.tv/articles/buddha_biography.html). Adapted with permission of the author.

Figure 4.7 The Example of a reading passage with beautiful decoration

### *Answering space in exercise*

The English content-based reading materials provided sufficient space for student monks to write down their answers to activities. This space encouraged student monks to complete the activities. Research conducted by Henderson (1993) revealed that questions without answer spaces were completed by only 40% of learners while the same question with answer space were complete by 90% of learners. Figure 4.8 is an example of space for answers.



**READING TWO: The First Dhamma Lecture**

**D. Try it out**

Look at Reading Two. Make prediction and fill in the first column "What I predict will happen". List the clues you used in the second column "Clues that I used to predict".

Before Reading		After Reading
What I predict will happen	Clues that I used to predict	What really happened

**Now read the text to find out whether your predictions are correct or not. If your predictions are incorrect, correct them in the third column "What really happened".**

Figure 4.8 Space for answers

*Empty space to take note*

For student monks and teachers to conveniently make their own notes, pages in each unit were allocated for ‘Student’s Note’ and ‘Teacher’s Note’ with dotted lines as illustrated in Figure 4.9.

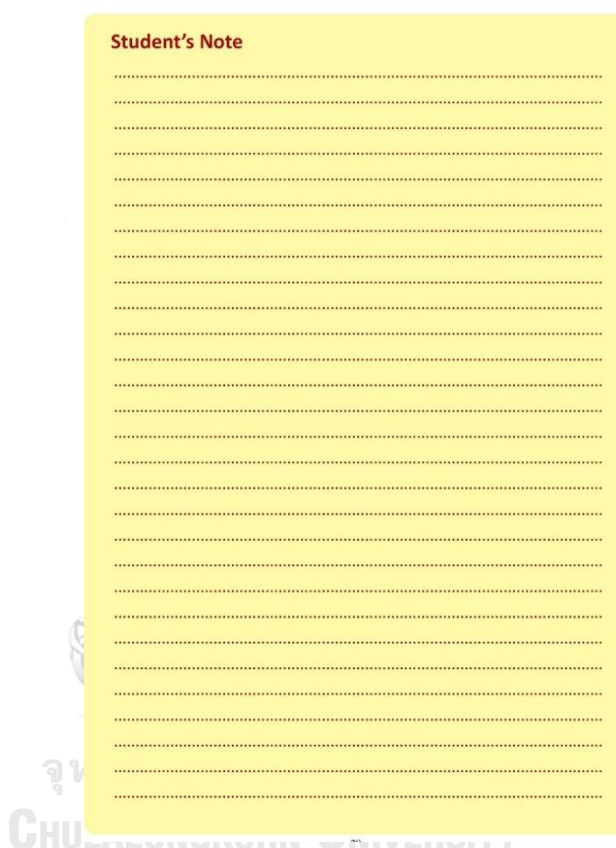


Figure 4.9 Empty space to take note

After the materials were validated and the revision was pilot tested on 6 student monks as mentioned in detail in previous chapter. Finally, the final version of English content-based reading materials was published and ready to be implemented (See Appendix U).

**Stage 6: Evaluation of the effectiveness of the developed materials**

The details of this stage have been covered in Chapter III and the results of the effectiveness of the developed materials are presented in the next research questions.

### 4.3 Results of Research Question 2

The second research question investigated the quality of the English content-based reading materials. To gain the attitude of the materials users, the question was divided into 2 sub research questions: ‘What is the attitude of student monks towards the quality of the English content-based reading materials?’ and ‘What is the attitude of teachers towards the quality of the English content-based reading materials?’

#### 4.3.1 Results of research question 2.1

This research question investigated the attitude of student monks towards the quality of English content-based reading materials. To address this research question, whilst-use evaluation questionnaire and post-use evaluation questionnaire were constructed in order to ask the 42 student monks who were the users of workbook. The whilst-use evaluation questionnaire was administered in the second week of the implementation and the post-use evaluation questionnaire was administered in the third week of the implementation. The student monks were divided into 3 classes based on the level of English proficiency: 17 low English proficiency student monks in class I, 15 medium English proficiency student monks in class II, and 10 high English proficiency student monks in class III. The results were calculated into mean and standard deviation and finally compared using the following criteria:

3.50-4.00	means	strongly agree
2.50-3.49	means	agree
1.50-2.49	means	disagree
1.00-1.49	means	strongly disagree

Table 4.9 presents the mean score, standard deviation and interpretation of student monks as presented in the whilst-use evaluation questionnaire.

Table 4.9 The statistical results of student monks' whilst-use evaluation questionnaire

No.	Criteria for evaluating the developed content-based materials	$\bar{x}$	S.D.	Interpretation
1.	The content			
1.1	The content is aligned to learning objectives.	3.33	0.48	agree
1.2	Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	3.31	0.56	agree
1.3	The content is in accordance with background knowledge and experiences of the student monks.	3.48	0.59	agree
1.4	The content is culled from authentic resources.	3.43	0.70	agree
2.	The organization of content			
2.1	The sequence of the units is logical.	3.29	0.64	agree
2.2	The content is divided into sections and subsections.	3.40	0.59	agree
2.3	Clear numbering.	3.50	0.55	strongly agree
2.4	There is a link between sections and units in each unit.	3.45	0.55	agree
2.5	The length of each unit is appropriate keeping in view of the theme and title.	3.62	0.49	strongly agree
3.	The presentation of content			
3.1	The important points of content are highlighted for easy references.	3.29	0.67	agree
3.2	The illustrations included in the text to promote interests, comprehension, and retention of information/ knowledge.	3.36	0.62	agree
3.3	An adequate review section and exercise are included.	3.38	0.62	agree
3.4	An adequate vocabulary list or glossary is included.	3.48	0.71	agree
3.5	The grammar points presented with brief and easy examples and explanation.	3.40	0.66	agree
3.6	The sources are given for further study.	3.26	0.77	agree
4.	The language use			
4.1	The language used in the materials is authentic.	3.38	0.66	agree
4.2	The language used is at the right level for the student monks' current English proficiency.	3.40	0.59	
4.3	The instructions are clear and easy to follow.	3.40	0.54	agree
4.4	The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	3.43	0.67	agree
4.5	The vocabulary and expression in the texts is commonly used in the religious field.	3.64	0.53	strongly agree
5.	The activities applied			
5.1	The activities incorporate individual, pair, and group work.	3.40	0.59	agree
5.2	Activities are appropriate to unit objectives and reading strategies.	3.45	0.50	agree

5.3	Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.	3.50	0.55	strongly agree
5.4	Activities help student monks to master in using reading strategies.	3.38	0.70	agree
5.5	The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	3.60	0.54	strongly agree
5.6	Model answers are provided in the exercises.	3.43	0.55	agree
6.	The layout and design			
6.1	The materials are organized effectively.	3.52	0.55	strongly agree
6.2	The design of the cover page is attractive and appealing.	3.62	0.58	strongly agree
6.3	The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	3.62	0.58	strongly agree
6.4	The page number included in the materials is clear and easy to be noticed.	3.60	0.59	strongly agree
6.5	Spacing between lines is aligned properly.	3.45	0.63	agree
6.6	Enough space is provided for writing useful information or the answers.	3.62	0.73	strongly agree
Total		3.45	0.60	agree

Table 4.9 reveals that all year 2 student monks studying English reading at the Department of Education of Dhammakaya Temple in academic year 2017 agreed or were satisfied ( $\bar{x} = 3.45$ ,  $S.D. = 0.60$ ) with the quality of academic and physical aspects of the developed English content-based reading materials in terms of content (Item No. 1.1-1.4), organization of content (Item No. 2.1-2.5), presentation of content (Item No. 3.1-3.6), language use (Item No. 4.1-4.5), activities applied (Item No. 5.1-5.6), and layout and design (Item No. 6.1-6.6).

The attitude of student monks towards the quality of the English content-based reading materials in terms of academic and physical aspects were further analyzed based on student monks' proficiency level divided into 3 groups as shown in Table 4.10 showing means of whilst-use evaluation from 3 classes.



Table 4.10 Comparing means of whilst-use evaluation from 3 classes

No.	Criteria for evaluating the developed content-based materials	Class I N=17	Class II N=15	Class III N=10
1.	The content			
1.1	The content is aligned to learning objectives.	3.06	3.47	3.60
1.2	Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	2.94	3.60	3.50
1.3	The content is in accordance with background knowledge and experiences of the student monks.	3.24	3.67	3.60
1.4	The content is culled from authentic resources.	3.41	3.33	3.60
2.	The organization of content			
2.1	The sequence of the units is logical.	3.06	3.47	3.40
2.2	The content is divided into sections and subsections.	3.18	3.53	3.60
2.3	Clear numbering.	3.29	3.60	3.70
2.4	There is a link between sections and units in each unit.	3.18	3.53	3.80
2.5	The length of each unit is appropriate keeping in view of the theme and title.	3.41	3.67	3.90
3.	The presentation of content			
3.1	The important points of content are highlighted for easy references.	3.06	3.33	3.60
3.2	The illustrations included in the text to promote interests, comprehension, and retention of information/ knowledge.	3.18	3.33	3.70
3.3	An adequate review section and exercise are included.	3.12	3.47	3.70
3.4	An adequate vocabulary list or glossary is included.	3.24	3.53	3.80
3.5	The grammar points presented with brief and easy examples and explanation.	3.24	3.40	3.70
3.6	The sources are given for further study.	3.18	3.13	3.60
4.	The language use			
4.1	The language used in the materials is authentic.	3.29	3.40	3.50
4.2	The language used is at the right level for the student monks' current English proficiency.	3.29	3.40	3.60
4.3	The instructions are clear and easy to follow.	3.24	3.47	3.60
4.4	The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	3.35	3.40	3.60
4.5	The vocabulary and expression in the texts is commonly used in the religious field.	3.47	3.80	3.70
5.	The activities applied			
5.1	The activities incorporate individual, pair, and group work.	3.29	3.40	3.60
5.2	Activities are appropriate to unit objectives and reading strategies.	3.18	3.53	3.80
5.3	Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.	3.29	3.53	3.80

5.4	Activities help student monks to master in using reading strategies.	3.06	3.40	3.90
5.5	The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	3.41	3.53	4.00
5.6	Model answers are provided in the exercises.	3.18	3.53	3.70
6.	The layout and design			
6.1	The materials are organized effectively.	3.53	3.53	3.50
6.2	The design of the cover page is attractive and appealing.	3.53	3.67	3.70
6.3	The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	3.65	3.60	3.60
6.4	The page number included in the materials is clear and easy to be noticed.	3.53	3.60	3.70
6.5	Spacing between lines is aligned properly.	3.24	3.47	3.80
6.6	Enough space is provided for writing useful information or the answers.	3.29	3.80	3.90
	Total	3.27	3.50	3.68

Table 4.10 shows the mean scores of the whilst-use evaluation questionnaire from low English proficiency class ( $\bar{x} = 3.27$ ), medium English proficiency class ( $\bar{x} = 3.50$ ), and high English proficiency class ( $\bar{x} = 3.68$ ). It was found that low English proficiency student monks in Class I agreed with most items (Item No.1.1-5.6 and 6.5-6.6) and strongly agreed on only 4 items all of which are in the criteria of layout and design (Item No.6.1-6.4). For medium English proficiency student monks in Class II, they agreed on 21 items (Item No.1.1, 1.4-2.1, 3.1-3.3, 3.5-4.4, 5.1, 5.4, and 6.5) and strongly agreed on 17 items (Item No.1.2-1.3, 2.2-2.5, 3.4, 4.5, 5.2-5.3, 5.5-6.4). For high English proficiency student monks in Class III, almost all items (Item No. 1.1-1.4, and 2.2-6.6) received strongly agreed except 1 item of ‘The sequence of the units is logical’ (Item No. 2.1) received only agreed.

This indicates that the student monks who have higher English proficiency tend to have stronger positive attitude or greater satisfaction towards the quality of the English content-based materials in terms of content and physical aspects including the

content, organization of content, presentation of content, language use, activities applied, and layout and design.

Regarding their attitude towards the quality of the English content-based materials in terms the effectiveness in enhancing student monks' reading comprehension, Table 4.11 presents the mean score, standard deviation and interpretation of student monks as presented in the post-use evaluation questionnaire.

Table 4.11 The statistical results of student monks' post-use evaluation questionnaire

No	Criteria for evaluating the developed content-based materials	$\bar{x}$	S.D.	Interpretation
1.	Through these materials, my reading comprehension skill has satisfactorily improved.	3.57	0.55	strongly agree
2.	These materials help me connect new knowledge of English language to my background knowledge that I have learned in Thai	3.64	0.48	strongly agree
3.	The theme of the Triple Gem causes me to have more motivation to read because the content is relevant and meaningful to Buddhist monks' life.	3.55	0.55	strongly agree
4.	These materials help me a lot to read other English texts in religious field in the future.	3.64	0.48	strongly agree
5.	The pre-reading, during-reading, and post-reading activities make me feel more confident to use reading strategies to comprehend the texts.	3.36	0.69	agree
6.	I have more confidence when reading religious textbooks, books, articles, newsletters, report, thesis , etc.	3.36	0.66	agree
7.	Before reading I know how to make prediction from available clues such as titles, headings, illustrations, keywords, etc.	3.81	0.40	strongly agree
8.	When I confront with an unfamiliar word or phrase while reading, I am able to guess its meaning from the context.	3.57	0.50	strongly agree
9.	When I come across with an unfamiliar word while reading , I am able to guess its meaning from the prefix, suffix, and root	3.38	0.70	agree

10.	After reading, I can write a summary to better understand the main idea.	3.26	0.80	agree
11.	I have learned new vocabulary commonly used in Buddhism that I did not know before.	3.62	0.54	strongly agree
12.	The examples in the grammar sections help me better learn the grammar in context.	3.43	0.59	agree
13.	The content, vocabulary, and grammar provided in these materials are useful for my future use in disseminating Buddhism.	3.69	0.47	strongly agree
14.	The content, vocabulary, and grammar are useful to further my student monks' education in internal context in the future.	3.62	0.58	strongly agree
15.	The activities in these materials encourage me to see the value of knowledge and the real use of English in my monastic life.	3.67	0.57	strongly agree
Total		3.67	0.62	strongly agree

Table 4.11 reveals that all year 2 student monks studying English reading at the Department of Education of Dhammakaya Temple in academic year 2017 strongly agreed or were very satisfied ( $\bar{x} = 3.67$ , S.D. = 0.62) with the materials' effects on enhancing their reading comprehension.

The attitude of student monks towards the quality of the English content-based reading materials in terms of the effectiveness in enhancing reading comprehension were further analyzed based on student monks' proficiency level divided into 3 groups as shown in Table 4.12.

Table 4.12 Comparing means of post-use evaluation from 3 classes

No.	Criteria for evaluating the developed content-based materials	Class I N=17	Class II N=15	Class III N=10
1.	Through these materials, my reading comprehension skill has satisfactorily improved.	3.29	3.67	3.90
2.	These materials help me connect new knowledge of English language to my background knowledge that I have learned in Thai	3.47	3.67	3.90
3.	The theme of the Triple Gem causes me to have more motivation to read because the content is relevant and meaningful to Buddhist monks' life.	3.18	3.67	4.00

4.	These materials help me a lot to read other English texts in religious field in the future.	3.41	3.73	3.90
5.	The pre-reading, during-reading, and post-reading activities make me feel more confident to use reading strategies to comprehend the texts.	2.88	3.47	4.00
6.	I have more confidence when reading religious textbooks, books, articles, newsletters, report, thesis , etc.	2.88	3.47	4.00
7.	Before reading I know how to make prediction from available clues such as titles, headings, illustrations, keywords, etc.	3.71	3.80	4.00
8.	When I confront with an unfamiliar word or phrase while reading, I am able to guess its meaning from the context.	3.29	3.60	4.00
9.	When I come across with an unfamiliar word while reading , I am able to guess its meaning from the prefix, suffix, and root	2.94	3.53	3.90
10.	After reading, I can write a summary to better understand the main idea.	2.71	3.40	4.00
11.	I have learned new vocabulary commonly used in Buddhism that I did not know before.	3.24	3.80	4.00
12.	The examples in the grammar sections help me better learn the grammar in context.	3.00	3.53	4.00
13.	The content, vocabulary, and grammar provided in these materials are useful for my future use in disseminating Buddhism.	3.35	3.87	4.00
14.	The content, vocabulary, and grammar are useful to further my student monks' education in internal context in the future.	3.29	3.73	4.00
15.	The activities in these materials encourage me to see the value of knowledge and the real use of English in my monastic life.	3.29	3.87	4.00
	Total	3.20	3.65	3.97

Table 4.12 shows the mean scores of the post-use evaluation questionnaire from low English proficiency class ( $\bar{x} = 3.20$ ), medium English proficiency class ( $\bar{x} = 3.65$ ), and high English proficiency class ( $\bar{x} = 3.97$ ). It was found that low English proficiency student monks in Class I agreed with all items (Item No.1-15). For medium English proficiency student monks in Class II, out of 15 items they strongly agreed with 12 items (Item No.1-4, 7-9, and 11-15) and agreed on 3 items (Item No. 5, 6, and 10). For

high English proficiency student monks in Class III, they strongly agreed with all items (Item No.1-15).

This indicated that the student monks who have higher English proficiency tend to have stronger positive attitude or greater satisfaction towards the quality of the English content-based reading materials in terms of the effectiveness in enhancing their reading comprehension. They felt motivated and confident to read texts in religious field because from these meaningful English content-based reading materials, now they knew how to use background knowledge, reading strategies, vocabulary, and grammar to comprehend authentic texts in religious field. The improvement of reading comprehension skill made them see valued of knowledge and the real use of English in real life.

The last part of the questionnaires was the open-ended question; student monks may or may not provide any answer. In the whilst-use evaluation questionnaire, none of the student monks provided any comment or suggestion. In the post-use evaluation questionnaire, there was only one participant providing a suggestion saying that the English content-based reading materials should include the use of punctuation in reading passages and 41 participants did not provide any comments.

In conclusion, the mean score of the whilst-use evaluation questionnaire above 2.49 indicates that student monks agreed or were satisfied with the quality of the English content-based reading materials in terms of academic and physical aspects including content, organization of content, presentation of content, language use, activities applied, and layout and design. The mean score of the post-use evaluation questionnaire was above 3.50 indicates that student monks strongly agreed or were very satisfied with the effectiveness in enhancing reading comprehension. Thus, the

hypothesis that the student monks have a positive attitude towards the quality of the English content-based reading materials against the criteria was accepted.

#### 4.3.2 Results of research question 2.2

This research question investigated the attitude of teachers towards the quality of English content-based reading materials. To address this research question, whilst-use evaluation questionnaire and post-use evaluation questionnaire were constructed in order to ask 3 English teachers who were the users of teachers' manual. Teacher I was responsible for teaching 17 low English proficiency student monks in class I, Teacher II was responsible for teaching 15 medium English proficiency student monks in class II, and Teacher 3 was responsible for teaching 10 English high proficiency student monks in class III. The whilst-use evaluation questionnaire was administered in the second week of the implementation and the results were calculated into mean and standard deviation and finally compared using the following criteria:

3.50-4.00	means	strongly agree
2.50-3.49	means	agree
1.50-2.49	means	disagree
1.00-1.49	means	strongly disagree

Table 4.13 presents the mean score, standard deviation and interpretation of teachers as presented in the whilst-use evaluation questionnaire.

Table 4.13 The statistical results of teachers' whilst-use evaluation questionnaire

No.	Criteria for evaluating the developed content-based materials	$\bar{x}$	S.D.	Interpretation
1.	The content			
1.1	The content is aligned to learning objectives.	4.00	0.00	strongly agree
1.2	Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	4.00	0.00	strongly agree

1.3	The content is in accordance with background knowledge and experiences of the student monks.	4.00	0.00	strongly agree
1.4	The content is culled from authentic resources.	3.67	0.58	strongly agree
2.	The organization of content			
2.1	The sequence of the units is logical.	4.00	0.00	strongly agree
2.2	The content is divided into sections and subsections.	3.67	0.58	strongly agree
2.3	Clear numbering.	3.67	0.58	strongly agree
2.4	There is a link between sections and units in each unit.	3.67	0.58	strongly agree
2.5	The length of each unit is appropriate keeping in view of the theme and title.	3.33	1.15	agree
3.	The presentation of content			
3.1	The important points of content are highlighted for easy references.	3.67	0.58	strongly agree
3.2	The illustrations included in the text to promote interests, comprehension, and retention of information/ knowledge.			strongly agree
3.3	An adequate review section and exercise are included.	3.67	0.58	strongly agree
3.4	An adequate vocabulary list or glossary is included.	4.00	0.00	strongly agree
3.5	The grammar points presented with brief and easy examples and explanation.	4.00	0.00	strongly agree
3.6	The sources are given for further study.	3.67	0.58	strongly agree
4.	The language use			
4.1	The language used in the materials is authentic.	3.67	0.58	strongly agree
4.2	The language used is at the right level for the student monks' current English proficiency.			strongly agree
4.3	The instructions are clear and easy to follow.	3.67	0.58	strongly agree
4.4	The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	3.67	0.58	strongly agree
4.5	The vocabulary and expression in the texts is commonly used in the religious field.	4.00	0.00	strongly agree
5.	The activities applied			
5.1	The activities incorporate individual, pair, and group work.	3.33	1.15	agree
5.2	Activities are appropriate to unit objectives and reading strategies.	3.67	0.58	strongly agree
5.3	Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.	3.67	0.58	strongly agree
5.4	Activities help student monks to master in using reading strategies.	3.67	0.58	strongly agree
5.5	The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	4.00	0.00	strongly agree
5.6	Model answers are provided in the exercises.	3.67	0.58	strongly agree



6.	The layout and design			
6.1	The materials are organized effectively.	4.00	0.00	strongly agree
6.2	The design of the cover page is attractive and appealing.	4.00	0.00	strongly agree
6.3	The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	3.67	0.58	strongly agree
6.4	The page number included in the materials is clear and easy to be noticed.	3.67	0.58	strongly agree
6.5	Spacing between lines is aligned properly.	3.33	1.15	agree
6.6	Enough space is provided for writing useful information or the answers.	4.00	0.00	strongly agree
7.	Teachers' manual			
7.1	The teachers' manual contains the introduction of how the materials can be used to the utmost advantage.	4.00	0.00	strongly agree
7.2	The teachers' manual provides accurate and adequate answers.	4.00	0.00	strongly agree
7.3	The suggested lesson plans incorporated with the teachers' manual provide clear steps of explicit strategy instruction.	4.00	0.00	strongly agree
7.4	The time allotment for each instruction step is appropriate.	3.67	0.58	strongly agree
7.5	The teaching dialogues are adequate to cover all aspects of the content that needs to be explained.	4.00	0.00	strongly agree
7.6	The suggested lesson plans are a useful help for novice teachers.	4.00	0.00	strongly agree
7.7	The steps in the lesson plans are in accordance with the features of the materials.	4.00	0.00	strongly agree
	Total	3.78	0.34	strongly agree

Table 4.13 shows the mean score of the whilst-use evaluation questionnaire from all English teachers who used teachers' manual to teach English Reading classes for Year 2 student monks at the Department of Education of Dhammakaya Temple in academic year 2017. It was found that English teachers teaching student monks with low, medium, and high English proficiency strongly agreed with most items (Item No.1.1-2.4, 3.1-4.5, 5.2-6.4, and 6.6-7.7) and agreed on 3 items which have the equal lowest mean ( $\bar{x} = 3.33$ ). They are 'The length of each unit is appropriate keeping in view of the theme and title' (Item No. 2.5), 'The activities incorporate individual, pair, and group work'(Item No. 5.1), and 'Spacing between lines is aligned properly' (Item No. 6.5). Overall, they strongly agreed or were very satisfied ( $\bar{x} = 3.78$ ,  $S.D. = 0.34$ )

with the quality of the English content-based reading materials in terms of academic and physical aspects including content (Item No. 1.1-1.4), organization of content (Item No. 2.1-2.5), presentation of content (Item No. 3.1-3.6), language use (Item No. 4.1-4.5), activities applied (Item No. 5.1-5.6), layout and design (Item No. 6.1-6.6), and teachers' manual (Item 7.1-7.7) of the developed English content-based reading materials.

The last part of the questionnaires was the open-ended question; teachers may or may not provide any answer. In the whilst-use evaluation questionnaire, none of the teachers provided any comment or suggestion.

Table 4.14 presents the mean score, standard deviation and interpretation of teachers as presented in the post-use evaluation questionnaire.

