

Research Title : Development of CEFR-Aligned Buddhist Context-Based
Reading Materials for ESP Instruction at MCU

Researchers : Phramaha Ashir Vajiranāgo
Phra Rungvit Aggadhammo, Dr.

Department : Language Institute, Mahachulalongkornrajavidyalaya University

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Abstract

This research had the following objectives: (1) to design CEFR-aligned Buddhist context-based reading materials for ESP learners at Mahachulalongkornrajavidyalaya University (MCU); (2) to revise and refine the developed reading materials based on evaluation results for instructional use in Buddhist professional contexts; and (3) to evaluate learner reading comprehension, perceived readability, and attitudes toward the developed reading materials. The study employed Research and Development (R&D) as its sole research design, implemented through three linked cycles: R1-D1, R2-D2, and R3-D3, with ADDIE guiding the development phases. The study involved 89 needs-analysis respondents, three instrument-validation experts, three materials-evaluation experts, and 12 ESP learners, 11 of whom completed the Learner Evaluation Questionnaire. All participants were purposively selected. Data were collected using questionnaires, an expert evaluation form, and embedded exercises. Data were analyzed using descriptive statistics and content analysis.

The research findings revealed that:

1. The needs analysis of 89 respondents showed that the major reading difficulties were recognizing the structure of academic texts (50.6%), understanding complex text organization (44.9%), and lacking appropriate reading strategies (34.8%). The respondents preferred simple and easy-to-understand sentences (50.6%), key vocabulary with Thai translations (38.2%), and Buddhist-related topics, particularly Buddhist teachings (40.4%). R1 evidence, together with relevant CEFR descriptors, ESP principles, and Buddhist-context requirements, informed D1. A master blueprint and a first draft of eight instructional units were developed with an accessible A2 core

and controlled progression toward B1. Each unit integrated explicit learning outcomes, Buddhist-context reading passages, bilingual vocabulary and visual support, reading-comprehension and vocabulary exercises, communication activities, and practical application tasks.

2. Three materials-evaluation experts rated the first draft at a high level overall ($M = 4.27$, $S.D. = 0.28$), with language and readability receiving the highest dimensional rating ($M = 4.73$, $S.D. = 0.33$). Their ratings and written recommendations informed D2 and Revision 1, which improved language accuracy, terminology, instructions, unit titles, matching activities, organization, presentation, and supporting references. Effective features of the eight-unit structure and Buddhist-context orientation were retained, whereas recommendations requiring expanded pronunciation, grammar, or multimedia components were recorded for future development because they exceeded the scope of the printed reading materials.

3. In R3, the 12 learners completed 24 unit-level exercise sets with a mean score of 28.04 out of 30 ($S.D. = 2.91$), equivalent to 93.47%. The 11 questionnaire respondents reported high self-assessed reading comprehension ($M = 4.23$, $S.D. = 1.03$), high perceived readability ($M = 3.91$, $S.D. = 1.12$), and high attitudes toward the materials ($M = 3.86$, $S.D. = 1.00$). D3 integrated these results, feedback, and a researcher audit to produce Revision 2 and the final 103-page book. The scores constitute formative task-performance evidence, not long-term learning gains or comparative effectiveness. The three cycles generated product, process, and decision knowledge concerning coherent, evidence-responsive, and traceable materials development.

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The researchers are deeply grateful to the three experts who examined the content validity of the Needs Analysis Questionnaire using the Index of Item-Objective Congruence (IOC). Their professional judgment and constructive recommendations helped improve the clarity, relevance, and appropriateness of the research instrument. Special appreciation is also extended to the 89 respondents whose participation in the needs analysis provided essential information concerning their English proficiency, reading needs, difficulties, interests, and expectations.

The researchers would also like to thank the three expert evaluators who assessed the first draft of the developed reading materials. Their detailed comments and recommendations regarding content, language, CEFR alignment, readability, learning activities, organization, and instructional suitability were valuable in guiding the revision and refinement of the materials.

Finally, sincere appreciation is extended to the 12 learner participants who took part in the pilot implementation. Their performance, questionnaire responses, and suggestions provided useful evidence concerning comprehension, readability, usability, and attitudes toward the materials. The researchers gratefully acknowledge all individuals and organizations whose contributions helped make this research possible.

Phramaha Ashir Vajiranāgo

Phra Rurngvit Aggadhammo, Dr.

Language Institute

Mahachulalongkornrajavidyalaya University

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List of Abbreviations

In this research, the principal and frequently used abbreviations are grouped according to their functions. These include *Pāli* canonical references, terms directly related to the research and instructional framework, institutional and policy abbreviations, statistical symbols, and conventions commonly used in footnotes and bibliographic references. Within each group, the abbreviations are arranged alphabetically. For example, M III 1–7 refers to volume III, pages 1–7 of the Pali Text Society edition of the *Majjhima Nikāya*, while M in statistical reporting indicates the mean.

1. *Pāli* Canonical References

A	<i>Āṅguttara Nikāya</i> (canonical citation)
M	<i>Majjhima Nikāya</i> (canonical citation); mean (statistical reporting)
MN	<i>Majjhima Nikāya</i> (discourse-number citation)
PTS	Pali Text Society
S	<i>Saṃyutta Nikāya</i> (canonical citation)
SN	<i>Saṃyutta Nikāya</i> (discourse-number citation)

2. Research and Instructional Terms

ADDIE	Analysis, Design, Development, Implementation, and Evaluation
CEFR	Common European Framework of Reference for Languages
EAP	English for Academic Purposes
EOP	English for Occupational Purposes
ERP	English for Religious Purposes
ESP	English for Specific Purposes
IOC	Index of Item-Objective Congruence
L2	Second Language
NA	Needs Analysis
R&D	Research and Development

3. Institutional and Policy Abbreviations

LiMCU	Language Institute, Mahachulalongkornrajavidyalaya University
MCU	Mahachulalongkornrajavidyalaya University
MOE	Ministry of Education
OBEC	Office of the Basic Education Commission

4. Statistical Abbreviations

f	Frequency
n	Number of cases or sample size
N	Total number of respondents or participants
S.D.	Standard Deviation

5. Footnote and Bibliographic Abbreviations

ed./eds.	edited by/editor(s)
et al.	<i>et alii</i> /and others
Ibid.	<i>Ibidem</i> /in the same place
No.	Number
p./pp.	page/pages
trans.	translated by/translator
Vol.	Volume

Chapter 1

Introduction

1.1 Background and Significance of the Study

Mahachulalongkornrajavidyalaya University (MCU) is one of Thailand's leading Buddhist universities, offering education to both monastic and lay learners across a wide range of programs. As an institution with a strong international orientation, MCU increasingly integrates English into its curricula, particularly for students who require English for academic, religious, and professional communication. However, despite this growing emphasis, many learners, especially those in Buddhist studies, enter MCU with varied but often limited English proficiency, resulting in difficulties when engaging with academic English, religious texts, and intercultural communication tasks. Previous studies within Buddhist higher education contexts reveal that the lack of meaningful, context-relevant English materials often leads to low motivation, reduced comprehension, and limited engagement.¹ This highlights a clear gap between MCU's English language demands and the resources currently available to its learners.

In addition to the general challenges of English proficiency, the local instructional context at MCU presents specific situational constraints that further complicate English reading development among learners. Many monastic and lay students encounter English primarily within classroom settings and short-term training programs, with limited opportunities for sustained exposure to graded reading materials outside formal instruction. Consequently, reading comprehension difficulties are linked not only to learners' proficiency profiles but also to the absence of systematically sequenced texts that gradually develop reading skills in accordance with CEFR progression. Previous needs-analysis research in a Buddhist university context reported

¹ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, "Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills," **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), p. 109.

that learners had limited English educational backgrounds and lacked formal learning materials connected to Buddhism, making course content less meaningful and more difficult to engage with.² Other research on Buddhist content-based reading materials found that learners with higher English proficiency responded more positively to the materials, underscoring the importance of calibrating texts and instructional support to differing proficiency levels.³ This situational reality highlights the need for locally designed reading materials that control linguistic load, reflect learners' actual communicative environments, and support incremental reading development.

Moreover, although CEFR has been increasingly adopted as a reference framework at the institutional level, its implementation at the classroom and materials-development levels remains uneven. In practice, instructors often rely on personal judgment or commercially available textbooks when selecting reading materials, which may not accurately correspond to CEFR descriptors or the linguistic realities of MCU learners. Guidance on CEFR alignment stresses the need to connect local curricula, instruction, and assessment systematically to the framework rather than treating alignment as a label.⁴ Analysis of CEFR reading descriptors likewise shows that different proficiency levels entail distinct reading demands that must be interpreted when selecting and developing texts.⁵ These considerations reinforce the need for a structured materials-development initiative that translates CEFR descriptors into concrete, context-sensitive reading texts suitable for MCU's ESP learners.

Within this context, Buddhist-related English reading materials become essential, particularly because existing textbooks rarely incorporate Buddhist themes, terminology, or communicative situations familiar to monastic and lay practitioners. Earlier developments of Buddhist English materials such as content-based reading

² Ibid., p. 109.

³ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, "Development of English Content-Based Reading Materials in a Buddhist Context," **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), p. 171.

⁴ British Council, UKALTA, EALTA, and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA, and ALTE, 2022), pp. 12–14.

⁵ Arda Arikan, "The CEFR and Reading: A Document Analysis," **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), pp. 501–504.

lessons for MCU students⁶ and corpus-based reading materials for the English *Pāli* Canon⁷ demonstrate the value of designing English resources grounded in Buddhist discourse, specialized vocabulary, and authentic textual patterns. Yet, despite these contributions, there remains a scarcity of CEFR-aligned reading materials tailored specifically for ESP learners at MCU who need accessible, level-appropriate texts reflecting real Buddhist contexts. Therefore, developing Buddhist context-based reading materials aligned with CEFR descriptors is both timely and necessary to enhance learner comprehension, improve readability, and support English learning that is meaningful, relevant, and consistent with MCU's educational mission.

In recent years, Mahachulalongkornrajavidyalaya University has expanded its efforts to strengthen English proficiency among its students and academic personnel through various developmental activities, training programs, and nationwide initiatives. These include on-campus English camps, CEFR-oriented workshops, and ESP-focused training for Buddhist practitioners, all designed to provide continuous exposure to English and promote communicative competence within Buddhist educational contexts. Such initiatives reflect MCU's strategic movement toward internationalization, where English serves not only as a medium for academic engagement but also as a tool for disseminating Buddhist knowledge globally. These institutional efforts align with national trends emphasizing the need for improved English proficiency among Buddhist scholars and educators, many of whom require English for academic writing, intercultural communication, and participation in international conferences.

A notable example of MCU's collaborative efforts is the joint training program co-organized with the Language Institute of Chiang Mai University. This initiative, titled "English Proficiency Development for Lecturers," provided a 20-hour course on English Reading and Writing Skills at the B1 Level, conducted at Lamphun

⁶ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, "Development of English Content-Based Reading Materials in a Buddhist Context," **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), pp. 175–176.

⁷ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 239–274.

Buddhist College from 22-24 May 2025.⁸ The program aimed to enhance lecturers' competencies in academic communication, report writing, and comprehension of novels and research papers, while fostering academic networks and knowledge exchange across institutions. This collaboration demonstrates MCU's commitment to elevating English standards through partnerships with leading universities, ensuring that both faculty members and students gain access to high-quality, CEFR-aligned language training.

Within the university, the Language Institute of Mahachulalongkornrajavidyalaya University (LiMCU) has long served as the central agency responsible for enhancing English language competencies for both monastic and lay learners. MCU frequently assigns LiMCU to organize English training programs, develop teaching materials, conduct proficiency assessments, and coordinate academic collaborations with external institutions. Through activities such as intensive English courses, ESP workshops for Buddhist monks, and CEFR-awareness seminars for lecturers, LiMCU plays a pivotal role in driving the university's language development initiatives. Its work ensures that MCU's language policies are effectively implemented, especially in promoting English for academic and religious purposes within Buddhist education.

Beginning in 2025, LiMCU has further strengthened its commitment to international standards by aligning its curriculum design, instructional activities, and assessment practices with the Common European Framework of Reference for Languages (CEFR). This shift marks a significant step toward establishing coherent proficiency benchmarks for learners across all faculties and campuses. As part of this strategic direction, the institute recognizes the need for CEFR-aligned materials that reflect the unique linguistic, cultural, and religious characteristics of MCU students. Consequently, the idea of developing CEFR-aligned Buddhist Context-Based Reading Materials emerged as a key initiative to support the university's policy. These materials

⁸ Language Institute Chiang Mai University, "Language Institute Chiang Mai University, with MCU, Organize an English Training Program for Lecturers in the Northern Region," **LICMU News**, [Online], Source: <https://www.li.cmu.ac.th/language-institute-chiang-mai-university-with-mcu-organize-an-english-training-program-for-lecturers-in-the-northern-region/>, [25 May 2026].

integrate Buddhist content familiar to monastic and lay learners with level-appropriate English input, ensuring accessibility, relevance, and pedagogical coherence within the CEFR framework.

Existing studies related to Buddhist English reading materials demonstrate that significant progress has been made in developing specialized resources for Buddhist learners, yet most works remain limited in scope and do not directly address the needs of ESP learners at MCU with varied lower- to intermediate-proficiency profiles. For instance, Chirawan Sukwitthayakul (2022)⁹ developed a corpus-based reading material derived from the English *Pāli* Canon, integrating keyword analysis, move analysis, and frequency lists to enhance comprehension of *suttas*. However, the study focused on highly advanced canonical texts and required readers to possess strong English proficiency, as indicated in the findings that participants were selected based on their ability to comprehend everyday English texts. The developed material also targeted a global audience of Buddhists and researchers rather than MCU learners specifically. Similarly, Yasumin Inkrungkao et al. (2022)¹⁰ produced Buddhist-themed reading lessons for undergraduate students and found moderate satisfaction among higher-proficiency learners, yet the content did not follow CEFR benchmarks nor explicitly focus on ESP needs within monastic education contexts. Phatchareporn Suphipat and Sumalee Chinokul likewise developed English content-based reading materials for Buddhist student monks that incorporated illustrations and exercises to support reading comprehension; however, the materials were not explicitly aligned with CEFR descriptors and focused on general reading development rather than professional Buddhist communication.¹¹ Overall, the reviewed studies demonstrate meaningful

⁹ Chirawan Sukwitthayakul, “A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach,” **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 13–15, 239–274.

¹⁰ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, “Development of English Content-Based Reading Materials in a Buddhist Context,” **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), pp. 169–170, 175–176.

¹¹ Phatchareporn Suphipat and Sumalee Chinokul, “The Development of the English Content-Based Reading Materials for Buddhist Student Monks,” **Suranaree Journal of Social Science** Vol. 13 No. 1 (January-June 2019), pp. 13-19.

progress but do not present a systematically developed set of Buddhist context-based reading materials in which CEFR alignment and text difficulty are determined in response to MCU learners' actual proficiency profiles and identified ESP needs.

While previous research provides valuable foundations, the analysis also shows clear gaps that the Language Institute of Mahachulalongkornrajavidyalaya University (LiMCU) has not yet addressed. None of the existing materials, whether corpus-based, genre-based, or content-based, were developed directly under LiMCU or designed to serve MCU's specific policy shift toward CEFR implementation beginning in 2025. Current materials developed outside LiMCU do not systematically use CEFR descriptors to calibrate text difficulty in relation to MCU learners' actual proficiency profiles and identified needs, nor do they integrate Buddhist professional contexts such as chanting, teaching *Dhamma* to laypeople, meditation instruction, or monastic administrative communication. Furthermore, despite LiMCU's increasing responsibility for English curriculum development and training programs, including collaborations with institutions such as Chiang Mai University for CEFR B1 reading-writing training, the institute has yet to produce its own formally developed CEFR-aligned Buddhist context-based reading materials.¹² This gap highlights the need for a tailored materials-development project that reflects MCU's unique learner population, including monks, novice monks, Buddhist teachers, and lay practitioners, while also aligning with the university's CEFR-driven language policy. Consequently, the development of such reading materials is both timely and essential for supporting LiMCU's academic mission and strengthening the English competence of MCU learners in a systematic and policy-aligned manner.

Taken together, the overall analysis reveals that although several scholars have contributed to the development of Buddhist-related English reading materials, these works have not directly addressed the linguistic realities of MCU learners or the university's CEFR-oriented policy framework. Existing studies predominantly target

¹² Language Institute Chiang Mai University, "Language Institute Chiang Mai University, with MCU, Organize an English Training Program for Lecturers in the Northern Region," **LICMU News**, [Online], Source: <https://www.li.cmu.ac.th/language-institute-chiang-mai-university-with-mcu-organize-an-english-training-program-for-lecturers-in-the-northern-region/>, [25 May 2026].

advanced readers, rely on complex canonical texts, or focus on general Buddhist content without systematically calibrating difficulty through CEFR descriptors in response to learner needs. Likewise, none of the prior materials were produced under LiMCU or systematically aligned with the ESP needs of monastic students, meditation instructors, novice monks, and Buddhist professionals who form a core learning community at MCU. This gap underscores the need for a localized, context-sensitive approach that bridges Buddhist content with accessible English input for learners with varied lower- to intermediate-proficiency profiles and determines its final proficiency focus through needs analysis.

Against this background, the materials were initially conceptualized with reference to CEFR A1–A2 reading descriptors in order to support lower-proficiency MCU learners. This range served as a provisional planning framework rather than a fixed target. The needs analysis of 89 respondents subsequently revealed a broader proficiency profile, including substantial proportions of learners at A2 and B1 or above. Accordingly, the final proficiency focus was refined to A2–B1, with the materials progressing from accessible A2 texts toward selected B1-level reading demands in the later units while retaining appropriate support for learners requiring additional scaffolding.

The present study, therefore, plays a crucial role in advancing MCU's academic development by creating CEFR-aligned Buddhist context-based reading materials specifically designed for ESP learners within Buddhist higher education. These materials support LiMCU's 2025 initiative to standardize English instruction according to CEFR and provide learners with reading texts that are meaningful, culturally familiar, and professionally relevant. By integrating Buddhist contexts such as chanting, mindfulness practice, monastic duties, and *Dhamma* teaching into CEFR-based materials development, the study supports both linguistic competence and disciplinary engagement. Ultimately, this research contributes to MCU's long-term vision of internationalization, improves the quality of English education for monastic and lay learners, and adds to the emerging field of English for Religious Purposes (ERP). It also establishes a model that future researchers and Buddhist institutions can adapt when developing CEFR-aligned instructional resources.

1.2 Research Objectives

1. To design CEFR-aligned Buddhist context-based reading materials for ESP learners at Mahachulalongkornrajavidyalaya University (MCU).
2. To revise and refine the developed reading materials based on evaluation results for instructional use in Buddhist professional contexts.
3. To evaluate learner reading comprehension, perceived readability, and attitudes toward the developed reading materials.

1.3 Research Questions

1. What features should CEFR-aligned Buddhist context-based reading materials contain to meet the needs of ESP learners at MCU?
2. What revisions are necessary to refine the developed reading materials for effective instructional use in Buddhist professional contexts?
3. What are the levels of learner reading comprehension and perceived readability of the developed reading materials, and what are learners' attitudes toward their use?

1.4 Research Targets

The research targets refer to the intended users and beneficiaries of the developed materials rather than the groups formally participating in data collection. The CEFR-aligned Buddhist context-based reading materials are intended for the following groups:

1. Meditation Instructors (*Vipassanā* Masters)

Individuals responsible for guiding meditation practice, teaching *Vipassanā* methods, and communicating Buddhist principles to both local and international practitioners.

2. Buddhist Teachers and *Dhamma* Instructors

Lay and monastic educators who teach Buddhist doctrines, lead study groups, and engage in academic or community-based Buddhist instruction.

3. Monastic Personnel

This group includes monks who study, teach, or perform administrative duties; novice monks; nuns; and administrative monastic staff who support Buddhist educational and religious institutions.

4. Individuals Working in Buddhist Organizations or Related Institutions

This group includes staff members of monasteries or Buddhist centers; officers and employees of Buddhist universities, including MCU personnel; and workers in religious foundations or Buddhist community organizations.

5. General Learners Interested in Buddhism

Anyone seeking to improve their English proficiency through Buddhist-themed reading materials, including students, practitioners, and individuals engaged in Buddhist cultural or educational activities.

1.5 Scope of the Study

The scope of this study is defined in four dimensions: content, participants, location, and duration, as follows:

1. Content Scope

This study focuses on the development of CEFR-aligned Buddhist context-based reading materials intended primarily for MCU learners within the A2–B1 proficiency range. This final proficiency focus was refined from the preliminary A1–A2 framework on the basis of the needs analysis. The content covers Buddhist themes relevant to monastic and lay practitioners, including fundamental concepts of Buddhism, *Vipassanā* practice, monastic duties, *Dhamma* instruction, and everyday Buddhist communication. The reading passages, vocabulary, and comprehension tasks are informed by relevant CEFR A2–B1 descriptors and systematically sequenced to support accessibility and progression.

2. Participant Scope

The study involved four groups that contributed data or validation evidence at different stages of the research process: needs-analysis respondents, instrument-validation experts, material-evaluation experts, and learner participants.

1) Needs-Analysis Respondents

A total of 89 MCU respondents completed the needs-analysis questionnaire. Their responses provided information about English proficiency profiles, reading difficulties, preferred Buddhist topics, and expectations for the reading materials.

2) Instrument-Validation Experts

Three experts examined the content validity of the needs-analysis questionnaire using the Index of Item-Objective Congruence (IOC). All three experts assigned +1 to every item, resulting in an IOC value of 1.00 for each item.

3) Material-Evaluation Experts

Three expert evaluators assessed the first draft of the developed materials and provided quantitative ratings and qualitative recommendations concerning content, language, CEFR alignment, activities, and instructional suitability.

4) Learner Participants

Twelve learner participants took part in the try-out and completed the assigned reading units and comprehension tasks. Of these participants, 11 completed the learner-evaluation questionnaire concerning readability, perceived difficulty, usability, and attitudes toward the developed materials.

3. Location Scope

The research was conducted primarily at Mahachulalongkornrajavidyalaya University (MCU). Needs-analysis, expert-evaluation, and learner-evaluation data were collected through appropriate onsite and online channels coordinated by the Language Institute and the researchers.

4. Duration Scope

The study was conducted from January to July 2026, a total of seven months. This period covered the needs analysis, design and development of the first draft, expert evaluation, Revision 1, learner try-out and evaluation, Revision 2, and finalization of the developed reading materials.

1.6 Definitions of Key Terms

For clarity and consistency throughout the study, the following operational definitions are provided:

1. Development

Development refers to a systematic process of designing, creating, revising, and evaluating instructional materials based on instructional design principles. In this study, development refers specifically to the process of creating CEFR-aligned Buddhist context-based reading materials for ESP instruction at Mahachulalongkornrajavidyalaya University through needs analysis, material design, expert evaluation, revision, and refinement.

2. CEFR-Aligned

CEFR-Aligned refers to the use of the Common European Framework of Reference for Languages (CEFR) in the design of instructional materials. In this study, CEFR alignment refers to the systematic use of relevant CEFR descriptors to inform the language, text complexity, reading skills, vocabulary, and learning tasks of the materials, with the final proficiency focus placed primarily within the A2–B1 range.

3. Buddhist Context-Based

Buddhist Context-Based refers to the incorporation of Buddhist themes, concepts, vocabulary, and communicative situations into instructional materials. In this study, Buddhist contexts include daily monastic life, meditation practices, *Dhamma* teaching, Buddhist ceremonies, temple activities, and communication within Buddhist educational and professional contexts.

4. Reading Materials

Reading Materials refer to instructional texts and accompanying learning activities designed to support reading comprehension and language development. In this study, reading materials refer specifically to a CEFR-aligned Buddhist context-based English reading book developed primarily for ESP learners within the A2–B1 proficiency range.

5. CEFR-Aligned Buddhist Context-Based Reading Materials

CEFR-Aligned Buddhist Context-Based Reading Materials refer to reading materials whose language, text complexity, reading skills, and learning activities are informed by relevant CEFR descriptors and adjusted according to learners' identified needs. In the present study, the materials were developed around an accessible A2 core with selected features supporting progression from A2 toward B1.

6. English for Specific Purposes (ESP)

English for Specific Purposes (ESP) refers to an approach to English language teaching designed to meet learners' specific educational, occupational, or professional needs. In this study, ESP refers specifically to English learning related to Buddhist educational and communicative purposes within Buddhist educational settings.

7. Mahachulalongkornrajavidyalaya University (MCU)

Mahachulalongkornrajavidyalaya University (MCU) refers to a Buddhist higher education institution in Thailand serving as the research setting for this study.

1.7 Expected Benefits

1. Instructional Materials Output

The study produces an eight-unit CEFR-aligned Buddhist context-based English reading book for A2–B1 ESP learners at MCU. The book contains level-appropriate reading passages, key vocabulary, comprehension and language activities, answer keys, a glossary, and supporting illustrations.

2. Validated and Refined Reading Materials

Through needs analysis, expert evaluation, two stages of revision, and a learner try-out, the study provides reading materials that have been systematically reviewed and refined for clarity, relevance, CEFR appropriateness, and suitability for Buddhist professional contexts.

3. Learning Outcomes for MCU Learners

The developed materials provide MCU learners with accessible practice in English reading comprehension through familiar Buddhist topics and support the development of relevant vocabulary and reading strategies. The learner try-out also provides evidence concerning comprehension performance, perceived readability, usability, and learner attitudes.

4. Direct Resource for ESP Instruction at LiMCU

LiMCU and MCU instructors receive a research-based instructional resource for use in ESP reading classes and related short courses for monastic and lay learners. The study also provides a documented R&D process that links learner needs, CEFR descriptors, expert evaluation, and try-out evidence to the final material design.