Table 4.14 The statistical results of teachers' post-use evaluation questionnaire

No.	Criteria for evaluating the developed content-based materials	$\bar{x}$	S.D.	Interpretation
1.	Through these materials, my student monks' reading comprehension skill has satisfactorily improved.	3.67	0.58	strongly agree
2.	These materials help my student monks connect new knowledge of English language to their background knowledge that they have learned in Thai	4.00	0.00	strongly agree
3.	The theme of the Triple Gem causes my student monks to have more motivation to read because the content is relevant and meaningful to Buddhist monks' life.	3.67	0.58	strongly agree
4.	These materials help my student monks a lot to read other English texts in religious field in the future.	3.67	0.58	strongly agree
5.	The pre-reading, during-reading, and post-reading activities make my student monks feel more confident to use reading strategies to comprehend the texts.	3.00	0.00	agree
6.	My student monks have more confidence when they have to read religious textbooks, books, articles, newsletters, report, thesis , etc.	3.33	0.58	agree

7.	Before reading my student monks know how to make prediction from available clues such as titles, headings, illustrations, keywords, etc.	4.00	0.00	strongly agree
8.	When my student monks confront with an unfamiliar word or phrase while reading, they are able to guess its meaning from the context.	3.67	0.58	strongly agree
9.	When my student monks come across with an unfamiliar word while reading, they are able to guess its meaning from the prefix, suffix, and root	3.33	1.15	agree
10.	After reading, my student monks can write a summary to better understand the main idea.	2.67	0.58	agree
11.	My student monks have learned new vocabulary and phrases commonly used in Buddhism that they did not know before.	3.33	1.15	agree
12.	The examples in the grammar sections help my student monks better learn the grammar in context.	3.00	0.00	agree
13.	The content, vocabulary, and grammar provided in these materials are useful for my student monks' future use in disseminating Buddhism.	4.00	0.00	strongly agree
14.	The content, vocabulary, and grammar are useful to further my student monks' education in internal context in the future.	3.67	0.58	strongly agree
15.	The activities in these materials encourage my student monks to see the value of knowledge and the real use of English in their monastic life.	3.67	0.58	strongly agree
Total		3.51	0.46	strongly agree

Overall, table 4.14 reveals that all English teachers who used teachers' manual to teach English Reading classes for Year 2 student monks at the Department of Education of Dhammakaya Temple in academic year 2017 strongly agreed or were very satisfied ( $\bar{x} = 3.51$ ,  $S.D. = 0.46$ ) with the quality of the English content-based reading materials in terms of the effectiveness in enhancing student monks' reading comprehension. They strongly agreed with 9 items (Item No.1-4, 7-8, and 13-15) and agreed on 6 items (Item No.5-6 and 9-12).

The last part of the questionnaires was the open-ended question; teachers may or may not provide any answer. In the post-use evaluation questionnaire, teachers provided their comments and suggestions as follows:

Teacher I said that although overall the English content-based reading materials both teachers' manual and workbook were good in design, they should have given fruitful instruction to solve reading problems for student monks. Unfortunately, the low proficiency of student monks in his class hinders the achievement of the optimum benefit of these developed content-based materials. Therefore, to achieve the long run affect and increase student monks' proficiency, the period of material implementation should be longer.

Teacher II commented that some student monks in her class took time to read complicated sentences and struggled with unfamiliar words, so most lesson time was spent on reading the passages and some activities had to be skipped to finish the unit in 2 hours. Thus, it would be better if time allotment for each lesson plan is longer probably 3 hours.

Teacher III suggested that most of student monks in her class found that the reading passages of unit 7-9 were good in length and not difficult to comprehend. They needed more challenging activities and needed to know pronunciation. During the class student monks often raised up questions related to the passages, therefore sometimes teachers did not have time to finish every activity as suggested in the content-based materials.

In sum, the mean score of the whilst-use evaluation questionnaire and post-use evaluation questionnaire above 3.50 indicates that teachers strongly agreed or were very satisfied with both quality: academic and physical aspects and effectiveness of the English content-based reading materials in enhancing reading comprehension. Thus, the hypothesis that the teachers have a positive attitude towards the quality of the English content-based reading materials against the criteria was accepted.

#### 4.4 Summary

This chapter presents the results and findings from each stage of the study in response to the research questions. The first section presents the process of developing the English content-based reading material. Six stages according to the framework of materials development and the integration of six components based on Six-T's approach are purposed. Then the results of needs analysis questionnaires regarding preferred tasks, topics, and physical aspects are reported. Based on this information, the English content-based reading materials are physically produced. They consisted of workbook and teachers' manual containing nine units under the main theme of the Triple Gem divided into 3 sub-themes of the Lord Buddha (Unit 1-3), the Dhamma (Unit 4-6), and the Sangha (Unit 7-9). Each sub-theme covered teaching of 3 reading strategies including predicting the content of an upcoming passage or section of the text (unit 1, 4, and 7), guessing the meaning of unfamiliar words or phrases (unit 2, 5, and 8), and writing a short summary to help understand the main ideas (unit 3, 6, and 9). All nine units had the same unit basic structure serving seven steps of explicit comprehension strategy instruction addressed by Lenz (2005) starting from introducing key concepts until conducting posttest. This structure enables English teachers to start teaching any themes first.

The second section shows the results from the whilst-used evaluation questionnaire and the post-used evaluation questionnaires collected from student monks group. The results of whilst-used evaluation questionnaire yields positives attitude or greater satisfaction towards the materials' quality in terms of academic and physical aspects including content, organize of content, presentation of content, language use, activities applied, and layout and design. Also, the results of post-used

evaluation questionnaire yields positives attitude or greater satisfaction towards the materials' quality in terms of the effectiveness in enhancing their reading comprehension. Moreover, the student monks who have higher English proficiency tend to have stronger positive attitude or greater satisfaction than those who have medium and low proficiency.

The second section also shows the results from the whilst-used evaluation questionnaire and the post-used evaluation questionnaires collected from English teacher group. The results of whilst-used evaluation questionnaire yields positives attitude or greater satisfaction towards the materials' quality in terms of academic and physical aspects including content, organize of content, presentation of content, language use, activities applied, layout and design, and teachers' manual. Also, the results of post-used evaluation questionnaire yields positives attitude or greater satisfaction towards the materials' quality in terms of the effectiveness in enhancing their reading comprehension.

## CHAPTER 5

### SUMMARY DISCUSSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter summarizes this study in three parts. The first part is a brief summary and a discussion of the study. The second part talks about some implications. The final part includes some recommendations for further study.

#### 5.2 Summary of the Study

The study aims to develop the English content-based reading materials for Buddhist monks. The primary objective is to find out how to develop the English content-based reading materials for Buddhist student monks. To do so, the principles of materials development by Tomlinson (2011) and Six-T's approach by Stoller and Grabe (2017) were used as the underlying principles. The next objective is to explore the attitude of student monks and teachers towards the quality of the English content-based reading materials. Thus, there are two main parts in the study – material development and material implementation and evaluation.

##### 5.2.1 Materials development

The principles of materials development by Tomlinson (2011) and Six-T's approach by Stoller and Grabe (2017) were the underlying principles in designing the

English content-based reading materials. Six main stages were conducted as shown in the following list:

Stage 1: Identification of needs of materials or problems to be solved by the creation of the materials was done by using semi-structured interview and needs analysis questionnaire survey. The interview with 1 current student monk, 1 English teacher, and 1 course administrator revealed the lack of appropriate instructional reading materials and the importance of the development of the English content-based reading materials specifically for student monks. Then the needs analysis questionnaires were developed, adjusted, and piloted before distributed to 138 student monks, 6 English teachers, and 10 course administrators. The results revealed preferred academic and physical aspects, task types, and topics to be included in the newly developed English content-based reading materials.

Stage 2: Exploration of problems and needs collected from previous stage was carried out through document study, literature review, and theory review mainly on 4 areas including materials development, Six T's approach, reading strategies, and reading comprehension. They helped specify language features which were vocabulary, grammar, reading strategies, and reading strategies instruction. These features, eventually, led to the determination of basic unit structure of the newly developed English content-based reading materials including 7 steps.

Stage 3: Contextual realization confirmed the selection of 3 components of Six-T's approach including themes, topics, and texts. First, the main theme of the Triple Gem consisting of 3 sub-themes of the Buddha, the Dhamma, and the Sangha were established as the central idea from which nine preferred topics were derived.



Lastly, texts were chosen from various authentic resources and sequenced in logic order.

Stage 4: Pedagogical realization enabled to effectively select another 3 components of Six-T's approach which were tasks, transitions, and threads. Task were designed to model and develop students' language, content, and reading strategies learning. Then transitions were determined across topics to facilitate a natural and systematic flow of content before moving to the next unit. Finally, threads were selected to create the coherence of the entire units.

Stage 5: The physical production of 3 sample units of English content-based reading materials was done primarily based on the results collected from previous stages which were needs collected in stage 1 and 2, and the deliberate selection of Six-T's components in stage 3 and 4. The sample units were validated, evaluated, and adjusted according to the experts' comments and suggestions before pilot tested with participants who shared similar characteristic with the participants of the main study. The information obtained from the pilot study was used as a guideline to adjust 3 sample units and continue developing 6 more units until the completion of a 9 unit English content-based reading materials which were implemented in the main study.

Stage 6: Evaluation of the effectiveness of the developed materials was done using whilst-use evaluation questionnaires and post-use evaluation questionnaires for student monks and English teachers. The whilst-use evaluation questionnaires asked student monks to rate their satisfaction towards 6 criteria including content, organization of content, presentation of content, language use, activities applied, and layout and design, and asked English teacher to rate their satisfaction against 7 criteria: 6 criteria exactly the same as those of student monks plus teachers' manual. The post-

use evaluation questionnaires asked both student monks and teachers to rate their satisfaction towards the materials' quality in terms of the effectiveness enhancing their reading comprehension.

### 5.2.2 Materials implementation and evaluation

The developed content-based materials consisting of workbook and teachers' manual were implemented with 42 Year 2 student monks and 3 English teachers at the Education Department of Wat Phra Dhammakaya in academic year 2017. Student monks were divided into 3 classes based on the level of English proficiency: 17 low English proficiency student monks in class I, 15 medium English proficiency student monks in class II, and 10 high English proficiency student monks in class III. Each English teacher, who had previously undertaken a training on how to use the English content-based reading materials, were assigned to teach 3 units under one sub-theme to one class: unit 1-3 under the Lord Buddha was assigned to class I, unit 4-6 under the Dhamma was assigned to class II, and unit 7-9 under the Sangha was assigned to class III. The teaching of 3 classes concurrently occurred during 6-20 December 2017. Each unit lasted for 1 period of 120 minutes.

In the second week of the implementation, the whilst-use questionnaires were administered and in the third week of the implementation, the post-use questionnaires were administered to student monks and English teachers to evaluate the quality of the developed English content-based reading materials.

### 5.3 Findings

1. In response to the research question 1: How can the English content-based reading materials be developed for Buddhist student monks?, the integration between six stages of material development framework of Tomlinson (2011) and six components

(themes, topics, texts, tasks, transitions, and treads) of Six-T's approach of Stoller and Grabe (2017) could effectively produce physical and academic aspects of the English content-based reading materials.

2. In response to the research question 2.1: What is the attitude of student monks towards the quality of the English content-based reading materials? – the result of  $\bar{x} = 3.45$  from the whilst-use evaluation questionnaire and  $\bar{x} = 3.67$  from the post-use evaluation questionnaire indicated that student monks had positive attitude towards the quality of the English content-based reading materials in terms of academic and physical aspects and the effectiveness in enhancing reading comprehension. The level of satisfaction of the developed materials was at a high level and the student monks with higher English proficiency tended to have stronger positive attitude or greater satisfaction.

3. In response to the research question 2.2: What is the attitude of teachers towards the quality of the English content-based reading materials? - the result of  $\bar{x} = 3.78$  from the whilst-use evaluation questionnaire and  $\bar{x} = 3.51$  from the post-use evaluation questionnaire indicated that English teachers had positive attitude towards the quality of the English content-based reading materials in terms of academic and physical aspects and the effectiveness in enhancing reading comprehension. The level of satisfaction of the developed materials was at a high level.

In short, the findings indicated that the effective English content-based reading materials could be successfully developed by using principles of materials development by Tomlinson (2011) and Six-T's approach by Stoller and Grabe (2017) as the underlying principles. These developed materials positively affected on student monks and teachers' attitude or satisfaction towards the quality of the English content-based

reading materials in terms of academic and physical aspects and the effectiveness in enhancing reading comprehension for student monks.

## 5.4 Discussion

In this part, the results of the findings that were primarily concerned with the development of the English content-based reading materials are going to be discussed on two main aspects: the process of instructional materials development and the factors affecting on materials users' attitude.

### 5.4.1 The process of instructional materials development

In view of the results reported earlier, the English content-based reading materials were successfully and effectively designed for a specific group of learners, in particular, student monks. This can be suggested that in the process of instructional materials development, the framework of materials development proposed by Tomlinson (2011) and Six-T's approach suggested by Stoller and Grabe (2017) can be integrated and used as the underlining principles.

The reason for this may be that Tomlinson's (2011) framework consisting of 6 stages offers novice materials writers a systematic way of designing, carrying out and employing resources to bring out meaningful and effective instructional materials. However, the framework alone seems insufficient to establish the coherent content promoting language, content, and strategies learning for EFL learners. This may be the reason why Six-T's approach should come to its play in creating coherence of meaningful content of the entire instructional materials; specifically, in the process of contextual and pedagogical realization in which the six components of themes, topics, texts, tasks, transitions, and threads were deliberately selected. Derived from the familiar theme of the Triple Gem, nine thematic topics were selected based on the exact

needs of student monks, English teachers and course administrators. These meaningful and relevant topics created connection between materials and student monks' own experiences and life. Texts gathered from various authentic resources promoted learning of language used in real religious situation. Tasks helped student monks gain mastery in content and language. Transitions and threads provided opportunity for student monks to revisit the integrated content focusing on different thematic aspects and view language and content in new cohesive perspectives.

The finding of this study is consistent with past research, which has found positive results of the effectiveness of Six-T's approach used as parts of the development of instructional model or instructional materials, particularly, in developing language skills and content knowledge of Thai students. For example, Ritthikuksithichai (2011) employed Six-T's approach to select contents for content-based and task-based instruction for undergraduate engineering students or Chetsadanuwat (2012) applied Six-T's approach to develop the self-instructional materials (SIMS) to enhance English listening skills for student nurses. The findings of both studies showed the effectiveness of the developed instructional materials and the satisfaction of materials users. Even though Chetsadanuwat's study aimed to enhance different language skills, it would suggest that Six-T's approach could be integrated in the process of development of content-based instructional materials for all language skills.

#### 5.4.2 The factors affecting on materials users' attitudes

It was found that the results of whilst-use evaluation questionnaires and post-use evaluation questionnaires from student monk and English teacher groups were positive. These indicate that they had positive attitude towards the quality of the

content-based materials in terms of both academic and physical aspects and the effectiveness in enhancing student monks' reading comprehension. The possible explanation for this result may be due to two main factors having effect on users' attitude including needs analysis and principles of second language acquisition relevant to the development of materials for the teaching of language.

In the initial process, the involvement of three different parties: student monks, English teachers, and course administrators in the interview and in needs analysis of selecting preferred topics, task types and physical aspects of the developed materials revealed interesting points of view among three parties. Although in general, all parties appeared to share similar points of view and their preferences tended to be in the same direction, there were some points they saw slightly different. For example, when selecting preferred topics, three groups of respondents selected the same 7 preferred topics out of 9 topics. Only 2 topics of fruits of good deeds and fruits of bad deeds that the preference of student monks was different from those of English teachers and course administrators. This indicates that different groups had different needs and the conduct of needs analysis helps keep their needs, lacks, and want of those concerned groups in balance. This finding supports Brown's (2016) principle suggesting that needs analysis should be conducted with ESP students and all stakeholders groups called democratic view and discrepancy view to identify what they exactly want and what is missing between the current ability of the learners and the expected outcome ability. Thus, the needs analysis involving student and stakeholder groups is the vital initial steps of instructional materials development.

Needs analysis also allows the participation of student monks in selecting preferred topics. This may be the reason why they could learn the language through the

familiar content relevant to their monastic life and able to use their solid background knowledge of Buddhism to comprehend authentic religious texts full of distinct language features for the purposes of education and religious mission. Such benefits are in line with the benefits of Content-Based Instruction (CBI) mentioned by Genesee and Lindholm-Leary (2013) in that students become more motivated and engaged to learn learning. These respects may explain the positive attitude of the materials users.

First, the respect of physical design was achieved through the selection of attractive presentation and the attempt to make students monks feel at ease by providing several features such as clear page and paragraph numbers, appropriate font size, enough space to write down answers and to make notes, and beautiful illustrations relevant to student monks' culture.

Second, the respect of content was attained by synthesizing texts from a variety of authentic resources such as articles, books, VDO clips, websites, etc. Lastly, the respect of language learning was accomplished by maximizing student monks' potential and encouraging intellectual involvement through the integration of various types of tasks in every unit such as background-knowledge stimulation, reading strategy practice, vocabulary activity, grammatical practice, comprehension practice, and transition activity between units.

Furthermore, the reading passages ranging from 'plain English' to 'difficult to read' may challenge student monks to deeper develop their content and linguistic knowledge with more difficult passages and use reading strategies for a range of academic reading tasks. The consideration on these three main respects supports the principles of second language acquisition relevant to the development of materials for the teaching of language proposed by Tomlinson (2011) in that materials can achieve

impact through novelty, variety, attractive presentation, appealing content, and achievable challenge.

### **5.5 Pedagogical Implication**

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

1. Chimroylarp (2006), who developed intensive English course for Buddhist missionary monks using task-based instruction, gave recommendation for further study that content-based instruction (CBI) should be used to teach monks. This study confirms that CBI is workable to develop reading ability for monks with different levels of English proficiency. Especially, when the instructional materials are developed based on their exact needs. Hence, suggesting that CBI and the development of CBI materials should be conducted in the other monastic context.

2. When teachers take role of materials writers, they should not develop instructional materials based only on their teaching experiences but also on theories of second language acquisition and materials development that may help them improve teaching and learning conditions. This is the way they can put theoretical and principle knowledge into practice. Through the systematic and rigorous process of materials production, teachers have the opportunity to observe, validate and restate effective language teaching and learning principles suitable for the students' current language performance. In such a way, the instructional materials will be effectively produced, and simultaneously teachers' understating of second language acquisition processes will also professionally grow. As a result, teachers develop expertise in materials design as well as become empowered to change classroom atmosphere that effect on students' attitude and performances.



3. To improve reading comprehension, materials writer should provide a wide variety of genres for students to read. Because each genre has its own features and purposes, which university students will encounter when reading across curricula. For example, narrative text tells a story, informative text gives facts, and persuasive text convinces a reader. Providing different genres make students familiar with diverse text features and as they become more skilled, they can use distinct features to learn information quickly and efficiency – for example, using timeline to follow narrative text or using headings to get through informational text.

4. To deal with students with different level of English proficiency, materials developers should provide flexible lesson plan probably by indicating optional tasks and compulsory tasks. This flexibility helps teachers prioritize tasks as well as adjust lesson plan to accommodate the students' learning rate. Low English proficiency students may take more time to figure out complicated sentence structure or to master reading comprehension strategies, whereas high English proficiency student may raise an interesting points and discussions beyond the lesson providing unexpected opportunities for language practice.

5. In order to produce content-based reading materials of good quality, teachers as material writers not just involve in a time consuming process but should also engage in team collaboration. Although teacher has good knowledge of the target language, the team should include experts from other fields such as content expertise for the content accuracy, language expertise for the language evaluation, and designer for graphic and layout designing. Throughout the dynamic process of materials production, the team has to closely work in ongoing review and revision of the materials until the

completion of the final version. Therefore, the collaboration among team members is crucial to optimize the academic and physical quality.

### **5.6 Recommendation for Further Studies**

This may be one of the pioneering research studies done with student monks in the field of the instructional development for English language teaching. Other issues that may be worth investigating are as follows;

1. The findings show that participants had positive attitude towards the materials' quality in terms of academic and physical aspects and the effectiveness in enhancing reading comprehension. This may be due to the features of these tailor-made materials specifically designed based on student monks and stakeholders' needs as previously discussed. However, time and financial constraints allow the conduct of pilot study and main study with one temple only. Similar English content-based reading materials, may need to be conducted in other temples for generalizability of the study.

2. Further research should include qualitative data such as interviewing materials users, student monks and English teachers, in the evaluation of the effectiveness of the developed content-based materials in order to acquire more in-depth information of their attitude and triangulate with quantitative data.

3. There should be a follow-up survey of student monks and stakeholders' attitudes whether student monks who attended the Reading class using content-based materials are able to use the gained knowledge to achieved their reading purposes outside classroom or not.

4. There should be a reading proficiency test such as pretest and posttest to investigate the effectiveness of the English content-based reading materials in enhancing reading ability of student monks.

## REFERENCES

- Abdelhalim, S. M. (2017). Developing EFL students' reading comprehension and reading engagement: effects of a proposed instructional strategy. *Theory and Practice in Language Studies*, 7(1), 37.
- Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The reading teacher*, 61(5), 364-373. doi: 10.1598/RT.61.5.1
- Ai, P. P. K., & Asavisanu, P. (2016). Learning-centered leadership for Buddhist monastic education in Thailand. *Prajna Vihara*, 17(1), 99-106.
- Al-Mahrooqi, R. (2014). *Focusing on EFL Reading: Theory and Practice*: Cambridge Scholars Publishing.
- Allwright, J., & Allwright, R. (1977). An approach to the teaching of medical English. *English for specific purposes*, 58-62.
- Alsaawi, A. (2013). To what extent guessing the meaning, from the context, is helpful in teaching vocabulary. *Annual review of education, communication and language sciences*, 10, 130-146. doi: 10.2139/ssrn.2819537
- Anderson, N. J. (1991). Individual differences in strategy use in second language reading and testing. *The modern language journal*, 75(4), 460-472. doi: 10.1111/j.1540-4781.1991.tb05384.x
- Anderson, N. J., & Cheng, X. (1999). *Exploring second language reading: issues and strategies*: Heinle & Heinle Boston, MA.
- Archer, A. L., & Hughes, C. A. (2011). *Explicit Instruction: Effective and Efficient Teaching*: Guilford Press.
- Arwae, S. (2013). *Developing materials to enhance English reading ability of three southern border provinces of Thailand*. (Master Degree), Chulalongkorn University.
- Baker, L., & Brown, A. L. (1984). Metacognitive skills and reading. *Handbook of reading research*, 1(353), V394.
- Brown. (2001). *Teaching by principles: an interactive approach to language pedagogy* (2nd ed. ed.). NY: Longman.
- Brown. (2016). *Introducing needs analysis and English for specific purposes*: Routledge.
- Brown, H. D. (2001). *Teaching by Principles. An Interactive Approach to Language Pedagogy*. New York: AW Longman: Inc.
- Campbell, E., & Cuba, M. (2015). Analyzing the role of visual cues in developing prediction-making skills of third-and ninth-grade English language learners. *The Catesol Journal*, 27(1), 53-93.
- Chall, J. S. (2000). *The Academic Achievement Challenge: What Really Works in the Classroom?* : ERIC.
- Chawwang, N. (2008). *An Investigation of English Reading Problems of Thai 12 th-Grade Students in Nakhonratchasima Educational Regions 1, 2, 3, and 7*. Srinakharinwirot University. Retrieved from [http://thesis.swu.ac.th/swuthesis/Eng\(M.A.\)/Nongnat\\_C.pdf](http://thesis.swu.ac.th/swuthesis/Eng(M.A.)/Nongnat_C.pdf)
- Chen, X., Dronjic, V., & Helms-Park, R. (2016). *Reading in a second language: cognitive and psycholinguistic issues*. NY: Routledge.

- Chen, Y. (2015). Material production for an EST course: Coursebook design for the English training programme for architects and civil engineers. *Scripta Manent*, 3(2), 82-104.
- Chetsadanuwat, K. (2012). *A Development of Self-Instructional Materials (SIMS) to Enhance English Listening Skills for Student Nurses*. (Master of Arts), Chulalongorn University.
- Coady, J. (1979). A psycholinguistic model of the ESL reader In R. Mackay, B. Barkman, & R. Jordan (Eds.), *Reading in a second language* (pp. 5-12): Rowley, Mass.: Newbury House.
- Cook, G. (1989). *Language teaching: a scheme for teacher education discourse*. China: Oxford: Oxford University Press.
- Coombe, C., & Davidson, P. (2015). Constructing Questionnaires. *The Cambridge Guide to Research in Language Teaching and Learning*, 217.
- Coyne, M. D., Zipoli Jr, R. P., Chard, D. J., Faggella-Luby, M., Ruby, M., Santoro, L. E., & Baker, S. (2009). Direct instruction of comprehension: Instructional examples from intervention research on listening and reading comprehension. *Reading & Writing Quarterly*, 25(2-3), 221-245.
- Day, R., & Jeong-suk, P. (2005). Developing reading comprehension questions. *Reading in a foreign language*, 17(1), 60.
- Deshpande, S. K. (2016). Activating background knowledge: an effective strategy to develop reading comprehension skills. *JELTL (Journal of English Language Teaching and Linguistics)*, 1(3).
- Dhammhaso, V. H. (2010). Buddhism: a religion of positivism or presentism.
- Dow, J. R. (1991). *Focus on Language and Ethnicity: Essays in honor of Joshua A. Fishman* (Vol. 2): John Benjamins Publishing.
- Duangchai, S. (2015). Strategic management in disseminating Buddhism of Thai Buddhist missionary monks from [http://www.mcu.ac.th/site/articlecontent\\_desc.php?article\\_id=2108&menutype=1&articlegroup\\_id=287](http://www.mcu.ac.th/site/articlecontent_desc.php?article_id=2108&menutype=1&articlegroup_id=287)
- Duke, N. K., & Pearson, P. D. (2008). Effective practices for developing reading comprehension. *The Journal of Education*, 189(1/2), 107-122.
- Dulay, H. (1982). *Language Two*. NY: Oxford University Press.
- Ellis, R. (1990). *Instructed second language acquisition: Learning in the classroom* (1st ed. ed.): Wiley-Blackwell.
- Ellis, R. (2005). *Instructed second language acquisition: A literature review*. Wellington: Research Division, Ministry of Education.
- Ellis, R., & Rathbone, M. (1987). The acquisition of German in a classroom context. *Mimeograph*. London: Ealing College of Higher Education.
- Flesch, R. (1979). *How to write plain English: Let's start with the formula*: Canterbury: University of Canterbury. Consultado na World Wide Web a.
- Foundation, D. (2014). *The history of Gotama Buddha*. Bangkok: OS Printing
- Fry, G. W., Nieminen, G. S., & Smith, H. E. (2013). *Historical dictionary of Thailand*: Scarecrow Press.
- Gascoigne, C. (2005). Toward an understanding of the relationship between L2 reading comprehension and grammatical competence. *The Reading Matrix*, 5(2), 1-14.

- Genesee, F., & Lindholm-Leary, K. (2013). Two case studies of content-based language education. *Journal of Immersion and Content-Based Language Education*, 1(1), 3-33.
- Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Literacy Research and Instruction*, 6(4), 126-135.
- Grabe, W. (1991). Current developments in second language reading research. *TESOL quarterly*, 25(3), 375-406. doi: 10.2307/3586977
- Grabe, W. (2009). 24 Teaching and Testing Reading. *The handbook of language teaching*, 441.
- Grabe, W. (2014). *Key issues in L2 reading development*. Paper presented at the Alternative pedagogies in the English language & communication classroom: Selected papers from the fourth CELC symposium for English language teachers, Centre for English Language Communication, National University of Singapore.
- Grabe, W., & Stoller, F. (2002). *Teaching and researching reading*. London: Pearson Education Longman.
- Grabe, W. P., & Stoller, F. L. (2014). *Teaching and researching: Reading* (2nd ed. ed.). NY: Routledge.
- Griffiee, D. T. (2012). An introduction to second language research methods: design and data. *TESL-EJ Publications*, Berkeley.
- Hays, J. (2014). Monks in Theravada Buddhism 2017, from <http://factsanddetails.com/asian/cat64/sub415/entry-2819.html#chapter-8>
- Henderson, P. (1993). *How to succeed in exams and assessments*. London: Collins Educational and National Extension College.
- Henze, R., Katz, A., Snow, M., & Brinton, D. (1997). What do VESL and content-based instruction have in common. *The content-based classroom: Perspectives on integrating language and content*, 355-359.
- Herber, H. L. (1978). *Teaching reading in content areas*: Prentice Hall.
- Hidalgo, A. C., Hall, D., & Jacobs, G. M. (1995). *Getting started: Materials writers on materials writing*. Singapore: SEAMEO Regional Language Centre.
- Holliday, A. (1994). *Appropriate methodology and social context*. NY: Cambridge University Press.
- Hussain, I., Javed, M., & Munshi, P. (2015). English As Second Language: Students' Awareness Of Learning Strategies Used In Reading Comprehension. *i-Manager's Journal on English Language Teaching*, 5(1), 11.
- Hutchinson, T. (1987). English for Specific Purposes: A learning-centered approach/T. Hutchinson, A. Waters. *Cambridge: Cambridge University Press*, 128, 58-66.
- Hyltenstam, K., & Pienemann, M. (1985). *Modelling and assessing second language acquisition* (Vol. 18). UK: Multilingual matters.
- Jacobs, J. E., & Paris, S. G. (1987). Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational psychologist*, 22(3-4), 255-278.
- Johns, T., & Davies, F. (1983). Text as a vehicle for information: The classroom use of written texts in teaching reading in a foreign language. *Reading in a foreign language*, 1(1), 1-19.

- Jolly, D., & Bolitho, R. (2011). A framework for materials writing. In B. Tomlinson (Ed.), *Materials development in language teaching* (pp. 90-115). UK: Cambridge University Press.
- Kalua, F. (2012). Reading for empowerment: Intertextuality offers creative possibilities for enlightened citizenry. *Reading & Writing-Journal of the Reading Association of South Africa*, 3(1), 1-5.
- Kasemsap, B., & Lee, H. Y.-H. (2015). L2 Reading in Thailand: Vocational College Students' Application of Reading Strategies to their Reading of English Texts. *The Reading Matrix: An International Online Journal*, 15(2), 101-117.
- King, K. (2008). Reading Strategies.
- Klauda, S. L., & Guthrie, J. T. (2015). Comparing relations of motivation, engagement, and achievement among struggling and advanced adolescent readers. *Reading and writing*, 28(2), 239-269. doi: 10.1007/s11145-014-9523-2
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*: Addison-Wesley Longman
- Krejcie, R. V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lah, Y. C., & Hashim, N. H. (2006). The level of reading comprehension of Malay language of primary school students. *Research Monograph No.1/2006(1)*, 667-672.
- Lah, Y. C., & Hashim, N. H. (2014). The Acquisition of Comprehension Skills among High and Low Achievers of Year 4 to 6 Students in Primary School. *Procedia-Social and Behavioral Sciences*, 114, 667-672. doi: 10.1016/j.sbspro.2013.12.765
- Larsen-Freeman, D., & Long, M. H. (2014). *An introduction to second language acquisition research*. NY: Routledge.
- Lenz, K. (2005). An introduction on reading comprehension. 2017, from [http://www.specialconnections.ku.edu/?q=instruction/reading\\_comprehension](http://www.specialconnections.ku.edu/?q=instruction/reading_comprehension)
- Lewis, E. R. (2016). Reciprocal Teaching as a Reading-Comprehension Strategy Among First-Year Industrial Technology Education Majors at the University of Technology, Jamaica.
- Li, Z. (2013). Thailand wants to Become the World's Buddhist Center, *Thailand Business News*. Retrieved from <http://www.thailand-business-news.com/lifestyle/45955-thailand-set-to-become-the-worlds-buddhist-center.html>
- Lightbown, P. M. (2014). *Focus on Content-Based Language Teaching-Oxford Key Concepts for the Language Classroom*: Oxford University Press.
- Liu, C.-y. (2007). *A descriptive study of how English is used and learned linguistically and culturally in a Taiwanese Buddhist monastery in Los Angeles*. (PH.D Dissertation), The University of Texas at Austin, Texas.
- Lyster, R., & Ballinger, S. (2011). Content-based language teaching: Convergent concerns across divergent contexts. *Language Teaching Research*, 15(3), 279-288. doi: 10.1177/1362168811401150
- Masuhara, H., & Tomlinson, B. (2008). Materials for general English. In B. Tomlinson (Ed.), *English Teaching Materials: A Critical Review* (pp. 17-37). NY: Continuum.

- McCawley, P. F. (2009). Methods for conducting an educational needs assessment. *University of Idaho*, 23.
- McDonough, J., & Shaw, C. (2012). *Materials and Methods in ELT* (3rd ed. ed.). UK: John Wiley & Sons.
- McNamara, D. S. (2009). The importance of teaching reading strategies. *Perspectives on language and literacy*, 35(2), 34-40.
- Meisel, J. M., Clahsen, H., & Pienemann, M. (1981). On determining developmental stages in natural second language acquisition. *Studies in second language acquisition*, 3(2), 109-135.
- Met, M. (1998). Curriculum decision-making in content-based language teaching. *Multilingual Matters*, 35-63.
- Muljani, D., Koda, K., & Moates, D. R. (1998). The development of word recognition in a second language. *Applied Psycholinguistics*, 19(1), 99-113.
- Munby, J. (1978). *Communicative syllabus design: A sociolinguistic model for defining the content of purpose-specific language programmes*. Cambridge: Cambridge University Press.
- Nation, I. S. P., & Macalister, J. (2010). *Language curriculum design*: Routledge.
- Nguyen, T. T. T. (2012). *The impact of background knowledge and time constraint on reading comprehension of Vietnamese learners of English as a second language*. (Master's Thesis), Southern Illinois University Carbondale, Illinois.
- Nunan, D. (2000). *Language teaching methodology: a textbook for teachers*. Heartfordshire: Ernst Klett Sprachen.
- O'Brien, B. (2017). About Buddhist Monks  
The Life and Role of the Bhikkhu. 2017, from <https://www.thoughtco.com/about-buddhist-monks-449758>
- Ololube, N. P., Kpolovie, P. J., & Makewa, L. N. (2015). *Handbook of research on enhancing teacher education with advanced instructional technologies*. PA: IGI Global.
- Paran, A. (2013). Content and language integrated learning: Panacea or policy borrowing myth? *Applied Linguistics Review*, 4(2), 317-342. doi: 10.1515/applirev-2013-0014
- Paris, S. G., Lipson, M. Y., & Wixson, K. K. (1983). Becoming a strategic reader. *Contemporary educational psychology*, 8(3), 293-316.
- Pearson, P. D., & Dole, J. A. (1987). Explicit comprehension instruction: A review of research and a new conceptualization of instruction. *The Elementary School Journal*, 88(2), 151-165. doi: 10.1086/461530
- Peregoy, S. F., & Boyle, O. F. (2000). English learners reading English: What we know, what we need to know. *Theory into practice*, 39(4), 237-247.
- Ritthikuksithichai, N. (2011). *The Development of an English Instructional Model Using the Content-based and the Task-Based Instruction to Enhance English Reading Comprehension Ability and Task Performance of Engineer Students*. (Doctor of Philosophy in Curriculum), Chulalongkorn University.
- Roller, C. M. (2001). *Learning To Teach Reading: Setting the Research Agenda*: ERIC.
- Ruddell, M. R. (2011). *Teaching content reading and writing* (6th ed. ed.). NJ: John Wiley & Sons.

- Rumelhart, D. E. (1994). *Toward an interactive model of reading*: International Reading Association.
- Sawangsamutchai, Y., & Rattanavich, S. (2016). A Comparison of Seventh Grade Thai Students' Reading Comprehension and Motivation to Read English through Applied Instruction Based on the Genre-Based Approach and the Teacher's Manual. *English Language Teaching*, 9(4), 54. doi: <http://dx.doi.org/10.5539/elt.v9n4p54>
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational psychology review*, 7(4), 351-371.
- Service, E. T. (2017). from <https://www.ets.org/>
- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). Improving Reading Comprehension in Kindergarten through 3rd Grade: IES Practice Guide. NCEE 2010-4038. *What Works Clearinghouse*.
- Shang, H.-F. (2015). An Investigation of scaffolded reading on EFL hypertext comprehension. *Australasian Journal of Educational Technology*, 31(3). doi: <https://doi.org/10.14742/ajet.1735>
- Sharwood Smith, M., & Rutherford, W. (1988). Grammar and second language teaching. NY: Newbury House.
- Sheng, H. J. (2000). *A cognitive model for teaching reading comprehension*. Paper presented at the Forum.
- Short, D., & Echevarria, J. (2004). Teacher skills to support English language learners. *Educational Leadership*, 62(4), 8-13.
- Silberstein, S. (1993). *Techniques and resources in teaching reading*. NY: Oxford University Press.
- Smith, R. J., & Barrett, T. C. (1979). *Teaching reading in the middle grades*: Addison Wesley Publishing Company.
- Snow, M. A. (2014). Content-based and immersion models for second and foreign language teaching. *Teaching English as a second or foreign language*, 3, 303-318.
- Snow, M. A., & Brinton, D. (2017). *The Content-Based Classroom: New Perspectives on Integrating Language and Content*: The University of Michigan Press.
- Stanovich, K. E. (1984). The interactive-compensatory model of reading a confluence of developmental, experimental, and educational psychology. *Remedial and special education*, 5(3), 11-19.
- Stoller, F. L. (2008). Content-Based Instruction *Encyclopedia of language and education* (pp. 1163-1174): Springer.
- Stoller, F. L., & Grabe, W. (1997). A Six-T's approach to content-based instruction *The content-based classroom: Perspectives on integrating language and content* (pp. 78-94). NY: Longman.
- Stoller, F. L., & Grabe, W. (2017). Building coherence into the content-based curriculum: six Ts revisited. In M. A. Snow; & D. M. Briton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 53-66). NY: University of Michigan Press.
- Tarchi, C. (2015). Fostering reading comprehension of expository texts through the activation of readers' prior knowledge and inference-making skills.



- International Journal of Educational Research*, 72(1), 80-88. doi:  
<https://doi.org/10.1016/j.ijer.2015.04.013>
- Taylor, A., Stevens, J., & Asher, J. W. (2006). The effects of explicit reading strategy training on L2 reading comprehension. *Synthesizing research on language learning and teaching*, 213-244.
- Thipwajana, P. (2010). *Effects of Content-based English Lessons Incorporating Form-focused Tasks on Upper Secondary School Students' Content Knowledge and Grammatical Knowledge*. (Master of Education in Teaching English as a Foreign Language), Chulalongkorn.
- Tomlinson, B. (2011). *Materials development in language teaching* (2nd ed. ed.). UK: Cambridge University Press.
- Tomlinson, B., & Masuhara, H. (2004). *Developing Language Course Materials. Portfolio Series# 11*: ERIC.
- Tunmer, W. E., & Hoover, W. A. (1993). Components of variance models of language-related factors in reading disability: A conceptual overview *Reading disabilities: Diagnosis and component processes* (Vol. 74, pp. 135-173): Springer.
- University, D. O. (n.d.). *Monastic lifestyle*. Thailand.
- Urquhart, A. H., & Weir, C. J. (2014). *Reading in a second language: Process, product and practice*. NY: Routledge.
- Wallace, C. (2010). *Reading: A scheme for teacher education*. Oxford: Oxford University Press
- Widdowson, H. G. (1983). *Learning purpose and language use*: Oxford University Press
- Yaemtui, W. (2015). *Investigating reading strategies utilized by able English users and less able English users of Thai EFL students*. Paper presented at the International Forum of Teaching and Studies.
- Yalden, J. (1987). *Principles of course design for language teaching*: Cambridge Univ Press.
- สำนักงานพระพุทธศาสนาแห่งชาติ. (2013). จำนวนวัดในประเทศไทย จำแนกตามลักษณะวัด (วัดที่ได้รับวิสุงคามสีมาและสำนักสงฆ์) นิกาย จังหวัด(หน่วย : แห่ง).
- สำนักงานพระพุทธศาสนาแห่งชาติ. (2015). จำนวนวัด จำแนกตามนิกาย เป็นรายภาค และ จังหวัด พ.ศ. 2558.
- สำนักงานสถิติแห่งชาติ. (2012). *สรุปผลที่สำคัญการสำรวจสถานะทางสังคมและวัฒนธรรม พ.ศ. 2554*
- 2016, from <http://service.nso.go.th/nso/nsopublish/themes/files/soc-culPocket.pdf>

**APPENDIX**



จุฬาลงกรณ์มหาวิทยาลัย  
**CHULALONGKORN UNIVERSITY**

## APPENDIX A Needs analysis questionnaire for student monks

### แบบสอบถามพระนิสิต

#### เรื่อง

การพัฒนาสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่าน  
ภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง ผู้ตอบแบบสอบถามนี้ คือ พระนิสิตสำนักการศึกษา วัดพระธรรมกาย แบบสอบถาม  
แบ่งเป็น ๓ ส่วน ดังนี้

ส่วนที่ ๑ เป็นแบบสอบถามเกี่ยวกับสถานภาพของผู้ตอบ

ส่วนที่ ๒ เป็นแบบสอบถามเกี่ยวกับการจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการ  
ของผู้เรียน

ส่วนที่ ๓ เป็นแบบสอบถามเกี่ยวกับหัวข้อเนื้อหาในสื่อการสอน

ในฐานะที่ท่านกรุณาให้ความอนุเคราะห์ในการประเมินและให้ข้อคิดเห็นในงานวิจัยเพื่อ  
พัฒนาสื่อการสอนวิชาภาษาอังกฤษ โดยมีจุดมุ่งหมายเพื่อเสริมสร้างความสามารถในการอ่าน  
ภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต ขอความกรุณาให้ท่านตอบแบบสอบถามทุกข้อ ทั้งนี้  
ความเห็นของท่านจะนำไปใช้ในการประมวลเพื่อการวิจัยครั้งนี้เท่านั้นและการตอบแบบสอบถาม  
ครั้งนี้ จะไม่ส่งผลกระทบต่อคะแนนในวิชาภาษาอังกฤษที่ผู้ตอบกำลังศึกษาอยู่

### ส่วนที่ ๑ สถานภาพของผู้ตอบ

คำชี้แจง โปรดเติมข้อความในช่องว่าง  ตามสภาพที่เป็นจริงเกี่ยวกับตัวท่าน

๑. อายุ (ปี)  ต่ำกว่า ๒๐ ปี  ๒๐  ๒๑  ๒๒  
 ๒๓  ๒๔  ๒๕  ๒๖

อื่นๆ (โปรดระบุ) \_\_\_\_

๒. พรรษา (นับถึงออกพรรษาปี พ.ศ. ๒๕๖๐)

- ๑  ๒  ๓  ๔  
 ๕  มากกว่า ๕

๓. การศึกษาทางธรรม

๓.๑ นักธรรม

- นักธรรมตรี  นักธรรมโท  นักธรรมเอก

๓.๒ เปรียญธรรม

- ประโยค ๑-๒  ประโยค ๓  ประโยค ๔  ประโยค ๕  
 ประโยค ๖  ประโยค ๗  ประโยค ๘  ประโยค ๙

๔. ระยะเวลาที่ได้ศึกษาภาษาอังกฤษ

- ๑-๕ ปี  ๖-๑๐ ปี  มากกว่า ๑๐ ปี

๕. ท่านคิดว่าระดับภาษาอังกฤษของท่านอยู่ในระดับใด

- ดีมาก  ดี  ปานกลาง  อ่อน  อ่อนมาก

ส่วนที่ ๒ การจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการของผู้เรียน

คำชี้แจง โปรดใส่เครื่องหมาย / ใต้ตัวเลขที่ตรงกับความเห็นของท่าน แบ่งออกเป็น ๔ ระดับ ดังนี้

- ๔ หมายถึง เห็นด้วยอย่างยิ่ง/ชอบมาก  
 ๓ หมายถึง เห็นด้วย/ชอบ  
 ๒ หมายถึง ไม่เห็นด้วย/ไม่ชอบ  
 ๑ หมายถึง ไม่เห็นด้วยอย่างยิ่ง/ไม่ชอบมาก

คำถาม	๔	๓	๒	๑
๑. ท่านเรียนการอ่านภาษาอังกฤษเพื่อ				
ใช้ในชีวิตประจำวัน				
ใช้ในการศึกษา				
การเผยแพร่				
อื่นๆ เช่น .....				
๒. ท่านคิดว่าลักษณะสื่อการสอนที่ดีควรมีลักษณะแต่ละ				
แบบมาก/น้อยเพียงใด				
มีการตกแต่งที่สวยงาม				
มีภาพประกอบและมีคำบรรยายใต้ภาพ				
มีตัวอย่างคำตอบในการทำแบบฝึกหัด				
มีพื้นที่มากพอสำหรับเขียนคำตอบในแบบฝึกหัด				
มีพื้นที่สำหรับจดโน้ตเพิ่มเติม				
อื่นๆ เช่น .....				
๓. ท่านชอบการทำกิจกรรมแต่ละประเภทมาก/น้อยเพียงใด				
แบบทำคนเดียว				
แบบทำเป็นคู่				
แบบทำเป็นกลุ่ม				
อื่นๆ เช่น .....				

ข้อเสนอแนะ.....

.....

ส่วนที่ ๓ เนื้อหาในสื่อการสอน (โปรดเลือก ๑ ตัวเลือก  ที่ท่านสนใจในแต่ละหัวข้อ)

๑. พระพุทธ

๑.๑ พุทธประวัติ (โปรดเลือก ๑ ตัวเลือก)

พระประสูติ

การตรัสรู้

ปฐมเทศนา

ปรีณิพพาน

อื่นๆ เช่น .....

๑.๒ ทศชาติชาดก: การบำเพ็ญบารมีใน ๑๐ชาติสุดท้ายของพระโพธิสัตว์ (โปรดเลือก ๑ ตัวเลือก)

เตมีย์ชาดก (เนกขัมมบารมี)

ชนกชาดก (วิริยบารมี)

สุวรรณสามชาดก (เมตตาบารมี)

เนมิราชชาดก (อริยฐานบารมี)

มโหสถชาดก (ปัญญาบารมี)

ภูริทัตชาดก (ศีลบารมี)

จันทชาดก (ขันติบารมี)

นารทชาดก (อุเบกขาบารมี)

วิฑูรชาดก (สังขารม)

เวสสันดรชาดก (ทานบารมี)

อื่นๆ เช่น .....

๑.๓ เหตุการณ์และบุคคลสำคัญในยุคพุทธกาล (โปรดเลือก ๑ ตัวเลือก)

- พระพุทธเจ้าเปิดโลก
- พระพุทธเจ้าเปลี่ยนบุคคลให้เป็นสัมมาทิฐิ
- ความพยายามที่จะทำลายชื่อเสียงพระพุทธองค์
- พุทธสาวกและบุคคลสำคัญสมัยพุทธกาล
- อื่นๆ เช่น .....

๒. พระธรรม

๒.๑ หลักธรรมสำคัญ (โปรดเลือก ๑ ตัวเลือก)

- ชัมมจักกัปปวัตตนสูตร ปฐมเทศนา แห่งอริยสัจ ๔
- โอวาทปาฏิโมกข์ หัวใจคำสอนของพระพุทธศาสนา
- มรรคมีองค์ ๘ ทางสายกลาง
- กุศลกรรมบถ ๑๐ ประการ
- อื่นๆ เช่น .....

๒.๒ ผลของกรรมดี (โปรดเลือก ๑ ตัวเลือก)

- อานิสงส์การให้ทาน
- อานิสงส์การรักษาศีล
- อานิสงส์การเจริญภาวนา
- อานิสงส์การนับถือพระรัตนตรัย
- อื่นๆ เช่น .....

๒.๓ ผลของกรรมชั่ว (โปรดเลือก ๑ ตัวเลือก)

- ผลของการไม่ให้ทาน
- ผลของการไม่รักษาศีล
- ผลของการไม่เจริญภาวนา

อื่นๆ เช่น .....

### ๓. พระสงฆ์

#### ๓.๑ กิจและข้อปฏิบัติของพระภิกษุสงฆ์ (โปรดเลือก ๑ ตัวเลือก)

ข้อปฏิบัติเบื้องต้นของพระภิกษุ

การบิณฑบาต

การดูแลเสนาสนะ

การสวดมนต์และนั่งสมาธิ

อื่นๆ เช่น .....

#### ๓.๒ อานิสงส์ของการบวช (โปรดเลือก ๑ ตัวเลือก)

สามัญญผลเบื้องต้น

สามัญญผลเบื้องกลาง

สามัญญผลเบื้องสูง

อื่นๆ เช่น .....

#### ๓.๓ พระภิกษุที่มีความสำคัญสมัยพุทธกาล (โปรดเลือก ๑ ตัวเลือก)

พระอัญญาโกณฑัญญะ พระภิกษุรูปแรก

พระโมคคัลลานะ อัครสาวกเบื้องซ้าย

พระสารีบุตร อัครสาวกเบื้องขวา

พระอานนท์ พุทธอุปัฏฐาก

อื่นๆ เช่น .....