Chapter 2

Review of Related Literature

The development of CEFR-aligned Buddhist context-based reading materials requires a coherent theoretical and empirical foundation drawn from several areas of language education. This chapter reviews the concepts most relevant to the present study, including English for Specific Purposes (ESP), the CEFR and its implications for curriculum and materials alignment, and readability principles that inform text selection and adaptation. It also examines the ADDIE instructional design model and the Research and Development (R&D) approach as systematic frameworks for developing and refining instructional materials. Together, these areas establish the principles needed to design level-appropriate and contextually relevant reading materials for learners in Buddhist educational settings.

In addition, this chapter examines Buddhist English communication across monastic, academic, community, and international professional domains, highlighting the language demands placed on monks and practitioners. National and institutional policies related to English education are also reviewed to situate the developed materials within broader educational directions. The chapter concludes with an analysis of previous studies on ESP, CEFR alignment, readability, and materials development, particularly those conducted in Buddhist contexts, in order to identify research gaps, support methodological decisions, and position the present study within existing scholarship. These collective insights form the conceptual and practical foundation for the design, evaluation, and refinement of the CEFR-aligned Buddhist ESP reading materials developed in this research.

2.1 Buddhist Principles Supporting Language Learning and Material Development

Buddhist teachings present learning as a gradual and systematic process of training rather than the immediate acquisition of knowledge. In the *Gaṇakamoggallāna*

Sutta, the Buddha explains that training in the Dhamma and discipline involves gradual training, gradual practice, and gradual progress, in the same way that other forms of knowledge and skill are developed step by step.¹³ This perspective emphasizes that learners require appropriate foundations and progressive development before advancing to more demanding levels of understanding. P. A. Payutto similarly explains Buddhist education as an integrated process of human development in which conduct, mental qualities, and wisdom are cultivated in a coordinated manner rather than as separate areas of learning.¹⁴

This Buddhist perspective provides a relevant conceptual foundation for language learning and instructional material development. Although Buddhist principles were not originally formulated as theories of second-language education, several of them are compatible with contemporary approaches that emphasize gradual progression, learner appropriateness, meaningful engagement, sustained effort, and reflective understanding. In the present study, these principles are applied as guiding perspectives rather than as direct equivalents of modern language-teaching theories. They support the design of reading materials that progress according to learners' proficiency, encourage careful engagement with meaning, provide language input suitable for learner readiness, and connect English learning with familiar Buddhist contexts.

The Buddhist principles most relevant to this study are *Tisikkhā*, which supports progressive and holistic development; *Yoniso Manasikāra*, which encourages careful and meaning-oriented reflection; *Sappāya*, which emphasizes suitability and supportive learning conditions; and *Iddhipāda IV*, which highlights motivation, effort, focused attention, and reflective investigation. These principles are considered together with Buddhist contextual knowledge and learners' actual communicative environments. Their application provides a culturally grounded framework for developing CEFR-aligned Buddhist context-based reading materials that are

¹³ M III 1–7, Bhikkhu Ñāṇamoli and Bhikkhu Bodhi (trans.), **Majjhima Nikāya [The middle length Discourse of the Buddha]**, (Oxford: PTS, 1995), pp. 874–879.

¹⁴ P. A. Payutto, **Education Made Easy**, trans. Robin Moore, (Bangkok: Wat Nyanavesakavan, 2018), pp. 4–11.

systematic, accessible, meaningful, and responsive to the needs of ESP learners at Mahachulalongkornrajavidyalaya University.

2.1.1 *Tisikkhā* and Progressive and Holistic Language Development

The Buddhist principle of *Tisikkhā*, or the Threefold Training, consists of training in higher ethical conduct (*adhisīla-sikkhā*), training in the higher mind (*adhicitta-sikkhā*), and training in higher wisdom (*adhipaññā-sikkhā*).¹⁵ These dimensions represent an integrated process of human development rather than three isolated areas of training. Ethical conduct regulates learners' interactions and behavior, mental cultivation develops positive mental qualities and focused attention, and wisdom enables knowledge, understanding, and appropriate judgment. P. A. Payutto explains that these three dimensions are interconnected and interdependent. Although each dimension may receive greater emphasis at a particular stage of training, all three continue to operate together and should be developed as an integrated whole.¹⁶

The principle of *Tisikkhā* also reflects the gradual nature of learning and development. In the *Gaṇakamoggallāna Sutta*, the Buddha explains that spiritual training proceeds through gradual training, gradual practice, and gradual progress. The discourse compares this process with other forms of structured learning in which learners advance step by step after establishing the necessary foundations.¹⁷ This perspective indicates that meaningful development requires an appropriate sequence of learning experiences rather than the immediate presentation of advanced knowledge or practice.

In the context of language education, *Tisikkhā* is applied in this study as a conceptual perspective for understanding language development as both progressive and holistic. It is not treated as a direct equivalent of a modern language-teaching theory. Rather, its three dimensions provide useful guidance for supporting different

¹⁵ A I 229, Woodward, F. L. (trans.), **Anguttara [The Book of the Gradual Sayings]**, vol 1, (London, Henley & Boston: PTS, 1979), pp. 208–209.

¹⁶ Bhikkhu P. A. Payutto (Somdet Phra Buddhaghosacariya), **Buddhadhamma: The Laws of Nature and Their Benefits to Life**, trans. Robin Philip Moore, 4th ed., (Bangkok: Buddhadhamma Foundation, 2021), pp. 665–670.

¹⁷ M III 1–7, Bhikkhu Ñāṇamoli and Bhikkhu Bodhi (trans.), **Majjhima Nikāya [The middle length Discourse of the Buddha]**, (Oxford: PTS, 1995), pp. 874–879.

aspects of the learning process. The disciplinary dimension may be associated with regular practice, self-regulation, and responsibility for learning; the mental dimension supports concentration and sustained attention during reading; and the wisdom dimension relates to comprehension, interpretation, and the ability to connect linguistic information with meaning. Language development therefore involves not only the accumulation of vocabulary and grammatical knowledge but also the cultivation of learning habits, focused engagement, and meaningful understanding.

This principle supports the progressive organization of the reading materials developed in the present study. The materials begin with linguistically accessible texts and clearly structured activities before introducing longer passages, broader vocabulary, and selected B1-level reading demands in the later units. Vocabulary support, guided questions, and graded activities provide learners with the foundations needed to approach increasingly complex texts. This progression is compatible with the CEFR, whose descriptors represent progressive mastery of language abilities across proficiency levels.¹⁸ However, the relationship between *Tisikkhā* and the CEFR should be understood as conceptual compatibility rather than direct equivalence: *Tisikkhā* provides the Buddhist educational perspective of gradual and integrated development, while the CEFR supplies the language-proficiency framework used to determine the level and progression of the reading materials.

2.1.2 *Yoniso Manasikāra* and Meaning-Oriented Reading Comprehension

Yoniso Manasikāra, commonly translated as wise attention or wise reflection, refers to the careful and systematic direction of the mind toward the causes, conditions, and essential meaning of an object or experience. In the *Sabbāsava Sutta*, the Buddha distinguishes wise attention from unwise attention, explaining that the way in which a person attends to an experience influences whether unwholesome mental states arise, persist, or are abandoned.¹⁹ The principle therefore emphasizes

¹⁸ Council of Europe, **Common European Framework of Reference for Languages: Learning, Teaching, Assessment—Companion Volume**, (Strasbourg: Council of Europe Publishing, 2020), pp. 31–42.

¹⁹ M I 6–12, Bhikkhu Ñāṇamoli and Bhikkhu Bodhi (trans.), **Majjhima Nikāya [The middle length Discourse of the Buddha]**, (Oxford: PTS, 1995), pp. 91–96.

that understanding does not depend only on receiving information but also on directing attention toward relevant aspects of that information in an appropriate manner. The English translations of MN 2 by I. B. Horner and Bhikkhu Bodhi both explicitly distinguish wise from unwise attention.

P. A. Payutto explains that *yoniso-manasikāra* involves methodical, systematic, causal, and analytical reflection. It enables a person to investigate an issue by tracing its origins, examining the relationships between causes and conditions, distinguishing its component parts, and considering it in relation to its purpose and consequences.²⁰ Wise reflection thus promotes the development of *paññā* by preventing thought from being governed merely by habitual preferences, assumptions, or superficial impressions. Instead, it encourages learners to consider information carefully, recognize relationships among ideas, and arrive at understanding through reasoned examination. In *Buddhadhamma*, this principle is discussed extensively as an internal condition for the development of wisdom and as a means of directing thought toward truth and effective problem solving.

In the context of reading instruction, *Yoniso Manasikāra* provides a conceptual foundation for meaning-oriented comprehension. Learners with limited English proficiency may concentrate heavily on translating individual words and grammatical forms, while paying insufficient attention to the overall message and organization of a passage. Applying the principle of wise reflection encourages learners to move beyond isolated word recognition and consider how words, sentences, and ideas function together. This includes identifying the main idea, distinguishing supporting details, recognizing sequences and cause-and-effect relationships, using contextual clues, and connecting information in the text with relevant prior knowledge.

The reading materials developed in this study apply this principle through structured passages and guided comprehension activities. Questions are designed not only to test the recall of separate details but also to direct learners' attention toward the central meaning, relationships among ideas, contextual information, and the purposes

²⁰ Bhikkhu P. A. Payutto (Somdet Phra Buddhaghosacariya), **Buddhadhamma: The Laws of Nature and Their Benefits to Life**, trans. Robin Philip Moore, 4th ed., (Bangkok: Buddhadhamma Foundation, 2021), pp. 1428–1434.

of the texts. Vocabulary support and clearly sequenced activities help reduce unnecessary linguistic difficulty, allowing learners to devote greater attention to comprehension and interpretation. *Yoniso Manasikāra* is therefore not treated as a direct equivalent of a modern reading theory; rather, it serves as a Buddhist conceptual perspective supporting careful, systematic, and meaning-focused engagement with English texts.

2.1.3 *Sappāya* and Learner-Appropriate Material Design

The Buddhist principle of *Sappāya* refers to that which is suitable, beneficial, or conducive to a particular form of development. In the *Aniccanibbānasappāya Sutta*, the Buddha describes a mode of contemplation that is suitable for the attainment of *Nibbāna*, indicating that progress depends partly on whether the method and conditions employed are conducive to the intended purpose (SN 35.147; S IV 133–134).²¹ Although the discourse concerns Buddhist practice rather than formal education, it establishes the underlying principle that a condition is valuable not merely because it is available, but because it appropriately supports the development being pursued.

The principle is explained in greater detail in the *Visuddhimagga*, which identifies seven areas that may be suitable or unsuitable for a practitioner: abode, resort, speech, person, food, climate, and posture. The text emphasizes that suitability is not necessarily identical for every individual. A particular food, climate, posture, or environment may support concentration for one person but not for another. A condition is considered suitable when it helps establish mindfulness and concentration or strengthens qualities that have already arisen.²² This explanation demonstrates that effective development requires attention to individual characteristics and to the conditions under which learning or practice occurs.

In the context of language education, *Sappāya* is applied in this study as a conceptual perspective for learner-appropriate material design rather than as a direct

²¹ Bhikkhu Bodhi (trans.), **Samyutta Nikāya [The Connected Discourses of the Buddha]**, vol 2, (Oxford: PTS, 2000), p. 1212.

²² Bhikkhu Ñāṇamoli, trans., **The Path of Purification (Visuddhimagga)**, 4th ed., (Kandy: Buddhist Publication Society, 2010), pp. 123–124.

theory of readability. Reading materials should correspond to learners' proficiency, background knowledge, learning needs, and ability to process the language presented. Research on second-language readability indicates that the accessibility of a text depends on the interaction of numerous factors, including vocabulary, syntactic complexity, textual organization, conceptual familiarity, format, learner background, and interest. Criteria for judging readability should therefore be selected according to the characteristics and needs of the target readers rather than determined solely by general measures of word or sentence length.²³

The application of *Sappāya* in the present study informed decisions concerning vocabulary load, sentence structure, passage length, content familiarity, activity sequencing, and instructional support. The reading materials were designed around accessible A2-level language while gradually introducing selected B1-level demands. Key Buddhist vocabulary, contextual clues, visual support, guided comprehension questions, and clearly organized activities were provided to reduce unnecessary linguistic obstacles. At the same time, the texts were not simplified to the extent that they removed opportunities for language development. Learner appropriateness therefore involves achieving a balance between accessibility and productive challenge, so that the materials remain comprehensible while supporting continued progress.

Accordingly, *Sappāya* strengthens the theoretical justification for designing materials in response to the actual conditions of the target learners. It supports the view that effective reading materials should not be based solely on predetermined linguistic content but should be adapted to learners' proficiency levels, Buddhist contextual knowledge, and instructional needs. In combination with CEFR descriptors and L2 readability research, the principle provides a culturally grounded perspective for ensuring that the developed materials are accessible, supportive, and appropriate for ESP learners at Mahachulalongkornrajavidyalaya University.

²³ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, "Text Readability Assessment for Second Language Learners," in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–13.

2.1.4 *Iddhipāda IV* and Learner Motivation, Persistence, and Reflective Improvement

The Buddhist principle of *Iddhipāda IV*, or the Four Paths to Success, consists of *chanda*, *virīya*, *citta*, and *vīmaṃsā*. In the *Iddhipādavibhaṅga Sutta*, these four qualities are associated respectively with concentration based on aspiration, energy, focused attention, and investigation, each supported by deliberate effort.²⁴ Although the discourse presents these qualities within the context of Buddhist training, they also provide a useful conceptual perspective on the mental conditions required for sustained learning. The principle indicates that successful development depends not only on the availability of instruction but also on learners' willingness to engage, perseverance in overcoming difficulty, concentration on the task, and capacity to examine and improve their performance. The four qualities are mutually supportive rather than independent, since interest can stimulate effort, effort can strengthen attention, and sustained attention can create the conditions for careful investigation.

P. A. Payutto explains *chanda* as enthusiasm for an activity and a desire to bring it to successful completion. Unlike desire directed merely toward external reward, *chanda* arises from recognizing the value of the activity and taking satisfaction in its progress. *Virīya* refers to energy, courage, perseverance, and the determination not to become discouraged by obstacles. *Citta* involves focused attention in which the mind remains closely engaged with an activity rather than becoming distracted. *Vīmaṃsā* refers to the application of wisdom through investigation, reasoning, experimentation, and the examination of weaknesses or shortcomings in order to make appropriate adjustments. P. A. Payutto further emphasizes that these four qualities generally support one another and may be developed in educational settings by helping learners recognize the value of knowledge, approach difficulty as a challenge, attend responsibly to their work, and investigate problems through inquiry and reflection.²⁵

²⁴ S V 277–281, Bhikkhu Bodhi (trans.), **Samyutta Nikāya [The Connected Discourses of the Buddha]**, vol 2, (Oxford: PTS, 2000), pp. 1736–1740.

²⁵ Bhikkhu P. A. Payutto (Somdet Phra Buddhaghosacariya), **Buddhadhamma: The Laws of Nature and Their Benefits to Life**, trans. Robin Philip Moore, 4th ed., (Bangkok: Buddhadhamma Foundation, 2021), pp. 1846–1853.

In language learning, these four qualities correspond to important dimensions of learner engagement. *Chanda* supports learners' interest and willingness to participate when the content is meaningful and relevant to their lives. *Viriya* supports continued practice when learners encounter unfamiliar vocabulary, complex sentences, or difficulties in understanding a passage. *Citta* enables learners to maintain attention while identifying main ideas, locating supporting details, and connecting information across a text. *Vīmaṃsā* encourages learners to examine their answers, identify causes of misunderstanding, reconsider the strategies they have used, and make improvements in subsequent reading activities. Contemporary Buddhist-oriented discussions of English education have similarly applied *Iddhipāda IV* to language learning by relating it to interest in learning English, perseverance in the face of difficulty, sustained concentration, and the analytical review and correction of learning weaknesses.²⁶ Roongrat Inprasert and Boonma Kuphan explicitly connect these qualities with continuous improvement in English learning.

The application of *Iddhipāda IV* informed several features of the reading materials developed in this study. Buddhist topics connected with learners' backgrounds and communicative needs were selected to stimulate *chanda* by making the content meaningful and relevant. Activities were organized progressively and provided repeated opportunities for practice in order to support *virīya* without placing an excessive burden on learners. Clear passage organization, vocabulary support, and focused comprehension questions were incorporated to facilitate *citta*. Tasks requiring learners to infer meaning, examine relationships among ideas, check their understanding, and reconsider incorrect responses were included to encourage *vīmaṃsā*. These features support active participation rather than passive exposure to English texts.

Accordingly, *Iddhipāda IV* is not treated in this study as a direct equivalent of a contemporary theory of language-learning motivation. Instead, it serves as a Buddhist conceptual framework for understanding the learner qualities that contribute

²⁶ Roongrat Inprasert and Boonma Kuphan, "Using English for Communication of Buddhist Learning in New Normal," **Journal of MCU Ubon Review**, Vol. 7, No. 3 (September–December 2022), pp. 89–90.

to productive engagement and continued development. Together, *chanda*, *viriya*, *citta*, and *vīmaṃsā* provide a culturally grounded basis for designing reading materials that encourage interest, persistence, focused attention, and reflective improvement. The principle therefore complements the study's concern with learner attitudes and supports the development of materials that learners are willing and able to engage with over time.

2.1.5 Buddhist Context, Prior Knowledge, and Authentic Language Use

In English for Specific Purposes, context is not merely a background theme added to general language instruction. It influences the content, vocabulary, communicative purposes, and learning tasks that should be included in instructional materials. ESP course design therefore begins with an examination of the situations in which learners need to use English, the knowledge they already possess, the difficulties they experience, and the conditions under which learning takes place.²⁷ In Buddhist educational settings, relevant contexts may include monastic life, meditation practice, Buddhist ceremonies, temple activities, *Dhamma* instruction, academic study, and communication with international visitors. Incorporating these contexts enables reading instruction to address both language development and learners' actual or anticipated uses of English.

Prior knowledge is particularly important in second-language reading because comprehension requires readers to integrate linguistic information with their existing conceptual knowledge. Learners may find a passage difficult not only because of unfamiliar vocabulary or sentence structure, but also because they lack familiarity with its subject matter and discourse. Conversely, familiar content can provide a conceptual foundation that helps learners predict meaning, interpret key vocabulary, recognize relationships among ideas, and understand the text as a whole. Research on content-based reading materials for Buddhist student monks has emphasized that materials should contain meaningful content related to learners' religious background knowledge. It has also indicated that the absence of appropriately designed materials

²⁷ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 53–58, 65–72.

can prevent learners from using their existing Buddhist knowledge to support English reading comprehension.²⁸

Buddhist context-based materials can therefore create a bridge between knowledge previously acquired in Thai or through lived experience and its expression in English. Learners may already understand concepts such as daily monastic routines, meditation methods, temple etiquette, Buddhist festivals, or basic teachings, but may not possess the English vocabulary and discourse patterns needed to read or communicate about them. Contextualized materials allow learners to develop this linguistic knowledge through familiar concepts rather than requiring them to process unfamiliar language and unfamiliar subject matter simultaneously. A needs-analysis study conducted in a Buddhist university similarly found that the absence of English materials related to Buddhism made course content less meaningful and reduced learner motivation and participation, supporting the need for materials designed around the educational and cultural context of the target learners.²⁹

Authentic language use in this study does not necessarily require the direct presentation of unmodified religious or academic texts, which may contain vocabulary, syntax, and discourse structures beyond the intended A2–B1 proficiency range. Instead, authenticity refers to the meaningful relationship between the language presented in the materials and the purposes for which learners may need to use it. Texts may be selected, adapted, or rewritten to achieve an appropriate level of difficulty while retaining relevant Buddhist concepts, commonly used expressions, communicative functions, and recognizable discourse features. Previous research on Buddhist content-based reading materials has similarly combined authentic religious

²⁸ Phatchareporn Suphipat and Sumalee Chinokul, “The Development of the English Content-Based Reading Materials for Buddhist Student Monks,” **Suranaree Journal of Social Science**, Vol. 13 No. 1 (January–June 2019), pp. 2–3.

²⁹ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, “Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills,” **LEARN Journal: Language Education and Acquisition Research Network**, Vol. 18 No. 2 (July–December 2025), pp. 108–110.

content with reading strategies and contextual adaptation to help learners apply their background knowledge before, during, and after reading.³⁰

In the present study, Buddhist contexts were incorporated through reading passages and activities related to learners' educational, religious, and communicative environments. The materials provide opportunities to read descriptions of monastic activities, explanations of Buddhist teachings, instructions related to meditation and temple conduct, accounts of ceremonies and traditions, and texts involving communication with foreign visitors. The accompanying activities require learners to identify main ideas, locate practical information, interpret contextual vocabulary, recognize sequences and relationships, and explain information presented in the passages. These tasks connect reading comprehension with language that may be used in academic study, Buddhist education, temple communication, and intercultural interaction.

Nevertheless, familiar content alone does not guarantee successful comprehension. Buddhist contextual knowledge must be combined with appropriate language levels, controlled text complexity, vocabulary support, clear organization, and guided reading activities. Buddhist context-based learning therefore complements the principles of *Sappāya*, CEFR-informed progression, and second-language readability. Together, these elements support the development of reading materials that are linguistically accessible, culturally meaningful, and relevant to the actual needs of ESP learners at Mahachulalongkornrajavidyalaya University.

2.1.6 Integration of Buddhist Principles into the Design of the Reading Materials

The Buddhist principles discussed in the preceding sections were integrated into the design of the reading materials as complementary guiding perspectives. They were not treated as direct substitutes for contemporary theories of language education. Rather, they provided a culturally grounded conceptual foundation that was combined with the principles of English for Specific Purposes, CEFR-informed progression,

³⁰ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science**, Vol. 13 No. 1 (January–June 2019), pp. 3–4.

second-language readability, and systematic materials development.³¹³² This integration enabled the materials to address both the linguistic needs of the learners and the Buddhist educational context in which English learning takes place.

Tisikkhā informed the overall progression and holistic orientation of the materials. Its emphasis on gradual and integrated development supported the organization of the units from linguistically accessible texts toward more demanding reading tasks. It also reinforced the view that reading development involves not only vocabulary and grammatical knowledge but also disciplined practice, sustained attention, and meaningful understanding. *Yoniso Manasikāra* informed the design of comprehension activities that direct learners' attention toward main ideas, supporting details, sequences, contextual meanings, and relationships among concepts. Rather than encouraging mechanical word-by-word translation, the activities were designed to promote careful and meaning-oriented engagement with the texts.

Sappāya guided decisions concerning the appropriateness of content, linguistic difficulty, passage length, vocabulary load, and instructional support. This principle was applied together with CEFR descriptors and readability considerations to ensure that the texts remained accessible to learners within the intended A2–B1 proficiency range. *Iddhipāda IV* supported the inclusion of relevant topics, progressive practice, focused tasks, and opportunities for self-examination. Through *chanda*, the materials aim to stimulate interest by using meaningful Buddhist content; through *virīya*, they encourage continued effort; through *citta*, they support concentration on reading tasks; and through *vīmaṃsā*, they promote reflection, answer checking, and improvement.

Buddhist context, prior knowledge, and authentic language use provided the thematic and communicative foundation of the materials. Topics related to monastic life, meditation, Buddhist teachings, ceremonies, temple activities, and communication with foreign visitors allow learners to connect English input with knowledge and

³¹ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 53–58, 65–78.

³² Council of Europe, **Common European Framework of Reference for Languages: Learning, Teaching, Assessment—Companion Volume**, (Strasbourg: Council of Europe Publishing, 2020), pp. 31–42, 53–60.

experience they already possess. At the same time, the texts and activities were linguistically adapted to learners' proficiency levels so that contextual authenticity did not result in excessive difficulty. The integration of the five elements is summarized in Table 2.1.

Table 2.1 Integration of Buddhist Principles into the Design of the Reading Materials

Buddhist Principle or Perspective	Educational Implication	Application in the Reading Materials	Related Research Aspect
<i>Tisikkhā</i>	Gradual and holistic development	Progression from accessible A2 texts toward selected B1 demands; development of disciplined practice, attention, and understanding	CEFR progression and reading development
<i>Yoniso Manasikāra</i>	Careful, systematic, and meaning-oriented reflection	Main-idea questions, supporting-detail tasks, contextual inference, sequencing, and recognition of relationships among ideas	Reading comprehension
<i>Sappāya</i>	Suitability to learner readiness and learning conditions	Control of vocabulary, sentence complexity, passage length, content familiarity, and instructional support	Readability and level appropriateness

Buddhist Principle or Perspective	Educational Implication	Application in the Reading Materials	Related Research Aspect
<i>Iddhipāda IV</i>	Interest, persistence, concentration, and reflective investigation	Relevant topics, repeated practice, focused activities, answer checking, and opportunities for improvement	Learner engagement and attitudes
Buddhist context and prior knowledge	Connection between language learning and learners' existing knowledge and communicative environment	Texts on Buddhist teachings, monastic activities, meditation, temple culture, and communication with international visitors	ESP relevance and contextual authenticity

The integrated framework also establishes a clear relationship between the theoretical foundation of the study and the principal aspects evaluated in the research. *Yoniso Manasikāra* is closely associated with reading comprehension, *Sappāya* with readability and learner appropriateness, and *Iddhipāda IV* with learner engagement and attitudes. *Tisikkhā* provides the broader developmental structure, while Buddhist context connects the materials with learners' specific needs and real-world language use. These relationships do not imply that each Buddhist principle corresponds exclusively to one research variable; rather, the principles operate together and collectively support the design of systematic, meaningful, and learner-responsive materials.

In summary, the integration of Buddhist principles strengthened the conceptual and cultural foundation of the developed reading materials. When combined with ESP needs analysis, CEFR descriptors, readability principles, and materials-development procedures, these principles supported the creation of reading materials that are progressively organized, linguistically appropriate, cognitively

engaging, and relevant to the educational and communicative needs of learners at Mahachulalongkornrajavidyalaya University.³³

2.2 Theoretical Foundations of the Conceptual Framework

The conceptual framework of this study is grounded in seven interrelated foundations: English for Specific Purposes (ESP), needs analysis, CEFR-based language instruction, second language reading comprehension and readability, materials development, instructional design, and the contextualization of learning materials within Buddhist education. These foundations collectively informed the design, development, evaluation, and refinement of the CEFR-aligned Buddhist context-based reading materials. Rather than functioning as separate or independent variables, they provided complementary perspectives for determining what the materials should contain, how they should be organized, how their language level should be established, and how their quality should be evaluated.