กราบขอบพระคุณสำหรับการตอบแบบสอบถาม

ผู้วิจัย



## APPENDIX B Needs analysis questionnaire for English teachers

การพัฒนาสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่าน

ภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง ผู้ตอบแบบสอบถามนี้ คือ อาจารย์สอนภาษาอังกฤษสำนักการศึกษา วัดพระธรรมกาย

แบบสอบถามแบ่งเป็น ๓ ส่วน ดังนี้

ส่วนที่ ๑ เป็นแบบสอบถามเกี่ยวกับสถานภาพของผู้ตอบ

ส่วนที่ ๒ เป็นแบบสอบถามเกี่ยวกับการจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการ  
ของผู้เรียน

ส่วนที่ ๓ เป็นแบบสอบถามเกี่ยวกับหัวข้อเนื้อหาในสื่อการสอน

ในฐานะที่ท่านกรุณาให้ความอนุเคราะห์ในการประเมินและให้ข้อคิดเห็นในงานวิจัยเพื่อพัฒนาสื่อการสอนวิชาภาษาอังกฤษ โดยมีจุดมุ่งหมายเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต ขอความกรุณาให้ท่านตอบแบบสอบถามทุกข้อ ทั้งนี้ ความเห็นของท่านจะนำไปใช้ในการประมวลเพื่อการวิจัยครั้งนี้เท่านั้น

### ส่วนที่ ๑ สถานภาพของผู้ตอบ

คำชี้แจง โปรดเติมข้อความในช่องว่างตามสภาพที่เป็นจริงเกี่ยวกับตัวท่าน

๑. อายุ ..... ปี

๒. ท่านมีประสบการณ์ในการเป็นอาจารย์สอนภาษาอังกฤษรวมเวลาทั้งสิ้น

๑-๕ ปี                       ๖-๑๐ ปี                       มากกว่า ๑๐ ปี

๓. ท่านมีประสบการณ์ในการเป็นอาจารย์ถวายความรู้ภาษาอังกฤษพระภิกษุรวมเวลาทั้งสิ้น

๑-๕ ปี                       ๖-๑๐ ปี                       มากกว่า ๑๐ ปี

๔. ท่านคิดว่าระดับความรู้ด้านพระพุทธศาสนาของตัวท่านเองอยู่ในระดับใด

ดีมาก                       ดี                       ปานกลาง                       อ่อน  อ่อนมาก

๕. ท่านคิดว่าระดับความรู้ด้านภาษาอังกฤษของพระนิสิตที่ท่านสอนอยู่ในระดับใด

ดีมาก                       ดี                       ปานกลาง                       อ่อน  อ่อนมาก

ส่วนที่ ๒ การจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการของผู้เรียน

คำชี้แจง โปรดใส่เครื่องหมาย / ใต้ตัวเลขที่ตรงกับความเห็นของท่าน แบ่งออกเป็น ๔ ระดับ ดังนี้

- ๔ หมายถึง เห็นด้วยอย่างยิ่ง/ชอบมาก  
 ๓ หมายถึง เห็นด้วย/ชอบ  
 ๒ หมายถึง ไม่เห็นด้วย/ไม่ชอบ  
 ๑ หมายถึง ไม่เห็นด้วยอย่างยิ่ง/ไม่ชอบมาก

คำถาม	๔	๓	๒	๑
๑.ท่านถวายนความรู้การอ่านภาษาอังกฤษเพื่อให้พระนิสิต ใช้ในชีวิตประจำวัน				
ใช้ในการศึกษา				
การเผยแพร่				
อื่นๆ เช่น .....				
๒.ท่านคิดว่าลักษณะสื่อการสอนที่ดีควรมีลักษณะแต่ละ แบบมาก/น้อยเพียงใด				
มีการตกแต่งที่สวยงาม				
มีภาพประกอบและมีคำบรรยายใต้ภาพ				
มีตัวอย่างคำตอบในการทำแบบฝึกหัด				
มีพื้นที่มากพอสำหรับเขียนคำตอบในแบบฝึกหัด				
มีพื้นที่สำหรับจดโน้ตเพิ่มเติม				
อื่นๆ เช่น .....				
๓.ท่านชอบให้พระนิสิตทำกิจกรรมแต่ละประเภทมาก/น้อย เพียงใด				
แบบทำคนเดียว				
แบบทำเป็นคู่				
แบบทำเป็นกลุ่ม				
อื่นๆ เช่น .....				

ข้อเสนอแนะ .....

.....

ส่วนที่ ๓ เนื้อหาในสื่อการสอน (โปรดเลือก ๑ ตัวเลือก ☒ ที่ท่านสนใจในแต่ละหัวข้อ)

๑. พระพุทธ

๑.๑ พุทธประวัติ (โปรดเลือก ๑ ตัวเลือก)

พระประสูติ

การตรัสรู้

ปฐมเทศนา

ปรีณิพพาน

อื่นๆ เช่น .....

๑.๒ ทศชาติชาดก: การบำเพ็ญบารมีใน ๑๐ชาติสุดท้ายของพระโพธิสัตว์ (โปรดเลือก ๑ ตัวเลือก)

เตมีย์ชาดก (เนกขัมมบารมี)

ชนกชาดก (วิริยบารมี)

สุวรรณสามชาดก (เมตตาบารมี)

เนมิราชชาดก (อริยฐานบารมี)

มโหสถชาดก (ปัญญาบารมี)

ภูริทัตชาดก (ศีลบารมี)

จันทชาดก (ขันติบารมี)

นารทชาดก (อุเบกขาบารมี)

วิฑูรชาดก (สังขารม)

เวสสันดรชาดก (ทานบารมี)

อื่นๆ เช่น .....

๑.๓ เหตุการณ์และบุคคลสำคัญในยุคพุทธกาล (โปรดเลือก ๑ ตัวเลือก)

- พระพุทธเจ้าเปิดโลก
- พระพุทธเจ้าเปลี่ยนบุคคลให้เป็นสัมมาทิฐิ
- ความพยายามที่จะทำลายชื่อเสียงพระพุทธองค์
- พุทธสาวกและบุคคลสำคัญสมัยพุทธกาล
- อื่นๆ เช่น .....

๒. พระธรรม

๒.๑ หลักธรรมสำคัญ (โปรดเลือก ๑ ตัวเลือก)

- ชัมมจักกัปปวัตตนสูตร ปฐมเทศนา แห่งอริยสัจ ๔
- โอวาทปาฏิโมกข์ หัวใจคำสอนของพระพุทธศาสนา
- มรรคมีองค์ ๘ ทางสายกลาง
- กุศลกรรมบถ ๑๐ ประการ
- อื่นๆ เช่น .....

๒.๒ ผลของกรรมดี (โปรดเลือก ๑ ตัวเลือก)

- อานิสงส์การให้ทาน
- อานิสงส์การรักษาศีล
- อานิสงส์การเจริญภาวนา
- อานิสงส์การนับถือพระรัตนตรัย
- อื่นๆ เช่น .....

๒.๓ ผลของกรรมชั่ว (โปรดเลือก ๑ ตัวเลือก)

- ผลของการไม่ให้ทาน
- ผลของการไม่รักษาศีล
- ผลของการไม่เจริญภาวนา

ผลของการไม่นับถือพระรัตนตรัย

อื่นๆ เช่น .....

### ๓. พระสงฆ์

#### ๓.๑ กิจและข้อปฏิบัติของพระภิกษุสงฆ์ (โปรดเลือก ๑ ตัวเลือก)

ข้อปฏิบัติเบื้องต้นของพระภิกษุ

การบิณฑบาต

การดูแลเสนาสนะ

การสวดมนต์และนั่งสมาธิ

อื่นๆ เช่น .....

#### ๓.๒ อานิสงส์ของการบวช (โปรดเลือก ๑ ตัวเลือก)

สามัญญผลเบื้องต้น

สามัญญผลเบื้องกลาง

สามัญญผลเบื้องสูง

อื่นๆ เช่น .....

#### ๓.๓ พระภิกษุที่มีความสำคัญสมัยพุทธกาล (โปรดเลือก ๑ ตัวเลือก)

พระอัญญาโกณฑัญญะ พระภิกษุรูปแรก

พระโมคคัลลานะ อัครสาวกเบื้องซ้าย

พระสารีบุตร อัครสาวกเบื้องขวา

พระอานนท์ พุทธอุปัฏฐาก

อื่นๆ เช่น .....

กราบขอบพระคุณสำหรับการตอบแบบสอบถาม

ผู้วิจัย

## APPENDIX C Needs analysis questionnaire for course administrators

### แบบสอบถามผู้จัดหลักสูตรภาษาอังกฤษ

#### เรื่อง

การพัฒนาสื่อการเรียนตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่าน

ภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง ผู้ตอบแบบสอบถามนี้ คือ พระอาจารย์หรือเจ้าหน้าที่รับผิดชอบเรื่องการจัดหลักสูตรการ

เรียนการสอนภาษาอังกฤษสำนักการศึกษา วัดพระธรรมกาย แบบสอบถามแบ่งเป็น ๓ ส่วน ดังนี้

ส่วนที่ ๑ เป็นแบบสอบถามเกี่ยวกับสถานภาพของผู้ตอบ

ส่วนที่ ๒ เป็นแบบสอบถามเกี่ยวกับการจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการ  
ของผู้เรียน

ส่วนที่ ๓ เป็นแบบสอบถามเกี่ยวกับหัวข้อเนื้อหาในสื่อการสอน

ในฐานะที่ท่านกรุณาให้ความอนุเคราะห์ในการประเมินและให้ข้อคิดเห็นในงานวิจัยเพื่อพัฒนาสื่อการสอนวิชาภาษาอังกฤษ โดยมีจุดมุ่งหมายเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต ขอความกรุณาให้ท่านตอบแบบสอบถามทุกข้อ ทั้งนี้ความเห็นของท่านจะนำไปใช้ในการประมวลเพื่อการวิจัยครั้งนี้เท่านั้น

### ส่วนที่ ๑ สถานภาพของผู้ตอบ

คำชี้แจง โปรดเติมข้อความในช่องว่างตามสภาพที่เป็นจริงเกี่ยวกับตัวท่าน

๑. อายุ ..... ปี

๒. สถานภาพ

พระภิกษุ พรรษา ..... (นับถึงออกพรรษาปี พ.ศ. ๒๕๖๐)  สมรส

๓. การศึกษาสูงสุด

ต่ำกว่าปริญญาตรี  ปริญญาตรี  ปริญญาโท  ปริญญาเอก

๔. การศึกษาทางธรรม

๓.๑ นักธรรม

นักธรรมตรี  นักธรรมโท  นักธรรมเอก

๓.๒ เปรียญธรรม

ประโยค ๑-๒  ประโยค ๓  ประโยค ๔  ประโยค ๕

ประโยค ๖  ประโยค ๗  ประโยค ๘  ประโยค ๙

๕. ท่านมีประสบการณ์จัดหลักสูตรการเรียนการสอนของพระนิสิตมาเป็นเวลา

๑-๕ ปี  ๖-๑๐ ปี  มากกว่า ๑๐ ปี

๖. ท่านคิดว่าระดับความรู้ด้านภาษาอังกฤษของพระนิสิตอยู่ในระดับใด

ดีมาก  ดี  ปานกลาง  อ่อน  อ่อนมาก



ส่วนที่ ๒ การจัดทำสื่อการสอน เนื้อหา กิจกรรม และความต้องการของผู้เรียน

คำชี้แจง โปรดใส่เครื่องหมาย / ใต้ตัวเลขที่ตรงกับความเห็นของท่าน แบ่งออกเป็น ๔ ระดับ ดังนี้

๔	หมายถึง	เห็นด้วยอย่างยิ่ง/ชอบมาก
๓	หมายถึง	เห็นด้วย/ชอบ
๒	หมายถึง	ไม่เห็นด้วย/ไม่ชอบ
๑	หมายถึง	ไม่เห็นด้วยอย่างยิ่ง/ไม่ชอบมาก

คำถาม	๔	๓	๒	๑
๔. ท่านเรียนการอ่านภาษาอังกฤษเพื่อ				
ใช้ในชีวิตประจำวัน				
ใช้ในการศึกษา				
การเผยแพร่				
อื่นๆ เช่น .....				
๕. ท่านคิดว่าลักษณะสื่อการสอนที่ดีควรมีลักษณะแต่				
ละแบบมาก/น้อยเพียงใด				
มีการตกแต่งที่สวยงาม				
มีภาพประกอบและมีคำบรรยายได้ภาพ				
มีตัวอย่างคำตอบในการทำแบบฝึกหัด				
มีพื้นที่มากพอสำหรับเขียนคำตอบในแบบฝึกหัด				
มีพื้นที่สำหรับจดโน้ตเพิ่มเติม				
อื่นๆ เช่น .....				
๖. ท่านชอบการทำกิจกรรมแต่ละประเภทมาก/น้อย				
เพียงใด				
แบบทำคนเดียว				
แบบทำเป็นคู่				
แบบทำเป็นกลุ่ม				
อื่นๆ เช่น .....				

ข้อเสนอแนะ.....  
 .....

ส่วนที่ ๑ เนื้อหาในสื่อการสอน (โปรดเลือก ๑ ตัวเลือก  ที่ท่านสนใจในแต่ละหัวข้อ)

๑. พระพุทธ

๑.๑ พุทธประวัติ (โปรดเลือก ๑ ตัวเลือก)

พระประสูติ

การตรัสรู้

ปฐมเทศนา

ปรีณิพพาน

อื่นๆ เช่น .....

๑.๒ ทศชาติชาดก: การบำเพ็ญบารมีใน ๑๐ชาติสุดท้ายของพระโพธิสัตว์ (โปรดเลือก ๑ ตัวเลือก)

เตมีย์ชาดก (เนกขัมมบารมี)

ชนกชาดก (วีริยบารมี)

สุวรรณสามชาดก (เมตตาบารมี)

เนมิราชชาดก (อริยฐานบารมี)

มโหสถชาดก (ปัญญาบารมี)

ภูริทัตชาดก (ศีลบารมี)

จันทชาดก (ขันติบารมี)

นารทชาดก (อุเบกขาบารมี)

วิรุทธชาดก (สังขารม)

เวสสันดรชาดก (ทานบารมี)

อื่นๆ เช่น .....

๑.๓ เหตุการณ์และบุคคลสำคัญในยุคพุทธกาล (โปรดเลือก ๑ ตัวเลือก)

พระพุทธเจ้าเปิดโลก

- พระพุทธเจ้าเปลี่ยนบุคคลให้เป็นสัมมาทิฐิ
  - ความพยายามที่จะทำลายชื่อเสียงพระพุทธองค์
  - พุทธสาวกและบุคคลสำคัญสมัยพุทธกาล
- อื่นๆ เช่น .....

## ๒. พระธรรม

### ๒.๑ หลักธรรมสำคัญ (โปรดเลือก ๑ ตัวเลือก)

- ชัมมจักกัปปวัตตนสูตร ปฐมเทศนา แห่งอริยสัจ ๔
  - โอวาทปาฏิโมกข์ หัวใจคำสอนของพระพุทธศาสนา
  - มรรคมีองค์ ๘ ทางสายกลาง
  - กุศลกรรมบถ ๑๐ ประการ
- อื่นๆ เช่น .....

### ๒.๒ ผลของกรรมดี (โปรดเลือก ๑ ตัวเลือก)

- อานิสงส์การให้ทาน
  - อานิสงส์การรักษาศีล
  - อานิสงส์การเจริญภาวนา
  - อานิสงส์การนับถือพระรัตนตรัย
- อื่นๆ เช่น .....

### ๒.๓ ผลของกรรมชั่ว (โปรดเลือก ๑ ตัวเลือก)

- ผลของการไม่ให้ทาน
  - ผลของการไม่รักษาศีล
  - ผลของการไม่เจริญภาวนา
  - ผลของการไม่นับถือพระรัตนตรัย
- อื่นๆ เช่น .....

### ๓. พระสงฆ์

#### ๓.๑ กิจและข้อปฏิบัติของพระภิกษุสงฆ์ (โปรดเลือก ๑ ตัวเลือก)

ข้อปฏิบัติเบื้องต้นของพระภิกษุ

การบิณฑบาต

การดูแลเสนาสนะ

การสวดมนต์และนั่งสมาธิ

อื่นๆ เช่น .....

#### ๓.๒ อานิสงส์ของการบวช (โปรดเลือก ๑ ตัวเลือก)

สามัญญผลเบื้องต้น

สามัญญผลเบื้องกลาง

สามัญญผลเบื้องสูง

อื่นๆ เช่น .....

#### ๓.๓ พระภิกษุที่มีความสำคัญสมัยพุทธกาล (โปรดเลือก ๑ ตัวเลือก)

พระอัญญาโกณฑัญญะ พระภิกษุรูปแรก

พระโมคคัลลานะ อัครสาวกเบื้องซ้าย

พระสารีบุตร อัครสาวกเบื้องขวา

พระอานนท์ พุทธอุปัฏฐาก

อื่นๆ เช่น .....

กราบขอบพระคุณสำหรับการตอบแบบสอบถาม

ผู้วิจัย

## APPENDIX D Whilst-use evaluation questionnaire for student monks

### แบบประเมิน (พระนิสิต)

แบบประเมินนี้จัดทำขึ้นเพื่อประเมินและวิเคราะห์ความเห็นว่าพระนิสิตมีต่อบทเรียนที่ได้พัฒนาขึ้นเพื่อใช้เป็นสื่อการเรียนตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านดังนี้

1 = ไม่เห็นด้วยอย่างยิ่ง

2 = ไม่เห็นด้วย

3 = เห็นด้วย

4 = เห็นด้วยอย่างยิ่ง

ข้อ ที่	หัวข้อ	ระดับความเห็น			
		1	2	3	4
<b>1.</b>	<b>เนื้อหา</b>				
1.1	สอดคล้องกับวัตถุประสงค์การเรียนรู้และความต้องการ				
1.2	แต่ละหน่วยการเรียนรู้มีองค์ประกอบครบถ้วน ได้แก่ วัตถุประสงค์ ตัวอย่างคำตอบของกิจกรรมและแบบฝึกหัด				
1.3	สอดคล้องกับความรู้เดิมและประสบการณ์ของพระนิสิต				
1.4	มีความสมจริง				
<b>2.</b>	<b>องค์ประกอบของเนื้อหา</b>				
2.1	การจัดลำดับเนื้อหาแต่ละบทมีความเหมาะสม				
2.2	เนื้อหาแบ่งเป็นตอนหลัก และตอนย่อย				
2.3	มีตัวเลขกำกับชัดเจน				
2.4	เนื้อหาเชื่อมโยงภายในบทเรียนเดียวกันและระหว่างบทเรียน				
2.5	ความยาวของเนื้อหาเหมาะสมกับหัวข้อหรือบทเรียนนั้นๆ				
<b>3.</b>	<b>การนำเสนอ</b>				
3.1	เนื้อหาและประเด็นที่สำคัญในบทเรียนนั้นๆ ชัดเจน สละจุดตา				
3.2	ภาพประกอบของเนื้อหาในบทเรียนชัดเจน ช่วยเสริมสร้าง ความสนใจ ความเข้าใจ และการจดจำเนื้อหาและความรู้				
3.3	มีบทสรุปและกิจกรรมอย่างเพียงพอ				
3.4	มีคำศัพท์หรืออภิธานศัพท์ประกอบเพียงพอ				
3.5	มีคำอธิบายไวยากรณ์พร้อมตัวอย่างที่สั้นกระชับและง่ายต่อการเข้าใจ				

3.6	มีอ้างอิงแหล่งที่มาเพื่อการศึกษาเพิ่มเติม				
4.	<b>ภาษา</b>				
4.1	ภาษาที่ใช้ในสื่อการอ่านมีความสมจริง				
4.2	ภาษาที่ใช้เหมาะสมกับระดับความสามารถทางภาษาอังกฤษของพระนิสิต				
4.3	คำชี้แจงสำหรับกิจกรรมต่างๆชัดเจนและง่ายต่อการทำกิจกรรม				
4.4	คำศัพท์และสำนวนที่ใช้เหมาะสมกับความรู้เดิมและประสบการณ์ของพระนิสิต				
4.5	คำศัพท์และสำนวนที่ใช้ เป็นคำศัพท์และสำนวนที่ใช้ในวงการพระพุทธศาสนา				
5.	<b>กิจกรรม</b>				
5.1	มีกิจกรรมแบบเดี่ยว แบบคู่ และแบบกลุ่ม				
5.2	สอดคล้องกับจุดประสงค์การเรียนรู้และกลวิธีการอ่านนั้นๆ				
5.3	มีกิจกรรมและแบบฝึกหัดที่เสริมสร้างความสนใจ ความเข้าใจ และการจดจำเนื้อหาและความรู้				
5.4	กิจกรรมเสริมสร้างให้พระนิสิตเชี่ยวชาญการใช้กลวิธีการอ่าน				
5.5	กิจกรรมเสริมสร้างให้พระนิสิตเห็นประโยชน์ของความรู้และการนำไปใช้จริงในชีวิตพระภิกษุสงฆ์				
5.6	มีตัวอย่างการทำกิจกรรม				
6.	<b>การจัดรูปเล่มและการออกแบบ</b>				
6.1	การจัดรูปเล่มเหมาะสมกับการอ่าน				
6.2	รูปแบบปกสวยงาม สะดุดตา				
6.3	ขนาดตัวอักษรของเนื้อหา หัวข้อหลัก หัวข้อย่อย คำอธิบาย และอื่นๆเหมาะสม				
6.4	หมายเลขหน้ากำกับชัดเจนและสังเกตง่าย				
6.5	ระยะห่างระหว่างบรรทัดเหมาะสม				
6.6	มีเนื้อที่ว่างสำหรับจดเนื้อหาและคำตอบ				

#### ข้อเสนอแนะเพิ่มเติม

คำแนะนำและข้อเสนอแนะเพิ่มเติมของท่านจักเป็นประโยชน์ยิ่งในการพัฒนาสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิตในลำดับต่อไป

นางสาวพัชรินทร์ ศุภพิพัฒน์

ผู้วิจัย

## APPENDIX E Whilst-use evaluation questionnaire for teachers

แบบประเมินนี้จัดทำขึ้นเพื่อประเมินและวิเคราะห์ความเห็นที่ครูผู้สอนมีต่อบทเรียนที่ได้พัฒนาขึ้นเพื่อใช้เป็นสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านดังนี้

1 = ไม่เห็นด้วยอย่างยิ่ง

2 = ไม่เห็นด้วย

3 = เห็นด้วย

4 = เห็นด้วยอย่างยิ่ง

ข้อที่	หัวข้อ	ระดับความเห็น			
		1	2	3	4
<b>1.</b>	<b>The content</b>				
1.1	สอดคล้องกับวัตถุประสงค์การเรียนรู้และความต้องการ The content is aligned to learning objectives.				
1.2	แต่ละหน่วยการเรียนรู้มีองค์ประกอบครบถ้วน ได้แก่ วัตถุประสงค์ ตัวอย่างคำตอบของกิจกรรมและแบบฝึกหัด Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.				
1.3	สอดคล้องกับความรู้เดิมและประสบการณ์ของพระนิสิต The content is in accordance with background knowledge and experiences of the student monks.				
1.4	มีความสมจริง The content is culled from authentic sources.				
<b>2.</b>	<b>The organization of content</b>				
2.1	การจัดลำดับเนื้อหาแต่ละบทมีความเหมาะสม The sequence of the units is logical.				
2.2	เนื้อหาแบ่งเป็นตอนหลัก และตอนย่อย The content is divided into sections and subsections.				
2.3	มีตัวเลขกำกับชัดเจน Clear numbering.				
2.4	เนื้อหาเชื่อมโยงภายในบทเรียนเดียวกันและระหว่างบทเรียน There is a link between sections and units in each unit.				
2.5	ความยาวของเนื้อหาเหมาะสมกับหัวข้อหรือบทเรียนนั้นๆ The length of each unit is appropriate keeping in view of the theme and title.				