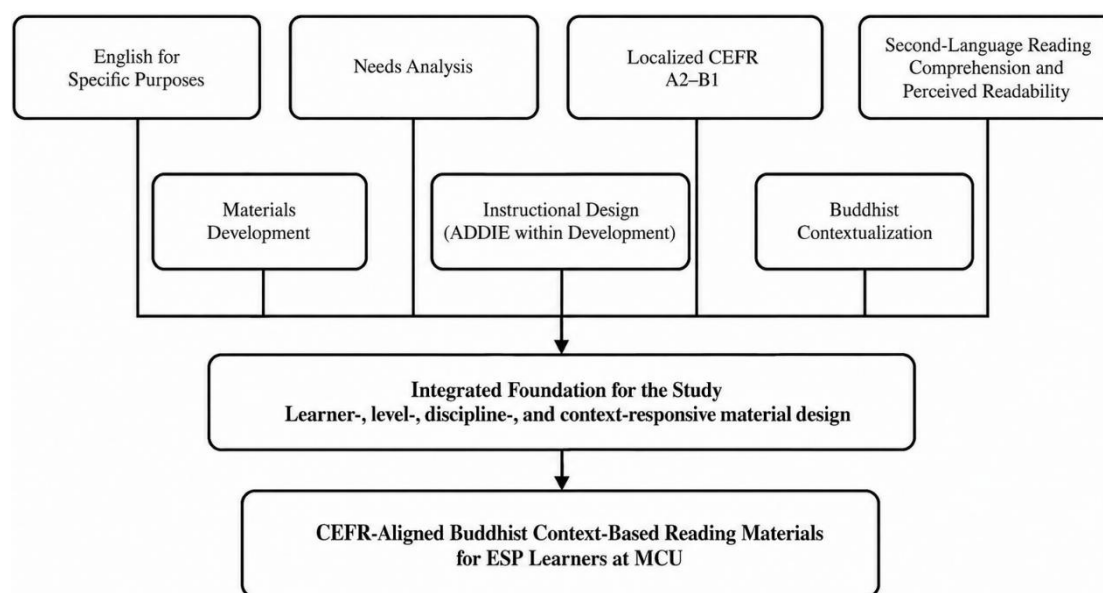


Figure 2.1: Theoretical Foundations of the Conceptual Framework

³³ Brian Tomlinson (ed.), **Materials Development in Language Teaching**, 2nd ed., (Cambridge: Cambridge University Press, 2011), pp. 1–15.

2.2.1 English for Specific Purposes

English for Specific Purposes provides the principal orientation of the conceptual framework. ESP emphasizes that language instruction should be developed in relation to the particular purposes, target situations, disciplinary contexts, and learning requirements of a specific group of learners. Hutchinson and Waters distinguish between target needs, which concern what learners need to do in the target situation, and learning needs, which concern what learners require in order to develop the necessary language abilities.³⁴

In the present study, the ESP perspective justified the development of reading materials specifically for learners at Mahachulalongkornrajavidyalaya University rather than the adoption of general English materials without contextual adaptation. The materials were therefore intended to connect English reading development with Buddhist academic, religious, and communicative purposes. ESP also supported the selection of relevant vocabulary, reading situations, text types, and learning activities associated with Buddhist education and the prospective use of English by the target learners.

2.2.2 Needs Analysis

Needs analysis constitutes the empirical starting point of the conceptual framework. Within ESP, materials should be developed from systematically collected evidence concerning learners' necessities, lacks, wants, proficiency profiles, difficulties, interests, and expectations. The purpose of needs analysis is not merely to identify preferred topics but to establish a learner and contextual profile that can guide decisions concerning objectives, content, language level, instructional support, and task design.

Hutchinson and Waters emphasize that learners' target and learning needs must be examined in relation to both the situations in which English will be used and the processes through which it will be learned.³⁵ Research conducted in a Buddhist

³⁴ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 53–56.

³⁵ Ibid.

university context similarly demonstrates that needs analysis can identify relevant content areas and language functions for the development of instructional materials that correspond to learners' academic and contextual requirements.³⁶ Accordingly, needs analysis in this study provided the basis for selecting Buddhist topics, determining the intended proficiency range, identifying reading difficulties, and establishing the forms of vocabulary and comprehension support to be included in the materials.

2.2.3 CEFR-Based Language Instruction

The Common European Framework of Reference for Languages provides the proficiency framework used to guide the intended language level and reading outcomes of the developed materials. The CEFR describes language proficiency through common reference levels and illustrative descriptors relating to communicative language activities, strategies, and competences.³⁷ Its descriptors provide reference points for determining what learners at different proficiency levels may reasonably be expected to understand and accomplish when reading.

In this study, relevant reading descriptors within the A2–B1 range were used to inform the expected reading performances, linguistic accessibility, and learning tasks of the materials. However, CEFR alignment was not treated as the simple attachment of a proficiency label to a passage. Guidance on alignment emphasizes the need to establish explicit relationships among the intended users, learning objectives, communicative activities, materials, relevant descriptors, and educational context.³⁸ The CEFR is also not a fixed curriculum or a prescribed list of grammatical and lexical items; its principles and descriptors must be adapted to the particular language,

³⁶ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, "Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills," **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 109–113.

³⁷ Council of Europe, **Common European Framework of Reference for Languages: Learning, Teaching, Assessment**, (Cambridge: Cambridge University Press, 2001), pp. 1, 21–27.

³⁸ British Council, UKALTA, EALTA, and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA, and ALTE, 2022), pp. 13, 29, 32–35.

learners, and context in which they are applied.³⁹ Consequently, CEFR descriptors provided proficiency reference points, while the needs analysis and Buddhist ESP context determined the content, purposes, and instructional forms through which those abilities were developed.

2.2.4 Second Language Reading Comprehension and Readability

The conceptual framework is also informed by research on second language reading comprehension and readability. Reading comprehension is an interactive process involving linguistic knowledge, background knowledge, reading strategies, textual organization, and the reader's ability to construct meaning from written information. For second language learners, comprehension may be affected by limited vocabulary, grammatical complexity, unfamiliar discourse organization, insufficient background knowledge, and difficulty applying appropriate reading strategies.

Readability refers to the relationship between the characteristics of a text and the ability of its intended readers to process and understand it. Research on readability for L2 learners identifies lexical and syntactic complexity, text organization, conceptual familiarity, reader background, and reader interest among the factors influencing text difficulty.⁴⁰ It further suggests that readability should be considered in relation to the proficiency and characteristics of the target learners rather than being determined solely through traditional formulas or surface features.

Research on English reading materials for Buddhist student monks also indicates that reading difficulties may arise from inadequate vocabulary, structural complexity, limited reading strategies, and the absence of materials that allow learners to draw upon relevant Buddhist background knowledge.⁴¹ These perspectives informed both the development and evaluation of the materials in this study. Readability was

³⁹ Arda Arikan, "The CEFR and Reading: A Document Analysis," **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), pp. 501–504.

⁴⁰ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, "Text Readability Assessment for Second Language Learners," in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–22.

⁴¹ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 2–3.

considered through the appropriateness of vocabulary, sentence structures, passage organization, instructions, and task difficulty, while comprehension was examined through learners' performance on reading and vocabulary activities.

2.2.5 Materials Development

Materials development provides the pedagogical basis for transforming the identified needs and theoretical principles into usable instructional resources. Tomlinson describes materials development as both a field of study concerned with the principles and procedures of designing, implementing, and evaluating language-learning materials and a practical activity involving the production and adaptation of resources for language learning.⁴² Effective materials should be relevant and useful to learners, provide meaningful exposure to language, support engagement, and create opportunities for learners to process and use language purposefully.

In the present study, materials development involved the selection and organization of Buddhist themes, the preparation and adaptation of reading passages, the presentation of specialized vocabulary, and the construction of reading comprehension and vocabulary activities. The materials were also designed to maintain consistency among learning outcomes, reading content, vocabulary support, exercises, and practical applications.

Previous studies on English content-based reading materials for Buddhist learners demonstrate that materials development may begin with needs identification and proceed through contextual realization, pedagogical realization, production, implementation, and evaluation.⁴³ They also show that Buddhist themes, meaningful texts, coherent tasks, and content relevant to monastic or Buddhist educational experiences can be integrated to support language development and reading

⁴² Brian Tomlinson (ed.), **Materials Development in Language Teaching**, 2nd ed., (Cambridge: Cambridge University Press, 2011), pp. 1–15.

⁴³ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 3–8.

comprehension.⁴⁴ These studies provided contextual examples of how general materials-development principles could be applied within Buddhist English education.

2.2.6 Instructional Design

Instructional design provides the systematic structure through which the different foundations of the framework were integrated. The study was particularly informed by the ADDIE approach, which consists of Analysis, Design, Development, Implementation, and Evaluation. ADDIE provides a guiding framework for developing educational products by connecting learner and contextual analysis with instructional objectives, content, learning activities, implementation, and evaluation.⁴⁵

The ADDIE approach was applied flexibly rather than as a rigid linear sequence. Instructional design models should be adaptable because development projects may require movement among design, development, evaluation, and revision in response to emerging evidence and practical constraints.⁴⁶ In this study, the Analysis phase was represented by the needs and contextual analysis; the Design and Development phases informed the preparation of the material blueprint and instructional units; the Implementation phase involved the learner try-out; and the Evaluation phase included expert and learner evaluation.

Evaluation also served a formative function throughout the development process. Evidence from expert review and learner use was employed to identify weaknesses and guide revision before finalization. This reflects the ADDIE principle that evaluation is connected to the other phases and supports the continuing improvement of instructional products rather than functioning only as a final judgment after development has been completed.⁴⁷

⁴⁴ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, “The Development of the English Content-Based Reading Materials for Buddhist Students of Mahachulalongkornrajavidyalaya University,” **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), pp. 172, 175–176.

⁴⁵ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 17–18.

⁴⁶ Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), p. ix.

⁴⁷ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 131–149.

2.2.7 Buddhist Contextualization of Learning Materials

The final foundation concerns the contextualization of English learning materials within Buddhist education. Contextualization refers to the selection and presentation of content that corresponds to learners' disciplinary knowledge, cultural experiences, educational environment, and anticipated uses of the language. In a Buddhist university, general English materials may provide useful language input but may not adequately represent the religious, academic, and communicative situations encountered by learners. Research in Buddhist higher education therefore emphasizes the value of instructional resources developed specifically around Buddhist content and learner needs.⁴⁸

Studies of Buddhist student monks have shown that meaningful and relevant content can help learners connect new English-language knowledge with existing Buddhist background knowledge. Materials containing Buddhist themes, specialized religious vocabulary, and contexts associated with monastic or Buddhist life have also been positively evaluated in relation to relevance, motivation, comprehension, and practical usefulness.⁴⁹ Similar research at Mahachulalongkornrajavidyalaya University demonstrates that English content-based reading materials can integrate Buddhist themes, texts, tasks, and reading strategies to create coherent learning experiences for Buddhist learners.⁵⁰

Accordingly, the Buddhist context in this study was not included merely as decorative subject matter. It functioned as the disciplinary and cultural setting within which English reading abilities were developed. Buddhist teachings, monastic life, meditation, temple activities, cultural traditions, communication with foreign visitors,

⁴⁸ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, "Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills," **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 108–113.

⁴⁹ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 14–16.

⁵⁰ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, "The Development of the English Content-Based Reading Materials for Buddhist Students of Mahachulalongkornrajavidyalaya University," **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), pp. 175–176.

and Buddhist education provided meaningful contexts for vocabulary learning, reading comprehension, and the practical application of information obtained from texts.

In summary, the conceptual framework of the study integrates seven complementary foundations: ESP, needs analysis, CEFR-based language instruction, second language reading comprehension and readability, materials development, instructional design, and Buddhist contextualization. ESP and needs analysis establish the purposes and learner requirements of the materials; CEFR provides proficiency reference points; reading comprehension and readability research informs linguistic and pedagogical accessibility; materials-development principles guide the construction of texts and activities; ADDIE provides a systematic and iterative development structure; and Buddhist contextualization ensures disciplinary, cultural, and practical relevance. Together, these foundations support the development of CEFR-aligned Buddhist context-based reading materials that are needs-based, level-appropriate, pedagogically systematic, and meaningful for the target learners.

2.3 Meaning and Scope of ESP (English for Specific Purposes)

English for Specific Purposes (ESP) refers to the branch of language education that focuses on developing learners' English proficiency to meet the communicative demands of particular academic, professional, or occupational contexts. Unlike general English instruction, which emphasizes broad language skills, ESP targets the specific linguistic features, discourse patterns, and functional language tasks required within a defined domain such as business, nursing, engineering, or, in this study, Buddhist education and monastic communication. The scope of ESP encompasses needs analysis, context-specific curriculum design, and the creation of materials that reflect real-world language use. Understanding the foundations and scope of ESP is therefore essential for designing effective CEFR-aligned reading materials that address the unique communicative needs of Buddhist learners.

2.3.1 Definition of ESP from Major Scholars

Major scholars emphasize that ESP is driven by learners' purposes rather than by a fixed body of language content. ESP is widely recognized as a major

approach within English Language Teaching (ELT), supported by decades of research and pedagogical practice in both academic and professional settings.⁵¹⁵² Richards and Rodgers (2014) situate ESP within the development of Communicative Language Teaching, emphasizing the specific language and communicative skills required for particular occupational or educational roles.⁵³ More broadly, they support principled eclecticism, through which relevant principles and practices from different teaching approaches may be reviewed, selected, and blended according to local circumstances and learners' needs.⁵⁴ In addition, Anthony (2018)⁵⁵ defines ESP as follows:

“English for Specific Purposes (ESP) is an approach to language teaching that targets the current and/or future academic or occupational needs of learners, focuses on the necessary language, genres, and skills to address these needs, and assists learners in meeting these needs through the use of general and/or discipline-specific teaching materials and methods.”

Hutchinson and Waters (1987)⁵⁶ likewise view ESP as an approach rather than a product, meaning that it does not prescribe a particular language variety, set of teaching materials, or methodology. This perspective represents a shift from a one-size-fits-all model of English instruction toward a learner-centered approach shaped by specific academic or professional needs.⁵⁷ Unlike General English, ESP begins with the target situation and works backward to determine the language, skills, genres, and learning activities that learners require.

⁵¹ Maggie Charles, “English for Academic Purposes,” in **The Handbook of English for Specific Purposes**, eds. Brian Paltridge and Sue Starfield, (Chichester: Wiley-Blackwell, 2013), pp. 137–154.

⁵² Meredith Marra, “English in the Workplace,” in **The Handbook of English for Specific Purposes**, eds. Brian Paltridge and Sue Starfield, (Chichester: Wiley-Blackwell, 2013), pp. 175–192.

⁵³ Jack C. Richards and Theodore S. Rodgers, **Approaches and Methods in Language Teaching**, 3rd ed., (Cambridge: Cambridge University Press, 2014), p. 95.

⁵⁴ *Ibid.*, p. 352–353.

⁵⁵ Laurence Anthony, **Introducing English for Specific Purposes**, (Abingdon: Routledge, 2018), pp. 10–11.

⁵⁶ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), p. 2.

⁵⁷ Qing Li and Xinghua Huo, “Research on Narrow Context ESP Course Design in Adult Education,” in **Proceedings of the International Conference on Education, Language, Art and Intercultural Communication**, (Paris: Atlantis Press, 2014), pp. 130–134.

Taken together, these definitions show that ESP is a focused and needs-based approach to English language teaching. It identifies what a particular group of learners must accomplish in academic or professional situations and then selects the language, skills, text types, materials, and methods most relevant to those purposes.

2.3.2 Scope and Characteristics of ESP

To understand English for Specific Purposes (ESP), it is necessary to distinguish it from General English (GE) and identify the characteristics that position it within English Language Teaching (ELT). ESP is commonly divided into two broad areas: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP).^{58,59,60} These branches extend into specialized areas such as English for Medical Purposes, Business English, English for Science and Technology, Engineering English, and Nursing English. ESP therefore has context-specific approaches to teaching, materials, and assessment.⁶¹ Hutchinson and Waters (1987) state that ESP serves learners who need English for particular academic, professional, or vocational domains, including science and technology, business, law, medicine, and social studies.⁶² Within this scope, Dudley-Evans' widely cited framework stresses that ESP is needs-based, uses methods and activities linked to the target discipline, and focuses on the language, skills, discourse, and genres required in authentic tasks.⁶³

Commonly noted characteristics include the following.

⁵⁸ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), pp. 4–6.

⁵⁹ Pauline C. Robinson, **ESP Today: A Practitioner's Guide**, (Hemel Hempstead: Prentice Hall, 1991), pp. 2–5.

⁶⁰ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 16–19.

⁶¹ Md. Momtazur Rahman and Sultanul Arefin, “Distinctive Characteristics of English for Specific Purposes and General English,” **Journal of Applied Linguistics and Language Research** Vol. 10 No. 4 (2023), pp. 63–70.

⁶² Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 16–17.

⁶³ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), pp. 4–5.

1. Needs-based: ESP courses are designed after a needs analysis to identify learners' target tasks, such as writing research articles, giving academic presentations, or communicating with patients or clients. As Hutchinson and Waters (1987) state, ESP is an approach "based on learner needs",⁶⁴ where the awareness of the need distinguishes it from General English.⁶⁵

2. Discipline-based and Contextualized: ESP adopts the underlying methodology, tasks, and discourse practices of the academic or professional disciplines it serves, focusing on the language, skills, discourse, and genres required for those real contexts.⁶⁶⁶⁷

3. Goal-oriented and purpose-related: ESP courses aim to equip learners with the English proficiency and competencies needed in specific target situations; therefore, course objectives and content are related to learners' study or job requirements and expressed in terms of intended learning outcomes and observable performance.⁶⁸⁶⁹

4. Learner-centered approach: ESP typically addresses adult or higher education learners and adapts methodology to their discipline. Dudley-Evans and St John (1998) list this as a "variable characteristic," noting that ESP "is likely to be designed for adult learners"⁷⁰ and often assumes some prior knowledge of the subject matter.

⁶⁴ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), p. 19.

⁶⁵ Ibid., p. 53.

⁶⁶ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), pp. 4–5.

⁶⁷ Ann M. Johns and Tony Dudley-Evans, "English for Specific Purposes: International in Scope, Specific in Purpose," **TESOL Quarterly** Vol. 25 No. 2 (Summer 1991), pp. 298–301.

⁶⁸ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 53–54.

⁶⁹ Titik Agustina, "English for Specific Purposes (ESP): An Approach of English Teaching for Non-English Department Students," **Beta: Jurnal Tadris Matematika** Vol. 7 No. 1 (May 2014), pp. 41–43, 55–56.

⁷⁰ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), p. 5.

5. Flexible in methodology: While ESP often draws on communicative, task-based, and genre-based approaches, it does not prescribe a single method; instead, methodology is chosen pragmatically to suit the learners, the discipline, and the institutional context.⁷¹⁷²

Taken together, these features show that ESP is best understood as an approach within ELT whose scope is defined by learners' specific academic or professional purposes, and whose distinctive characteristic is the systematic alignment of needs analysis, content, methods, materials, and assessment with those purposes.

2.3.3 Types of English for Specific Purposes (ESP)

The classification of ESP is essential for curriculum design, as it dictates the nature of the syllabus, materials, and teaching methodology. Traditionally, ESP is classified through two major frameworks: the subject-matter classification (The Tree of ELT) and the purpose-based classification (Academic vs. Occupational).

1. The Subject-Matter Classification (The Tree of ELT)

In their seminal work, Hutchinson and Waters (1987) conceptualized ESP through the metaphor of a tree. They argued that while the roots (learning/communication) are the same, the branches diverge based on the specific discipline. According to this framework, ESP is divided into three major categories:⁷³

1. English for Science and Technology (EST): This was the earliest form of ESP and remains one of the most significant.
2. English for Business and Economics (EBE): Focusing on the commercial and administrative sectors.
3. English for Social Studies (ESS): Covering fields such as psychology, law, and education.

⁷¹ Ibid., pp. 4–5.

⁷² Laurence Anthony, **Introducing English for Specific Purposes**, (Abingdon: Routledge, 2018), pp. 90, 113–115.

⁷³ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), p. 17.

2. The Purpose-Based Classification: EAP and EOP

A more functional distinction, widely adopted in modern applied linguistics, divides ESP based on the learner's operational purpose: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP).

A. English for Academic Purposes (EAP)

EAP refers to language instruction designed for learners who need English to perform academic tasks. Dudley-Evans and St John (1998) define EAP as education that focuses on the “communicative skills and practices required for study purposes”.⁷⁴ Jordan (1997) further subdivides EAP into two categories:

1. English for General Academic Purposes (EGAP): Focuses on study skills transferable across disciplines, such as academic listening, note-taking, and referencing.⁷⁵

2. English for Specific Academic Purposes (ESAP): Focuses on the language features specific to a discipline, such as English for Medical Studies or English for Theology.

B. English for Occupational Purposes (EOP)

EOP involves the study of English for use in professional or vocational settings. Robinson (1991) distinguishes EOP by noting that it is studied “for the purpose of practicing it” in a job, rather than for the purpose of studying a subject.⁷⁶ On the other hand, Dudley-Evans and St John (1998) categorize EOP into:

1. Professional Purposes: Involving high-status professions (e.g., Medicine, Law, Administration).

⁷⁴ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), p. 34.

⁷⁵ Robert R. Jordan, **English for Academic Purposes: A Guide and Resource Book for Teachers**, (Cambridge: Cambridge University Press, 1997), p. 4.

⁷⁶ Pauline C. Robinson, **ESP Today: A Practitioner's Guide**, (Hemel Hempstead: Prentice Hall, 1991), p. 3.

2. Vocational Purposes: Involving non-professional or technical occupations (e.g., Tourism, Nursing Assistants, Technical Trades).⁷⁷

3. Specialized Domains within ESP

Within the broad EAP/EOP frameworks, several established sub-types of ESP have developed their own distinct literatures and methodologies.

1. English for Science and Technology (EST)

EST is often considered the prototype of ESP. Swales (1985) noted that “EST has always been the trendsetter” for the movement.⁷⁸ It focuses heavily on scientific discourse, technical vocabulary, and specific grammatical structures like the passive voice and nominalization used in research reporting.

2. English for Business Purposes (EBP)

EBP, or Business English, combines specialized terminology with broader communication skills. Ellis and Johnson (1994) define its scope as mediating between learners’ business knowledge and their language skills.⁷⁹ It commonly focuses on meetings, negotiations, presentations, and professional correspondence.

3. English for Legal Purposes (ELP)

ELP is characterized by a high degree of linguistic conservatism. Bhatia (1993) analyzes legal English as a distinct genre marked by long, complex sentences and archaic vocabulary (e.g., “herein,” “aforementioned”) designed to ensure precision and avoid ambiguity.⁸⁰

4. English for Medical Purposes (EMP)

EMP serves medical and health-care communities. Maher (1986) emphasizes that it covers two registers: a technical register used for reading

⁷⁷ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), p. 7.

⁷⁸ John M. Swales, **Episodes in ESP**, (Oxford: Pergamon Press, 1985), p. 10.

⁷⁹ Mark Ellis and Christine Johnson, **Teaching Business English**, (Oxford: Oxford University Press, 1994), p. 3.

⁸⁰ Vijay K. Bhatia, **Analysing Genre: Language Use in Professional Settings**, (London: Longman, 1993), p. 102.

professional literature and communicating with colleagues, and a lay register used for clear and empathetic communication with patients.⁸¹

5. English for Socio-Cultural or Religious Purposes

Although less codified in early Western literature, English for Religious Purposes (ERP) falls within the broader English for Social Studies branch.⁸² It includes the translation of doctrine and the performance of pastoral or missionary responsibilities, placing it at the intersection of EAP and EOP.

The classification of English for Specific Purposes (ESP) is a foundational step in curriculum design, as it aligns teaching methodology with the specific goals of the learner. This classification is generally approached through two primary frameworks: subject-matter and purpose.

The foundational framework, proposed by Hutchinson and Waters (1987) via the “Tree of ELT,” categorizes ESP by discipline: English for Science and Technology (EST), English for Business and Economics (EBE), and English for Social Studies (ESS). However, modern applied linguistics favors a purpose-based distinction between English for Academic Purposes (EAP) and English for Occupational Purposes (EOP).

2.4 Meaning and Framework of CEFR (Common European Framework of Reference for Languages)

The Common European Framework of Reference for Languages (CEFR) provides an internationally recognized system for describing language proficiency across six levels, from A1 to C2. Developed by the Council of Europe, the CEFR offers a comprehensive framework that defines what learners “can do” in real communicative situations, emphasizing functional language use, task performance, and progressive skill development. In language curriculum design, the CEFR serves

⁸¹ John C. Maher, “The Development of English as an International Language of Medicine,” **Applied Linguistics** Vol. 7 No. 2 (Summer 1986), p. 210.

⁸² Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), p. 17.

as a foundation for aligning learning outcomes, selecting level-appropriate materials, and designing assessment practices that reflect communicative competence. Understanding the meaning and structural components of the CEFR is essential for developing CEFR-aligned Buddhist ESP reading materials, ensuring that the texts and tasks used in this study correspond to learners' proficiency levels and support their language development effectively.

2.4.1 Definition and Purpose of CEFR

The Common European Framework of Reference for Languages (CEFR) is an international framework developed by the Council of Europe to provide a common basis for describing language proficiency across learning, teaching, and assessment contexts. It defines six proficiency levels, A1–C2, organized into three broad bands: Basic, Independent, and Proficient Users. The framework specifies what learners can do in listening, reading, speaking, and writing. Rather than prescribing a fixed curriculum or particular linguistic content, the CEFR offers an action-oriented model in which language use is viewed as purposeful performance in real-world tasks, emphasizing communicative activities, learner competences, and observable outcomes.⁸³

The primary purpose of the CEFR is to promote transparency, coherence, and comparability in language education across institutions and countries. It serves as a shared reference for curriculum development, assessment design, materials selection or production, and the articulation of learning outcomes. Importantly, the CEFR is intended as a flexible guide, not a prescriptive checklist, and can be adapted to local contexts, domains, and learner needs. Research further notes that CEFR descriptors enable educators to design activities and materials consistent with its principles, including reading tasks aligned with level-appropriate cognitive demands and communicative purposes.⁸⁴ In ESP and Buddhist education, the CEFR can therefore support systematic text selection, readability decisions, and learner progression in

⁸³ John Trim, **Using the CEFR: Principles of Good Practice**, (Cambridge: University of Cambridge ESOL Examinations, 2011), pp. 2–31.

⁸⁴ Arda Arian, "The CEFR and Reading: A Document Analysis," **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), pp. 501–504.

relation to communicative functions required in monastic and professional environments.

2.4.2 CEFR as Thailand's National English Reform Framework (Based on MOE Policy)

Thailand has officially adopted the Common European Framework of Reference for Languages (CEFR) as a national guideline for English language reform, particularly through policies implemented by the Ministry of Education (MOE) and the Office of the Basic Education Commission (OBEC). The CEFR functions as a unified standard for describing proficiency levels from A1–C2 and for promoting transparency and coherence across curricula, assessment, and instructional practices. As noted by the Council of Europe, the CEFR is a non-prescriptive and flexible framework for curriculum development, assessment alignment, and language-policy planning rather than a rigid checklist or teaching method.⁸⁵

Thai national education agencies have used the CEFR primarily as a reference for improving English teaching quality, raising proficiency outcomes, and standardizing expected competency levels for students and teachers. MOE reform initiatives emphasize CEFR-based descriptors for listening, speaking, reading, and writing, promoting consistency in curriculum mapping, textbook design, and achievement targets across basic and higher education. In the CEFR scales, A1–A2 represent Basic Users, B1–B2 Independent Users, and C1–C2 Proficient Users, providing benchmarks for learner outcomes and teacher professional development.

Within OBEC guidelines, English teachers are encouraged to apply CEFR descriptors to assess learners' communicative performance and adapt instructional materials to appropriate proficiency bands. This aligns with the CEFR's action-oriented approach, which views learners as "social agents" performing real-life communicative tasks rather than merely acquiring linguistic knowledge. Thai curriculum reforms have therefore shifted focus toward task-based learning, functional communication, and performance-based assessment, moving away from grammar-

⁸⁵ John Trim, **Using the CEFR: Principles of Good Practice**, (Cambridge: University of Cambridge ESOL Examinations, 2011), pp. 2–31.

heavy, rote learning styles traditionally found in Thai classrooms. In addition, the national evaluation framework encourages CEFR-informed assessment to increase comparability and accuracy in measuring student proficiency.

Furthermore, research in Thailand shows increasing use of the CEFR for curriculum alignment and text-difficulty evaluation. Thai studies examining automated CEFR analyzers, such as Siripol et al. (2025),⁸⁶ identify inconsistencies in text classification and reinforce the need for qualitative judgment and professional expertise when applying CEFR levels to materials. These findings show that CEFR alignment must be interpreted thoughtfully in relation to local contexts rather than treated as an absolute or automatic measurement.

Overall, CEFR serves as the foundation for Thailand's national English education reform. It guides curriculum development, assessment policy, instructional material design, and professional standards for English teachers. While CEFR provides a valuable structural framework, its successful implementation in Thailand requires contextual adaptation, teacher capacity-building, and alignment with local educational needs and realities.

2.4.3 CEFR Reading Descriptors Relevant to the Study (A2–B1)

The final proficiency focus of the present study is the A2–B1 range. A2 was selected as the accessible core because learners at this level can process short, straightforward texts on familiar topics and locate specific information, while B1 descriptors provide a basis for progression toward connected factual texts, main ideas, and supporting details. A1 descriptors are retained only as a supplementary scaffolding reference for learners who require additional support; A1 is not the final target level of the developed materials.

At A2, learners can read short, simple texts on familiar topics and locate specific information in everyday materials such as brochures, menus, schedules, and short narratives. They can follow the main ideas of simple paragraphs and understand

⁸⁶ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, "Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification," **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), pp. 3283–3294.

high-frequency vocabulary related to daily life. Compared with A1, A2 involves a greater ability to process connected sentences, interpret moderately more complex grammatical structures, and comprehend limited detail within familiar contexts.

At B1, learners can understand straightforward factual texts on familiar subjects, identify main points and supporting information, and follow connected descriptions or explanations expressed in clear standard language. This level marks a progression from basic information retrieval toward more sustained comprehension of connected texts. CEFR guidance notes that descriptors should be interpreted flexibly and adapted to local learning contexts because they represent communicative outcomes rather than fixed lists of linguistic features. John Trim further highlights that CEFR scales are not exhaustive but serve as transparent reference points for mapping learner progress and aligning reading tasks with real-world performance expectations.⁸⁷ In the present study, A1–A2 descriptors served as the preliminary planning reference. Following the needs analysis, the final proficiency focus was refined to A2–B1, with A1 retained as a reference for scaffolding learners who require additional support.

2.4.4 CEFR-Based Material Design and Assessment

CEFR-based material design emphasizes the alignment between learning objectives, instructional input, and assessable outcomes through clearly defined can-do descriptors. According to the Council of Europe, CEFR descriptors outline observable communicative abilities across proficiency levels and should guide text selection, task design, and scaffolding strategies in instructional materials. In this approach, reading materials are not chosen merely for linguistic difficulty but for their relevance to communicative purposes, cognitive demands, and level-appropriate textual features. Cambridge's principles of good practice highlight that CEFR alignment requires identifying the most appropriate illustrative scales for a given activity and ensuring that tasks reflect real-world communication rather than isolated grammatical patterns.

⁸⁷ John Trim, **Using the CEFR: Principles of Good Practice**, (Cambridge: University of Cambridge ESOL Examinations, 2011), pp. 2–31.

Assessment within a CEFR framework focuses on learners' ability to perform communicative tasks rather than on discrete linguistic knowledge alone. Reading assessments should correspond to relevant descriptors, such as extracting specific information at A1–A2, identifying main ideas across A2–B1, and interpreting straightforward arguments at B1. The CEFR stresses that assessment should be criterion-referenced, transparent, and aligned with performance standards so that learner progress can be meaningfully mapped across levels.⁸⁸ In the Thai educational context, CEFR-informed assessment likewise requires reading tasks to be calibrated to the learners' relevant proficiency bands in order to support fair and accurate evaluation.

Overall, CEFR-based material design and assessment ensure coherence between curriculum goals, instructional content, and learner evaluation, providing a systematic foundation for developing Buddhist-context reading materials that are level-appropriate, pedagogically sound, and responsive to the communicative needs of monastic learners.

2.4.5 Strengths and Limitations of CEFR Alignment in ESP Material Development

Aligning English for Specific Purposes (ESP) materials with the Common European Framework of Reference for Languages (CEFR) can offer pedagogical, assessment-related, and policy-related benefits. First, the CEFR provides common reference levels and illustrative descriptors that can inform the development of reading materials, learning tasks, and assessment criteria.⁸⁹⁹⁰ In ESP contexts, particularly those involving domain-specific communication such as Buddhist studies, these descriptors help determine appropriate linguistic complexity in relation to learners' language levels and communicative needs. Research shows that CEFR descriptors

⁸⁸ Ibid.

⁸⁹ Council of Europe, **Common European Framework of Reference for Languages: Learning, Teaching, Assessment**, (Cambridge: Cambridge University Press, 2001), pp. 1, 68–71, 178–180.

⁹⁰ British Council, UKALTA, EALTA, and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA, and ALTE, 2022), pp. 10–12, 29, 32–35.

support the selection of input texts with suitable lexical and syntactic demands, enabling more effective scaffolding and progression in reading development.⁹¹

Second, CEFR alignment contributes to valid and reliable material leveling, an issue widely discussed in readability and CEFR-mapping studies. Automated readability tools and CEFR classifiers are known to vary in accuracy and consistency,⁹² which makes CEFR's qualitative descriptors essential for human-guided text selection. Studies on text readability for L2 learners⁹³ indicate that CEFR provides a more holistic framework than traditional readability formulas because it incorporates communicative purpose, text type, functional language, and discourse competence. Thus, CEFR alignment enhances the validity of ESP materials by ensuring that text difficulty is judged not only by quantitative indices but also by communicative appropriateness.

Third, CEFR alignment enhances curriculum transparency and international comparability. As Thailand's Ministry of Education (MOE) and the Office of Basic Education Commission have adopted CEFR as the national English proficiency framework, institutions including Buddhist universities are increasingly required to align instruction, assessment, and curriculum development with CEFR-based standards. This alignment ensures that ESP materials produced within Buddhist higher education meet both national quality benchmarks and international expectations, supporting mobility, academic collaboration, and the development of English-medium Buddhist scholarship.

Finally, CEFR-aligned ESP materials can promote learner autonomy and make progress more visible because learners can monitor their development through can-do statements. The CEFR's action-oriented approach also supports tasks grounded

⁹¹ Arda Arikan, "The CEFR and Reading: A Document Analysis," **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), pp. 501–504.

⁹² Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, "Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification," **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), pp. 3283–3294.

⁹³ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, "Text Readability Assessment for Second Language Learners," in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–22.

in relevant domains of language use. In Buddhist professional contexts, such tasks may include guiding meditation, explaining Dhamma, and interacting with international visitors. Research on context-specific materials indicates that instruction connected to learners' communicative contexts can contribute to improved learning achievement, confidence, and practical communication^{94 95}

A major strength of the CEFR is its action-oriented view of learners as social agents and its use of shared proficiency descriptors to make progression, instructional expectations, and assessment criteria more transparent. In ESP, these descriptors provide a common frame that can be translated into context-specific reading tasks rather than functioning as a fixed syllabus or a universal list of linguistic content.^{96 97}

The generality that makes the CEFR transferable is also a limitation when it is applied to specialized domains. The framework does not prescribe Buddhist technical vocabulary, culturally embedded concepts, discipline-specific genres, or the conceptual load of religious texts. An MCU learner may possess substantial prior knowledge of *Dhamma* while still experiencing difficulty with English vocabulary and syntax, whereas another learner may have stronger general English but limited familiarity with Buddhist concepts. Consequently, general CEFR descriptors must be localized rather than applied mechanically.⁹⁸

Valid CEFR alignment therefore requires more than assigning an A2 or B1 label to a text. It requires explicit mapping to relevant descriptors, analysis of lexical

⁹⁴ Banjob Piyamat, "The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community's Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province," **Research Report**, (Huachiew Chalermprakiet University, 2019), pp. 78–79, 82–83.

⁹⁵ Decha Talanuek and Chalermphong Tham-ngarn, "The Use of English Language Among Development Monk Scholars," **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 875–876, 879–881.

⁹⁶ Council of Europe, **Common European Framework of Reference for Languages: Learning, Teaching, Assessment**, (Cambridge: Cambridge University Press, 2001), p. 9.

⁹⁷ Brian North, **The Development of a Common Framework Scale of Language Proficiency**, (Frankfurt am Main: Peter Lang, 2000), p. 29.

⁹⁸ J. Charles Alderson, **Diagnosing Foreign Language Proficiency: The Interface between Learning and Assessment**, (London: Continuum, 2005), p. 28.

and syntactic demands, attention to task complexity and learner background, expert judgment, and evidence from learner use. Localized inventories and contextualized can-do statements can strengthen this process, while automated CEFR analyzers should remain supplementary aids. This evidence-based approach also reduces the risk of cosmetic alignment in which a proficiency label is claimed without adequate correspondence between descriptors, materials, tasks, and assessment.^{99 100}

2.4.6 Contextual Appropriateness of CEFR for MCU Learners and Buddhist Technical Terminology

For the MCU context, a localized A2–B1 framework is appropriate because learners encounter both general academic reading and Buddhist content with differing levels of linguistic and conceptual complexity. This is particularly relevant to learners in education- and humanities-related programs, while remaining applicable to monastic and lay learners from diverse academic and professional backgrounds. The A2 core supports access through controlled vocabulary, straightforward sentence structures, manageable passage length, and guided tasks, whereas selected B1 features provide progression toward connected explanations, main ideas, supporting details, and more sustained reading.

Specialized Buddhist terms create lexical, orthographic, and conceptual demands that are not captured by a CEFR level alone. Research on reading the English *Pāli* Canon has identified lexical and structural difficulties associated with specialized vocabulary and recurring discourse patterns. Accordingly, the materials combine CEFR-informed control of general English with repeated contextual exposure, concise explanations, glossary support, and consistent Romanized *Pāli* forms. These features can strengthen word recognition and reduce unnecessary barriers while preserving the doctrinal and cultural relevance of the content.¹⁰¹

⁹⁹ Neus Figueras, “The Impact of the CEFR,” **ELT Journal** Vol. 66 No. 4 (October 2012), pp. 477–485.

¹⁰⁰ Phillip Glover, “Using CEFR Level Descriptors to Raise University Students’ Awareness of Their Speaking Skills,” **Language Awareness** 20, no. 2 (2011): p. 122.

¹⁰¹ Chirawan Sukwitthayakul, “A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach,” **A Dissertation of Doctor of Philosophy**, (Thammasat University, 2022), pp. 132–145, 242–244.

The present study applies CEFR primarily to reading comprehension, text accessibility, and perceived readability. CEFR reading descriptors do not directly measure oral-reading or pronunciation accuracy. Graded exposure to specialized terms may support recognition and provide a foundation for pronunciation practice, but any claim of improved pronunciation would require phonetic transcription, audio models, and a separate pronunciation assessment. Such features should therefore be treated as supplementary development or future research rather than as an outcome measured in the present study.

2.5 English for Specific Purposes in Religious, Monastic, or Buddhist Professional Contexts

English for Specific Purposes (ESP) in religious, monastic, and Buddhist professional contexts focuses on the English monks and Buddhist scholars need for study, teaching, propagation, and community service, rather than for general conversation. It typically covers skills such as explaining Buddhist concepts, guiding meditation, giving Dhamma talks, interacting with international visitors, and engaging in academic Buddhist studies.

2.5.1 Monks' ESP Needs in Temples and Communities

Studies of Buddhist monks in Thailand show that their English needs are strongly task-based and context-specific, which fits the ESP framework. One thesis on monks in tourist temples reports that they require listening and speaking skills for guiding visitors, answering questions about temple history and architecture, and giving basic explanations of Buddhist teachings, highlighting English for religious tourism and temple communication as a practical ESP domain. On the other hand, a study conducted with development Buddhist monks emphasizes that English proficiency enables monks to participate in international conferences, collaborate with NGOs, advocate for peace and social justice, and disseminate Buddhist teachings globally,

framing their English use as English for Religious and Development Purposes within ESP.¹⁰²

2.5.2 The Religious “Discourse Community”

The theoretical justification for teaching English specifically to Buddhist monks lies in the concept of the “Discourse Community.” Swales (1990) defines a discourse community as a group that has common public goals, mechanisms of intercommunication, and crucially a specific lexis.¹⁰³ Buddhist monastics and scholars form a distinct discourse community because: 1. Common Goals: The propagation of the Dhamma (Dhammaduta) and the attainment of educational qualifications. 2. Specific Lexis: The use of specialized terminology (e.g., Samsara, Nirvana, Anatta) which often lacks direct equivalence in General English. 3. Specific Genres: The community utilizes unique genres such as the Dharma talk (sermon), chanting, and commentarial translation. Therefore, an ESP approach is required to help learners navigate the specific linguistic expectations of this community.

2.5.3 The Intersection of EAP and EOP in Buddhist Contexts

For Buddhist professionals, academic and occupational purposes often overlap. Buddhist EAP involves studying Buddhism as an academic discipline through activities such as reading scriptures, engaging in comparative religious studies, and writing theses. It therefore requires the concepts, discourse practices, and methods of inquiry associated with the humanities.¹⁰⁴ For example, a learner analyzing Abhidhamma texts may need to process abstract nouns, complex sentence structures, and extended academic arguments. Buddhist EOP concerns the practical use of English in activities such as Dhammaduta work, temple administration, meditation instruction, and pastoral communication. This corresponds to Robinson’s (1991)

¹⁰² Ibid.

¹⁰³ John M. Swales, **Genre Analysis: English in Academic and Research Settings**, (Cambridge: Cambridge University Press, 1990), pp. 24–27.

¹⁰⁴ Peter Strevens, “ESP after Twenty Years: A Re-appraisal,” in **ESP: State of the Art**, ed. Makhan L. Tickoo, (Singapore: SEAMEO Regional Language Centre, 1988), pp. 1–13.

description of EOP as language learned for professional performance.¹⁰⁵ A monk guiding meditation for international practitioners, for instance, needs clear procedural language and an appropriately supportive tone rather than the language of academic debate.

2.5.4 Characteristics of English for Religious Purposes (ERP)

Scholars identify challenges in English for Religious Purposes that differ from those found in business or scientific communication. Explaining Eastern spiritual concepts through English requires intercultural and translation strategies, and ESP instruction in this domain often involves mediated communication across cultural frames.¹⁰⁶ In Buddhist ESP, Dhamma can serve as the carrier content through which language is learned. Dudley-Evans and St John (1998) note that familiar disciplinary content can support motivation and comprehension when used to teach language forms and functions.¹⁰⁷ Religious communication also includes distinctive genres, such as Dhamma talks and meditation instructions, whose rhetorical organization reflects their communicative purposes. This is consistent with Bhatia's (1993) view that ESP instruction should address the communicative purposes and discourse conventions of relevant genres.¹⁰⁸

2.6 Theories and Principles of Material Development

The development of instructional materials plays a central role in improving teaching and learning, particularly in English for Specific Purposes (ESP), where materials must be relevant, level-appropriate, and aligned with learners' communicative needs. Effective materials should be grounded in pedagogical principles, systematic design models, and clear developmental procedures that support

¹⁰⁵ Pauline C. Robinson, **ESP Today: A Practitioner's Guide**, (Hemel Hempstead: Prentice Hall, 1991), p. 3.

¹⁰⁶ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), p. 11.

¹⁰⁷ Ibid.

¹⁰⁸ Vijay K. Bhatia, **Analysing Genre: Language Use in Professional Settings**, (London: Longman, 1993), p. 13.

accuracy and usability. In CEFR-aligned Buddhist reading materials, development requires the integration of proficiency descriptors, content relevance, readability, and contextual authenticity. Understanding the ADDIE model and the Research and Development (R&D) approach is therefore essential for guiding the systematic creation, implementation, evaluation, and refinement of learning resources intended primarily for learners within the A2–B1 range.

2.6.1 Meaning and Principles of Material Development

Material development refers to the systematic process of designing, creating, evaluating, and refining instructional resources used to support language learning. According to Tomlinson (2011), language-learning materials include anything used by teachers or learners to facilitate language learning, ranging from workbooks and photocopied exercises to videos, online media, teacher instructions, and learner tasks.¹⁰⁹ In ESP settings, materials should respond to learners' needs, expose them to real language, and employ texts and tasks in ways that reflect real-world purposes. At the same time, the input should be challenging yet achievable, grounded in learners' existing experience and knowledge, and clearly connected to their learning needs and realities.¹¹⁰ This aligns with Richards's (2001) discussion of materials development, which emphasizes adapting materials to specific contexts and learners' needs, relating them to program goals, and providing opportunities for authentic language use and communicative purposes.¹¹¹

Key principles of materials development emphasize coherence, flexibility, learner engagement, and contextual relevance. Tomlinson (2013) argues that materials should provide rich and meaningful exposure to language in use, stimulate affective and cognitive engagement, and offer opportunities for contextualized and purposeful

¹⁰⁹ Brian Tomlinson, "Introduction: Principles and Procedures of Materials Development," in Brian Tomlinson, ed., **Materials Development in Language Teaching**, 2nd ed., (Cambridge: Cambridge University Press, 2011), p. 2.

¹¹⁰ Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), pp. 27–28, 170–172.

¹¹¹ Jack C. Richards, **Curriculum Development in Language Teaching**, (Cambridge: Cambridge University Press, 2001), pp. 258–263.

communication in the target language.¹¹² Nunan (2004) further emphasizes that task-based instruction should be learner-centered and supported through carefully scaffolded and sequenced tasks. Task demands should increase gradually, while task selection and grading should take account of learners' linguistic knowledge, assessed ability, processing capacity, and need for assistance.¹¹³ For CEFR-aligned Buddhist reading materials, these principles imply the integration of level-appropriate language, explicit attention to readability, and the incorporation of Buddhist cultural content that enhances authenticity and relevance for monastic and lay learners.

2.6.2 ADDIE Model

The ADDIE Model is one of the most influential and widely applied instructional design frameworks for developing instructional materials. It provides a systematic, iterative, and flexible process consisting of five major phases: Analysis, Design, Development, Implementation, and Evaluation. Branch (2009) describes ADDIE as a procedural guide that helps designers create effective learning solutions grounded in performance needs and learner characteristics.¹¹⁴ The model has been used extensively in educational, corporate, and technology-enhanced learning contexts, including media development, e-learning, language teaching, and nursing education.

Morrison et al. (2013) present instructional design as a systematic and flexible process that integrates the identification of instructional problems, learner and context analysis, content sequencing, instructional strategies, development, and evaluation within an interrelated design framework.¹¹⁵ Contemporary applications of ADDIE demonstrate that the model is adaptable rather than strictly linear. For example, Somdee Ananpattiwet (2021) successfully used ADDIE to develop video-

¹¹² Brian Tomlinson, **Developing Materials for Language Teaching**, 2nd ed., (London: Bloomsbury, 2013), pp. 97–100.

¹¹³ David Nunan, **Task-Based Language Teaching**, (Cambridge: Cambridge University Press, 2004), pp. 14–15, 35–36, 120, 123–126.

¹¹⁴ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 17–18.

¹¹⁵ Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), pp. 14–16.

based instructional media in nursing education,¹¹⁶ while Mohammad Taufiq Abdul Ghani (2018) applied ADDIE to the creation of web-based language learning materials. These cases show that ADDIE remains relevant for material development across diverse instructional settings.

ADDIE Components

1) Analysis

This phase focuses on identifying instructional needs, determining the performance gap, analyzing target learners, and defining learning goals. Branch (2009) points out that validating the performance problem and understanding learner characteristics are essential foundations for the entire design process.¹¹⁷ The analysis also includes identifying required resources and potential delivery systems.

2) Design

During instructional design, task analysis, instructional objectives, content sequencing, instructional strategies, and evaluation measures are developed as interrelated elements. Morrison et al. (2013) emphasize that task analysis informs the development of instructional objectives and that assessment measures should be matched to the intended objectives and learning outcomes.¹¹⁸ Accordingly, a design blueprint can help maintain alignment among instructional objectives, content, learning activities, and assessment.

3) Development

This phase involves creating and assembling actual learning materials, such as texts, multimedia resources, worksheets, or online modules. Branch (2009) describes development as generating content, selecting or developing media, and

¹¹⁶ Somdee Ananpitiwet, Warunee Tubtimtong, and Uraiwan Cinmuk, "The Development of Video Media Based on ADDIE Model on Nursing Care for High-Risk Preterm Infants," **Journal of Nursing and Education** Vol. 14 No. 4 (October–December 2021), pp. 64–74.

¹¹⁷ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 23–56.

¹¹⁸ Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), pp. 14–16, 74–75, 100–101, 130, 138, 258–260.

producing prototypes for formative evaluation.¹¹⁹ In applied studies such as Somdee Ananpattiwet's video media project the development step transforms design into complete instructional units.

4) Implementation

Implementation involves delivering instruction and coordinating the conditions required for its use. This includes arranging facilities and technological resources, coordinating instructional materials, scheduling and training instructors, and preparing learners for instruction. Morrison et al. (2013) further emphasize instructor training and supervisory support before and after instruction to facilitate consistent delivery and reinforce learning.¹²⁰

5) Evaluation

Evaluation is both formative and summative. Branch (2009) notes that formative evaluation occurs throughout all ADDIE phases, while summative evaluation measures the effectiveness of the completed instructional product.¹²¹ Research using ADDIE such as Mohammad Taufiq Abdul Ghani (2018) demonstrates that evaluation is key to refining materials, assessing learner performance, and ensuring the final product meets quality standards.¹²²

2.6.3 Research and Development (R&D) Model

The Research and Development (R&D) Model is a methodological approach used to create, test, and refine educational products such as instructional materials, media, or curriculum tools. R&D aims to bridge theoretical foundations with practical application through systematic development, pilot testing, and revision. In educational contexts, this model emphasizes the creation of high-quality and user-validated

¹¹⁹ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 83–131.

¹²⁰ Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), pp. 384–388.

¹²¹ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 151–163.

¹²² Mohammad Taufiq Abdul Ghani and Wan Ab Aziz Wan Daud, "Adaptation of ADDIE Instructional Model in Developing Educational Website for Language Learning," **Global Journal Al-Thaqafah** Vol. 8 No. 2 (December 2018), pp. 7–16.

instructional innovations. The process is cyclical, allowing researchers to continuously improve products until they achieve acceptable levels of effectiveness and usability. R&D is widely used in material development studies across various disciplines, including nursing, language learning, and instructional technology.

The R&D process typically begins with identifying a problem or need, followed by designing and developing a prototype, conducting expert review, implementing a try-out with target learners, and refining the product based on evaluation results. This approach is evident in Somdee Ananpattiwet's (2021) development of instructional video media.¹²³ The study involved expert validation, implementation with learners, evaluation of learning outcomes, and revision, demonstrating how R&D supports systematic and evidence-based product improvement.