<b>3.</b>	<b>The presentation of content</b>				
3.1	เนื้อหาและประเด็นที่สำคัญในบทเรียนนั้นๆ ชัดเจน สะดุดตา The important points of content are highlighted for easy references.				
3.2	ภาพประกอบของเนื้อหาในบทเรียนเสริมสร้างความสนใจ ความเข้าใจ และการจดจำเนื้อหาและความรู้ The illustrations included in the text to promote interests, comprehension, and retention of information/ knowledge.				
3.3	มีบทสรุปและกิจกรรมอย่างเพียงพอ An adequate review section and exercise are included.				
3.4	มีคำศัพท์หรืออภิธานศัพท์ประกอบเพียงพอ An adequate vocabulary list or glossary is included.				
3.5	มีคำอธิบายไวยากรณ์พร้อมตัวอย่างที่สั้นกระชับและง่ายต่อการเข้าใจ The grammar points presented with brief and easy examples and explanation.				
3.6	มีอ้างอิงแหล่งที่มาเพื่อการศึกษาเพิ่มเติม The sources are given for further study.				
<b>4.</b>	<b>The language use</b>				
4.1	ภาษาที่ใช้ในสื่อการอ่านมีความสมจริง The language used in the materials is authentic.				
4.2	ภาษาที่ใช้เหมาะสมกับระดับความสามารถทางภาษาอังกฤษของพระนิสิต The language used is at the right level for the student monks' current English proficiency.				
4.3	คำชี้แจงสำหรับกิจกรรมต่างๆชัดเจนและง่ายต่อการทำกิจกรรม The instructions are clear and easy to follow.				
4.4	คำศัพท์และสำนวนที่ใช้เหมาะสมกับความรู้เดิมและประสบการณ์ของพระนิสิต The vocabulary and expression used is relevant to student monks' background knowledge and experiences.				
4.5	คำศัพท์และสำนวนที่ใช้เป็นคำศัพท์และสำนวนที่ใช้ในวงการพระพุทธศาสนา The vocabulary and expression in the texts are commonly used in the religious field.				
<b>5.</b>	<b>The activities applied</b>				
5.1	มีกิจกรรมแบบเดี่ยว แบบคู่ และแบบกลุ่ม The activities incorporate individual, pair, and group work.				
5.2	สอดคล้องกับจุดประสงค์การเรียนรู้และกลวิธีการอ่านนั้นๆ Activities are appropriate to unit objectives and reading strategies.				
5.3	มีกิจกรรมและแบบฝึกหัดที่เสริมสร้างความสนใจ ความเข้าใจ และการจดจำเนื้อหาและความรู้				



	Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.				
5.4	กิจกรรมเสริมสร้างให้พระนิสิตเชี่ยวชาญการใช้กลวิธีการอ่าน Activities help student monks to master in using reading strategies.				
5.5	กิจกรรมเสริมสร้างให้พระนิสิตเห็นประโยชน์ของความรู้และการนำไปใช้จริงในชีวิตพระภิกษุสงฆ์ The activities promote the student monks to see the value of knowledge and the real use in their monastic life.				
5.6	มีตัวอย่างการทำกิจกรรม Model answers are provided in the exercises.				
<b>6.</b>	<b>The layout and design</b>				
6.1	การจัดรูปเล่มเหมาะสมกับการอ่าน The materials are organized effectively.				
6.2	รูปแบบปกสวยงาม สะดุดตา The design of the cover page is attractive and appealing.				
6.3	ขนาดตัวอักษรของเนื้อหา หัวข้อหลัก หัวข้อย่อย คำอธิบาย และอื่นๆเหมาะสม The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.				
6.4	หมายเลขหน้ากำกับชัดเจนและสังเกตเห็นง่าย The page number included in the materials is clear and easy to be noticed.				
6.5	ระยะห่างระหว่างบรรทัดเหมาะสม Spacing between lines is aligned properly.				
6.6	มีเนื้อที่ว่างสำหรับจดเนื้อหาและคำตอบ Enough space is provided for writing useful information or the answers.				
<b>7.</b>	<b>Teachers' manual</b>				
7.1	คู่มือครูมีบทนำอธิบายการใช้สื่อการอ่านเพื่อให้ได้ประโยชน์อย่างสูงสุด The teachers' manual contains the introduction of how the materials can be used to the utmost advantage.				
7.2	คู่มือครูมีคำตอบที่ถูกต้องและเพียงพอ The teachers' manual provides accurate and adequate answers.				
7.3	แผนการสอนแนะนำที่มีในคู่มือครูมีการสอนกลวิธีการอ่านแบบชัดเจน The suggested lesson plans incorporated with the teachers' manual provide clear steps of explicit strategy instruction.				
7.4	ระยะเวลาในการสอนในแต่ละขั้นเหมาะสม The time allotment for each instruction step is appropriate.				
7.5	คำพูดที่ใช้สอนในแผนการสอนครอบคลุมเนื้อหาประเด็นหลักที่จะต้องอธิบาย				

	The teaching dialogues are adequate to cover all aspects of the content that needs to be explained.				
7.6	แผนการสอนแนะนำเป็นประโยชน์แก่ครูผู้ฝึกสอน The suggested lesson plans are a useful help for novice teachers.				
7.7	ขั้นตอนต่างๆในแผนการสอนมีความสอดคล้องกับ โครงสร้างของสื่อ การอ่าน The steps in the lesson plans are in accordance with the features of the materials.				

#### ข้อเสนอแนะเพิ่มเติม

คำแนะนำและข้อเสนอแนะเพิ่มเติมของท่านจักเป็นประโยชน์ยิ่งในการพัฒนาสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิตในลำดับต่อไป

นางสาวพัชรินทร์ สุขพิพัฒน์

ผู้วิจัย

## APPENDIX F Post-use evaluation questionnaire for student monks

### แบบประเมินหลังเรียน (พระนิสิต)

แบบประเมินนี้จัดทำขึ้นเพื่อประเมินและวิเคราะห์ความเห็นหลังเรียนที่พระนิสิตมีต่อบทเรียนที่ได้พัฒนาขึ้นเพื่อใช้เป็นสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านดังนี้

1 = ไม่เห็นด้วยอย่างยิ่ง

2 = ไม่เห็นด้วย

3 = เห็นด้วย

4 = เห็นด้วยอย่างยิ่ง



จุฬาลงกรณ์มหาวิทยาลัย  
CHULALONGKORN UNIVERSITY

ข้อที่	หัวข้อ	ระดับความเห็น			
		1	2	3	4
1.	สื่อการอ่านเล่มนี้ช่วยให้ความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจดีขึ้นอย่างน่าพึงพอใจ				
2.	สื่อการอ่านเล่มนี้ช่วยให้สามารถเชื่อมโยงความรู้ใหม่ที่เป็นภาษาอังกฤษกับความรู้เดิมที่เคยเรียนมาเป็นภาษาไทยได้				
3.	ใจความหลักเรื่องพระรัตนตรัยของสื่อการอ่านเล่มนี้ ทำให้มีแรงจูงใจที่จะอ่านภาษาอังกฤษมากขึ้น เพราะเป็นเรื่องที่เกี่ยวข้องและสำคัญต่อชีวิตของพระภิกษุสงฆ์				
4.	สื่อการอ่านเล่มนี้ช่วยให้สามารถอ่านบทความภาษาอังกฤษอื่นๆเกี่ยวกับพระพุทธศาสนาในอนาคต				
5.	กิจกรรมนำเข้าสู่การอ่าน กิจกรรมระหว่างการอ่าน และกิจกรรมหลังการอ่านทำให้มีความมั่นใจในการใช้กลวิธีการอ่านเพื่อความเข้าใจมากขึ้น				
6.	มีความมั่นใจในการอ่านหนังสือเรียน หนังสือทั่วไป บทความจดหมายข่าว รายงาน วิทยานิพนธ์ ที่เกี่ยวข้องกับพระพุทธศาสนาเพิ่มขึ้นกว่าแต่ก่อน				
7.	ก่อนอ่านเรื่องสามารถคาดเดาเนื้อหาที่จะอ่าน โดยการดูจากข้อมูลที่มี เช่น ชื่อเรื่อง หัวเรื่อง ภาพประกอบ คำสำคัญ เป็นต้น				
8.	เมื่ออ่านภาษาอังกฤษแล้วพบคำศัพท์หรือวลีที่ไม่คุ้นเคย ก็สามารถใช้วิธีการคาดเดาความหมายจากบริบทได้				
9.	เมื่ออ่านภาษาอังกฤษแล้วพบคำศัพท์ที่ไม่คุ้นเคย สามารถใช้วิธีการคาดเดาความหมายจากองค์ประกอบของคำศัพท์ คือ อุปสรรค (Prefix) ปัจจัย (Suffix) และรากศัพท์ (Root) ได้				
10.	เมื่ออ่านเนื้อเรื่องจบ สามารถเขียนบทสรุปใจความสำคัญได้				
11.	ได้เรียนรู้คำศัพท์และวลีใหม่ๆหลายคำ ที่ใช้ในแวดวงพระพุทธศาสนาซึ่งไม่เคยทราบมาก่อนหน้านี้				
12.	ตัวอย่างไวยากรณ์ช่วยในการเรียนไวยากรณ์ภาษาอังกฤษในบริบทได้อย่างดี				

13.	เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อการนำไปใช้เผยแพร่พระพุทธศาสนาในอนาคต				
14.	เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อการศึกษาต่อในสายพระพุทธศาสนานานาชาติในระดับสูงอนาคต				
15.	กิจกรรมต่างๆในหนังสือเล่มนี้ทำให้เห็นคุณค่าของความรู้และการนำภาษาอังกฤษไปใช้จริงในชีวิตของพระภิกษุสงฆ์				

### ข้อเสนอแนะเพิ่มเติม

คำแนะนำและข้อเสนอแนะเพิ่มเติมของท่านจักเป็นประโยชน์ยิ่งในการพัฒนาสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิตในลำดับต่อไป

นางสาวพัชรินทร์ สุภพิพัฒน์  
ผู้วิจัย

จุฬาลงกรณ์มหาวิทยาลัย  
CHULALONGKORN UNIVERSITY

## APPENDIX G Post-use evaluation questionnaire for teachers

แบบประเมินนี้จัดทำขึ้นเพื่อประเมินและวิเคราะห์ความเห็นหลังเรียนที่ผู้สอนมีต่อบทเรียนที่ได้พัฒนาขึ้นเพื่อใช้เป็นสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิต

คำชี้แจง กรุณาทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความคิดเห็นของท่านดังนี้

1 = ไม่เห็นด้วยอย่างยิ่ง

2 = ไม่เห็นด้วย

3 = เห็นด้วย

4 = เห็นด้วยอย่างยิ่ง

ข้อที่	หัวข้อ	ระดับความเห็น			
		1	2	3	4
1.	สื่อการอ่านเล่มนี้ช่วยให้ความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิตดีขึ้นอย่างน่าพึงพอใจ Through these materials, my student monks' reading comprehension skill has satisfactorily improved.				
2.	สื่อการอ่านเล่มนี้ช่วยให้พระนิสิตสามารถเชื่อมโยงความรู้ใหม่ที่เป็นภาษาอังกฤษกับความรู้เดิมที่ท่านเรียนรู้มาเป็นภาษาไทยได้ These materials help my student monks connect new knowledge of English language to their background knowledge that they have learned in Thai				
3.	ใจความหลักเรื่องพระรัตนตรัยของสื่อการอ่านเล่มนี้ ทำให้พระนิสิตมีแรงจูงใจที่จะอ่านภาษาอังกฤษมากขึ้น เพราะเป็นเรื่องที่เกี่ยวข้องและสำคัญต่อชีวิตของพระภิกษุสงฆ์ The theme of the Triple Gem causes my student monks to have more motivation to read because the content is relevant and meaningful to Buddhist monks' life.				
4.	สื่อการอ่านเล่มนี้ช่วยให้พระนิสิตสามารถอ่านบทความภาษาอังกฤษอื่นๆเกี่ยวกับพระพุทธศาสนาในอนาคต These materials help my student monks a lot to read other English texts in religious field in the future.				

5.	<p>กิจกรรมนำเข้าสู่การอ่าน กิจกรรมระหว่างการอ่าน และกิจกรรมหลังการอ่านทำให้พระนิสิตมีความมั่นใจในการใช้กลวิธีการอ่านเพื่อความเข้าใจมากขึ้น</p> <p>The pre-reading, during-reading, and post-reading activities make my student monks feel more confident to use reading strategies to comprehend the texts.</p>			
6.	<p>พระนิสิตมีความมั่นใจในการอ่านหนังสือเรียน หนังสือทั่วไป บทความ จดหมายข่าว รายงาน วิทยานิพนธ์ ที่เกี่ยวข้องกับพระพุทธศาสนาเพิ่มขึ้นกว่าแต่ก่อน</p> <p>My student monks have more confidence when they have to read religious textbooks, books, articles, newsletters, report, thesis , etc.</p>			
7.	<p>ก่อนอ่านเรื่องพระนิสิตสามารถคาดเดาเนื้อหาที่จะอ่าน โดยการดูจากข้อมูลที่มี เช่น ชื่อเรื่อง หัวเรื่อง ภาพประกอบ คำสำคัญ เป็นต้น</p> <p>Before reading my student monks know how to make prediction from available clues such as titles, headings, illustrations, keywords, etc.</p>			
8.	<p>เมื่ออ่านภาษาอังกฤษแล้วพระนิสิตพบคำศัพท์หรือวลีที่ไม่คุ้นเคย ท่านก็สามารถใช้วิธีการคาดเดาความหมายจากบริบทได้</p> <p>When my student monks confront with an unfamiliar word or phrase while reading, they are able to guess its meaning from the context.</p>			
9.	<p>เมื่ออ่านภาษาอังกฤษแล้วพระนิสิตพบคำศัพท์ที่ไม่คุ้นเคย ท่านก็สามารถใช้วิธีการคาดเดาความหมายจากองค์ประกอบของคำศัพท์คือ อุปสรรค (Prefix) ปัจจัย (Suffix) และรากศัพท์ (Root) ได้</p> <p>When my student monks come across with an unfamiliar word while reading , they are able to guess its meaning from the prefix, suffix, and root</p>			
10.	<p>เมื่อพระนิสิตอ่านเนื้อเรื่องจบ ท่านสามารถเขียนบทสรุปใจความสำคัญได้</p> <p>After reading my student monks can write a summary to better understand the main idea.</p>			
11.	<p>พระนิสิตได้เรียนรู้คำศัพท์และวลีใหม่ๆหลายคำ ที่ใช้ในแวดวงพระพุทธศาสนาซึ่งไม่เคยทราบมาก่อนหน้านี้</p> <p>My student monks have learned new vocabulary and phrases commonly used in Buddhism that they did not know before.</p>			

12.	ตัวอย่างไวยากรณ์ช่วยในการเรียนไวยากรณ์ภาษาอังกฤษในบริบทได้อย่างดี The examples in the grammar sections help my student monks better learn the grammar in context.				
13.	เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อพระนิสิตที่จะนำไปใช้เผยแผ่พระพุทธศาสนาในอนาคต The content, vocabulary, and grammar provided in these materials are useful for my student monks' future use in disseminating Buddhism.				
14.	เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อการศึกษาต่อในสายพระพุทธศาสนานานาชาติของพระนิสิตในระดับสูงในอนาคต The content, vocabulary, and grammar are useful to further my student monks' education in internal context in the future.				
15.	กิจกรรมต่างๆในสื่อการอ่านเล่มนี้ทำให้พระนิสิตเห็นคุณค่าของความรู้และการนำภาษาอังกฤษไปใช้จริงในชีวิตของพระภิกษุสงฆ์ The activities in these materials encourage my student monks to see the value of knowledge and the real use of English in their monastic life.				

#### ข้อเสนอแนะเพิ่มเติม

คำแนะนำและข้อเสนอแนะเพิ่มเติมของท่านจักเป็นประโยชน์ยิ่งในการพัฒนาสื่อการอ่านตามแนวการสอนแบบเน้นเนื้อหาเพื่อเสริมสร้างความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิตในลำดับต่อไป



**APPENDIX H The experts' evaluation of the needs analysis questionnaires**

No.	Criteria for validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
1.	Objectives of the questionnaire (Please see the attached document)	+1	+1	+1	1.0	accept
2.	The congruence of participant's personal data to be obtained					
	2.1 Age	+1	+1	+1	1.0	accept
	2.2 Length of ordination	+1	+1	+1	1.0	accept
	2.3 Education background & religious background	+1	+1	+1	1.0	accept
	2.4 Length of studying English /teaching English/ or organizing English course	+1	+1	+1	1.0	accept
	2.5 Level of English competency as perceived by the participants	+1	+1	+1	1.0	accept
	2.6 Level of Buddhist knowledge as perceived by the participants	+1	+1	+1	1.0	accept
3.	The content, activity, and the needs in developing the materials (Please see part 2)					
	3.1 The objective of learning English/ teaching English/ and organizing English course	+1	+1	+1	1.0	accept
	3.2 Preferred physical aspects in the materials	+1	0	+1	0.67	accept
	3.3 Preferred task type in the materials	+1	0	+1	0.67	accept

4.	<p>Criteria of rating the needs and/or wants</p> <p>The use of four-points Likert's scales in part 2 of the questionnaire and the associated meaning are as follows:</p> <p>4 = strongly agree/ like very much</p> <p>3 = agree/ like</p> <p>2 = disagree/ dislike</p> <p>1 = strongly disagree/ dislike very much</p>	+1	+1	+1	1.0	accept
5.	<p>Preferred reading topics in each conceptual theme of the Triple Gem</p> <p>3.1 The Buddha</p> <p>3.2 The Dhamma</p> <p>3.3 The Sangha</p>	+1	+1	+1	1.0	accept
		+1	0	+1	0.67	accept
		+1	+1	+1	1.0	accept
6.	<p>Criteria of rating the needs and/or wants</p> <p>The use of checkbox in part 3 of the question</p>	0	+1	+1	0.67	accept

## APPENDIX I The experts' evaluation of the sample lesson units of student workbook

No.	Criteria for validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
<b>1.</b>	<b>The content</b>					
1.1	The content is aligned to learning objectives.	+1	+1	+1	1.0	accept
1.2	Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	+1	+1	+1	1.0	accept
1.3	The content is in accordance with background knowledge and experiences of the student monks.	+1	+1	+1	1.0	accept
1.4	The content is culled from authentic sources.	+1	+1	+1	1.0	accept
<b>2.</b>	<b>The organization of content</b>	+1	+1	+1	1.0	accept
2.1	The sequence of the units is logical.	+1	+1	+1	1.0	accept
2.2	The content is divided into sections and subsections.	+1	+1	+1	1.0	accept
2.3	Clear numbering.	+1	+1	+1	1.0	accept
2.4	There is a link between sections and units in each unit.	+1	+1	+1	1.0	accept
2.5	The length of each unit is appropriate keeping in view of the theme and title.	+1	+1	+1	1.0	accept
<b>3.</b>	<b>The presentation of content</b>					
3.1	The important points of content are highlighted for easy references.	+1	+1	+1	1.0	accept
3.2	The illustrations included in the text are clear and help create interests increase comprehension and retention of information/ knowledge.	+1	+1	+1	1.0	accept
3.3	An adequate review section and exercise are included.	+1	+1	+1	1.0	accept
3.4	An adequate vocabulary list or glossary is included.	+1	+1	+1	1.0	accept
3.5	The grammar point presented with brief and easy examples and explanation.	+1	+1	+1	1.0	accept
3.6	The sources are given for further study.	+1	+1	0	0.67	accept
<b>4.</b>	<b>The language use</b>					
4.1	The language used in the materials authentic.	+1	+1	+1	1.0	accept

4.2	The language used is at the right level for the student monks' current English proficiency.	+1	+1	0	0.67	accept
4.3	The instructions are clear and easy to follow.	+1	+1	+1	1.0	accept
4.4	The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	+1	+1	+1	1.0	accept
4.5	The vocabulary and expression in the texts is commonly used in the religious field.	+1	+1	+1	1.0	accept
<b>5.</b>	<b>The activities applied</b>					
5.1	The activities incorporate individual, pair, and group work.	+1	+1	+1	1.0	accept
5.2	Activities are appropriate to unit objectives and reading strategies.	+1	+1	+1	1.0	accept
5.3	Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.	+1	+1	+1	1.0	accept
5.4	Activities help student monks to master in using reading strategies.	+1	+1	+1	1.0	accept
5.5	The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	+1	+1	+1	1.0	accept
5.6	Model answers are provided in the exercises.	+1	+1	+1	1.0	accept
<b>6.</b>	<b>The layout and design</b>	+1	+1	+1	1.0	accept
6.1	The materials are organized effectively.	+1	+1	+1	1.0	accept
6.2	The design of the cover page is attractive and appealing.	+1	+1	+1	1.0	accept
6.3	The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	+1	+1	0	0.67	accept
6.4	The layout and design are appropriate and clear for reading.	+1	+1	+1	1.0	accept
6.5	The page number included in the materials is clear and easy to be noticed.	+1	+1	+1	1.0	accept
6.6	Spacing between lines are aligned properly.	+1	+1	0	0.33	accept
6.7	Enough space is provided for writing useful information or the answers.	+1	+1	+1	1.0	accept

## APPENDIX J The experts' evaluation of teachers' manual

No.	Criteria for validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
<b>1.</b>	<b>The content</b>					
1.1	The content is aligned to learning objectives.	+1	+1	+1	1.0	accept
1.2	Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	+1	+1	+1	1.0	accept
1.3	The content is in accordance with background knowledge and experiences of the student monks.	+1	+1	+1	1.0	accept
1.4	The content is culled from authentic sources.	+1	+1	+1	1.0	accept
<b>2.</b>	<b>The organization of content</b>	+1	+1	+1	1.0	accept
2.1	The sequence of the units is logical.	+1	+1	+1	1.0	accept
2.2	The content is divided into sections and subsections.	+1	+1	+1	1.0	accept
2.3	Clear numbering.	+1	+1	+1	1.0	accept
2.4	There is a link between sections and units in each unit.	+1	+1	+1	1.0	accept
2.5	The length of each unit is appropriate keeping in view of the theme and title.	+1	+1	+1	1.0	accept
<b>3.</b>	<b>The presentation of content</b>					
3.1	The important points of content are highlighted for easy references.	+1	+1	+1	1.0	accept
3.2	The illustrations included in the text are clear and help create interests increase comprehension and retention of information/ knowledge.	+1	+1	+1	1.0	accept
3.3	An adequate review section and exercise are included.	+1	+1	+1	1.0	accept
3.4	An adequate vocabulary list or glossary is included.	+1	+1	+1	1.0	accept

3.5	The grammar point presented with brief and easy examples and explanation.	+1	+1	+1	1.0	accept
3.6	The sources are given for further study.	+1	+1	0	0.67	accept
4.	<b>The language use</b>					
4.1	The language used in the materials authentic.	+1	+1	+1	1.0	accept
4.2	The language used is at the right level for the student monks' current English proficiency.	+1	+1	0	0.67	accept
4.3	The instructions are clear and easy to follow.	+1	+1	+1	1.0	accept
4.4	The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	+1	+1	+1	1.0	accept
4.5	The vocabulary and expression in the texts is commonly used in the religious field.	+1	+1	+1	1.0	accept
5.	<b>The activities applied</b>					
5.1	The activities incorporate individual, pair, and group work.	+1	+1	+1	1.0	accept
5.2	Activities are appropriate to unit objectives and reading strategies.	+1	+1	+1	1.0	accept
5.3	Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.	+1	+1	+1	1.0	accept
5.4	Activities help student monks to master in using reading strategies.	+1	+1	+1	1.0	accept
5.5	The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	+1	+1	+1	1.0	accept
5.6	Model answers are provided in the exercises.	+1	+1	+1	1.0	accept
6.	<b>The layout and design</b>					
6.1	The materials are organized effectively.	+1	+1	+1	1.0	accept

6.2	The design of the cover page is attractive and appealing.	+1	+1	+1	1.0	accept
6.3	The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	+1	+1	0	0.67	accept
6.4	The layout and design are appropriate and clear for reading.	+1	+1	+1	1.0	accept
6.5	The page number included in the materials is clear and easy to be noticed.	+1	+1	+1	1.0	accept
6.6	Spacing between lines are aligned properly.	+1	+1	0	0.67	accept
6.7	Enough space is provided for writing useful information or the answers.	+1	+1	+1	1.0	accept
<b>7.</b>	<b>Teachers' manual</b>					
7.1	The teachers' manual contains the introduction of how the materials can be used to the utmost advantage.	+1	+1	+1	1.0	accept
7.2	The teachers' manual provides accurate and adequate answers.	+1	+1	+1	1.0	accept
7.3	The suggested lesson plans incorporated with the teachers' manual provide cleared steps of explicit strategy instruction.	+1	+1	+1	1.0	accept
7.4	The suggest lesson plans are a useful help for novice teachers.	+1	+1	+1	1.0	accept
7.5	The teaching dialogues are adequate to cover all aspects of the content that needs to be explained.	+1	+1	+1	1.0	accept
7.6	The time allotment for each instruction step is appropriated.	+1	+1	+1	1.0	accept
7.7	The steps in the lesson plans are in accordance with the features of the materials.	+1	+1	+1	1.0	accept