Similarly, the systematic and iterative instructional design processes described by Branch (2009) and Morrison et al. (2013) share important features with R&D, particularly the development, formative evaluation, testing, and revision of instructional products.¹²⁴¹²⁵ Branch (2009) emphasizes analysis, iterative refinement, and performance-based design, which parallel key R&D stages. Furthermore, Morrison et al. (2013) highlight the importance of task analysis, message design, development heuristics, and evaluation strategies components essential to R&D cycles. Research on language instructional development, such as that of Mohammad Taufiq Abdul Ghani (2018),¹²⁶ also demonstrates how ADDIE-based development contributes to the broader R&D framework through prototype creation, implementation, and feedback-driven revision.

¹²³ Somdee Ananpattiwet, Warunee Tubtimtong, and Uraiwan Cinmuk, "The Development of Video Media Based on ADDIE Model on Nursing Care for High-Risk Preterm Infants," **Journal of Nursing and Education** Vol. 14 No. 4 (October–December 2021), pp. 64–74.

¹²⁴ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 17–18, 122–128.

¹²⁵ Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), pp. 14–18.

¹²⁶ Mohammad Taufiq Abdul Ghani and Wan Ab Aziz Wan Daud, "Adaptation of ADDIE Instructional Model in Developing Educational Website for Language Learning," **Global Journal Al-Thaqafah** Vol. 8 No. 2 (December 2018), pp. 7–16.

Practical applications of the R&D Model often involve multiple validation layers, including expert review, learner testing, and iterative enhancement. This is reflected in empirical studies where instructional products undergo both formative and summative evaluations before reaching a finalized version. For instance, in Somdee Ananpattiwet's study, the developed media was revised until its efficiency exceeded predetermined criteria (86.47/87.89), demonstrating the effectiveness of R&D-driven cycles. Such examples showcase how R&D ensures instructional materials are not only theoretically grounded but also empirically validated and contextually appropriate.

Overall, the R&D Model provides a framework that ensures instructional materials such as CEFR-aligned Buddhist reading texts undergo a systematic process of development, trial, evaluation, and refinement. This makes R&D highly suitable for the present study, which requires a rigorous approach to developing, evaluating, and improving reading materials intended for real-world use in Buddhist educational and professional settings.

2.6.4 The Role of ADDIE within the R&D Process

In the present study, R&D and ADDIE do not represent competing or combined research methodologies. Research and Development (R&D) serves as the overarching research design because the study develops, evaluates, revises, and finalizes an instructional product. ADDIE functions only as an instructional-design guide within the development phases, helping the researchers organize learner analysis, objectives, content, activities, implementation conditions, and formative evaluation.¹²⁷¹²⁸

The R&D process was operationalized through three linked cycles. R1 involved the study, analysis, and synthesis of needs, context, and literature, leading to D1, the blueprint and first draft. R2 involved expert evaluation and the collection of evidence concerning the first draft, leading to D2, analysis of the findings and Revision 1. R3 involved the learner try-out and evaluation, leading to D3, Revision 2

¹²⁷ Robert Maribe Branch, *Instructional Design: The ADDIE Approach*, (New York, NY: Springer, 2009), pp. 17–18.

¹²⁸ *Ibid.*, pp. 3, 10, 17–18.

and finalization of the developed materials. Prior instructional-development studies likewise demonstrate the value of expert validation, learner implementation, and feedback-guided revision in improving educational products.¹²⁹¹³⁰

ADDIE-informed decisions were embedded within these R&D cycles. Evidence from R1 supported the Analysis function; D1 and D2 applied Design and Development procedures; R3 provided the main Implementation opportunity; and Evaluation occurred across expert review, learner performance, learner perceptions, and both revision stages. This relationship preserves R&D as the single research design while using ADDIE to strengthen the systematic quality of instructional-material design.¹³¹¹³²

2.6.5 Characteristics of Effective ESP Reading Materials

Effective ESP reading materials must reflect the specific communicative purposes, discourse features, and contextual needs of target learners. Sukwitthayakul (2022) emphasizes genre awareness, enabling learners to recognize macro- and micro-level textual structures and to use predictable organization to support comprehension.¹³³ Such materials may also incorporate authentic or adapted input informed by corpus evidence, including frequent keywords, lexical bundles, and collocations that reflect domain-specific usage. These linguistic features help learners build familiarity with specialized terminology and discourse practices relevant to their professional or academic contexts. ESP reading materials should also support both

¹²⁹ Somdee Ananpattiwet, Warunee Tubtimtong, and Uraiwan Cinmuk, “The Development of Video Media Based on ADDIE Model on Nursing Care for High-Risk Preterm Infants,” **Journal of Nursing and Education** Vol. 14 No. 4 (October–December 2021), pp. 64–74.

¹³⁰ Mohammad Taufiq Abdul Ghani and Wan Ab Aziz Wan Daud, “Adaptation of ADDIE Instructional Model in Developing Educational Website for Language Learning,” **Global Journal Al-Thaqafah** Vol. 8 No. 2 (December 2018), pp. 7–16.

¹³¹ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 17–18.

¹³² Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), pp. 12–18.

¹³³ Chirawan Sukwitthayakul, “A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach,” **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 239–274.

top-down processing, such as activating background knowledge, and bottom-up processing of vocabulary, syntax, and textual features, as illustrated in Sukwitthayakul's reading lessons developed from the English Pali Canon.

In addition to genre and linguistic relevance, effective ESP reading materials require pedagogical quality, including clear organization, coherent presentation, meaningful activities, and accessible language. Suphipat's (2019) development of content-based reading materials for Buddhist student monks identified strengths in content selection, organization, presentation, language use, activities, and layout and design, all of which received positive evaluations from student monks and teachers.¹³⁴ These criteria highlight the need to balance domain-specific content with readability and pedagogical usability.

Furthermore, CEFR-based principles strengthen ESP reading materials by ensuring that text types, difficulty levels, communicative activities, and learning outcomes align with clearly defined proficiency descriptors. The British Council CEFR Alignment Handbook stresses that materials must match the target CEFR levels, specify relevant communicative competences, and cover appropriate reading tasks and strategies for the intended proficiency band. Proper alignment ensures that reading passages, tasks, and assessment components are not only relevant to the ESP context but also linguistically attainable for learners, avoiding mismatches between content demands and learner ability.

Taken together, the literature suggests that effective ESP reading materials should combine (1) contextual and genre relevance, (2) authentic domain-specific language, (3) well-structured pedagogical design, and (4) CEFR-aligned readability and communicative objectives. These characteristics are crucial for developing Buddhist-context reading materials that are accessible, meaningful, and pedagogically effective for learners at MCU.

¹³⁴ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 1–22.

2.6.6 Readability Theory and CEFR-Based Readability

Readability theory examines how linguistic, cognitive, and textual factors influence the ease with which readers can comprehend a text. Traditional readability formulas such as Flesch-Kincaid and Gunning Fog evaluate surface-level features like sentence length, word length, and syllable count to estimate text difficulty. However, contemporary research in readability increasingly incorporates deeper linguistic and discourse-level features, including lexical sophistication, syntactic complexity, cohesion, and conceptual load, particularly for second language (L2) readers. Modern approaches integrate computational linguistics and natural language processing (NLP) to capture these multidimensional aspects of text difficulty, resulting in more accurate assessments than traditional formulas alone.¹³⁵¹³⁶ Studies also highlight that L2 readers rely more heavily on grammatical and lexical transparency than native speakers, suggesting that readability metrics must be context-sensitive when applied to language learners.

Within proficiency-based instruction, the Common European Framework of Reference for Languages (CEFR) provides qualitative reading descriptors across six levels, A1–C2. CEFR-based readability therefore involves aligning texts with proficiency levels in relation to linguistic complexity, communicative purpose, and cognitive demand. Relevant features include vocabulary range, syntactic structure, text coherence, and the reading behaviors expected at each level, such as scanning, inference, and interpretation. Research also shows that automated CEFR text analyzers can produce inconsistent classifications, so qualitative judgment is needed in addition to algorithmic results. Genre, content familiarity, and text purpose can further influence classification, requiring material developers to interpret automated outputs cautiously.

¹³⁵ Scott A. Crossley, Jerry Greenfield, and Danielle S. McNamara, “Assessing Text Readability Using Cognitively Based Indices,” *TESOL Quarterly* Vol. 42 No. 3 (September 2008), pp. 475–493.

¹³⁶ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, “Text Readability Assessment for Second Language Learners,” in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–22.

In addition, research in readability for closely related or low-resource languages demonstrates how linguistic similarity, orthographic patterns, and shared lexical features can support cross-lingual readability modeling when data resources are limited. These findings reinforce the notion that readability and CEFR alignment are multifactorial and must be adapted to language-specific and learner-specific contexts. For L2 English learners, integrating CEFR descriptors with modern NLP-based readability features yields higher accuracy and more reliable leveling of instructional texts, particularly in ESP (English for Specific Purposes) settings where domain-specific vocabulary adds further complexity. As such, CEFR-based readability serves as an essential framework for designing and evaluating reading materials that support learner progression, instructional coherence, and curriculum alignment.

2.6.7 Authentic vs. Adapted Texts in ESP

In English for Specific Purposes (ESP), the choice between authentic and adapted texts plays a crucial role in learners' comprehension, motivation, and exposure to domain-specific discourse. Authentic texts are produced for real-world professional or academic communication rather than for pedagogical purposes. Professional reports, religious sermons, canonical Buddhist passages, procedural guidelines, and workplace documents expose learners to the discourse features, genre structures, and terminology used in authentic contexts. Sukwitthayakul (2022) emphasizes that authentic texts can help learners recognize genre-specific patterns, macrostructures, frequent vocabulary, and recurrent phraseology; features that support genre awareness and disciplinary literacy in ESP settings.¹³⁷

However, authentic texts can present challenges for lower-proficiency learners, including those at A1–A2, because of high lexical density, complex syntax, and culturally embedded references. This issue is especially relevant in Buddhist-context ESP, where canonical or doctrinal texts may contain abstract concepts, specialized Pali or Sanskrit terminology, and complex textual structures. Suphipat's

¹³⁷ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 239–274.

(2019) research shows that Buddhist content can be pedagogically valuable when reading materials are systematically developed and supported through appropriate organization, language, activities, and design.¹³⁸ Adaptation can preserve relevant content while modifying vocabulary load, sentence structure, coherence, and task demands to match learners' proficiency levels and instructional objectives.

From a CEFR-based perspective, the CEFR Alignment Handbook emphasizes that both authentic and adapted materials must be related to descriptors specifying linguistic difficulty, communicative functions, and text-processing expectations at each proficiency level. This helps ensure that vocabulary range, text length, cohesion, and cognitive demand remain within learners' ability ranges. Arikan (2015) notes that the CEFR's action-oriented approach permits varied text types as long as they are connected to appropriate descriptors and meaningful tasks.¹³⁹ Adapted texts can therefore be especially useful in lower-proficiency ESP contexts because they preserve contextual relevance while providing comprehensible and scaffolded input. More authentic texts can then be introduced progressively as learners' proficiency develops.

In summary, both authentic and adapted texts have distinct pedagogical roles in ESP. Authentic texts promote exposure to real-world discourse and prepare learners for professional communication, whereas adapted texts ensure accessibility, CEFR alignment, and manageable cognitive load for lower-proficiency learners. Effective ESP material development often requires a strategic combination of both types, using adapted texts to scaffold foundational skills and authentic texts to cultivate advanced domain-specific literacy.

2.6.8 Principles of Text Selection for Buddhist-Context ESP

Selecting reading texts for Buddhist-context ESP requires the integration of linguistic, contextual, cultural, and pedagogical considerations. Learners may need

¹³⁸ Phatchareporn Supphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 1–22.

¹³⁹ Arda Arikan, "The CEFR and Reading: A Document Analysis," **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), pp. 501–504.

English for guiding meditation, explaining Dhamma concepts, interacting with international visitors, or engaging in academic study; text selection should therefore reflect both domain relevance and language accessibility. Needs-analysis research in Buddhist higher education also demonstrates that content and language functions should be determined from learner and stakeholder evidence rather than assumed in advance. Although such studies may focus on different language skills, the underlying needs-based principle applies directly to the selection of reading content and tasks for Buddhist ESP.

A second principle is genre relevance and discourse accessibility, particularly in Buddhist ESP contexts where texts may include sermons, meditation instructions, doctrinal explanations, parables, or canonical passages. Sukwitthayakul (2022) demonstrates that English suttas have identifiable discourse structures and recurrent lexical patterns that can support genre awareness.¹⁴⁰ Selected texts should therefore represent genres learners may encounter in Buddhist communication while remaining manageable in discourse organization. Highly abstract arguments or dense canonical passages may require adaptation to suit learners' developmental stages.

Third, CEFR-based readability is a core selection criterion. The CEFR Alignment Handbook stresses that linguistic difficulty, vocabulary load, sentence complexity, cohesion, and text length should correspond to relevant proficiency descriptors. For learners progressing from A2 toward B1, texts should use frequent and progressively expanding vocabulary, clear sentence structures, familiar or contextually relevant topics, and increasingly connected discourse, while introducing essential Buddhist terminology through appropriate scaffolding. Arikan (2015) notes that the CEFR's action-oriented approach permits varied text types when their linguistic and task demands are appropriate for the intended level.¹⁴¹ This flexibility supports the use of both adapted Buddhist texts and carefully selected authentic texts.

¹⁴⁰ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 239–274.

¹⁴¹ Arda Arikan, "The CEFR and Reading: A Document Analysis," **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), pp. 501–504.

Finally, effective text selection requires attention to learners' cognitive load, cultural background, and motivational factors. Supphipat's (2019) study on content-based materials for monks shows that learners and teachers value texts that are well-organized, clearly presented, and connected to Buddhist practice, as these elements improve engagement and comprehension.¹⁴² Texts should also reflect both traditional Buddhist concepts and contemporary Buddhist communication needs such as mindfulness in daily life, temple interactions, and international Buddhist events to maximize relevance and learner motivation. Appropriate visual aids, clear layout, and supportive pre-reading activities can further enhance comprehension, particularly for novice or low-proficiency learners.

In summary, the selection of texts for Buddhist-context ESP should follow four core principles: (1) Contextual and functional relevance based on real communicative needs; (2) Genre and discourse appropriateness reflecting Buddhist textual practices; (3) CEFR-aligned linguistic suitability ensuring readability at the learner's level; and (4) Pedagogical and motivational effectiveness that supports learner engagement and comprehension. These principles help ensure that the materials used in Buddhist ESP instruction are meaningful, accessible, and supportive of both language development and Buddhist professional competence.

2.7 Meaning, Components, and Measurement of Readability

Readability is a key concept in language education and material development, particularly for designing level-appropriate reading texts for second language (L2) learners. It refers to how easily a reader can process and comprehend written language, determined by the interaction of linguistic, cognitive, and contextual factors. In CEFR-aligned instruction, readability plays a crucial role in ensuring that reading materials match learners' proficiency levels, support progressive skill development, and prevent cognitive overload. For ESP contexts especially Buddhist

¹⁴² Phatchareporn Supphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 1–22.

English, readability becomes even more significant due to the presence of specialized terminology, doctrinal concepts, and complex discourse structures. Understanding readability, its key components, and how it can be measured provides an essential foundation for selecting, evaluating, and adapting texts that are accessible, pedagogically sound, and aligned with the communicative needs of monastic learners.

2.7.1 Definitions of Readability

Readability has been widely defined as the degree to which a text can be easily understood by a target reader, based on a combination of linguistic, cognitive, and discourse-related factors. Readability refers to “the sum of all elements in textual material that affect a reader’s understanding, reading speed, and level of interest”¹⁴³, highlighting that readability is multidimensional and shaped by lexical, syntactic, conceptual, and organizational features of the text as well as characteristics of the reader. This definition is particularly relevant in ESP contexts, where domain-specific vocabulary and discourse structures further influence text comprehensibility.

In line with this, Siripol et al.¹⁴⁴ explained that readability traditionally emerged from attempts to calculate text difficulty through quantitative indicators such as sentence length, word length, and syntactic complexity, seen in formulas like Flesch-Kincaid and Gunning Fog. They argue that readability today is best understood as a construct that integrates both surface-level linguistic features and deeper cognitive demands, especially when aligning texts with CEFR proficiency levels for instructional purposes. Similarly, research in computational readability by Imperial and Kochmar¹⁴⁵ notes that readability refers not only to linguistic difficulty but also

¹⁴³ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, “Text Readability Assessment for Second Language Learners,” in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–22.

¹⁴⁴ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, “Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification,” **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), pp. 3283–3294.

¹⁴⁵ Joseph Marvin Imperial and Ekaterina Kochmar, “Automatic Readability Assessment for Closely Related Languages,” in **Findings of the Association for Computational Linguistics: ACL 2023**, (Toronto, Canada: Association for Computational Linguistics, 2023), pp. 5371–5386.

the degree to which a text's structure and vocabulary match learner proficiency, making readability assessment essential for selecting appropriate pedagogical materials.

Together, these perspectives show that readability is not a single measurable property but a composite construct influenced by textual features, reader characteristics, and communicative purpose. In the context of CEFR-aligned Buddhist ESP materials, readability must therefore account for both general English linguistic complexity and the specialized conceptual load of Buddhist terminology and discourse.

2.7.2 Readability Formulas vs. CEFR Descriptors

Traditional readability formulas estimate text difficulty primarily through quantitative measures such as sentence length, word length, syllable count, and average sentence complexity. Formulas such as Flesch-Kincaid, Gunning Fog, and SMOG were originally developed for native readers and focus on surface linguistic features rather than cognitive or discourse-level demands. Siripol et al.¹⁴⁶ note that although such formulas provide fast and convenient estimates, they can oversimplify reading difficulty by assuming that longer words or sentences necessarily indicate greater complexity. They cannot fully capture semantic load, conceptual abstraction, cohesion, or background-knowledge demands, all of which influence comprehension.

In contrast, CEFR descriptors offer a qualitative, skill-based, and communicative approach to evaluating text difficulty. Rather than relying solely on numerical indicators, CEFR descriptors specify what learners at each proficiency level (A1–C2) can understand, process, and accomplish when interacting with a text. Arikan¹⁴⁷ highlights that CEFR is an action-oriented model, meaning that reading difficulty is evaluated based on the tasks readers can perform such as identifying main ideas, making inferences, or processing detailed information rather than based on

¹⁴⁶ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, "Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification," **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), pp. 3283–3294.

¹⁴⁷ Arda Arikan, "An Autoethnography of Teaching English to Young Learners: From Theory to Practice," **The Anthropologist** Vol. 20 Nos. 1–2 (2015), pp. 77–85.

word- or sentence-level metrics alone. This makes CEFR descriptors more sensitive to context, communicative purpose, genre, and cognitive demands.

Research on L2 readability reinforces this distinction. Xia, Kochmar, and Briscoe¹⁴⁸ note that grammatical complexity, conceptual load, and vocabulary sophistication may affect second-language readability more strongly than word or sentence length alone. CEFR-aligned assessment can therefore reflect learners' comprehension challenges more fully than traditional formulas. Imperial and Kochmar¹⁴⁹ likewise argue that readability assessment for L2 learners should incorporate syntactic patterns, lexical distributions, discourse organization, and proficiency-related features that formulas do not capture.

Overall, readability formulas and CEFR descriptors serve different purposes. Readability formulas provide quick, surface-level estimates, while CEFR descriptors provide holistic, ability-based evaluations aligned with actual learner performance. For CEFR-aligned Buddhist ESP materials, traditional readability formulas may serve as initial indicators of complexity, but CEFR descriptors remain essential for ensuring that texts match learners' linguistic proficiency, cognitive readiness, and communicative needs.

2.7.3 Factors Affecting Readability

Readability is shaped by multiple linguistic, cognitive, and contextual factors that influence how easily a reader can understand written text. For L2 learners in particular, these factors extend beyond surface-level features and include deeper lexical, syntactic, semantic, and discourse-related characteristics. Xia, Kochmar, and Briscoe emphasized that lexical complexity such as word frequency, polysemy, and morphological difficulty plays a central role in determining readability for second-

¹⁴⁸ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, "Text Readability Assessment for Second Language Learners," in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–22.

¹⁴⁹ Joseph Marvin Imperial and Ekaterina Kochmar, "Automatic Readability Assessment for Closely Related Languages," in **Findings of the Association for Computational Linguistics: ACL 2023**, (Toronto, Canada: Association for Computational Linguistics, 2023), pp. 5371–5386.

language readers. They note that unfamiliar or specialized vocabulary, especially in ESP contexts, increases cognitive load and reduces text accessibility.¹⁵⁰

Syntactic complexity is another major factor. Long sentences, embedded clauses, passive constructions, and non-canonical word order can increase processing demands for readers with limited proficiency. Siripol et al.¹⁵¹ highlight that sentence length and structural density influence how automated CEFR analyzers classify text difficulty, noting that texts with complex syntax often receive higher CEFR-level predictions even when vocabulary appears simple. Similarly, Imperial and Kochmar¹⁵² demonstrate that syntactic and morphological structures contribute significantly to readability in both high-resource and low-resource languages, showing that readability assessment must incorporate linguistic features beyond word and sentence length.

A third factor concerns discourse organization and cohesion. Coherent logical structure, clear paragraphing, connectives, and consistent reference chains help readers follow the flow of information. When cohesion is weak or when texts rely heavily on implicit links and inference-making, comprehension becomes more difficult especially for novice readers. Discourse expectations within particular genres also influence readability. CEFR-oriented analyses such as Arikan emphasized that tasks associated with different text types (e.g., instructions vs. narratives) place distinct cognitive demands on learners, affecting how easily they can process information.¹⁵³

¹⁵⁰ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, “Text Readability Assessment for Second Language Learners,” in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), p. 14.

¹⁵¹ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, “Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification,” **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), p. 3291.

¹⁵² Joseph Marvin Imperial and Ekaterina Kochmar, “Automatic Readability Assessment for Closely Related Languages,” in **Findings of the Association for Computational Linguistics: ACL 2023**, (Toronto, Canada: Association for Computational Linguistics, 2023), p. 5382.

¹⁵³ Mustafa Bulut and Arda Arikan, “Socially Responsible Teaching and English Language Coursebooks: Focus on Ethnicity, Sex, and Disability,” **Journal of Yaşar University** Vol. 10 No. 39 (December 2015), p. 15.

Finally, conceptual and cultural load significantly affects readability, particularly in Buddhist-context ESP. Abstract philosophical concepts, culturally specific metaphors, and domain-specific terminology (e.g., “cessation,” “cultivation,” “non-self”) can challenge learners even when linguistic form is simple. Siripol et al.¹⁵⁴ point out that content familiarity and genre specificity influence readability classification, as texts with specialized themes often appear more difficult to automated CEFR tools and human readers alike. Imperial and Kochmar¹⁵⁵ further support this by showing that conceptual familiarity can alter readability perceptions even when linguistic features remain constant.

In summary, readability is influenced by four major groups of factors: (1) Lexical complexity (word frequency, terminology, morphological difficulty), (2) Syntactic complexity (sentence structure, clause embedding), (3) Discourse and cohesion (organization, coherence, connectives), and (4) Conceptual and cultural load (domain-specific knowledge, abstract concepts). These factors are especially critical in CEFR-aligned Buddhist ESP materials, where linguistic demands must be carefully balanced with the specialized content learners must understand.

2.7.4 Tools for Readability Assessment

Readability assessment tools range from traditional formula-based calculators to modern computational systems designed to estimate text difficulty more accurately for both native and L2 readers. Traditional tools such as online Flesch-Kincaid, Gunning Fog, and SMOG calculators provide quick numerical scores based primarily on superficial indicators like sentence length and syllable count. While these tools are easily accessible and widely used, Xia, Kochmar, and Briscoe¹⁵⁶ argue that

¹⁵⁴ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, “Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification,” **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), p. 3292.

¹⁵⁵ Joseph Marvin Imperial and Ekaterina Kochmar, “Automatic Readability Assessment for Closely Related Languages,” in **Findings of the Association for Computational Linguistics: ACL 2023**, (Toronto, Canada: Association for Computational Linguistics, 2023), p. 5383.

¹⁵⁶ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, “Text Readability Assessment for Second Language Learners,” in **Proceedings of the 11th Workshop on**

they fail to capture deeper linguistic features such as syntactic patterns, discourse cohesion, and lexical sophistication, which are particularly important for assessing texts intended for second-language learners.

To address these limitations, more advanced automated readability assessment (ARA) tools have emerged, many of which draw on natural language processing (NLP) and machine learning techniques. These tools incorporate lexical frequency distributions, part-of-speech patterns, syntactic tree depth, cohesion indices, and semantic features to provide a more comprehensive estimation of text difficulty. Imperial and Kochmar¹⁵⁷ show that NLP-based systems can outperform traditional formulas significantly, especially when assessing texts in low-resource languages or specialized domains. However, they also highlight the challenge that automated tools may produce inconsistent results if training data or language models are insufficiently representative.

In CEFR-aligned educational settings, teachers increasingly rely on automated CEFR text analyzers, which attempt to classify texts according to CEFR proficiency levels. These include tools such as Text Inspector, CEFR Checker, and various web-based analyzers. Yet, as demonstrated by Siripol et al.¹⁵⁸, these tools frequently generate inconsistent CEFR level predictions across the same text, sometimes differing by two or more proficiency bands. Their study reveals that factors such as genre, topic familiarity, and discourse structure significantly influence automated CEFR outputs, showing that these tools should be used as supplementary aids rather than definitive evaluators.

Innovative Use of NLP for Building Educational Applications, (San Diego, CA: Association for Computational Linguistics, 2016), p. 12.

¹⁵⁷ Joseph Marvin Imperial and Ekaterina Kochmar, “Automatic Readability Assessment for Closely Related Languages,” in **Findings of the Association for Computational Linguistics: ACL 2023**, (Toronto, Canada: Association for Computational Linguistics, 2023), p. 5382.

¹⁵⁸ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, “Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification,” **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), p. 3289.

Another category of assessment tools involves task-based CEFR alignment, where texts are evaluated based on the types of reading tasks learners can perform, such as identifying main ideas, scanning for details, or interpreting implied meaning. Arikan¹⁵⁹ notes that CEFR's action-oriented approach relies not only on text complexity but also on task demands and communicative objectives, implying that teachers must use qualitative judgment when determining whether a text genuinely aligns with a CEFR level.

Overall, readability assessment tools can be grouped into three main types: 1. Formula-based calculators (fast but superficial), 2. NLP/ML-based readability systems (more accurate but dependent on data quality), and 3. CEFR-alignment tools (useful for level matching but prone to inconsistency). For Buddhist-context ESP material development, these tools should be used in combination with expert judgment, CEFR descriptors, and sensitivity to domain-specific terminology to ensure that texts are both level-appropriate and pedagogically meaningful.

2.7.5 Perceived Readability and Learner Evaluation

Perceived readability refers to learners' judgments of how easily a text and its accompanying instructional components can be read and understood. It differs from formula-based readability, which estimates difficulty from textual features, and from demonstrated reading comprehension, which is measured through performance on reading tasks. Perceived readability may be influenced by vocabulary familiarity, sentence structure, passage organization, prior knowledge, instructions, activity design, visual support, and the learner's confidence while using the materials.

In the present study, perceived readability was evaluated through the post-try-out learner-evaluation questionnaire rather than through a standalone readability formula. The questionnaire evidence was interpreted together with comprehension-task performance, usability judgments, and learner attitudes. This distinction prevents the study from treating learners' perceptions as an objective formula score and

¹⁵⁹ Mustafa Bulut and Arda Arikan, "Socially Responsible Teaching and English Language Coursebooks: Focus on Ethnicity, Sex, and Disability," **Journal of Yaşar University** Vol. 10 No. 39 (December 2015), p. 15.

provides a more complete account of how the developed materials functioned during actual use.

2.8 Buddhist English Communication and Professional Domains

Buddhist English communication encompasses the use of English within monastic, educational, community, and international Buddhist contexts, reflecting the diverse linguistic demands placed on monks and practitioners in contemporary society. As temples, meditation centers, and Buddhist universities increasingly interact with global audiences, English has become essential for guiding meditation, explaining Dhamma, interpreting cultural practices, engaging in academic discourse, and participating in international Buddhist networks. These evolving responsibilities indicate that Buddhist English operates as a specialized form of ESP, characterized by doctrinal terminology, culturally embedded expressions, and context-specific communicative tasks. Understanding how English functions across these professional Buddhist domains provides a foundation for designing CEFR-aligned reading materials that support learners' real-world communicative needs.

2.8.1 English Use in Buddhist Communities

English plays an increasingly important role in contemporary Buddhist communities, particularly in meditation centers, temples, and settings where Dhamma instruction is offered to international participants. As Thailand has become a key destination for spiritual tourism and meditation retreats, monks and temple staff are frequently required to communicate with foreign visitors, guide meditation practices, and explain Buddhist concepts in English. Research indicates that monks face persistent reading and communication challenges due to limited exposure to comprehensible English materials, domain-specific vocabulary, and structurally complex religious texts¹⁶⁰. Buddhist English thus emerges as a specialized variety shaped by doctrinal terminology, ritual expressions, and context-specific discourse patterns that differ significantly from general English usage.

¹⁶⁰ Phatchareporn Supphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), p. 2.

Within meditation centers, English is used to guide sitting meditation, walking meditation, and provide mindfulness instructions to international practitioners. This requires clear, accessible language that conveys both procedural steps and underlying Buddhist principles. According to Banjob Piyamat, English training for Buddhist monks and community representatives involved in temple-based cultural tourism should prepare them to explain local traditions, culture, community life, the history of important sites, and the historical and aesthetic significance of temple architecture and Buddha images. This indicates a practical need for communicative competence that integrates cultural knowledge with English-speaking skills.¹⁶¹

Temples serving as cultural and religious hubs also utilize English in interactions with visitors, volunteer groups, foreign students, and international Buddhist networks. Decha Talanuek¹⁶² highlights that monks increasingly participate in global Buddhist engagements such as international conferences, pilgrimages, intercultural dialogue programs, and social development initiatives where English serves as the lingua franca. In these contexts, monks must not only explain Buddhist teachings but also articulate the relevance of Buddhist practices in contemporary society, reinforcing English as an essential tool for communication and community leadership.

In the domain of Dhamma instruction, English is used to explain fundamental teachings such as the Four Noble Truths, Noble Eightfold Path, mindfulness, and monastic discipline. However, Chirawan Sukwitthayakul¹⁶³ notes that English renderings of canonical texts often contain abstract concepts, complex

¹⁶¹ Banjob Piyamat, *The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community's Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province*, **Research Report**, (Samutprakarn: Huachiew Chalermprakiet University, 2019), pp. 53–54, 63–68.

¹⁶² Decha Talanuek and Chalermphong Tham-ngarn, "The Use of English Language Among Development Monk Scholars," **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 866–884.

¹⁶³ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 239–274.

sentence structures, and culturally embedded meanings, making comprehension challenging for learners. This difficulty underscores the necessity for adapted and level-appropriate Buddhist English materials to support both monks and lay practitioners in delivering accurate and meaningful Dhamma explanations.

Overall, English use in Buddhist communities spans ritual, pedagogical, cultural, and communicative functions. The need for effective English communication in meditation centers, temples, and Dhamma teaching environments highlights the importance of developing CEFR-aligned, contextually appropriate reading materials that support monks and practitioners in performing their roles confidently and accurately within increasingly internationalized Buddhist settings.

2.8.2 Key Buddhist-English Terminology and Translation Considerations

Buddhist English contains specialized terms derived from Pali and Sanskrit, many of which express doctrinal concepts without direct equivalents in general English. These include Dhamma, sīla, samādhi, paññā, saṃsāra, nibbāna, ārammaṇa, and kamma, as well as vocabulary used in meditation practice, such as mindfulness, concentration, insight, and mental formations. According to Chirawan Sukwitthayakul, English translations of the Pali Canon contain recurrent lexical patterns, discourse structures, and specialized vocabulary that differ from general English usage. Learners must therefore negotiate both terminological specificity and doctrinal complexity when reading these texts.¹⁶⁴

When translating Buddhist terminology into English, several challenges arise due to semantic depth, cultural embeddedness, and the lack of direct equivalents. For instance, terms like dukkha, sati, and anicca cannot be captured fully through single-word translations such as “suffering,” “mindfulness,” or “impermanence.” Suphipat notes that monks and learners often struggle with doctrinal terminology because literal translations may obscure key conceptual nuances, while overly

¹⁶⁴ Chirawan Sukwitthayakul and Saneh Thongrin, “Understanding the Pali Canon through Keyword Analysis: A Comparison between Different Reference Corpora,” **Rangsit Journal of Social Sciences and Humanities** Vol. 9 No. 2 (July–December 2022), p. 35.

interpretive translations may introduce unintended meanings.¹⁶⁵ Therefore, Buddhist ESP materials must balance accuracy, clarity, and accessibility, often requiring glossaries, simplified explanations, or context-sensitive paraphrasing to support comprehension.

Furthermore, Buddhist-English translation must consider pragmatic functions, particularly when monks communicate with international audiences in meditation centers or temple settings. As observed by Banjob Piyamat¹⁶⁶, monks frequently explain symbolic meanings, rituals, cultural heritage, and local practices to visitors, requiring translation choices that preserve both doctrinal accuracy and cultural significance. In such contexts, translation involves not only linguistic equivalence but also intercultural mediation, ensuring that the intended Buddhist values come across clearly to non-Buddhist or non-Asian audiences.

In international Buddhist engagements, English enables monks to participate in international conferences, engage in intercultural dialogue, and communicate Buddhist teachings to broader audiences. Decha Talanuek and Chalermphong Tham-ngarn further explain that monks use English to discuss Buddhist philosophy and practices and to translate and disseminate Buddhist texts, thereby helping to bridge cultural and linguistic gaps.¹⁶⁷

Given these challenges, effective Buddhist ESP materials should incorporate:

1. Core doctrinal terminology with clear definitions,
2. Contextualized examples demonstrating practical or ritual use,
3. Parallel Pali–English explanations when appropriate,

¹⁶⁵ Phatchareporn Suphipat and Sumalee Chinokul, “The Development of the English Content-Based Reading Materials for Buddhist Student Monks,” **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), p. 2.

¹⁶⁶ Banjob Piyamat, “The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community’s Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province,” **Research Report**, (Huachiew Chalermprakiet University, 2019), p. 118.

¹⁶⁷ Decha Talanuek and Chalermphong Tham-ngarn, “The Use of English Language Among Development Monk Scholars,” **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 869, 871, 880.

4. Simplified rephrasing for lower CEFR levels, and
5. Intercultural notes which support accurate communication across cultural backgrounds.

In summary, Buddhist-English communication requires careful handling of specialized terminology, conceptual nuance, and cultural meaning. Translation in this domain involves more than lexical substitution; it demands sensitivity to doctrinal intent, contextual appropriateness, and learner proficiency, underscoring the importance of well-designed ESP materials in Buddhist educational settings.

2.8.3 Intercultural Communication in Buddhist Professional Settings

Intercultural communication has become a central component of Buddhist professional practice, particularly as temples, meditation centers, and Buddhist institutions increasingly engage with international communities. Buddhist monks and practitioners often interact with visitors, volunteers, researchers, and spiritual tourists from diverse cultural backgrounds. These interactions require not only English proficiency but also intercultural awareness, sensitivity, and the ability to convey Buddhist concepts in ways that are meaningful to audiences with varying worldviews. Banjob Piyamat highlights that monks routinely communicate local identity, cultural traditions, and Buddhist symbolism to foreign visitors, performing a mediating role between Thai Buddhist culture and global audiences. This intercultural function is essential in temple tourism, cultural ceremonies, and community-based activities where English serves as a bridge between cultures.¹⁶⁸

In professional Buddhist contexts, intercultural communication requires the ability to interpret and present Buddhist teachings in culturally accessible ways. Many Buddhist concepts such as *kamma*, *nibbāna*, *anicca*, and *dukkha* carry layered cultural meanings that may not align with Western or non-Buddhist perspectives. Chirawan Sukwitthayakul notes that when explaining doctrinal content in English, monks must adapt explanations to the listener's cultural frame of reference while maintaining

¹⁶⁸ Banjob Piyamat, "The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community's Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province," **Research Report**, (Huachiew Chalermprakiet University, 2019), pp. 118–119.

doctrinal accuracy. This process demands skillful negotiation between traditional Buddhist discourse and contemporary intercultural expectations, especially in settings involving meditation instruction, Dhamma talks, or discussions about Buddhist practice.¹⁶⁹

Furthermore, intercultural communication extends to international Buddhist conferences, academic exchanges, collaborative programs, and development work. Decha Talanuek and Chalermphong Tham-ngarn (2024) explain that English serves as a global lingua franca that enables monks to participate in international conferences, academic collaborations, and intercultural dialogue. Through these activities, monks can present research and Buddhist perspectives, discuss ideas with international peers, respond to questions about Buddhism, and exchange views across cultural backgrounds in ways that foster mutual understanding.¹⁷⁰

At the learner level, intercultural communication demands can present barriers, particularly for monks with limited English proficiency. Suphipat reports that linguistic challenges such as unfamiliar vocabulary, complex sentence structures, and culturally embedded concepts often hinder monks' ability to communicate effectively with international interlocutors.¹⁷¹ As a result, ESP materials must incorporate not only linguistic competence but also intercultural communicative competence, helping learners develop the skills necessary to interpret cultural cues, adjust communication strategies, and convey Buddhist concepts across cultural boundaries.

In summary, intercultural communication in Buddhist professional settings involves a combination of linguistic skills, cultural awareness, doctrinal understanding, and communicative adaptability. As Buddhist communities become increasingly

¹⁶⁹ Chirawan Sukwitthayakul and Saneh Thongrin, "Understanding the Pali Canon through Keyword Analysis: A Comparison between Different Reference Corpora," **Rangsit Journal of Social Sciences and Humanities** Vol. 9 No. 2 (July–December 2022), p. 35.

¹⁷⁰ Decha Talanuek and Chalermphong Tham-ngarn, "The Use of English Language Among Development Monk Scholars," **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 869–872, 880–881.

¹⁷¹ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), p. 2.

international, developing CEFR-aligned reading materials that integrate intercultural elements becomes essential for preparing monks and practitioners to engage effectively and confidently in multicultural environments.

2.8.4 Prior Frameworks of Buddhist English Training

Buddhist English training frameworks have emerged from the need to equip monks, students, and Buddhist practitioners with language relevant to increasingly international educational and religious environments. Earlier instruction often relied on general English content with limited attention to Buddhist discourse or context-specific purposes. Needs analysis by Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk¹⁷² identified Buddhist-context subject areas and language functions considered important by doctoral students and university administrators for a listening-and-speaking textbook. Although their study focused on oral skills, it demonstrates the broader ESP principle that materials should be developed from evidence about learners' and stakeholders' actual needs.

One significant development in Buddhist English training is the movement toward content-based and context-based instruction. Suphipat (2019) demonstrates that reading materials for Buddhist student monks can integrate disciplinary content with reading strategies and systematically developed learning activities.¹⁷³ Student monks and teachers evaluated the resulting materials positively, supporting ESP frameworks that connect language development with relevant Buddhist content.

At the community level, Banjob Piyamat (2019) demonstrates how English training can be organized around community identity and cultural-tourism communication. Such training requires learners to explain historical, social, aesthetic, and environmental meanings associated with a Buddhist community. It therefore

¹⁷² Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, "Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills," **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 108–129.

¹⁷³ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 7–15.

extends beyond general linguistic competence to include cultural explanation, narrative organization, and intercultural communication.

English development for monks also supports international Buddhist engagement. Decha Talanuek and Chalermphong Tham-ngarn (2024) discuss the role of English in accessing scholarship, participating in conferences and academic collaboration, disseminating Buddhist teachings, and engaging in intercultural dialogue. These responsibilities require the integration of doctrinal knowledge, linguistic clarity, and intercultural awareness.

Despite these developments, significant challenges remain. Sukwitthayakul (2022) found that readers of the English Pali Canon experienced lexical and structural difficulties, while the canonical texts contained specialized vocabulary and recurring discourse patterns. Without appropriately adapted or scaffolded materials, learners may struggle to comprehend English suttas or use doctrinal language accurately. These limitations support the need for CEFR-aligned Buddhist ESP reading materials that develop accessible reading skills while gradually introducing domain-specific discourse.

In summary, prior frameworks of Buddhist English training have evolved from general English instruction toward specialized ESP approaches that integrate Buddhist content, intercultural tasks, and professional communication needs. These developments highlight the importance of designing CEFR-aligned materials that account for both linguistic proficiency and the unique communicative roles of monks and novices in modern Buddhist communities.

2.9 Relevant Policies and National/Institutional Guidelines

The development of CEFR-aligned Buddhist ESP reading materials must be informed by national language policies and institutional guidelines that shape English education across Thailand's general and Buddhist educational systems. Both the Ministry of Education (MOE) and Buddhist universities such as MCU have adopted policies emphasizing CEFR alignment, curriculum modernization, and the enhancement of communicative competence to meet global standards. These policies

highlight the need for standardized learning outcomes, appropriate text difficulty, and context-sensitive material development. Understanding national reforms and institutional directions provides an essential foundation for ensuring that the materials created in this study are pedagogically sound, policy-aligned, and responsive to the specific needs of Buddhist learners.

2.9.1 MOE English Reform Policy Emphasizing CEFR Alignment

Thailand's Ministry of Education (MOE) has identified the improvement of English language competence as an important national policy concern, leading to the implementation of an English language teaching reform policy grounded in CEFR alignment. According to the Office of the Basic Education Commission (OBEC), the reform framework establishes the CEFR as the principal reference framework for curriculum design, instructional development, testing, assessment, teacher development, and the establishment of learning targets. The guidelines specify target CEFR levels for learners at different educational levels and direct educational agencies and schools to use the CEFR in curriculum development, instruction, and assessment, as well as to select textbooks, instructional materials, and learning resources appropriate to learners' CEFR levels. This initiative positions the CEFR as a central mechanism for the systematic improvement of English proficiency in Thailand.¹⁷⁴

A core component of the policy is the development of CEFR-informed curricula that promote communicative competence, task-based learning, and authentic language use. The reform encourages schools and educational institutions to adopt instructional materials that reflect CEFR-aligned vocabulary levels, text complexity, and communicative functions. In line with international practices, the MOE highlights the importance of CEFR-aligned reading tasks such as identifying main ideas, scanning for information, making inferences, and processing texts of increasing complexity as part of the national effort to modernize English instruction.

The policy also stresses teacher professional development, requiring English teachers to strengthen their proficiency and their ability to apply CEFR-informed

¹⁷⁴ Ministry of Education, "Announcement of the Ministry of Education on the Policy of English Language Teaching Reform," **Official Announcement**, (Bangkok: Ministry of Education, 2014), pp. 1, 4, 9–10.

assessment and materials design. This direction is supported by resources such as *Aligning Language Education with the CEFR: A Handbook*, which provides procedures for familiarization, specification, standardization, standard setting, and validation of alignment claims. These guidelines reinforce the goal of improving coherence across curricula, instruction, materials, and assessment.

Overall, the MOE's CEFR-based English reform framework underscores three major directions:

1. Standardization of curricula and assessment using CEFR;
2. Improvement of teacher proficiency and pedagogical competence;
3. Alignment of instructional materials and classroom tasks with CEFR descriptors.

Such policy directions directly support the development of CEFR-aligned Buddhist ESP reading materials, ensuring that they conform to national standards, support learner progression, and contribute to the broader goal of elevating English proficiency within Thailand's Buddhist educational institutions.

2.9.2 Institutional Directions on English Education in Buddhist Universities

Buddhist universities in Thailand, including Mahachulalongkornrajavidyalaya University (MCU), increasingly recognize English as important for monastic education, academic development, and international engagement. Needs analysis in Buddhist higher education shows that English programs should be informed by both learner and stakeholder expectations. Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk identified subject areas and language functions for a Buddhist-context listening-and-speaking textbook for doctoral students, illustrating the need for materials tied to actual course demands and institutional contexts.¹⁷⁵

¹⁷⁵ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, "Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills," **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 124–125.

As part of their broader educational mission, Buddhist institutions such as MCU support English-language initiatives that foster intercultural dialogue and broader Buddhist engagement. Decha Talanuek and Chalermphong Tham-ngarn (2024) emphasize that English enables monks to participate in international conferences, academic collaborations, and global Buddhist scholarship, as well as to communicate Buddhist teachings across cultures. Buddhist universities therefore have reason to support English courses that integrate academic communication, Buddhist content, and intercultural competence.¹⁷⁶

Institutional directions also highlight the need for context-specific and culturally relevant English instruction. Research by Phatchareporn Suphipat (2019) shows the value of reading materials developed specifically for Buddhist student monks, integrating relevant content, reading strategies, language activities, and appropriate presentation. Such work supports the development of ESP materials tailored to Buddhist contexts rather than reliance on generic EFL texts.

Moreover, Buddhist universities can use English education to support community service and cultural preservation. Banjob Piyamat (2019) shows how English training can facilitate communication about community identity and cultural tourism in a Buddhist setting. This highlights the value of integrating language proficiency with cultural explanation so that learners can communicate Buddhist and local meanings effectively in intercultural contexts.

Overall, institutional directions at Buddhist universities such as MCU reflect four core goals:

1. Enhancing monastic communication competence for both local and international contexts;
2. Supporting global Buddhist academic engagement through English proficiency;

¹⁷⁶ Decha Talanuek and Chalermphong Tham-ngarn, “The Use of English Language Among Development Monk Scholars,” **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 867, 869, 875–876, 883.

3. Developing ESP-based materials that match monastic roles and CEFR standards;

4. Promoting cultural and community communication as part of monastic service.

These institutional priorities strongly support the need for CEFR-aligned Buddhist ESP reading materials, ensuring that English education within Buddhist universities is both pedagogically grounded and professionally relevant.

2.9.3 ESP Needs within Buddhist Institutions

English for Specific Purposes (ESP) needs within Buddhist institutions arise from the varied religious, academic, and community roles performed by monks, students, and practitioners. Needs analysis is therefore necessary to determine relevant subject content, language functions, learner difficulties, and expected uses before materials are developed. Sarobol and Sudaruk's study of doctoral students and university administrators illustrates this process in a Buddhist-context listening-and-speaking course.¹⁷⁷ Although the language skills differ from those in the present research, the study supports the same needs-based principle applied to reading materials.

One major category of ESP needs concerns Buddhist doctrinal communication. Monks and Buddhist learners may need to explain concepts such as the Four Noble Truths, the Noble Eightfold Path, mindfulness, meditation, and monastic precepts in English. Phatchareporn Suphipat¹⁷⁸ shows that content-based reading materials can connect Buddhist subject knowledge with explicit reading strategies and structured learning activities. This supports the development of ESP materials that make disciplinary content accessible while building relevant vocabulary and comprehension skills.

¹⁷⁷ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, "Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills," **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 124–125.

¹⁷⁸ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), p. 2.

Another crucial ESP need relates to identity and cultural communication, especially in temple settings where monks act as cultural mediators. Banjob Piyamat demonstrates the need to prepare monks and community representatives to communicate local identity, historical narratives, and cultural values to foreign visitors, requiring them to explain temple history, cultural practices, Buddhist symbolism, and community traditions clearly in English.¹⁷⁹

Buddhist institutions also face growing ESP needs in international Buddhist engagement. Decha Talanuek and Chalermphong Tham-ngarn observe that monks increasingly participate in international conferences, academic workshops and seminars, intercultural exchanges, and interfaith dialogues. These settings require higher-order ESP skills such as academic reading and writing, conference participation, intercultural communication, and the structured presentation of Buddhist teachings in English. Consequently, Buddhist universities should incorporate advanced ESP components that prepare learners for academic and professional communication beyond local temple contexts.¹⁸⁰

In addition, ESP needs extend to scriptural literacy in English, especially for monks studying translated Buddhist texts. Chirawan Sukwitthayakul¹⁸¹ notes that English translations of the Pali Canon, commentarial literature, and academic Buddhist writing contain complex discourse structures, doctrinal abstractions, and culturally embedded meanings. Learners require specialized training to navigate these texts effectively, including genre awareness, lexical comprehension, and interpretive strategies. These needs reinforce the importance of CEFR-aligned reading materials that gradually expose learners to canonical English while scaffolding comprehension.

¹⁷⁹ Banjob Piyamat, “The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community’s Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province,” **Research Report**, (Huachiew Chalermprakiet University, 2019), pp. 39, 63–64.

¹⁸⁰ Decha Talanuek and Chalermphong Tham-ngarn, “The Use of English Language Among Development Monk Scholars,” **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 869–870, 876–881.

¹⁸¹ Chirawan Sukwitthayakul and Saneh Thongrin, “Understanding the Pali Canon through Keyword Analysis: A Comparison between Different Reference Corpora,” **Rangsit Journal of Social Sciences and Humanities** Vol. 9 No. 2 (July–December 2022), pp. 35–36.

Overall, ESP needs within Buddhist institutions can be grouped into four domains:

1. Doctrinal and meditative communication (explaining teachings and guiding meditation)
2. Cultural and identity communication (interpreting temple culture and rituals)
3. International academic and professional communication (participating in conferences and intercultural dialogues)
4. Scriptural and academic reading literacy (accessing translated Pali Canon and Buddhist scholarship)

These needs highlight the necessity for CEFR-aligned Buddhist-context ESP materials that reflect both linguistic proficiency and the distinctive communicative responsibilities of monks, students, and practitioners in contemporary Buddhist institutions.

2.10 Previous Studies Related to ESP, CEFR Alignment, and Material Development

A review of previous studies is essential for establishing the theoretical and empirical foundation of CEFR-aligned Buddhist ESP material development. Research in the fields of English for Specific Purposes (ESP), CEFR-based curriculum design, and instructional material development provides valuable insights into learner needs, text difficulty, communicative functions, and effective design principles. Studies conducted in Buddhist educational contexts further highlight the unique challenges faced by monks and practitioners, including specialized terminology, cultural communication demands, and limited proficiency in academic English. By examining prior work across these domains, this section synthesizes key findings that inform the rationale, design, and methodological choices of the present study, ensuring that the developed reading materials are pedagogically sound, contextually relevant, and aligned with international standards.

2.10.1 Studies on ESP and Buddhist-specific English Needs

1. **Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk**¹⁸² conducted a needs analysis titled “**Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills.**” The study investigated the subject content and language functions required for a Buddhist-context English textbook. Participants comprised 155 doctoral students from various fields and 19 university administrators at a Buddhist university in Thailand.

The findings identified subject areas such as traditions and festivals, education, science and technology, and social issues as important to both groups. Relevant language functions included listening for main ideas and details, making suggestions, giving instructions, expressing opinions, and providing reasons. The study demonstrates that both learner and stakeholder perspectives can inform the content and functional focus of instructional materials.

The study also highlights the value of developing English materials that are meaningfully connected to a Buddhist university context. Although it focused on listening and speaking rather than reading, its needs-analysis procedure provides a relevant model for identifying content, functions, and learner expectations before textbook development.

Sarobol and Sudaruk’s work contributes to the present study by: 1) demonstrating the importance of needs analysis before materials development; 2) showing the value of collecting evidence from both learners and institutional stakeholders; 3) supporting the use of Buddhist-context content in English materials; and 4) reinforcing the principle that the content and difficulty of materials should respond to the actual characteristics and needs of the target learners.

¹⁸² Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, “Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills,” **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 108–129.

2. **Phatchareporn Suphipat and Sumalee Chinokul¹⁸³** conducted a study titled **“The Development of the English Content-Based Reading Materials for Buddhist Student Monks.”** The study aimed to develop content-based reading materials, examine student monks’ attitudes toward their quality, and examine teachers’ attitudes. The development followed six stages and integrated Tomlinson’s materials-development framework with the Six-T’s approach of Stoller and Grabe.