**APPENDIX K The experts' evaluation of the whilst-use evaluation questionnaire for student monks**

No	Criteria for Validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
<b>1.</b>	<b>The content</b>					
1.1	สอดคล้องกับวัตถุประสงค์การเรียนรู้และความต้องการ The content is aligned to learning objectives.	+1	+1	+1	1.0	accept
1.2	แต่ละหน่วยการเรียนรู้มีองค์ประกอบครบถ้วน ได้แก่ วัตถุประสงค์ ตัวอย่างคำตอบของกิจกรรมและแบบฝึกหัด Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	+1	+1	+1	1.0	accept
1.3	สอดคล้องกับความรู้เดิมและประสบการณ์ของพระนิสิต The content is in accordance with background knowledge and experiences of the student monks.	+1	+1	+1	1.0	accept
1.4	มีความสมจริง The content is culled from authentic sources.	+1	+1	+1	1.0	accept
<b>2.</b>	<b>The organization of content</b>					
2.1	การจัดลำดับเนื้อหาแต่ละบทมีความเหมาะสม The sequence of the units is logical.	+1	+1	+1	1.0	accept
2.2	เนื้อหาแบ่งเป็นตอนหลัก และตอนย่อย The content is divided into sections and subsections.	+1	+1	+1	1.0	accept
2.3	มีตัวเลขกำกับชัดเจน Clear numbering.	+1	+1	+1	1.0	accept
2.4	เนื้อหาเชื่อมโยงภายในบทเรียนเดียวกันและระหว่างบทเรียน	+1	+1	+1	1.0	accept



	There is a link between sections and units in each unit.					
2.5	ความยาวของเนื้อหาเหมาะสมกับหัวข้อหรือบทเรียนนั้นๆ The length of each unit is appropriate keeping in view of the theme and title.	+1	+1	+1	1.0	accept
<b>3.</b>	<b>The presentation of content</b>					
3.1	เนื้อหาและประเด็นที่สำคัญในบทเรียนนั้นๆ ชัดเจน สละจุดตา The important points of content are highlighted for easy references.	+1	+1	+1	1.0	accept
3.2	ภาพประกอบของเนื้อหาในบทเรียนเสริมสร้างความสนใจ ความเข้าใจ และการจดจำเนื้อหาและความรู้ The illustrations included in the text to promote interests, comprehension, and retention of information/ knowledge.		+1	+1	1.0	accept
3.3	มีบทสรุปและกิจกรรมอย่างเพียงพอ An adequate review section and exercise are included.	+1	+1	+1	1.0	accept
3.4	มีคำศัพท์หรืออภิธานศัพท์ประกอบเพียงพอ An adequate vocabulary list or glossary is included.	+1	+1	+1	1.0	accept
3.5	มีคำอธิบายไวยากรณ์พร้อมตัวอย่างที่สั้นกระชับและง่ายต่อการเข้าใจ The grammar points presented with brief and easy examples and explanation.	+1	+1	+1	1.0	accept
3.6	มีอ้างอิงแหล่งที่มาเพื่อการศึกษาเพิ่มเติม The sources are given for further study.	0	+1	+1	0.67	accept
<b>4.</b>	<b>The language use</b>					
4.1	ภาษาที่ใช้ในสื่อการอ่านมีความสมจริง The language used in the materials is authentic.	+1	+1	+1	1.0	accept

4.2	ภาษาที่ใช้เหมาะสมกับระดับ ความสามารถทางภาษาอังกฤษของพระ นิสิต The language used is at the right level for the student monks' current English proficiency.	0	+1	+1	0.67	accept
4.3	คำชี้แจงสำหรับกิจกรรมต่างๆชัดเจน และง่ายต่อการทำกิจกรรม The instructions are clear and easy to follow.	+1	+1	+1	1.0	accept
4.4	คำศัพท์และสำนวนที่ใช้เหมาะสมกับ ความรู้เดิมและประสบการณ์ของพระ นิสิต The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	+1	+1	+1	1.0	accept
4.5	คำศัพท์และสำนวนที่ใช้ เป็นคำศัพท์และ สำนวนที่ใช้ในวงการพระพุทธศาสนา The vocabulary and expression in the texts is commonly used in the religious field.	+1	+1	+1	1.0	accept
<b>5.</b>	<b>The activities applied</b>					
5.1	มีกิจกรรมแบบเดี่ยว แบบคู่ และแบบ กลุ่ม The activities incorporate individual, pair, and group work.	+1	+1	+1	1.0	accept
5.2	สอดคล้องกับจุดประสงค์การเรียนรู้และ กลวิธีการอ่านนั้นๆ Activities are appropriate to unit objectives and reading strategies.	+1	+1	+1	1.0	accept
5.3	มีกิจกรรมและแบบฝึกหัดที่เสริมสร้าง ความสนใจ ความเข้าใจ และการจดจำ เนื้อหาและความรู้ Activities are included in the text to promote interests, comprehension, and retention of information/ knowledge.	+1	+1	+1	1.0	accept

5.4	กิจกรรมเสริมสร้างให้พระนิสิต เชี่ยวชาญการใช้กลวิธีการอ่าน Activities help student monks to master in using reading strategies.	+1	+1	+1	1.0	accept
5.5	กิจกรรมเสริมสร้างให้พระนิสิตเห็น ประโยชน์ของความรู้และการนำไปใช้ จริงในชีวิตพระภิกษุสงฆ์ The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	+1	+1	+1	1.0	accept
5.6	มีตัวอย่างการทำกิจกรรม Model answers are provided in the exercises.	+1	+1	+1	1.0	accept
<b>6.</b>	<b>The layout and design</b>					
6.1	การจัดรูปเล่มเหมาะสมกับการอ่าน The materials are organized effectively.	+1	+1	+1	1.0	accept
6.2	รูปแบบปกสวยงาม สะดุดตา The design of the cover page is attractive and appealing.	+1	+1	+1	1.0	accept
6.3	ขนาดตัวอักษรของเนื้อหา หัวข้อหลัก หัวข้อย่อย คำอธิบาย และอื่นๆเหมาะสม The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	+1	+1	0	0.67	accept
6.4	หมายเลขหน้ากำกับชัดเจนและสังเกตเห็น ง่าย The page number included in the materials is clear and easy to be noticed.	+1	+1	+1	1.0	accept
6.5	ระยะห่างระหว่างบรรทัดเหมาะสม Spacing between lines is aligned properly.	0	+1	+1	0.67	accept
6.6	มีเนื้อที่ว่างสำหรับจดเนื้อหาและคำตอบ Enough space is provided for writing useful information or the answers.	+1	+1	+1	1.0	accept

**APPENDIX L The experts' evaluation of the whilst-use evaluation questionnaire for English teachers**

No.	Criteria for Validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
<b>1.</b>	<b>The content</b>					
1.1	สอดคล้องกับวัตถุประสงค์การเรียนรู้และความต้องการ The content is aligned to learning objectives.	+1	+1	+1	1.0	accept
1.2	แต่ละหน่วยการเรียนรู้มีองค์ประกอบครบถ้วน ได้แก่ วัตถุประสงค์ ตัวอย่างคำตอบของกิจกรรมและแบบฝึกหัด Each unit has clear introduction, purposes, benefits, and steps of using the reading strategy.	+1	+1	+1	1.0	accept
1.3	สอดคล้องกับความรู้เดิมและประสบการณ์ของพระนิสิต The content is in accordance with background knowledge and experiences of the student monks.	+1	+1	+1	1.0	accept
1.4	มีความสมจริง The content is culled from authentic sources.	+1	+1	+1	1.0	accept
<b>2.</b>	<b>The organization of content</b>					
2.1	การจัดลำดับเนื้อหาแต่ละบทมีความเหมาะสม The sequence of the units is logical.	+1	+1	+1	1.0	accept
2.2	เนื้อหาแบ่งเป็นตอนหลัก และตอนย่อย The content is divided into sections and subsections.	+1	+1	+1	1.0	accept
2.3	มีตัวเลขกำกับชัดเจน Clear numbering.	+1	+1	+1	1.0	accept
2.4	เนื้อหาเชื่อมโยงภายในบทเรียนเดียวกันและระหว่างบทเรียน There is a link between sections and units in each unit.	+1	+1	+1	1.0	accept

2.5	ความยาวของเนื้อหาเหมาะสมกับหัวข้อหรือบทเรียนนั้นๆ The length of each unit is appropriate keeping in view of the theme and title.	+1	+1	+1	1.0	accept
<b>3.</b>	<b>The presentation of content</b>					
3.1	เนื้อหาและประเด็นที่สำคัญในบทเรียนนั้นๆ ชัดเจน สะดุดตา The important points of content are highlighted for easy references.	+1	+1	+1	1.0	accept
3.2	ภาพประกอบของเนื้อหาในบทเรียนเสริมสร้างความสนใจ ความเข้าใจ และการจดจำเนื้อหาและความรู้ The illustrations included in the text to promote interests, comprehension, and retention of information/ knowledge.	+1	+1	+1	1.0	accept
3.3	มีบทสรุปและกิจกรรมอย่างเพียงพอ An adequate review section and exercise are included.	+1	+1	+1	1.0	accept
3.4	มีคำศัพท์หรืออภิธานศัพท์ประกอบเพียงพอ An adequate vocabulary list or glossary is included.	+1	+1	+1	1.0	accept
3.5	มีคำอธิบายไวยากรณ์พร้อมตัวอย่างที่สั้นกระชับและง่ายต่อการเข้าใจ The grammar points presented with brief and easy examples and explanation.	+1	+1	+1	1.0	accept
3.6	มีอ้างอิงแหล่งที่มาเพื่อการศึกษาเพิ่มเติม The sources are given for further study.	0	+1	+1	0.67	accept
<b>4.</b>	<b>The language use</b>					
4.1	ภาษาที่ใช้ในสื่อการอ่านมีความสมจริง The language used in the materials is authentic.	+1	+1	+1	1.0	accept
4.2	ภาษาที่ใช้เหมาะสมกับระดับความสามารถทางภาษาอังกฤษของพระนิสิต	0	+1	+1	0.67	accept

	The language used is at the right level for the student monks' current English proficiency.					
4.3	คำชี้แจงสำหรับกิจกรรมต่างๆชัดเจนและ ง่ายต่อการทำกิจกรรม The instructions are clear and easy to follow.	+1	+1	+1	1.0	accept
4.4	คำศัพท์และสำนวนที่ใช้เหมาะสมกับ ความรู้เดิมและประสบการณ์ของพระนิสิต The vocabulary and expression used is relevant to student monks' background knowledge and experiences.	+1	+1	+1	1.0	accept
4.5	คำศัพท์และสำนวนที่ใช้ เป็นคำศัพท์และ สำนวนที่ใช้ในวงการพระพุทธศาสนา The vocabulary and expression in the texts are commonly used in the religious field.	+1	+1	+1	1.0	accept
<b>5.</b>	<b>The activities applied</b>					
5.1	มีกิจกรรมแบบเดี่ยว แบบคู่ และแบบกลุ่ม The activities incorporate individual, pair, and group work.	+1	+1	+1	1.0	accept
5.2	สอดคล้องกับจุดประสงค์การเรียนรู้และ กลวิธีการอ่านนั้นๆ Activities are appropriate to unit objectives and reading strategies.	+1	+1	+1	1.0	accept
5.3	มีกิจกรรมและแบบฝึกหัดที่เสริมสร้าง ความสนใจ ความเข้าใจ และการจดจำ เนื้อหาและความรู้ Activities are included in the text to promote interests, comprehension, and retention of information/knowledge.	+1	+1	+1	1.0	accept
5.4	กิจกรรมเสริมสร้างให้พระนิสิตเชี่ยวชาญ การใช้กลวิธีการอ่าน Activities help student monks to master in using reading strategies.	+1	+1	+1	1.0	accept

5.5	กิจกรรมเสริมสร้างให้พระนิสิตเห็นประโยชน์ของความรู้และการนำไปใช้จริงในชีวิตพระภิกษุสงฆ์ The activities promote the student monks to see the value of knowledge and the real use in their monastic life.	+1	+1	+1	1.0	accept
5.6	มีตัวอย่างการทำกิจกรรม Model answers are provided in the exercises.	+1	+1	+1	1.0	accept
<b>6.</b>	<b>The layout and design</b>					
6.1	การจัดรูปเล่มเหมาะสมกับการอ่าน The materials are organized effectively.	+1	+1	+1	1.0	accept
6.2	รูปแบบปกสวยงาม สะดุดตา The design of the cover page is attractive and appealing.	+1	+1	+1	1.0	accept
6.3	ขนาดตัวอักษรของเนื้อหา หัวข้อหลัก หัวข้อย่อย คำอธิบาย และอื่นๆเหมาะสม The font size of the main text, unit headings, sub-headings, captions, etc., are appropriate.	+1	+1	0	0.67	accept
6.4	หมายเลขหน้ากำกับชัดเจนและสังเกตเห็นง่าย The page number included in the materials is clear and easy to be noticed.	+1	+1	+1	1.0	accept
6.5	ระยะห่างระหว่างบรรทัดเหมาะสม Spacing between lines is aligned properly.	0	+1	+1	0.67	accept
6.6	มีเนื้อที่ว่างสำหรับจดเนื้อหาและคำตอบ Enough space is provided for writing useful information or the answers.	+1	+1	+1	1.0	accept
<b>7.</b>	<b>Teachers' manual</b>					
7.1	คู่มือครูมีบทนำอธิบายการใช้สื่อการเรียน เพื่อให้ได้ประโยชน์อย่างสูงสุด The teachers' manual contains the introduction of how the materials can be used to the utmost advantage.	+1	+1	+1	1.0	accept

7.2	คู่มือครูมีคำตอบที่ถูกต้องและเพียงพอ The teachers' manual provides accurate and adequate answers.	+1	+1	+1	1.0	accept
7.3	แผนการสอนแนะนำที่มีในคู่มือครูมีการสอนกลวิธีการอ่านแบบชัดเจน The suggested lesson plans incorporated with the teachers' manual provide clear steps of explicit strategy instruction.	+1	+1	+1	1.0	accept
7.4	ระยะเวลาในการสอนในแต่ละขั้นเหมาะสม The time allotment for each instruction step is appropriate.	+1	+1	+1	1.0	accept
7.5	คำพูดที่ใช้สอนในแผนการสอนครอบคลุมเนื้อหาประเด็นหลักที่จะต้องอธิบาย The teaching dialogues are adequate to cover all aspects of the content that needs to be explained.	+1	+1	+1	1.0	accept
7.6	แผนการสอนแนะนำเป็นประโยชน์แก่ครูผู้ฝึกสอน The suggested lesson plans are a useful help for novice teachers.	+1	+1	+1	1.0	accept
7.7	ขั้นตอนต่างๆในแผนการสอนมีความสอดคล้องกับโครงสร้างของสื่อการอ่าน The steps in the lesson plans are in accordance with the features of the materials.	+1	+1	+1	1.0	accept



**APPENDIX M The experts' evaluation of the post-use evaluation questionnaire for student monks**

No.	Criteria for Validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
1.	<p>สื่อการอ่านเล่มนี้ช่วยให้ความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจดีขึ้นอย่างน่าพึงพอใจ</p> <p>Through these materials, my reading comprehension skill has satisfactorily improved.</p>	+1	+1	+1	1.0	accept
2.	<p>สื่อการอ่านเล่มนี้ช่วยให้สามารถเชื่อมโยงความรู้ใหม่ที่เป็นภาษาอังกฤษกับความรู้เดิมที่เคยเรียนมาเป็นภาษาไทยได้</p> <p>These materials help me connect new knowledge of English language to my background knowledge that I have learned in Thai</p>	+1	+1	+1	1.0	accept
3.	<p>ใจความหลักเรื่องพระรัตนตรัยของสื่อการอ่านเล่มนี้ ทำให้มีแรงจูงใจที่จะอ่านภาษาอังกฤษมากขึ้น เพราะเป็นเรื่องที่เกี่ยวข้องและสำคัญต่อชีวิตของพระภิกษุสงฆ์</p> <p>The theme of the Triple Gem causes me to have more motivation to read because the content is relevant and meaningful to Buddhist monks' life.</p>	0	+1	+1	0.67	accept
4.	<p>สื่อการอ่านเล่มนี้ช่วยให้สามารถอ่านบทความภาษาอังกฤษอื่นๆเกี่ยวกับพระพุทธศาสนาในอนาคต</p> <p>These materials help me a lot to read other English texts in religious field in the future.</p>	+1	+1	+1	1.0	accept
5.	<p>กิจกรรมนำเข้าสู่การอ่าน กิจกรรมระหว่างการอ่าน และกิจกรรมหลังการอ่านทำให้มี</p>	+1	+1	+1	1.0	accept

	<p>ความมั่นใจในการใช้กลวิธีการอ่านเพื่อความเข้าใจมากขึ้น</p> <p>The pre-reading, during-reading, and post-reading activities make me feel more confident to use reading strategies to comprehend the texts.</p>					
6.	<p>มีความมั่นใจในการอ่านหนังสือเรียน หนังสือทั่วไป บทความ จดหมายข่าว รายงาน วิทยานิพนธ์ ที่เกี่ยวข้องกับ พระพุทธศาสนา มากขึ้นกว่าแต่ก่อน</p> <p>I have more confidence when reading religious textbooks, books, articles, newsletters, report, thesis , etc.</p>	+1	+1	+1	1.0	accept
7.	<p>ก่อนอ่านเรื่องสามารถคาดเดาเนื้อหาที่จะอ่าน โดยการดูจากข้อมูลที่มี เช่น ชื่อเรื่อง หัวเรื่อง ภาพประกอบ คำสำคัญ เป็นต้น</p> <p>Before reading I know how to make prediction from available clues such as titles, headings, illustrations, keywords, etc.</p>	+1	+1	+1	1.0	accept
8.	<p>เมื่ออ่านภาษาอังกฤษแล้วพบคำศัพท์หรือวลีที่ไม่คุ้นเคย ก็สามารถใช่วิธีการคาดเดาความหมายจากบริบทได้</p> <p>When I confront with an unfamiliar word or phrase while reading, I am able to guess its meaning from the context.</p>	+1	+1	+1	1.0	accept
9.	<p>เมื่ออ่านภาษาอังกฤษแล้วพบคำศัพท์ที่ไม่คุ้นเคย ก็สามารถใช่วิธีการคาดเดาความหมายจากองค์ประกอบของคำศัพท์ คือ อุปสรรค (Prefix) บังท้าย (Suffix) และรากศัพท์ (Root) ได้</p> <p>When I come across with an unfamiliar word while reading , I am able to guess its meaning from the prefix, suffix, and root</p>	+1	+1	+1	1.0	accept

10.	เมื่ออ่านเนื้อเรื่องจบ สามารถเขียนบทสรุปใจความสำคัญได้ After reading I can write a summary to better understand the main idea.	+1	+1	+1	1.0	accept
11.	ได้เรียนรู้คำศัพท์และวลีใหม่ๆหลายคำที่ใช้ในแวดวงพระพุทธศาสนาซึ่งไม่เคยทราบมาก่อนหน้านี้ I have learned new vocabulary commonly used in Buddhism that I did not know before.	+1	+1	+1	1.0	accept
12.	ตัวอย่างไวยากรณ์ช่วยในการเรียนไวยากรณ์ภาษาอังกฤษในบริบทได้อย่างดี The examples in the grammar sections help me better learn the grammar in context.	+1	+1	+1	1.0	accept
13.	เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อการนำไปใช้เผยแผ่พระพุทธศาสนาในอนาคต The content, vocabulary, and grammar provided in these materials are useful for my future use in disseminating Buddhism.	+1	+1	+1	1.0	accept
14.	เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อการศึกษาคือในสายพระพุทธศาสนานานาชาติในระดับสูงในอนาคต The content, vocabulary, and grammar are useful to further my student monks' education in internal context in the future.	+1	+1	+1	1.0	accept
15.	กิจกรรมต่างๆในหนังสือเล่มนี้ทำให้เห็นคุณค่าของความรู้และการนำภาษาอังกฤษไปใช้จริงในชีวิตของพระภิกษุสงฆ์ The activities in these materials encourage me to see the value of knowledge and the real use of English in my monastic life.	0	+1	+1	0.67	accept

**APPENDIX N The experts' evaluation of the post-use evaluation questionnaire for English teachers**

No	Criteria for Validating	Experts			$\bar{x}$	Interpretation
		1	2	3		
1.	<p>สื่อการอ่านเล่มนี้ช่วยให้ความสามารถในการอ่านภาษาอังกฤษเพื่อความเข้าใจของพระนิสิตดีขึ้นอย่างน่าพึงพอใจ</p> <p>Through these materials, my student monks' reading comprehension skill has satisfactorily improved.</p>	+1	+1	+1	1.0	accept
2.	<p>สื่อการอ่านเล่มนี้ช่วยให้พระนิสิตสามารถเชื่อมโยงความรู้ใหม่ที่เป็นภาษาอังกฤษกับความรู้เดิมที่ท่านเรียนรู้มาเป็นภาษาไทยได้</p> <p>These materials help my student monks connect new knowledge of English language to their background knowledge that they have learned in Thai</p>	+1	+1	+1	1.0	accept
3.	<p>ใจความหลักเรื่องพระรัตนตรัยของสื่อการอ่านเล่มนี้ ทำให้พระนิสิตมีแรงจูงใจที่จะอ่านภาษาอังกฤษมากขึ้น เพราะเป็นเรื่องที่เกี่ยวข้องและสำคัญต่อชีวิตของพระภิกษุสงฆ์</p> <p>The theme of the Triple Gem causes my student monks to have more</p>	0	+1	+1	0.67	accept

	motivation to read because the content is relevant and meaningful to Buddhist monks' life.					
4.	<p>สื่อการอ่านเล่มนี้ช่วยให้พระนิสิตสามารถอ่านบทความภาษาอังกฤษอื่นๆเกี่ยวกับพระพุทธศาสนาในอนาคต</p> <p>These materials help my student monks a lot to read other English texts in religious field in the future.</p>	+1	+1	+1	1.0	accept
5.	<p>กิจกรรมนำเข้าสู่การอ่าน กิจกรรมระหว่างการอ่าน และกิจกรรมหลังการอ่านทำให้พระนิสิตมีความมั่นใจในการใช้กลวิธีการอ่านเพื่อความเข้าใจมากขึ้น</p> <p>The pre-reading, during-reading, and post-reading activities make my student monks feel more confident to use reading strategies to comprehend the texts.</p>	+1	+1	+1	1.0	accept
6.	<p>พระนิสิตมีความมั่นใจในการอ่านหนังสือเรียน หนังสือทั่วไป บทความ จดหมายข่าว รายงาน วิทยานิพนธ์ ที่เกี่ยวข้องกับพระพุทธศาสนาเพิ่มขึ้นกว่าเดิม</p> <p>My student monks have more confidence when they have to read religious textbooks, books, articles, newsletters, report, thesis , etc.</p>	+1	+1	+1	1.0	accept

7.	<p>ก่อนอ่านเรื่องพระนิสิตสามารถคาดเดาเนื้อหาที่จะอ่าน โดยการดูจากข้อมูลที่มี เช่น ชื่อเรื่อง หัวเรื่อง ภาพประกอบ คำสำคัญ เป็นต้น</p> <p>Before reading my student monks know how to make prediction from available clues such as titles, headings, illustrations, keywords, etc.</p>	+1	+1	+1	1.0	accept
8.	<p>เมื่ออ่านภาษาอังกฤษแล้วพระนิสิตพบคำศัพท์หรือวลีที่ไม่คุ้นเคย ท่านก็สามารถใช้วิธีการคาดเดาความหมายจากบริบทได้</p> <p>When my student monks confront with an unfamiliar word or phrase while reading, they are able to guess its meaning from the context.</p>	+1	+1	+1	1.0	accept
9.	<p>เมื่ออ่านภาษาอังกฤษแล้วพระนิสิตพบคำศัพท์ที่ไม่คุ้นเคย ท่านก็สามารถใช้วิธีการคาดเดาความหมายจากองค์ประกอบของคำศัพท์ คือ อุปสรรค (Prefix) ปัจจัย (Suffix) และรากศัพท์ (Root) ได้</p> <p>When my student monks come across with an unfamiliar word while reading , they are able to guess its meaning from the prefix, suffix, and root</p>	+1	+1	+1	1.0	accept

10.	<p>เมื่อพระนิสิตอ่านเนื้อเรื่องจบ ท่านสามารถเขียนบทสรุปใจความสำคัญได้</p> <p>After reading my student monks can write a summary to better understand the main idea.</p>	+1	+1	+1	1.0	accept
11.	<p>พระนิสิตได้เรียนรู้คำศัพท์และวลีใหม่ๆ หลายคำ ที่ใช้ในแวดวงพระพุทธศาสนาซึ่งไม่เคยทราบมาก่อนหน้านี้</p> <p>My student monks have learned new vocabulary and phrases commonly used in Buddhism that they did not know before.</p>	+1	+1	+1	1.0	accept
12.	<p>ตัวอย่างไวยากรณ์ช่วยในการเรียนไวยากรณ์ภาษาอังกฤษในบริบทได้อย่างดี</p> <p>The examples in the grammar sections help my student monks better learn the grammar in context.</p>	+1	+1	+1	1.0	accept
13.	<p>เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อพระนิสิตที่จะนำไปใช้เผยแพร่พระพุทธศาสนาในอนาคต</p> <p>The content, vocabulary, and grammar provided in these materials are useful for my student monks' future use in disseminating Buddhism.</p>	+1	+1	+1	1.0	accept

14.	<p>เนื้อหา คำศัพท์ และไวยากรณ์ในสื่อการอ่านเล่มนี้เป็นประโยชน์ต่อการศึกษาต่อในสายพระพุทธศาสนานานาชาติของพระนิสิตในระดับสูงในอนาคต</p> <p>The content, vocabulary, and grammar are useful to further my student monks' education in internal context in the future.</p>	+1	+1	+1	1.0	accept
15.	<p>กิจกรรมต่างๆในสื่อการอ่านเล่มนี้ทำให้พระนิสิตเห็นคุณค่าของความรู้และการนำภาษาอังกฤษไปใช้จริงในชีวิตของพระภิกษุสงฆ์</p> <p>The activities in these materials encourage my student monks to see the value of knowledge and the real use of English in their monastic life.</p>	0	+1	+1	0.67	accept



## APPENDIX O Personal preference towards the topics of English content-based reading materials

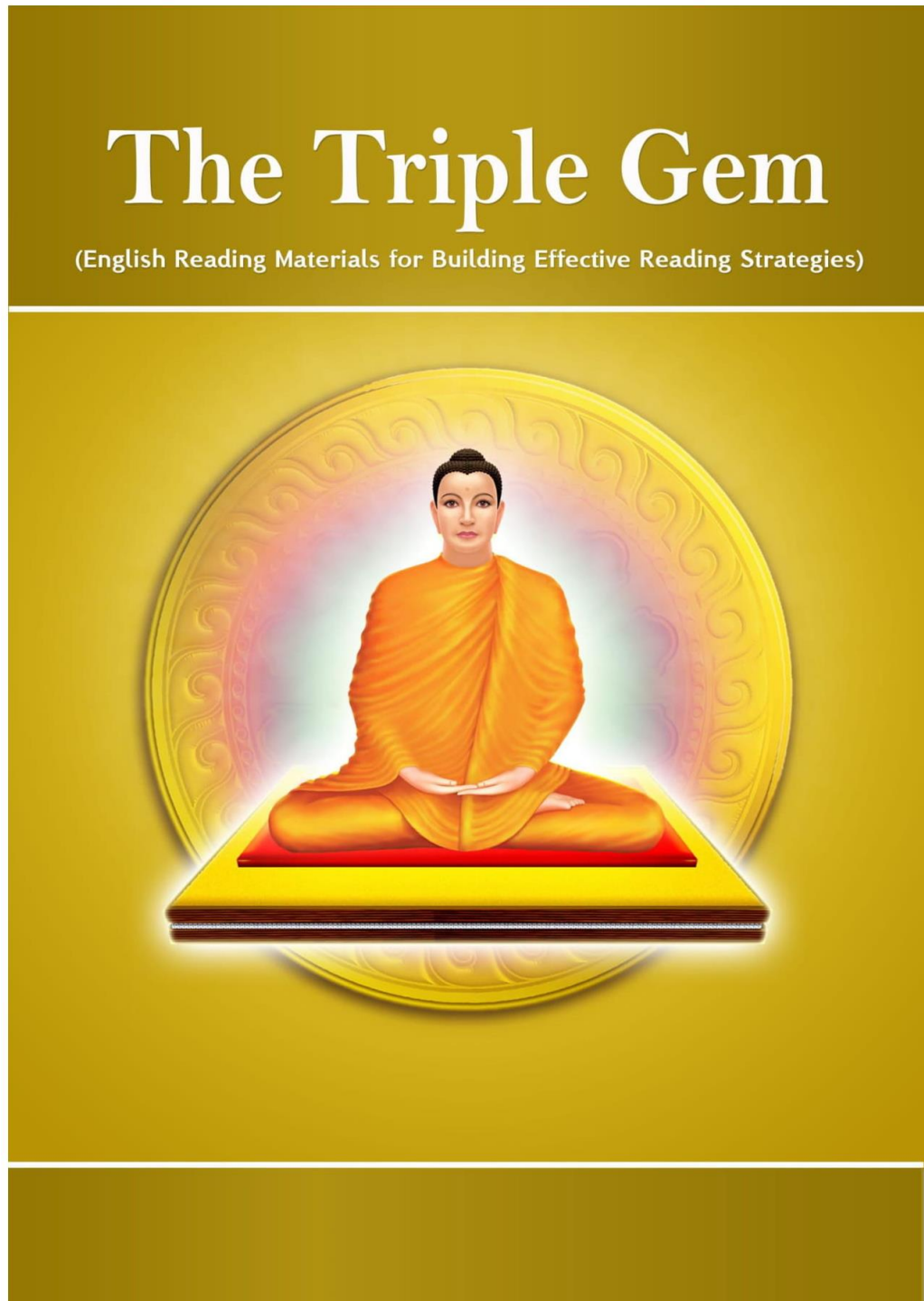
Reading Topics	Student Monks (n = 138)	English Teachers (n = 6)	Course Administrators (n = 10)	Total (n = 154)
<b>1. The Buddha</b>				
<b>1.1 The Lord Gotama Buddha's Biography</b>				
His birth	34 (24.6%)	2 (33.3%)	2 (20.0%)	38 (24.7%)
Self-enlightenment	42 (30.4%)	1 (16.7%)	1 (10.0%)	44 (28.6%)
The first Dhamma lecture	53 (38.4%)	3 (50.0%)	4 (40.0%)	60 (39.0%)
His attainment of complete Nibbana	7 (5.1%)	-	2 (20.0%)	9 (5.8%)
Others	2 (1.4%)	-	1 (10.0%)	3 (1.9%)
<b>1.2 The Ten Jataka Tales: Ten birth stories of the Buddha</b>				
Temiya Jataka (the perfection of renunciation)	14 (10.1%)	-	2 (20.0%)	16 (10.4%)
Mahajanaka Jataka (the perfection of perseverance)	5 (3.6%)	-	1 (10.0%)	6 (3.9%)
Sama Jataka (the perfection of loving-kindness)	10 (7.2%)	-	-	10 (6.5%)
Nimi Jataka (the perfection of resolution)	1 (0.7%)	-	-	1 (0.6%)
Mahosatha Jataka (the perfection of wisdom)	60 (43.5%)	3 (50.0%)	6 (60.0%)	69 (44.8%)
Bhuridatta Jataka (the perfection of morality)	5 (3.6%)	-	-	5 (3.2%)
Canda Jataka (the perfection of forbearance)	4 (2.9%)	-	-	4 (2.6%)
Narada Jataka (the perfection of equanimity)	1 (0.7%)	-	-	1 (0.6%)
Vidhura Jataka (the perfection of truthfulness)	1 (0.7%)	-	-	1 (0.6%)
Vessantara Jataka (the perfection of charity)	37 (26.8%)	3 (50.0%)	1 (10.0%)	41 (26.6%)
<b>1.3 The important events in the Buddha's time</b>				
The Lord Buddha unveiled the three spheres of existence.	29 (21.0%)	1 (16.7%)	-	30 (19.5%)
The Lord Buddha turned people to have the right view.	60 (43.5%)	4 (66.7%)	7 (70.0%)	71 (46.1%)

An attempt to discredit the Lord Buddha	10 (7.2%)	-	-	10 (6.5%)
Important followers and people	39 (28.3%)	1 (16.7%)	3 (30.0%)	43 (27.9%)
Others	-	-	-	
<b>2. The Dhamma</b>				
<b>2.1 The important teachings</b>				
Dhammacakkappavattana Sutta	57 (41.3%)	5 (83.3%)	6 (60.0%)	68 (44.2%)
Ovada Patimokkha	31 (22.5%)	-	3 (30.0%)	34 (22.1%)
The Noble Eightfold Path	29 (21.0%)	1 (16.7%)	-	30 (19.5%)
Wholesome Course of Action	21 (15.2%)	-	1 (10.0%)	22 (14.3%)
Others	-	-	-	
<b>2.2 Fruits of good deeds</b>				
Fruits of Dhanna	38 (27.5%)	2 (33.3%)	1 (10.0%)	41 (26.6%)
Fruits of Sila	23 (16.7%)	-	3 (30.0%)	26 (16.9%)
Fruits of meditation	37 (26.8%)	3 (50.0%)	4 (40.0%)	44 (28.6%)
Fruits of believing in the Triple Gem	38 (27.5%)	1 (16.7%)	2 (20.0%)	41 (26.6%)
Others	2 (1.4%)	-	-	2 (1.3%)
<b>2.3 Fruits of bad deeds</b>				
Fruits of not giving	42 (30.4%)	2 (33.3%)	4 (40.0%)	48 (31.2%)
Fruits of not holding Sila	53 (38.4%)	2 (33.3%)	2 (20.0%)	57 (37%)
Fruits of not practicing meditation	12 (8.7%)	1 (16.7%)	1 (10.0%)	14 (9.1%)
Fruits of not believing in the Triple Gem	29 (21.0%)	1 (16.7%)	3 (30.0%)	33 (21.4%)
Others	2 (1.4%)	-	-	2 (1.3%)
<b>3. The Sangha</b>				
<b>3.1 Duties and responsibilities for Buddhist monks</b>				
General practice	68 (49.3%)	3 (50.0%)	8 (80.0%)	79 (51.3%)
Alms gathering	7 (5.1%)	-	-	7 (4.5%)
Cleaning	9 (6.5%)	-	1 (10.0%)	10 (6.5%)
Chanting and meditation	52 (37.7%)	3 (50.0%)	1 (10.0%)	56 (36.4%)
Others	2 (1.4%)	-	-	2 (1.3%)
<b>3.2 The fruits of monkhood</b>				
Low fruits of true monkhood	93 (67.4%)	4 (66.7%)	8 (80.0%)	105 (68.2%)
Intermediate fruits of true monkhood	17 (12.3%)	1 (16.7%)	-	18 (11.7%)
Higher fruits of true monkhood	26 (18.8%)	-	2 (20.0%)	29 (18.8%)
Others	2 (1.4%)	-	-	2 (1.3%)
<b>3.3 Monks in the Lord Buddha's time</b>				

Kondanna	28 (20.3%)	1 (16.7%)	-	29 (18.8%)
Moggallana	13 (9.4%)	1 (16.7%)	1 (10.0%)	15 (9.7%)
Sariputta	39 (28.3%)	-	2 (20.0%)	41 (26.6%)
Ananda	53 (38.4%)	4 (66.7%)	6 (60.0%)	63 (40.9%)
Others	5 (3.6%)	-	1 (10.0%)	6 (3.9%)



**APPENDIX P Cover of students' workbook**



## APPENDIX Q Letter of permission from the publisher

### AFTER YOU READ

#### A. Comprehension

##### I. Close Reading

Circle the word(s) that correctly completes the sentence.

1. The Lord Buddha set out for the Deer Park in order to save /punish the Pancavaggiya Ascetics.
2. Once the Lord Buddha approached, all five of them forgot /remembered their previous agreement.
3. The Five Ascetics thought that since the Lord Buddha no longer practiced self-mortification, He could /could not achieve meditative attainments.
4. It was on the 15th day of the 8th waxing /waning moon that the Lord Buddha gave the first Dhamma lecture.
5. When a Universal Monarch wants to extend his territory, he will drive his Precious Wheel /Dhamma Wheel and when the Lord Buddha wants to propagate His Teachings, He mobilizes the Dhamma Wheel.
6. The Lord Buddha's first Dhamma lecture caused hell-fire to be temporarily / permanently extinguished.

##### II. Main Ideas

Write the number of the paragraph that matches each main idea from the reading.

- Paragraph 1 gives the information about the Lord Buddha and His teaching.
- Paragraph 2 tells what the Five Ascetics planned to do when the Lord Buddha came.
- Paragraph 3 tells what the Five Ascetics really did when the Lord Buddha arrived.
- Paragraph 5 is about the turning of the Dhamma Wheel.
- Paragraph 6 explains the miraculous events caused by The Lord Buddha's first Dhamma lecture.
- Paragraph 7 describes how the ascetic Kondanna attained the Eyes of Truth.
- Paragraph 9 talks about the occurrence of the Triple Gem.

## APPENDIX R Exercises with answers provided in teachers' manual

### AFTER YOU READ

#### A. Comprehension

##### I. Close Reading

Circle the word(s) that correctly completes the sentence.

1. The Lord Buddha set out for the Deer Park in order to **save** /punish the Pancavaggiya Ascetics.
2. Once the Lord Buddha approached, all five of them **forgot** /remembered their previous agreement.
3. The Five Ascetics thought that since the Lord Buddha no longer practiced self-mortification, He **could** /**could not** achieve meditative attainments.
4. It was on the 15th day of the 8th **waxing** /waning moon that the Lord Buddha gave the first Dhamma lecture.
5. When a Universal Monarch wants to extend his territory, he will drive his **Precious Wheel** /Dhamma Wheel and when the Lord Buddha wants to propagate His Teachings, He mobilizes the Dhamma Wheel.
6. The Lord Buddha's first Dhamma lecture caused hell-fire to be **temporarily** / permanently extinguished.

##### II. Main Ideas

Write the number of the paragraph that matches each main idea from the reading.

- Paragraph 1 gives the information about the Lord Buddha and His teaching.
- Paragraph 2 tells what the Five Ascetics planned to do when the Lord Buddha came.
- Paragraph 3 tells what the Five Ascetics really did when the Lord Buddha arrived.
- Paragraph 5 is about the turning of the Dhamma Wheel.
- Paragraph 6 explains the miraculous events caused by The Lord Buddha's first Dhamma lecture.
- Paragraph 7 describes how the ascetic Kondanna attained the Eyes of Truth.
- Paragraph 9 talks about the occurrence of the Triple Gem.

## APPENDIX S Lesson plan provided in teachers' manual

### Unit 1: Lesson Plan

#### Unit 1 - The Lord Buddha: Life of the Lord Buddha

##### Lesson Plan 1

**Time:** 2 hours

**Level:** Second Year

#### **Terminal Objective:**

Student monks will be able to correctly make prediction from available clues before they read the texts.

#### **Enabling Objectives:**

- 1) Before reading the text, student monks will be able to find clues that help them make prediction from titles, headings, illustrations, keywords, etc.
- 2) Student monks will be able to comprehend and answer questions about life of the Lord Buddha correctly by quickly previewing the text.
- 3) Student monks will be able to complete sentences with correct vocabularies or phrases.
- 4) Student monks will be able to correctly match the main ideas to the paragraphs.
- 5) Student monks will be able to complete sentences with correct forms of verbs.

#### **Language Content:**

- Functions: using pre-reading strategy of predicting the content
- Vocabulary: Lord Buddha's biography related terms
- Grammar: Past Simple Tense and Past Perfect Tense

#### **Materials:**

- Content-based reading materials
- Pictures of the Triple Gem and the Lord Buddha
- Sentence strips

#### **Evaluation:**

- 1) The reading strategy used by student monks to read and comprehend the texts will be assessed by the correctness of their Content-based reading materials exercises and after-unit-test. The criteria of passing mark is 60% correct response.
- 2) Student monks' participation and cooperation will be assessed during the tasks by teacher's observation rubric. The criteria of passing is that student monk should gain at least 3 points of each aspect.

## Unit 1: Lesson Plan

## 7 steps of strategy instruction

**Step 1: Introduce key concepts, assess, and gain students' learning commitment**

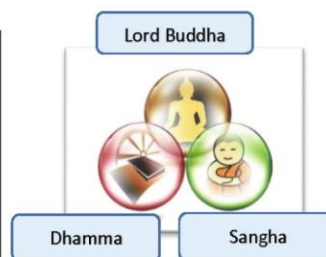
Duration: 7 mins

**Before You Read (2 mins)****Teacher's role:** Introducing and drawing student monks' attention to the theme.**Student monks' role:** Individually thinking of the theme and answering questions.

- 
1. Teacher shows picture of the Triple Gem to introduce theme of the whole materials and to focus on the Lord Buddha.
  2. Teacher asks student monks to individually think of statements about the Lord Buddha which is the theme of the first unit to gain student monks' learning commitment, and checks the answers.

*(Teacher shows picture of the Triple Gem on the screen).***The script could sound like:**

*T: Venerable, you all know that Buddhists take refuge in the Triple Gem consisting of the Lord Buddha, the Dhamma, and the Sangha. Today we will learn about the Lord Buddha. Which of these following statements are true about Him?*



**Answer**  *The Lord Gotama Buddha is just one of many countless Buddhas.*

**A. Warm-up (5 mins)****Teacher's role:** Activating student monks' prior knowledge.**Student monks' role:** Relating information to prior knowledge and cooperatively performing the tasks.

- 
3. Teacher asks student monks to match phrases with pictures, put the story in chronological order, and then check the answers together with teacher.
-



## Unit 1: Lesson Plan

## 7 steps of strategy instruction

**Step 1: Introduce key concepts, assess, and gain students' learning commitment**

Duration: 7 mins

**Before You Read (2 mins)****Teacher's role:** Introducing and drawing student monks' attention to the theme.**Student monks' role:** Individually thinking of the theme and answering questions.

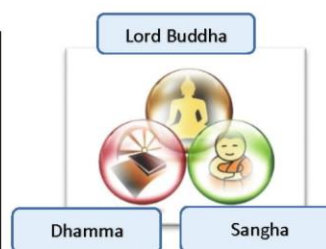
1. Teacher shows picture of the Triple Gem to introduce theme of the whole materials and to focus on the Lord Buddha.

2. Teacher asks student monks to individually think of statements about the Lord Buddha which is the theme of the first unit to gain student monks' learning commitment, and checks the answers.

(Teacher shows picture of the Triple Gem on the screen).

**The script could sound like:**

*T: Venerable, you all know that Buddhists take refuge in the Triple Gem consisting of the Lord Buddha, the Dhamma, and the Sangha. Today we will learn about the Lord Buddha. Which of these following statements are true about Him?*



**Answer**  The Lord Gotama Buddha is just one of many countless Buddhas.

**A. Warm-up (5 mins)****Teacher's role:** Activating student monks' prior knowledge.**Student monks' role:** Relating information to prior knowledge and cooperatively performing the tasks.

3. Teacher asks student monks to match phrases with pictures, put the story in chronological order, and then check the answers together with teacher.

**Unit 1: Lesson Plan**

**Step 2: Explain the purpose, benefits, and steps of the strategy**

Duration: 5 mins

**B. Reading Strategy Focus (5 mins)**

**Teacher's role:** Informing learning objective and explicitly teaching the reading strategy.

**Student monks' role:** Listening to the teacher and verbally answering questions.

-----

4. Teacher informs student monks that the learning objective of today's lesson is that they will be able to make prediction correctly from available clues before reading the texts.

5. Teacher uses Reading Strategy Focus to explain the purposes of using pre-reading strategy of making prediction, points out benefits, and shows steps of the strategy.

**Step 3: Model how to use the strategies**

**Step 4: Give practice in steps**

**Step 5: Provide guided and controlled practice with feedback**

Duration: 25 mins

**C. Practice (25 mins)**

**Teacher's role:** Scaffolding, thinking aloud, and providing corrective feedback.

**Student monks' role:** Practicing with teacher and performing the task, in pair, as modeled by the teacher.

-----

6. Teacher introduces the table which is divided into 2 main parts: before and after reading. Teacher asks student monks to look at Reading One and models them how to find clues to make prediction in steps and how to complete the first part of the table by using a "think aloud" to demonstrate the use of strategy.

7. Teacher and student monks work together to make prediction and fill in column 1&2.

8. Teacher asks student monks to practice in pair to complete the table using steps that have been instructed.

9. Teacher asks each pair to share their predictions with the whole class. While student monks share the answers, teacher provides feedback.

**Unit 1: Lesson Plan**

**(Thinking aloud) The script could sound like:**

*T: On page 5 you will see a table in which you put your predictions and clue, and on page 6, you will see Reading One. I will show you how to use the strategy step by step and also how to complete the first part of the table.*

- *First, I quickly preview the story and see three pictures under the title.*
- *Second, I find clues from one of the main pictures on the left hand side. My background knowledge told me that this baby is a Bodhisatta who pointed his finger up on his 7<sup>th</sup> step right after he was born under a Sala Tree.*
- *Third, I make prediction from these clues that the story will talk about the Birth of Bodhisatta. So, I fill my prediction in column 1, "the Bodhisatta's birth" and in column 2, I write down 'main picture' which is the clue that I use. Next, let's work together on the next prediction. "What is another clue that you see?"*

10. Teacher shows student monks next steps in making prediction: reading the materials and confirming/correcting the prediction.

11. Teacher reads the story aloud together with student monks and periodically stops where it is possible to find any clues and demonstrates how to fill in column 3.

**(Thinking aloud) The script could sound like:**

*T: the next steps of making prediction are reading the story and confirming or correcting your predictions. After making prediction by using available clues before reading the story, then you read the story to see whether your predictions are right or wrong. Let's read the story together. If your prediction in column 1 is correct write 'correct' in column 3 but if it is incorrect, write down the correct answer.*

## Unit 1: Lesson Plan

## Suggested answers

Before Reading			After Reading
What I predict will happen	Clues that I used to predict		What really happened
Example		R e a d	
-The Bodhisatta's birth	main picture		correct
-The Bodhisatta's self-enlightenment	main picture		correct
-The attainment of Nirvana	main picture		correct
- The Buddha's biography	title		correct
-The Lord Buddha's life from His birth until the attainment of Nirvana	timeline		correct
-The birth and the renunciation of the Bodhisatta	headings		correct
-After the attainment of self-enlightenment	heading	correct	

**Step 6: Gradually reduce teachers' role and increase students' independent practice**

Duration: 73 mins

**D. Try it out (50 mins)**

**Teacher's role:** Supporting language development, increasing independent practice, and observing student monks' task involvement.

**Student monks' role:** Collaboratively completing task without teacher's help

-----

12. Teacher teaches vocabulary and grammar student monks needed to comprehend the text.
13. Teacher lets student monks work in group and make prediction by themselves using Reading Two.
14. Teacher randomly selects student monk to read Story Two aloud, asks about the predictions and clues his group have, and lets the whole class confirm/correct them. Answers can be varied.

**Suggested answers**

## Unit 1: Lesson Plan

Before Reading		After Reading
What I predict will happen	Clues that I used to predict	What really happened
- The First Dhamma Lecture.	title	R e a d
- The Lord Buddha gave Dhamma lecture to the five ascetics.	main picture	
- The Self-Mortification.	timeline	
- The Self-Enlightenment.	timeline	
- The Journey to the Deer Park.	timeline	
- The first Dhamma Lecture.	timeline	
- The First Buddhist monk.	timeline	
- The Dhamma Wheel Began to Turn.	heading	
- The first disciple.	heading	
- The Universal Monarch drives his Precious Wheel.	picture & caption	
- Annakondanna saw the truth	picture & caption	
- The Lord Buddha ordained Annakondanna	picture & caption	

**After You Read (15 mins)****Teacher's role:** Reflecting**Student monks' role:** Collaboratively working in group

15. In the same group, teacher asks student monks to do the comprehension, vocabulary, and grammar exercises.

(In case that the class time is running out, these exercises can be assigned as homework.)

16. Teacher and student monks answer the questions together. While answering the question, teacher points out how to get that answer.

**Answers****A. Comprehension****I. Close Reading**

- |           |                   |                |
|-----------|-------------------|----------------|
| 1. save   | 2. forgot         | 3. could not   |
| 4. waxing | 5. Precious Wheel | 6. temporarily |

**II. Main Ideas**

Paragraph 1, 2, 3, 5, 6, 7, and 9

**B. Vocabulary****I. Word Usage**

## Unit 1: Lesson Plan

- |               |                       |                         |
|---------------|-----------------------|-------------------------|
| 1. compassion | 2. self-mortification | 3. propagate/ suffering |
| 4. standstill | 5. insight            |                         |

## C. Grammar

- |                   |                         |                         |
|-------------------|-------------------------|-------------------------|
| 1. spent          | 2. donated              | 3. married              |
| 4. had never seen | 5. did not see/had gone | 6. had torture/attained |
| 7. attained       | 8. had worked           |                         |

## D. Before Closing (5 mins)

**Teacher's role:** Establishing link to the new topic

**Student monks' role:** Performing group discussion

17. In the same group, teacher asks each group to think of a good example that the Lord Buddha saved people from suffering.