The study involved 42 student monks and three English teachers. The developed materials incorporated Buddhist content and explicit reading strategies. Student monks and teachers expressed positive attitudes toward the materials’ academic and physical qualities, including content, organization, presentation, language use, activities, and layout and design.

The study demonstrates how content-based reading materials can connect learners’ Buddhist background knowledge with reading-strategy instruction. It also shows the importance of systematic needs identification, development, implementation, and evaluation when creating specialized reading materials.

Suphipat and Chinokul’s work contributes to the present study by: 1) confirming the relevance of Buddhist-context reading materials; 2) providing a structured model of materials development; 3) highlighting the importance of reading strategies and learner background knowledge; and 4) identifying quality criteria for content, language, activities, organization, and physical presentation.

3. **Banjob Piyamat¹⁸⁴** conducted a study titled **“The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community’s Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province.”** The study

¹⁸³ Phatchareporn Suphipat and Sumalee Chinokul, “The Development of the English Content-Based Reading Materials for Buddhist Student Monks,” **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 1–22.

¹⁸⁴ Banjob Piyamat, “The Development of English Skills for Identity and Meaning Communications for Buddhist Monks and Community’s Representatives to Promote Cultural Tourism: A Case Study of Bua Roi Temple, Bang Saothong District, Samutprakarn Province,” **Research Report**, (Huachiew Chalermprakiet University, 2019), pp. 85–89.

investigated English communication needs, developed a training handbook, and compared participants' performance before and after training.

The mixed-method study involved ten participants associated with the local school and subdistrict administrative organization. The findings indicated substantial needs for English communication development and identified grammar, speaking, writing, listening, and reading as relevant areas. The developed handbook addressed the historical, social, aesthetic, and environmental identity of the Bua Roi Temple community and received positive evaluations from experts and participants.

The study highlights the value of English materials that integrate local culture, community identity, and real communicative purposes. It also demonstrates that materials for cultural-tourism contexts should support both linguistic development and the explanation of culturally meaningful content.

Piyamat's work contributes to the present study by: 1) demonstrating the importance of context-specific English communication; 2) identifying cultural identity as relevant ESP content; 3) showing the value of needs analysis, handbook development, expert evaluation, and learner implementation; and 4) supporting the inclusion of temple and community communication in Buddhist-context materials.

4. **Decha Talanuek and Chalermphong Tham-ngarn**¹⁸⁵ authored “**The Use of English Language Among Development Monk Scholars.**” The article examines the growing importance of English for Thai development monks whose responsibilities extend into education, social development, and international engagement.

The authors explain that English enables monks to access international Buddhist scholarship, participate in conferences and academic collaboration, disseminate Buddhist teachings, and engage in intercultural dialogue. They also identify obstacles such as limited learning resources, cultural barriers, demanding schedules, and uneven access to qualified instruction.

¹⁸⁵ Decha Talanuek and Chalermphong Tham-ngarn, “The Use of English Language Among Development Monk Scholars,” **Lanna Journal of Buddhist Studies and Cultures** Vol. 6 No. 1 (2024), pp. 866–884.

The article recommends partnerships with educational institutions, greater use of digital learning platforms, and the integration of English into monastic curricula. These recommendations support context-specific English development connected to monks' educational, social, and international responsibilities.

Talanuek and Tham-ngarn's work contributes to the present study by: 1) identifying professional and international uses of English among development monks; 2) showing the need for accessible learning resources; 3) emphasizing academic and intercultural communication; and 4) supporting Buddhist-context materials that prepare learners for engagement beyond local settings.

5. **Chirawan Sukwitthayakul**¹⁸⁶ conducted a dissertation titled "**A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach.**" The study aimed to identify readers' problems and needs, analyze discourse structures in suttas from the Dīgha Nikaya, identify frequent words and keywords, develop reading materials, and explore users' perceptions of the developed material.

The needs analysis involved 30 participants and found that readers experienced lexical and structural problems when reading the English Pali Canon. Corpus and move analyses identified recurrent discourse structures, frequent words, and keywords in two English translations of the Dīgha Nikaya. These findings were then incorporated into needs-based and corpus-based reading lessons.

The developed material was evaluated by three experts and ten participants, whose overall perceptions were at a moderate level. The study demonstrates how needs analysis, discourse analysis, corpus evidence, materials development, and user evaluation can be integrated when developing reading support for specialized Buddhist texts.

Sukwitthayakul's work contributes to the present study by: 1) identifying lexical and structural difficulties in English suttas; 2) demonstrating the value of

¹⁸⁶ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 239–274.

needs-based and corpus-based materials development; 3) providing a model for integrating discourse and vocabulary evidence into reading lessons; and 4) reinforcing the need to adapt specialized Buddhist English to learners' reading needs.

2.10.2 Studies on CEFR Alignment and Reading Instruction

6. **The British Council** and partner language-testing associations published a reference document titled “**Aligning Language Education with the CEFR: A Handbook.**” The handbook provides procedures for relating curricula, instructional materials, and assessment frameworks to the Common European Framework of Reference for Languages (CEFR). It explains that alignment involves a defensible process rather than the simple assignment of level labels.

The handbook shows that CEFR alignment requires familiarization with the framework, specification of relevant descriptors and competences, standardization of judgments, standard setting, and validation of alignment claims. These procedures help institutions connect learning outcomes, materials, tasks, and assessments to the intended CEFR levels in a transparent and evidence-based manner.

The handbook also stresses the coherence of the different components of a language-education system. Materials should be related to relevant communicative activities, strategies, competences, text types, and proficiency descriptors, and claims of alignment should be supported by documented evidence.

The handbook contributes to the present study by: 1) providing a systematic process for interpreting CEFR alignment; 2) emphasizing the specification of relevant descriptors and competences; 3) supporting transparent judgments about text and task appropriateness; and 4) reinforcing the need for evidence when claiming alignment of Buddhist-context ESP materials.

7. **Arda Arikan**¹⁸⁷ conducted a study titled “**The CEFR and Reading: A Document Analysis.**” The study analyzed CEFR reading descriptors to understand how reading skills are framed within the CEFR's action-oriented approach. Its purpose was to examine how CEFR levels conceptualize reading ability, the types of reading

¹⁸⁷ Arda Arikan, “The CEFR and Reading: A Document Analysis,” **Procedia - Social and Behavioral Sciences** Vol. 199 (2015), p. 501.

tasks associated with each level, and the implications for curriculum design and text selection. By conducting a textual analysis of CEFR documentation, Arikan identified how CEFR descriptors operationalize reading proficiency across A1–C2.

Findings show that CEFR defines reading competence not merely by linguistic difficulty but by the cognitive and functional demands placed on learners. At lower levels (A1–A2), descriptors emphasize extracting simple information, recognizing familiar words, and understanding short, highly predictable texts. Higher levels incorporate tasks such as inference-making, processing abstract ideas, interpreting argumentative texts, and recognizing discourse structures. Arikan highlights that CEFR descriptors describe what learners can do, rather than prescribing formulas or quantitative thresholds.

The study demonstrates that CEFR-aligned text selection must consider task demands, communicative purpose, genre, and cognitive complexity, not just surface linguistic features such as sentence length or vocabulary frequency. This insight is particularly relevant for ESP contexts where specialized terminology and complex conceptual content may appear even in short texts.

Arikan’s work contributes to the present study by: 1) clarifying how CEFR conceptualizes reading proficiency across levels; 2) emphasizing that reading difficulty must be judged using functional descriptors, not only readability formulas; 3) supporting CEFR-based selection and adaptation of Buddhist reading materials; and 4) reinforcing the need to design reading tasks aligned with CEFR’s action-oriented framework.

2.10.3 Studies on Material Development (ADDIE, R&D, and ESP Materials)

8. **Somdee Ananpatiwet, Warunee Tubtimtong, and Uraiwan Cinmuk**¹⁸⁸ conducted a study titled **“The Development of Video Media Based on ADDIE Model on Nursing Care for High-Risk Preterm Infants.”** The study developed and

¹⁸⁸ Somdee Ananpatiwet, Warunee Tubtimtong, and Uraiwan Cinmuk, “The Development of Video Media Based on ADDIE Model on Nursing Care for High-Risk Preterm Infants,” **Journal of Nursing and Education** Vol. 14 No. 4 (October–December 2021), p. 65.

evaluated instructional video media for nursing students and provides an example of systematic product development through the five ADDIE phases: Analysis, Design, Development, Implementation, and Evaluation.

Findings show that the developed instructional videos achieved high efficiency scores and were positively evaluated by both experts and learners. The media improved comprehension, supported self-directed learning, and enhanced learner engagement. Somdee also demonstrated that iterative revisions based on expert review and pilot testing were essential for improving clarity, content accuracy, and instructional quality.

The study highlights the value of structured instructional design in materials development. Its results show that systematic analysis, production, expert review, implementation, and evaluation can support effective learning outcomes, an insight applicable to CEFR-aligned ESP materials in other fields.

Somdee's work contributes to the present study by: 1) demonstrating the effectiveness of the ADDIE model for systematic material development; 2) showing the importance of expert validation and iterative revision; 3) offering a methodological model that can be adapted for developing CEFR-aligned Buddhist ESP reading materials; and 4) reinforcing the need for clear alignment between learner needs, content design, and evaluation processes.

9. **Phipat Kaewsai**¹⁸⁹ authored an article titled “**English Language Development for Mahachulalongkornrajavidyalaya University Graduate Students’ Learning.**” The article discusses the importance, meanings, models, characteristics, and recommendations associated with English development for MCU graduate students.

The article emphasizes English as a means of international communication and access to global knowledge. It also discusses self-directed learning through

¹⁸⁹ Phipat Kaewsai, “English Language Development for Mahachulalongkornrajavidyalaya University Graduate Students’ Learning,” **Journal of Dhammaduta** Vol. 2 No. 1 (January–June 2022), pp. 18–31.

resources such as textbooks, instructional videos, and digital applications, allowing learners to study according to their needs, proficiency, and available time.

Although the article does not report an R&D intervention or experimental materials evaluation, it provides institutionally relevant guidance for English development at MCU. Its discussion supports flexible learning opportunities, learner autonomy, and the use of accessible instructional resources.

Kaewsai's work contributes to the present study by: 1) situating English development within the MCU graduate-learning context; 2) emphasizing learner-centered and self-directed learning; 3) supporting the use of varied and accessible instructional resources; and 4) reinforcing the importance of matching English learning opportunities to learners' needs and proficiency.

2.10.4 Studies on Readability and CEFR-based Text Difficulty

10. **Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara**¹⁹⁰ conducted a study titled “**Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification.**” The study examined the accuracy, consistency, and limitations of online tools used to classify English texts according to CEFR proficiency levels. It compared outputs across analyzers and documented discrepancies relevant to text selection and curriculum design.

Findings reveal that CEFR text analyzers frequently produce inconsistent or conflicting level classifications for the same input text. Differences of one to three proficiency levels were observed, largely due to variations in each tool's algorithms, linguistic feature sets, and training corpora. The study also noted that these tools often fail to account for discourse complexity, conceptual load, and content familiarity factors crucial for accurate readability assessment, especially for L2 learners. As a result, relying solely on automatic tools may lead to mismatched text difficulty and inappropriate instructional decisions.

¹⁹⁰ Piyathat Siripol, Seongha Rhee, Suthathip Thirakunkovit, and Aphiwit Liang-Itsara, “Evaluating the Consistency of Automated CEFR Analyzers: A Study of English Language Text Classification,” **International Journal of Evaluation and Research in Education** Vol. 14 No. 4 (August 2025), pp. 3283–3294.

The study emphasizes that CEFR alignment requires qualitative judgment, task analysis, and human expertise in addition to automated results. It argues that CEFR descriptors should guide text evaluation more strongly than machine-generated scores, especially for specialized or culturally embedded content where analyzers struggle.

Siripol et al.'s work contributes to the present study by: 1) demonstrating the limitations of automated CEFR tools and the need for expert interpretation; 2) highlighting that CEFR alignment must consider discourse, conceptual difficulty, and learner context; 3) supporting the use of manual CEFR-based evaluations when selecting Buddhist-context reading materials; and 4) reinforcing the importance of adapting texts to ensure readability and CEFR appropriateness for ESP learners.

11. **Menglin Xia, Ekaterina Kochmar, and Ted Briscoe**¹⁹¹ conducted a study titled “**Text Readability Assessment for Second Language Learners.**” This study investigated how text readability can be assessed more effectively for second language (L2) learners by analyzing a wide range of linguistic features beyond traditional readability formulas. The researchers aimed to identify which lexical, syntactic, and discourse-level features best predict reading difficulty for L2 readers, and to develop models that more accurately reflect learners’ real comprehension challenges. Using a large learner corpus and computational linguistic techniques, the study compared multiple feature sets to determine their predictive value.

Findings show that readability for L2 learners is influenced by a combination of lexical sophistication, syntactic complexity, discourse coherence, and semantic transparency, rather than by surface-level features such as sentence length or word length alone. The study demonstrated that L2 readability differs significantly from native-speaker readability because L2 learners rely more heavily on vocabulary frequency, grammatical clarity, and cohesive structures. The authors highlight that readability prediction improves substantially when deeper linguistic features such as

¹⁹¹ Menglin Xia, Ekaterina Kochmar, and Ted Briscoe, “Text Readability Assessment for Second Language Learners,” in **Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications**, (San Diego, CA: Association for Computational Linguistics, 2016), pp. 12–22.

dependency structures, lexical bundles, and semantic relations are incorporated into assessment models.

The study underscores that L2 readability assessment must be multidimensional, integrating linguistic features that reflect both cognitive load and learner proficiency. This challenges the use of traditional readability formulas in educational contexts and supports more sophisticated, learner-sensitive approaches to text evaluation.

Xia et al.'s work contributes to the present study by: 1) demonstrating that readability for L2 learners requires deeper linguistic analysis beyond formula-based measures; 2) highlighting lexical, syntactic, and discourse features relevant to CEFR-aligned text selection; 3) supporting the need for careful text adaptation in Buddhist ESP materials to match learners' processing abilities; and 4) providing evidence that readability assessments must consider the unique challenges faced by L2 learners engaging with specialized Buddhist content.

12. **Joseph Marvin Imperial and Ekaterina Kochmar**¹⁹² conducted a study titled “**Automatic Readability Assessment for Closely Related Languages.**” The study examined how readability assessment can draw on cross-lingual natural language processing when annotated resources in a target language are limited. The researchers explored predictive models using linguistic information shared across related languages.

Findings show that cross-lingual models can produce reasonably accurate readability predictions, even when training data in the target language are limited. The study demonstrates that textual difficulty is influenced by a combination of lexical distributions, syntactic structures, semantic similarity measures, and n-gram patterns shared across languages. However, the authors also note several challenges: readability predictions for low-resource languages are often less stable, errors increase when texts

¹⁹² Joseph Marvin Imperial and Ekaterina Kochmar, “Automatic Readability Assessment for Closely Related Languages,” in **Findings of the Association for Computational Linguistics: ACL 2023**, (Toronto, Canada: Association for Computational Linguistics, 2023), p. 5371–5381.

contain culturally specific or domain-specific terminology, and deeper discourse-level features are harder to model automatically.

The study emphasizes the importance of combining computational readability tools with human expertise, especially in contexts where texts contain specialized vocabulary or cultural content. This insight is particularly relevant for ESP and religious domains, where automated models may misclassify text difficulty due to unfamiliar terminology or conceptual density.

Imperial and Kochmar's work contributes to the present study by: 1) demonstrating the limits of automated readability systems for specialized or culturally embedded texts; 2) supporting the need for manual CEFR-based evaluation when assessing Buddhist English materials; 3) highlighting lexical and syntactic features that influence readability across languages; and 4) reinforcing that cross-lingual NLP tools can assist, but cannot replace, expert judgment in CEFR-aligned ESP material development.

2.10.5 Synthesis of Previous Studies and Research Gap

The reviewed literature converges on the principle that ESP materials should be developed around learners' identified purposes, disciplinary contexts, and learning conditions. Effective materials connect relevant texts with purposeful activities, draw on learners' existing knowledge, and adapt authentic disciplinary content when unmodified texts would impose excessive linguistic or cognitive demands.¹⁹³¹⁹⁴

Needs analysis provides the empirical foundation for these decisions by distinguishing target-situation demands from learners' present abilities, difficulties, preferences, and learning needs. Evidence from learners, specialists, and relevant discourse or documents strengthens the validity of the resulting material specifications and reduces the risk of designing content from assumptions alone.¹⁹⁵

¹⁹³ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), p. 107.

¹⁹⁴ David Jolly and Rod Bolitho, "A Framework for Materials Writing," in **Materials Development in Language Teaching**, 2nd ed., ed. Brian Tomlinson, (Cambridge: Cambridge University Press, 2011), p. 107.

¹⁹⁵ Michael H. Long, ed., **Second Language Needs Analysis**, (Cambridge: Cambridge University Press, 2005), p. 27.

The instructional-development literature further indicates that educational products require systematic design, formative evaluation, and revision. Within the present study, R&D provides the overarching sequence of investigation and product refinement, while ADDIE-informed procedures support instructional decisions within the development phases. This relationship allows expert and learner evidence to be converted into traceable revisions rather than being treated only as final judgments of product quality.¹⁹⁶¹⁹⁷

Studies in religious and Buddhist English contexts have documented the importance of authentic communicative purposes, specialized religious content, accessible learning support, and practice connected to learners' real roles. However, the reviewed studies have generally addressed these elements separately. They have not yet combined a localized A2–B1 CEFR framework, an MCU-specific needs analysis, Buddhist contextualization, expert evaluation, learner try-out, perceived-readability evidence, and a three-cycle R&D process within one systematically documented set of reading materials. This integrated gap provides the rationale for the present study.¹⁹⁸¹⁹⁹

2.11 Conceptual Framework

The conceptual framework positions Buddhist principles, ESP and needs analysis, localized CEFR A2–B1 descriptors, second-language reading comprehension and perceived readability, and Buddhist contextualization as the foundations of the study. These foundations inform a three-cycle R&D process consisting of R1–D1, R2–D2, and R3–D3. ADDIE guides instructional-design decisions within the development

¹⁹⁶ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 17–18.

¹⁹⁷ Walter Dick and Lou Carey, **The Systematic Design of Instruction**, 4th ed., (New York: HarperCollins, 1996), p. 8.

¹⁹⁸ Yih-Lan Chen, "English for Missionary Purpose: Perspectives from ESP Learners," **International Journal of Arts and Commerce**, Vol. 3 No. 8 (2014), pp. 81–94.

¹⁹⁹ Saifon Busaban, Phrasrisomphot (Waranyoo Sornchun), and Samart Sukhuprakarn, "Guidelines for Developing English Skills for Buddhism Propagation of Vipassana Instructors," **The Journal of Research and Academics**, Vol. 8 No. 3 (May–June 2025), pp. 81–83, 87–92.

phases but does not constitute a separate research design. The process culminates in finalized CEFR-aligned Buddhist context-based reading materials for ESP learners at MCU.

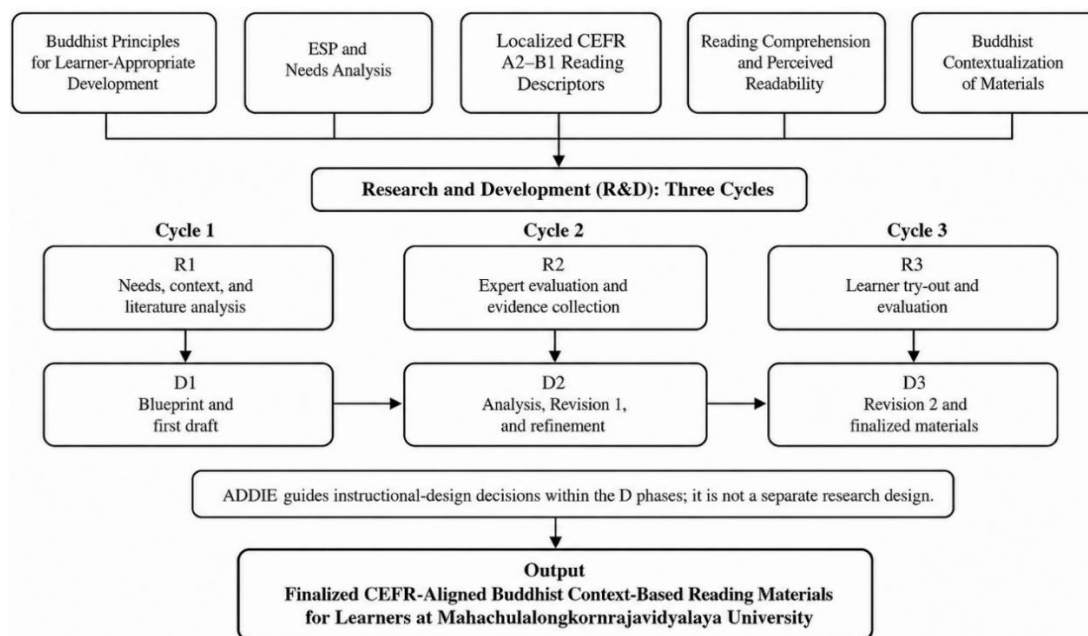


Figure 2.1: Conceptual Framework

Chapter 3

Research Methodology

3.1 Research Design

The research entitled “Development of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at Mahachulalongkornrajavidyalaya University” employed Research and Development (R&D) as its sole overarching research design. R&D was selected because the study systematically investigated learner and contextual needs, developed an educational product, collected evaluation evidence, revised the product, conducted a learner try-out, and finalized the resulting materials.²⁰⁰

Quantitative and qualitative evidence was collected within the R&D cycles according to the function of each data source. The use of different forms of evidence did not constitute a separate mixed-methods research design. Numerical data supported the description of learner needs, expert evaluations, learner performance, perceived readability, and learner attitudes, while documentary and written-response data supported interpretation and product revision.

3.1.1 Research and Development Framework

The R&D process was organized into three linked cycles: R1–D1, R2–D2, and R3–D3. R1 involved literature and document review, development and validation of the Needs Analysis Questionnaire, administration of the questionnaire to 89 respondents, and analysis and synthesis of the resulting evidence. D1 converted the R1 evidence into a master blueprint and the first draft of the reading materials. R2 involved expert evaluation of the first draft by three materials-evaluation experts. D2 analyzed and synthesized the expert evidence and produced Revision 1. R3 involved a learner try-out with 12 participants, learner performance assessment, and learner evaluation. D3 analyzed the try-out evidence, produced Revision 2, and finalized the

²⁰⁰ Meredith D. Gall, Joyce P. Gall, and Walter R. Borg, **Educational Research: An Introduction**, 8th ed., (Boston: Pearson/Allyn & Bacon, 2007), p. 589.

research product. Each research stage therefore generated evidence for the immediately following development stage.

3.1.2 The Role of ADDIE within the Development Phases

ADDIE was employed as an instructional-design guide within the development phases and did not constitute a second research design. Evidence from R1 supported learner and context Analysis; D1 applied Design and initial Development procedures; R2 and D2 provided formative Evaluation and refinement of the first draft; R3 provided the main Implementation opportunity; and D3 incorporated Evaluation evidence into final revision and product completion. This nested relationship preserved R&D as the single research design while using ADDIE to organize instructional decisions concerning objectives, content, CEFR alignment, activities, implementation conditions, and formative evaluation.²⁰¹

3.2 Research Site and Organizational Context

The study was conducted at Mahachulalongkornrajavidyalaya University (MCU), Wang Noi District, Phra Nakhon Si Ayutthaya Province, Thailand. MCU is a Buddhist higher education institution serving monastic and lay learners and integrating Buddhist studies with English-language education. The site was appropriate because learners encounter English for academic study, Buddhist education, intercultural communication, and professional activities connected with Buddhist contexts.

The developed materials were intended primarily for ESP learners at MCU, including learners in education- and humanities-related programs, while remaining applicable to monastic and lay learners from other academic and professional backgrounds. The study focused on reading comprehension, text accessibility, perceived readability, and attitudes toward the materials. Pronunciation accuracy was not treated as a research outcome and no pronunciation test was administered.

²⁰¹ Robert Maribe Branch, *Instructional Design: The ADDIE Approach*, (New York, NY: Springer, 2009), pp. 2–3.

3.3 Population and Participant Groups

3.3.1 Target and Accessible Population

The target population comprised monastic and lay learners, Buddhist educators, and MCU personnel who required English reading skills for academic, educational, professional, or Buddhist communicative purposes. The accessible population consisted of approximately 100 individuals participating in selected English-related courses, language-development activities, and Buddhist educational programs at MCU during the research period.

3.3.2 Needs Analysis Respondents

The needs analysis involved 89 respondents selected purposively from the accessible population according to their involvement in English learning or English-related activities and their need for English reading in academic, educational, professional, or Buddhist contexts. Participation was voluntary. The respondents were not restricted in advance to a single CEFR level because identifying their existing proficiency and needs was one purpose of R1. Self-reported proficiency was collected as background information and used together with the needs evidence to determine the final A2–B1 focus of the materials, with A2 as the accessible core and A1 descriptors retained only as supplementary scaffolding references.

The inclusion criteria were:

- participation in an English-related course, language-development activity, or Buddhist educational program at MCU;
- a need for English reading in academic, educational, professional, or Buddhist communicative situations; and
- voluntary agreement to complete the Needs Analysis Questionnaire.

3.3.3 IOC Validation Experts

Three instrument-validation experts were selected purposively on the basis of qualifications and experience in English-language education, educational research, questionnaire development, and Buddhist educational contexts. They examined the relevance, clarity, and congruence of every Needs Analysis Questionnaire item. This

group was distinct from the three experts who later evaluated the developed reading materials.