**The task' script might sound like:**

*T: Venerable, from the story "The First Dhamma Lecture" you can see that the Lord Buddha chose a particular Dhamma lecture suitable for the Pancavaggiya Ascetics so that they could attain the Dhamma easily. In the same group, I would like you to think of one good example that the Lord Buddha chose a particular Dhamma lecture to save people from suffering. You have a few minutes to think of a story which all of the group members agree that it is the best example. For example, for me the good example is the Lord Buddha's final advice before He attained Nirvana. He taught us one word about 'heedfulness' as everything in the world will not exist forever.*

## E. Closing: What You Have Learned (3 mins)

**Teacher's role:** Checking student monks' learning evidence.

**Student monks' role:** Providing verbal response one by one.

18. Teacher checks student monks' understanding by asking each of them to tell one thing they have learned. Teacher uses Closing box as a reference to check key words of the answers.

**Step 7: Conduct posttest and helping students to transfer the strategy to different situations**

**Unit 1: Lesson Plan**

Duration: 10 mins

**F. After-unit-test (10 mins)**

**Teacher's role:** Evaluating student monks' ability to use reading strategy to comprehend the texts.

**Student monks' role:** Choosing the best answer using the reading strategy learned.

19. Teacher gets student monks to individually complete the after-unit-test.

20. When time is up, teacher asks student monks to exchange the test with their partners and gives the correct answers.

**Answers**

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

## APPENDIX T Rubric provided in teachers' manual

<b>Teacher Observation Rubric – Lesson 1</b>					
<b>Criteria</b>	<b>Inadequate (1 point)</b>	<b>Developing but below Expectations (2 points)</b>	<b>Meets Expectations (3 points)</b>	<b>Exemplary (4 points)</b>	<b>Score</b>
<b>Content Knowledge</b>	Student monk does not have grasp of information; student monk cannot answer questions about the topic.	Student monk is uncomfortable with information and is able to answer only basic questions about the topic.	Student monk is at ease with content but fails to elaborate.	Student monk demonstrates full knowledge with explanations and elaboration.	
<b>Reading Strategy: Make Prediction</b>	Student monk is not able to make any sort of prediction.	Student monk makes only 'guesses' – not based on available clues or prior-knowledge.	Student monk makes predictions, though some are based on flawed understanding.	Student monk makes valid predictions based on available clues from text and prior-knowledge.	
<b>Using Signal Word (e.g. title, headings, key words, first sentence, visuals, captions, last sentence)</b>	Student monk rarely uses signal words and studied reading strategy to complete the tasks.	Student monk sometimes uses signal words and studied reading strategy to complete the tasks, but does not do it consistently.	Student monk usually uses signal words and studied reading strategy to complete the tasks.	Student monk always uses signal words and studied reading strategy to complete the tasks.	
<b>Understand Key Vocabulary</b>	Student monk cannot identify any key vocabulary from reading.	Student monk can identify 1-2 key vocabulary from reading.	Student monk can identify 3-4 keys vocabulary from reading.	Student monk can identify a minimum of 5 key vocabulary from reading.	
<b>Grammar</b>	Student monk does not use the studied grammar and/or errors make it very difficult to understand.	Student monk uses studied grammar as seem of the time but errors interfere with comprehension.	Student monk uses studied grammar correctly most of the time and errors do not detract.	Student monk uses studied grammar correctly, errors do not detract, attempts to go beyond unit.	
<b>Follows Along</b>	Student monk is on the wrong page or not reading at all.	Student monk is on the correct page and seems to read along occasionally. May have a little trouble finding place when called upon to read.	Student monk is on the correct page and usually appears to be actively reading, but looks at the reader or the pictures occasionally. Can find place easily when called upon to read.	Student monk is on the correct page and is actively reading along (eyes move along the lines) or finger is following words being read aloud by others.	
<b>Comprehension</b>	Student monk has trouble understanding the reading passage and cannot answer any questions correctly.	Student monk understands some part of the reading passage and accurately answers 1 question related to the reading passage.	Student monk seems to understand most of the reading passage and accurately answers 2-3 questions related to the reading passage.	Student monk seems to understand entire reading passage and accurately answers more than 3 questions related to the reading passage.	
<b>Level of Engagement</b>	Student monk never contributes to group discussion; fails to respond to direct questions.	Student monk sometimes contributes to class discussion; seldom volunteers but responds to direct questions.	Student monk proactively contributes to class discussion; asking questions and respond to direct questions.	Student monk proactively and regularly contributes to class discussion; initiates discussion on issues related to topic.	
<b>Group/ Partner Teamwork</b>	Student monk does not work well with others and shows no interest in completing group tasks. Contributes little to group effort. Does not perform duties of assigned team role.	Student monk occasionally helps to complete group tasks. Finishes individual task but does not assist team members. Performs some duties of assigned team role.	Student monk usually helps to complete all group tasks. Performs nearly all duties of assigned team role.	Student monk works to complete all group tasks. All team members contribute equally. Performs all duties of assigned team role.	
<b>Total Points:</b> _____					



APPENDIX U A sample lesson unit of the English content-based  
reading materials

# UNIT 1

## THE LORD BUDDHA: Life of the Lord Buddha

### PRE-READING STRATEGY

- Making Prediction



## BEFORE YOU READ

► Check (✓) the statement you think is true about the Lord Buddha.

- The Lord Gotama Buddha is a God of Buddhism.
- The Lord Gotama Buddha is the creator of Buddhism.
- The Lord Gotama Buddha is the only Lord Buddha of Buddhism.
- The Lord Gotama Buddha is just one of many countless Buddhas.

### READING ONE: The Gotama Buddha's Biography

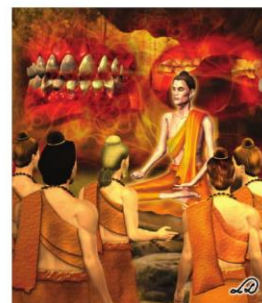
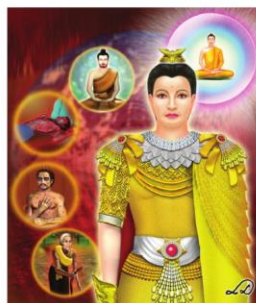
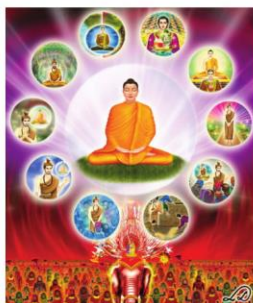
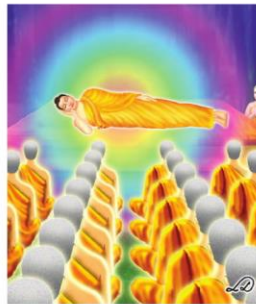
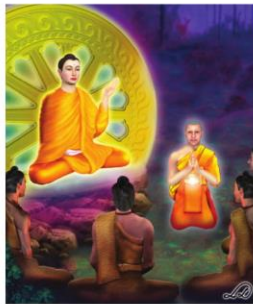
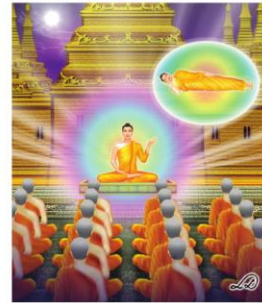
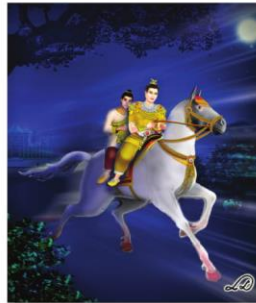
#### A. Warm-Up

In pair, think of what you have learned about the Lord Buddha. Match pictures with phrases in the box below. Then put the story in chronological order.

- a) The birth of a great man with 32 perfect signs
- b) The renunciation in search of liberation to all sufferings
- c) The self-mortification to eradicate sufferings
- d) The marriage with Princess Yasodhara
- e) The observation of four sights: an old man, a sick man, a corpse and an ascetic
- f) The announcement of Parinirvana
- g) The first discourse to the five ascetics, the Dhammacakkappavattana Sutta
- h) The attainment of complete Nirvana
- i) The victory before attaining self-enlightenment



a.



**Put the story in correct order.**  
 1) ...a.... 2) ..... 3) ..... 4) ..... 5) ..... 6) ..... 7) ..... 8) ..... 9) .....

## B. Reading Strategy Focus

### ► Pre-reading strategy: Making Prediction

#### ►► The purposes of making prediction are that you:

- Learn as much about the passage as you can in a brief period of time by previewing the information you have such as titles, headings, illustrations, keywords, etc.
- Make guesses based on clues from the text about what you will learn.
- Make connections between your prior knowledge and what you will learn.

#### ►► Steps of making prediction

- 1) Preview
- 2) Find Clues
- 3) Make a Prediction
- 4) Read the Materials
- 5) Confirm/Correct

## C. Practice

Look at Reading One. Make prediction and fill in the first column "What I predict will happen". List the clues you used in the second column "Clues that I used to predict".

Before Reading		After Reading
What I predict will happen	Clues that I used to predict	What really happened
Example		
<i>-The Bodhisatta's birth</i>	<i>main picture</i>	<i>correct</i>

R  
e  
a  
d

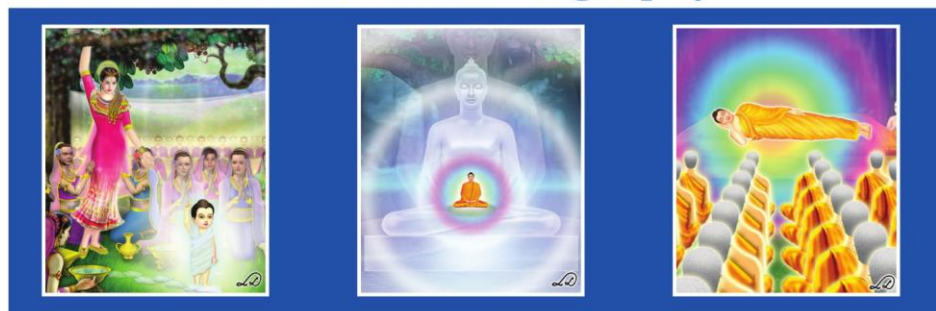
--	--	--

R  
e  
a  
d

**Now read the text to find out whether your predictions are correct or not. If your predictions are incorrect, correct them in the third column "What really happened".**

### Reading One

## The Gotama Buddha's Biography



### *His Birth*

1. The name Buddha is a title, not a proper name, meaning “**Awakened,**” thus “**Enlightened.**” Gotama was the Buddha, the historical **founder** of Buddhism whose teachings, the Dhamma (Skt., Dharma), form its core. The historical Buddha was born in 623 B.C. as Prince Siddhattha Gotama in Lumbini Park at Kapilavatthu, near the present day border of India and Nepal. He was the son of King Suddhodana and Queen Maya of the kingdom of the Sakyans, a tribe of the Aryan race that lived in the northern region of present day India.

### *The Renunciation*

2. At age 16 Siddhattha married Yashodhara who gave birth to their only son, Rahula. At the age of 29 Siddhattha **renounced** worldly life and left the palace to find an answer to the problem of **suffering** and a path to **liberation** from cyclic existence. Siddhattha attained Enlightenment and became a Buddha at the age of 35.

### *After the Attainment of Self-Enlightenment*

3. He spent forty five years wandering up and down the Ganges Valley **expounding** the **doctrine** that he has found and **establishing** the Sangha, the Order of Buddhist monks and nuns, which still exists today. The Buddha died at age 80 in the year 543 B.C. in Kushinagara, not far from his **birthplace** at Lumbini.

## READING TWO: The First Dhamma Lecture

### D. Try it out

Look at Reading Two. Make prediction and fill in the first column "What I predict will happen". List the clues you used in the second column "Clues that I used to predict".

Before Reading		After Reading
What I predict will happen	Clues that I used to predict	What really happened

R  
e  
a  
d

Now read the text to find out whether your predictions are correct or not. If your predictions are incorrect, correct them in the third column "What really happened".

## E. Vocabulary

Attainment	(n.)	Achievement
Compassion	(n.)	A strong feeling of sympathy for the suffering of others
Enlightenment	(n.)	The state of understand something
Exclamation	(n.)	A sudden cry or remark
Extinguish	(v.)	Put out
Glorious	(adj.)	Deserving great admiration, praise, and honour
Inappropriate	(adj.)	Unsuitable
Insight	(n.)	The ability to have a clear, deep and sometimes sudden understanding of a complicated problem or situation
Mortification	(n.)	The act of causing physical pain
Ordain	(v.)	To officially make someone a monk
Propagate	(v.)	To spread the teachings among a lot of people
Prosperity	(n.)	The state of being successful or having a lot of money
Standstill	(n.)	A condition in which all movement has stopped
Sentient	(adj.)	Able to experience feelings
Suffering	(n.)	Physical or mental pain
Territory	(n.)	An area of land that is considered as belonging to or connected with a particular country



## F. Grammar Focus: Past Simple Tense & Past Perfect Tense

### • Past simple tense



#### USE 1 Completed Action in the Past



#### EXAMPLE

- The Five Ascetics took the Lord Buddha's alms-bowl and robe as they used to do in the past.

#### USE 2 Duration in the Past



#### EXAMPLE

The Bodhisatta practiced self-mortification to the fullest extent for six years.

### • Past perfect tense



#### USE 1 Completed Action before Something in the Past



#### EXAMPLE

- The Lord Buddha's insight let him know that Kondanna had attained the Truth.

#### USE 2 Duration before Something in the Past



#### EXAMPLE

- The Bodhisatta **had tortured** himself for six years before he attained enlightenment.

### Reading Two

## The First Dhamma Lecture



The Self-Mortification

The Self-Enlightenment

The Journey to the  
Deer Park

The First Dhamma  
Lecture

The First Buddhist  
Monk

1. Our Lord Buddha is the Supreme Teacher. His boundless **compassion** moves Him to teach **sentient** beings to end **suffering** and attain the everlasting bliss of Nirvana. He chooses a particular Dhamma lecture to give to each person so that the person can attain the Dhamma easily. He knew that the Five Ascetics were ready for Enlightenment; therefore, he set out for the Deer Park in order to save them.
2. The Lord Buddha trekked past different places until he arrived at the Deer Park in Vanasri where the Pancavaggiya Ascetics were living. They saw Him coming from a distance because of the **glorious** brightness of His personage. They had no idea about His **self-enlightenment** but thought that since the Lord Buddha no longer practiced **self-mortification**, they would not welcome Him. They would not get up to greet Him. They would not take His alms-bowl and His robe. And they would merely prepare a seat for Him.
3. But once the Lord Buddha approached, all five of them forgot their previous agreement. They got up to greet Him, took His alms-bowl and robe as they used to do in the past. However, they still addressed Him using an **inappropriate** term of “**Avuso**”, which means a younger person or a junior person.

4. The Lord Buddha forbade them and told them how He had already attained Self-enlightenment. The ascetics did not believe Him. The Lord Buddha asked them if He had ever said anything that was not true in all the time that they had been together. This caused the Five Ascetics to become interested in what the Lord Buddha had to say but He told them to wait until the morrow.

### The Dhamma Wheel Began to Turn



When a Universal Monarch wants to extend his territory, he will drive his Precious Wheel.

5. It was on the 15th day of the 8th waxing moon that the Lord Buddha gave the first Dhamma lecture called the **Dhammacakkappavattana Sutta**. It caused the Dhamma Wheel to begin turning. When a Universal Monarch wants to extend his **territory**, he will drive his Precious Wheel and mobilize his army to bring **prosperity** to his kingdom. When the Lord Buddha wants to **propagate** His Teachings, He mobilizes the Dhamma Wheel to bring living beings out of suffering.
6. The Lord Buddha's first Dhamma lecture caused miraculous events to happen in certain parts of the galaxy, namely, in the Human Realm, in the Celestial Realm, and in the Brahma Realm. There were earthquakes. There was a display of brilliant light in the same way as the time of the Lord Buddha's birth and Self-Enlightenment. The sound of celestial music was in the air. Blind and deaf people were cured and became normal at a time. Hell-fire was temporarily **extinguished**.

## The First Disciple



Once Annakondanna saw the truth, The Lord Buddha said,

*“Come and be a Bhikkhu. The Truth which I have already taught is sublime. Live the Holy Life in order to put an end to suffering.”*

7. While the Lord Buddha was giving His first Dhamma lecture, the ascetic Kondanna allowed his mind to follow the Lord Buddha’s teaching until it came to a **standstill** on the Middle Way inside his mind. His meditative attainments allowed him to see the Truth with his supernatural **insight**. In the other words, he had attained the Eyes of Truth, and he realized that ...
8. “Whatever comes into existence naturally will cease to exist naturally.” This is the level of supernatural insight attained by a Sotapanna, the first stage of Ariyahood.
9. The Lord Buddha’s supernatural insight let him know that Konhanna had attained the Truth and He exclaimed, “Annasi vatabho kondanno”, which means Kondanna can now know my teaching. As a result of this **exclamation**, Kondanna was later called Annakondanna. Then, he asked to be ordained. The day that Annakondanna became the first Buddhist monk in this Buddha Eon was also the day that the Triple Gem (The Buddha, the Dhamma, and the Sangha) was completed.

## AFTER YOU READ

### A. Comprehension

#### I. Close Reading

Circle the word(s) that correctly completes the sentence.

1. The Lord Buddha set out for the Deer Park in order to save/punish the Pancavaggiya Ascetics.
2. Once the Lord Buddha approached, all five of them **forgot/remembered** their previous agreement.
3. The Five Ascetics thought that since the Lord Buddha no longer practiced self-mortification, He **could/could not** achieve meditative attainments.
4. It was on the 15th day of the 8th **waxing/waning** moon that the Lord Buddha gave the first Dhamma lecture.
5. When a Universal Monarch wants to extend his territory, he will drive his **Precious Wheel/Dhamma Wheel** and when the Lord Buddha wants to propagate His Teachings, He mobilizes the Dhamma Wheel.
6. The Lord Buddha's first Dhamma lecture caused hell-fire to be **temporarily/ permanently** extinguished.

#### II. Main Ideas

Write the number of the paragraph that matches each main idea from the reading.

- Paragraph 1 gives the information about the Lord Buddha and His teaching.
- Paragraph \_\_\_ tells what the Five Ascetics planned to do when the Lord Buddha came.
- Paragraph \_\_\_ tells what the Five Ascetics really did when the Lord Buddha arrived.
- Paragraph \_\_\_ is about the turning of the Dhamma Wheel.
- Paragraph \_\_\_ explains the miraculous events caused by The Lord Buddha's first Dhamma lecture.
- Paragraph \_\_\_ describes how the ascetic Kondanna attained the Eyes of Truth.
- Paragraph \_\_\_ talks about the occurrence of the Triple Gem.

## B. Vocabulary

### I. Word Usage

Complete the sentences with the correct word(s) from the box. Use each word only once. Not all the words will be used.

attainment	compassion	insight	propagate
self-enlightenment	self-mortification	standstill	suffering

1. The Lord Buddha's boundless compassion moves Him to teach sentient beings.
2. The Pancavaggiya ascetics thought that since the Lord Buddha no longer practiced \_\_\_\_\_, they would not welcome Him.
3. When the Lord Buddha wants to \_\_\_\_\_ His Teachings, He mobilizes the Dhamma wheel to bring living beings out of \_\_\_\_\_.
4. The ascetic Kondanna allowed his mind to follow the Lord Buddha's teaching until it came to a \_\_\_\_\_ on the Middle Way.
5. The Lord Buddha's supernatural \_\_\_\_\_ let him know that Kondanna had attained the Truth.

## C. Grammar

Put the verbs in brackets in the correct tenses (past simple tense or past perfect tense).

1. Lord Buddha spent (spend) 20 Asankheyyas and 100,000 Kappas to pursue Ten Perfections at all three levels.
2. The Bodhisatta \_\_\_\_\_ (donate) His blood, body parts, heads, and eyes for countless times.
3. At the age of sixteen, Prince Siddhatha \_\_\_\_\_ (marry) Princess Yasodhara.
4. Prince Siddhatha \_\_\_\_\_ (never see) an old man, a sick person, and a corpse before an excursion outside of the palace.
5. Princess Yasodhara \_\_\_\_\_ (not see) the Prince leaving the palace because she \_\_\_\_\_ (go) to bed.

- 6. The Bodhisatta \_\_\_\_\_ (torture) himself for six years before he \_\_\_\_\_ (attain) enlightenment.
- 7. On the 15th day of the 6th waxing moon, the Lord Buddha \_\_\_\_\_ (attain) Nirvana.
- 8. The Lord Buddha \_\_\_\_\_ (work) very hard till the very last moments of His life.

**D. Before Closing**

**Discuss in small group other examples that the Lord Buddha saved people from suffering.**

**Student's Note**

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

## E. Closing: What You Have Learned

These are the important points in this unit:

**Content:**

- The Biography of Gotama Buddha focusing on His first Dhamma Lecture.

**Reading strategy:**

- Making prediction helps build your background knowledge about the topic with available information you get by quickly previewing the text.
- You can find clues that help make prediction from titles, headings, illustrations, keywords, etc.
- The steps are:

Preview → Find clues → Make prediction → Read the materials → Confirm/Correct

**Comprehension**

- Main ideas & Close reading

**Vocabulary**

- Word Usage

**Grammar**

- Past Simple Tense & Past Perfect Tense

Past Simple Tense

[VERB+ -ed] or irregular verbs

Past Perfect Tense

[had + past participle]



**F. End-of-unit test****Choose the best answer**

1. From the title, what is this reading mainly about?
  - a. The Lord Buddha
  - b. The Dhamma
  - c. The Sangha
  - d. The Triple Gem
  
2. What can we predict from the main picture?
  - a. The Lord Buddha taught five people in the palace.
  - b. There were six people talking to the Lord Buddha.
  - c. The Lord Buddha gave lecture to five ascetics in the forest.
  - d. The Lord Buddha gave lecture to five Buddhist monks in the forest.
  
3. The timeline gives us the events of the story **EXCEPT**.
  - a. The Lord Buddha's self-mortification
  - b. The Lord Buddha's self-enlightenment
  - c. The Lord Buddha's first Dhamma Lecture
  - d. The Lord Buddha's attainment of Nirvana
  
4. Which choice shows the events in the correct order of the story?
  1. The first Dhamma lecture
  2. The self-enlightenment
  3. The first Buddhist monk
  4. The journey to the Deer Park
  5. The self-mortification
  - a. 1, 2, 3, 4, 5
  - b. 2, 1, 3, 4, 5
  - c. 5, 2, 4, 3, 1
  - d. 5, 2, 4, 1, 3
  
5. What is the meaning of term of "Avuso" in paragraph 3?
  - a. An inappropriateness
  - b. A junior person
  - c. A senior person
  - d. An older person

**F. End-of-unit test****Choose the best answer**

1. From the title, what is this reading mainly about?
  - a. The Lord Buddha
  - b. The Dhamma
  - c. The Sangha
  - d. The Triple Gem
  
2. What can we predict from the main picture?
  - a. The Lord Buddha taught five people in the palace.
  - b. There were six people talking to the Lord Buddha.
  - c. The Lord Buddha gave lecture to five ascetics in the forest.
  - d. The Lord Buddha gave lecture to five Buddhist monks in the forest.
  
3. The timeline gives us the events of the story **EXCEPT**.
  - a. The Lord Buddha's self-mortification
  - b. The Lord Buddha's self-enlightenment
  - c. The Lord Buddha's first Dhamma Lecture
  - d. The Lord Buddha's attainment of Nirvana
  
4. Which choice shows the events in the correct order of the story?
  1. The first Dhamma lecture
  2. The self-enlightenment
  3. The first Buddhist monk
  4. The journey to the Deer Park
  5. The self-mortification
  - a. 1, 2, 3, 4, 5
  - b. 2, 1, 3, 4, 5
  - c. 5, 2, 4, 3, 1
  - d. 5, 2, 4, 1, 3
  
5. What is the meaning of term of "Avuso" in paragraph 3?
  - a. An inappropriateness
  - b. A junior person
  - c. A senior person
  - d. An older person



## VITA

Ms. Phatchareporn Suphipat was born on 13 October 1977 in Bangkok. She graduated with a B.A. (Second Honor) in Western Languages from Chulalongkorn University in 1999. In 2000, she started working as a volunteer teacher teaching English and Spanish to Buddhist student monks. During 2001-2009, she was working as a flight attendant for Qantas Airways Limited flying to diverse destinations in Africa, Asia, Europe, and Oceania. Traveling to many countries gave her opportunity to visit many Thai temples and made her realized that English is a crucial tool for Buddhist monks to successfully carry out their assigned duties abroad. In 2010-2011, she was working as a Project Coordinator for Oxford Business Group, a British company producing English economic reports on several countries including Thailand; in the meantime, she continued her volunteer work teaching English to student monks on her days off. In 2016, she furthered her education for Master Degree in Teaching English as a Foreign Language (TEFL) at Chulalongkorn University in academic year 2016.