3.3.4 Materials-Evaluation Experts

Three materials-evaluation experts were selected purposively according to their academic qualifications, professional experience, and collective expertise in English for Specific Purposes, CEFR-based language teaching, English-language materials development, and Buddhist education. They evaluated the first draft in relation to content appropriateness, linguistic accuracy, CEFR alignment, language and readability, Buddhist contextual accuracy, vocabulary support, learning activities, instructional suitability, organization, and overall presentation. Their numerical ratings and written recommendations informed D2 and Revision 1.

3.3.5 Pilot Group

The learner try-out involved 12 monastic and lay learners selected purposively from English-related learning activities at MCU. A small-group trial of approximately 8–20 learners is suitable for formative examination of revised instructional materials; therefore, 12 participants were considered adequate for the development purpose of R3.²⁰²

Each participant completed two assigned units, resulting in 24 unit-level exercise sets. All 12 participants contributed learner-performance evidence, while 11 participants returned completed Learner Evaluation Questionnaires. English proficiency was recorded as background information rather than used as a rigid selection criterion because the try-out examined how the materials functioned with actual MCU ESP learners and did not seek to estimate population-level treatment effects.

The inclusion criteria were:

- monastic or lay learner status and participation in English-learning activities at MCU;

²⁰² Ibid., p. 124.

- experience in learning or using English for academic, educational, or Buddhist communicative purposes;
- availability to complete the assigned units and evaluation activities; and
- voluntary agreement to participate in the learner try-out.

3.4 Research Instruments and Supporting Digital Tools

The study employed four data-collection instruments, one developed instructional product, and one supplementary AI-assisted research tool. Each instrument or tool served a defined function within the R&D process.

3.4.1 Needs Analysis Questionnaire

The Needs Analysis Questionnaire collected information concerning respondents' backgrounds, self-reported English proficiency, purposes for using English, reading needs and difficulties, preferred Buddhist topics, and expectations regarding the instructional features of the materials. It consisted primarily of categorical, multiple-choice, and multiple-response items, together with selected open-ended questions. The resulting evidence supported R1 and informed the proficiency focus, content scope, reading skills, vocabulary and language support, learning outcomes, and unit organization specified in D1.

3.4.2 CEFR-Aligned Buddhist Context-Based Reading Materials

The instructional product comprised eight units of CEFR-aligned Buddhist context-based reading materials. Each unit included a Buddhist context-based passage, vocabulary and language support, illustrations, learning activities, embedded exercises, and supporting components. The final proficiency focus was A2–B1, with A2 functioning as the accessible core and B1 providing progression toward connected factual texts, main ideas, and supporting details. A1 descriptors were used only as scaffolding references for learners requiring additional support.

CEFR alignment was applied to reading comprehension, text accessibility, task demands, and perceived readability rather than being treated as a simple level label. Buddhist technical terms were supported through contextual repetition, concise

explanation, glossary support, and consistent Romanized forms. The product was evaluated and revised through R2–D2 and R3–D3.

3.4.3 Expert Evaluation Form

The Expert Evaluation Form consisted of 5-point rating-scale items and open-ended sections. The rating items addressed content appropriateness, CEFR alignment, language accuracy and readability, Buddhist contextual accuracy, vocabulary support, learning activities, instructional suitability, organization, and overall presentation. Numerical ratings provided descriptive evidence of product quality, while written comments identified specific changes for Revision 1.

3.4.4 Learner Performance Assessment through Embedded Exercises

Learner comprehension was assessed through scored exercises embedded in the assigned units rather than through a separate standardized reading test. The exercises examined vocabulary understanding, main ideas, specific information, sequencing, and textual relationships appropriate to the materials. Because participants completed different assigned units, the scores were interpreted as formative unit-level performance evidence and not as a common standardized test score.

3.4.5 Learner Evaluation Questionnaire

The Learner Evaluation Questionnaire was administered after the try-out. It used a 5-point Likert scale to obtain learners' perceptions of readability, content and language appropriateness, instructional suitability, usefulness, and overall quality, together with open-ended questions concerning difficulties and suggestions. Perceived readability referred to learners' judgments of how easily the passages and instructional components could be read and understood; it was interpreted separately from demonstrated comprehension and formula-based readability.

3.4.6 Generative AI-Assisted Research Tool

Generative AI was employed as a supplementary research tool. ChatGPT (GPT-5.6 Sol)²⁰³, Gemini (Gemini 3.1 Pro)²⁰⁴, and Claude (Claude Opus 5)²⁰⁵ supported the design of the reading volume, including unit organization, passage and activity development, vocabulary and language support, language refinement, and visual or layout concepts. The researchers reviewed, revised, and approved all AI-assisted material before inclusion in the research product.

ChatGPT was also used to assist the organization and analysis of qualitative feedback and to support the calculation and checking of descriptive statistics. AI outputs were not treated as research data, independent judgments, or final analytical decisions. All calculations were checked against the raw data, qualitative categories were reviewed by the researchers, and identifying information was excluded from data submitted for AI-assisted processing.

3.4.7 Validation and Quality Assurance of the Research Instruments

1) Content Validity of the Needs Analysis Questionnaire

The three IOC validation experts judged every questionnaire item as congruent with the intended objective by assigning +1 to every item. The Index of Item-Objective Congruence (IOC) was calculated as $IOC = \Sigma R/N$, where R represents an expert's judgment (+1, 0, or -1) and N represents the number of experts.²⁰⁶

Because all three experts assigned +1 to every item, the IOC of each item was $3/3 = 1.00$, and the average IOC for the questionnaire was 1.00. Every item therefore exceeded the acceptance criterion of 0.50. The researchers nevertheless reviewed the

²⁰³ OpenAI, "GPT-5.6: Frontier Intelligence That Scales with Your Ambition," online, <https://openai.com/index/gpt-5-6/>, accessed August 28, 2026.

²⁰⁴ Google DeepMind, "Gemini," online, <https://deepmind.google/models/gemini/>, accessed August 28, 2026.

²⁰⁵ Anthropic, "Transparency Hub," online, <https://www.anthropic.com/transparency>, accessed August 28, 2026.

²⁰⁶ Richard J. Rovinelli and Ronald K. Hambleton, "On the Use of Content Specialists in the Assessment of Criterion-Referenced Test Item Validity," *Tijdschrift voor Onderwijsresearch* Vol. 2 (1977), pp. 49–60.

experts' written suggestions and refined wording where such changes improved clarity without altering the intended content.

2) Quality Assurance of the Reading Materials and Embedded Exercises

The first draft, including the reading passages, vocabulary and language support, learning activities, and embedded exercises, was evaluated by three materials-evaluation experts. Their numerical ratings and written recommendations were analyzed together and used in D2. The embedded exercises were formative components that differed by unit and were not administered as one common standardized test; consequently, KR-20 was not applied.

3) Reliability Considerations

No reliability coefficient was fabricated or inferred for instruments to which such a coefficient was not methodologically appropriate. The Needs Analysis Questionnaire consisted mainly of categorical and multiple-response items addressing several distinct dimensions rather than a single latent construct; Cronbach's alpha was therefore not appropriate. The Expert Evaluation Form was used by only three experts for product judgment, and the Learner Evaluation Questionnaire was used by 11 respondents for small-group formative feedback rather than standardized scale validation. Their results were consequently reported descriptively and interpreted together with written evidence. These decisions and the absence of Cronbach's alpha or KR-20 are stated explicitly to distinguish content validity, product evaluation, and formative evidence from statistical scale reliability.

3.5 Research and Data Collection Procedures

The study was conducted over seven months, from January to July 2026. The procedures were organized into three consecutive R&D cycles. ADDIE-informed instructional decisions were embedded within the development stages and formative evaluation occurred across the cycles.²⁰⁷

²⁰⁷ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 2–3.

3.5.1 Cycle 1: R1–D1

R1: Investigation, Analysis, and Synthesis

The researchers reviewed literature and documents concerning R&D, ADDIE, CEFR reading descriptors, ESP, second-language reading and readability, materials development, and Buddhist English contexts. The Needs Analysis Questionnaire was developed, validated by three IOC experts, refined, and administered to 89 respondents. Categorical and open-ended evidence was analyzed and synthesized to identify learner characteristics, purposes, difficulties, preferred topics, desired instructional support, and contextual requirements.

D1: Master Blueprint and First Draft

The R1 evidence was converted into a master blueprint specifying the A2–B1 proficiency focus, unit topics, reading and vocabulary focuses, language support, learning outcomes, unit sequence, activity types, embedded exercises, and Buddhist contextual features. The researchers then developed the first draft of the eight-unit instructional product.

3.5.2 Cycle 2: R2–D2

R2: Expert Evaluation

The first draft and Expert Evaluation Form were submitted to three materials-evaluation experts. Numerical ratings and written recommendations were collected concerning content, CEFR alignment, language and readability, Buddhist contextual accuracy, vocabulary support, learning activities, instructional suitability, organization, illustrations, and overall presentation.

D2: Analysis, Synthesis, and Revision 1

The expert ratings were summarized using mean and standard deviation, while written recommendations were coded and grouped by revision area. The researchers interpreted the two forms of evidence together, corrected identified problems, expanded or refined instructional support, and produced Revision 1 for the learner try-out.

3.5.3 Cycle 3: R3–D3

R3: Learner Try-Out and Evaluation

Revision 1 was tried out with 12 learners. Each participant completed two assigned units, generating 24 unit-level exercise sets. Learner performance was recorded from the embedded exercises. After the assigned materials had been completed, 11 participants submitted the Learner Evaluation Questionnaire, providing rating-scale responses and open-ended feedback concerning perceived readability, usefulness, language appropriateness, instructional suitability, attitudes, difficulties, and suggestions.

D3: Analysis, Revision 2, and Finalization

Learner performance, questionnaire ratings, and written feedback were analyzed and interpreted together. The researchers identified remaining areas for improvement, completed Revision 2, checked the answer keys and glossary, refined language, activities, illustrations, and organization, and compiled the finalized eight-unit research product.

3.5.4 Research Activities Timeline

Table 3.1 Research Activities Timeline

Stage	Research Activity	Timeframe
R1	Literature and document review; development, IOC validation, administration, and analysis of the Needs Analysis Questionnaire	Months 1–6, January–June 2026
D1	Synthesis of design requirements, preparation of the master blueprint, and development of the first draft	Month 6, June 2026
R2	Expert evaluation of the first draft by three materials-evaluation experts; collection of ratings, comments, and recommendations	Month 6, June 2026
D2	Analysis and synthesis of expert evidence and Revision 1 of the materials	Month 7, July 2026
R3	Learner try-out with 12 participants; collection of 24 unit-level exercise sets and 11 learner-evaluation questionnaires	Month 7, July 2026
D3	Analysis and synthesis of try-out evidence, Revision 2, and finalization of the research product	Month 7, July 2026

3.5.5 Research and Development Diagram

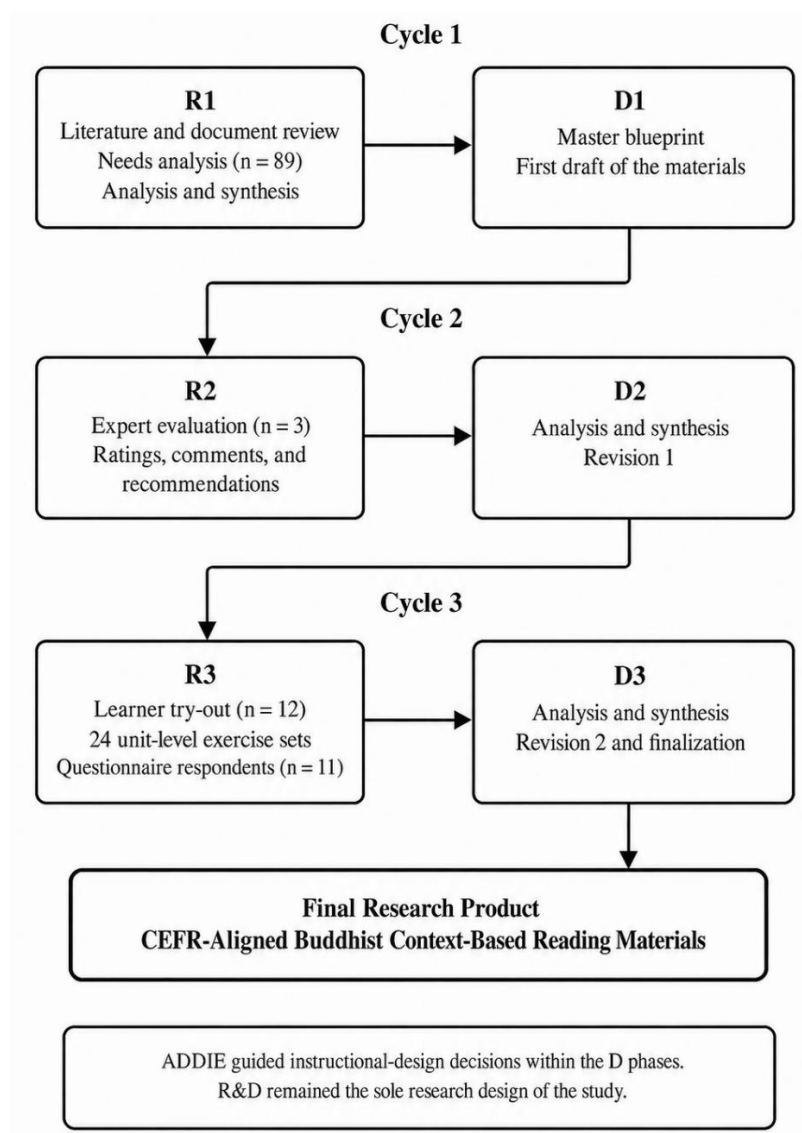


Figure 3.1 Three-Cycle Research and Development Process

3.6 Data Analysis

Data were analyzed according to their functions within the R&D cycles. Descriptive statistics summarized numerical evidence, while content analysis examined documents and written feedback. No inferential statistics were employed because R2 and R3 were formative product-evaluation stages and the learner try-out was not designed as an experimental effectiveness study.

3.6.1 Quantitative Data Analysis

In R1, frequency and percentage were used to summarize respondent characteristics, proficiency information, purposes for English use, reading needs and difficulties, preferred Buddhist topics, and desired instructional features. Percentage was calculated as $(f/N) \times 100$. In R2, mean and standard deviation summarized the expert ratings for the quality dimensions of the first draft. In R3, mean, standard deviation, and percentage scores summarized learner performance across the 24 unit-level exercise sets, while frequency, percentage, mean, and standard deviation were used as appropriate for the 11 learner-evaluation questionnaires.

The 5-point ratings were interpreted descriptively in relation to the defined evaluation categories. Learner-performance percentages represented the proportion of the maximum available exercise score achieved within the assigned units and were interpreted as formative comprehension evidence rather than population estimates.

3.6.2 Qualitative Data Analysis

Documentary evidence, expert comments, and open-ended learner responses were analyzed through content analysis. The researchers first read the complete responses, identified meaningful units, coded recurring issues and recommendations, grouped related codes into categories, checked the categories against the original responses, and summarized the evidence according to content, language use, CEFR alignment, readability, vocabulary support, activities, illustrations, organization, and overall presentation. The resulting categories were used to specify traceable revisions in D1, D2, and D3.

3.6.3 Instrument Validation Analysis

IOC was calculated for every Needs Analysis Questionnaire item using $IOC = \Sigma R/N$. With three experts assigning +1 to every item, every item obtained $IOC = 1.00$. No item was removed for failing the 0.50 criterion. Reliability coefficients were not calculated for the reasons stated in Section 3.4.7, and the remaining quantitative evidence was analyzed descriptively.

3.6.4 AI-Assisted Analysis and Researcher Verification

ChatGPT assisted with checking descriptive-statistical calculations and organizing or summarizing qualitative feedback. The researchers retained the original data, checked numerical outputs against the source records, reviewed every qualitative category, resolved discrepancies through direct re-examination of the responses, and assumed full responsibility for the reported analysis. AI-generated text or calculations were never accepted without researcher verification.

3.7 Ethical Considerations

Participation in the needs analysis and learner try-out was voluntary. Participants received information concerning the purpose of the study, the activities involved, the intended use of the data, and their right to decline or withdraw without penalty. Consent was obtained before participation. Names and direct personal identifiers were excluded from the research report, and findings were reported in aggregate or de-identified form.

Research records were used only for the purposes of the study and were handled by the researchers. Where generative AI supported materials development or analysis, identifying information was not submitted to the AI systems. AI outputs were treated as provisional assistance, not authoritative evidence, and all content, calculations, interpretations, and research decisions remained under researcher review and responsibility.

3.8 Presentation of Research Findings

Chapter 4 presents the findings according to the three research objectives and their corresponding R&D cycles. This organization enables each finding to be connected directly to the evidence, development decision, and resulting product revision.

1) Objective 1 and Cycle R1–D1: Needs Analysis, Design Requirements, and First Draft

This section presents the needs-analysis findings, document synthesis, final design requirements, A2–B1 proficiency focus, master blueprint, and development of the first draft. Frequencies and percentages are used for questionnaire evidence, and narrative synthesis explains how the evidence informed D1.

2) Objective 2 and Cycle R2–D2: Expert Evaluation and Revision 1

This section presents expert-evaluation means and standard deviations, summarizes the experts' written recommendations, and documents the changes implemented in Revision 1. The presentation links each significant evaluation issue to the corresponding improvement in D2.

3) Objective 3 and Cycle R3–D3: Learner Try-Out, Evaluation, Revision 2, and Final Product

This section presents the learner profile, performance evidence from 24 unit-level exercise sets, responses from 11 learner-evaluation questionnaires, perceived readability, usefulness, instructional suitability, attitudes, and open-ended feedback. It then explains Revision 2 and presents the finalized eight-unit instructional product and the principal knowledge derived from the development process.

3.9 Summary of the Research Process

This chapter established R&D as the sole research design and organized the study into three linked cycles. R1–D1 investigated needs and documents, established the A2–B1 design requirements, and produced the first draft. R2–D2 evaluated the first draft through three experts and produced Revision 1. R3–D3 conducted the learner try-out with 12 participants, analyzed 24 unit-level performance sets and 11 learner questionnaires, produced Revision 2, and finalized the research product. ADDIE guided instructional decisions within the development stages without functioning as a separate research methodology.

The Needs Analysis Questionnaire obtained $IOC = 1.00$ for every item from three validation experts. Quantitative evidence was analyzed using frequency,

percentage, mean, and standard deviation, while documentary evidence and written responses were analyzed through content analysis. ChatGPT supported statistical checking and qualitative organization under researcher verification. The seven-month study observed voluntary participation and confidentiality and culminated in finalized CEFR-aligned Buddhist context-based reading materials for ESP instruction at Mahachulalongkornrajavidyalaya University.

Chapter 4

Research Findings

This chapter presents the findings of the research entitled “Development of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at Mahachulalongkornrajavidyalaya University.” The findings are organized according to the three research objectives and the three linked research-and-development cycles established in Chapter 3. Cycle 1 (R1–D1) reports the needs-analysis and documentary evidence, the resulting design requirements, the master blueprint, and the first draft. Cycle 2 (R2–D2) reports the expert evaluation and Revision 1. Cycle 3 (R3–D3) reports the learner try-out, unit-level exercise performance, questionnaire responses, Revision 2, and the final research product.

The chapter reports only evidence generated in the present research and the researchers’ documented development decisions. Interpretations involving external theories and previous studies are reserved for Chapter 5. The chapter concludes by synthesizing the three linked R&D cycles and the product, process, and decision knowledge derived from the research.

4.1 Objective 1 and Cycle R1–D1: Needs Analysis, Design Requirements, and First Draft

Objective 1: “To design CEFR-aligned Buddhist context-based reading materials for ESP learners at Mahachulalongkornrajavidyalaya University (MCU).”

Cycle R1–D1 began with the collection and analysis of needs-analysis and documentary evidence. The R1 findings established the learner profile, English-use purposes, reading needs, difficulties, interests, preferred forms of instructional support, and intended Buddhist professional contexts. D1 converted this evidence into design requirements, a master blueprint, and the first draft of the eight-unit reading materials.

4.1.1 R1: Needs Analysis Findings

4.1.1.1 Respondent Information

The Needs Analysis Questionnaire was completed by 89 respondents. The respondent information covered status, frequency and purposes of English use, and self-assessed English reading ability.

Table 4.1 Status of the Respondents (N = 89)

Status of the Respondents	Frequency (f)	Percentage (%)
Monk	55	61.8
Student	37	41.6
Educational Personnel	13	14.6
Nun / Religious Practitioner	7	7.9
Dhamma Teacher	6	6.7
Novice Monk	3	3.4
Meditation Instructor	2	2.2
Staff Member	1	1.1
University Personnel	1	1.1

Note: Respondents could select more than one category; therefore, the total percentage exceeds 100 percent.

The largest respondent groups were Buddhist monks (61.8%), students (41.6%), and educational personnel (14.6%). Smaller groups included nuns or religious practitioners, Dhamma teachers, novice monks, meditation instructors, staff members, and university personnel.

Table 4.2 Frequency of English Language Use (N = 89)

Frequency of English Language Use	Frequency (f)	Percentage (%)
Rarely or never	9	10.1

Frequency of English Language Use	Frequency (f)	Percentage (%)
Occasionally	38	42.7
Quite often	16	18.0
Regularly	26	29.2
Total	89	100.0

The largest proportion used English occasionally (42.7%), followed by regularly (29.2%) and quite often (18.0%). Only 10.1 percent reported rare or no English use.

Table 4.3 Main Purposes for Using English (N = 89)

Main Purposes for Using English	Frequency (f)	Percentage (%)
Study / Education	71	79.8
Communication with Foreigners	30	33.7
Reading Buddhist Documents or Academic Articles	21	23.6
Teaching Dhamma	14	15.7
Teaching or Conducting Meditation Training	9	10.1
Study and Daily Communication	1	1.1
Teaching Students	1	1.1

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

Study and education were the principal purpose for using English (79.8%). Communication with foreigners (33.7%) and reading Buddhist documents or academic articles (23.6%) were also prominent purposes.

Table 4.4 Self-Assessment of English Reading Ability (N = 89)

Self-Assessment of English Reading Ability	Frequency (f)	Percentage (%)
A1 Level: I can read vocabulary and short sentences.	29	32.6
A2 Level: I can read short passages with simple vocabulary.	24	27.0
B1 Level or above: I can read general articles fairly well.	32	36.0
Not sure	4	4.4
Total	89	100.0

Self-assessed reading proficiency was distributed across A1 (32.6%), A2 (27.0%), and B1 or above (36.0%), while 4.4 percent were uncertain. The variation supported an accessible A2 instructional core, with scaffolding for less-proficient learners and controlled progression toward B1.

4.1.1.2 Reading Needs and Interests

Table 4.5 Problems Encountered When Reading English Texts (N = 89)

Problems Encountered When Reading English Texts	Frequency (f)	Percentage (%)
Vocabulary is too difficult	44	49.4
Sentences are long and complex	31	34.8
Unable to understand the main idea	23	25.8
Unfamiliar content	22	24.7
Need to translate word by word	19	21.3
Other responses	3	3.3

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

Difficult vocabulary was the most frequently reported problem (49.4%), followed by long and complex sentences (34.8%), difficulty identifying the main idea (25.8%), unfamiliar content (24.7%), and word-by-word translation (21.3%).

Table 4.6 Preferred English Reading Topics (N = 89)

Preferred English Reading Topics	Frequency (f)	Percentage (%)
Buddhist Teachings	36	40.4
Communicating with Foreign Visitors in Monasteries	32	36.0
Daily Life of Monks or Religious Practitioners	30	33.7
Buddhist Culture and Traditions	28	31.5
Meditation Practice	20	22.5
Dhamma Talks and Sermons	16	18.0
Other responses	5	5.6

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

The most preferred topics were Buddhist teachings (40.4%), communication with foreign visitors in monasteries (36.0%), daily monastic life (33.7%), and Buddhist culture and traditions (31.5%). Meditation practice and *Dhamma* talks were also selected.

Table 4.7 Preferred Reading Formats (N = 89)

Preferred Reading Formats	Frequency (f)	Percentage (%)
Short Stories	25	28.1
Step-by-Step Instructions	19	21.3

Preferred Reading Formats	Frequency (f)	Percentage (%)
Short Articles with Illustrations	18	20.2
Dialogue	15	16.9
Multi-modal Content	12	13.5
Total	89	100.0

Short stories were the most preferred format (28.1%), followed by step-by-step instructions (21.3%), short illustrated articles (20.2%), dialogues (16.9%), and multimodal content (13.5%).

4.1.1.3 Reading Difficulties

Table 4.8 Reading Difficulties (N = 89)

Reading Difficulties	Frequency (f)	Percentage (%)
Difficulty recognizing the structure of academic texts	45	50.6
Difficulty understanding complex text organization	40	44.9
Lack of reading strategies (e.g., skimming and scanning)	31	34.8
Other responses	5	5.6

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

The most frequently reported difficulty was recognizing the structure of academic texts (50.6%), followed by understanding complex text organization (44.9%) and lacking effective reading strategies such as skimming and scanning (34.8%). These results were converted into requirements for explicit organization, manageable text structure, and guided comprehension activities.

4.1.1.4 Expectations toward the Reading Materials

Table 4.9 Preferred Features of English Reading Materials (N = 89)

Preferred Features of English Reading Materials	Frequency (f)	Percentage (%)
Simple and easy-to-understand sentences	45	50.6
Key vocabulary with Thai translations	34	38.2
Post-reading exercises	25	28.1
Repeated vocabulary for memorization	24	27.0
Comprehension questions	24	27.0
Illustrations	19	21.3
Other responses	1	1.1

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

The most preferred feature was the use of simple and understandable sentences (50.6%). Key vocabulary with Thai meanings (38.2%), post-reading exercises (28.1%), repeated vocabulary (27.0%), comprehension questions (27.0%), and illustrations (21.3%) were also requested.

Table 4.10 Preferred Types of Exercises (N = 89)

Preferred Types of Exercises	Frequency (f)	Percentage (%)
Multiple-choice questions	49	55.1
Short-answer questions	48	53.9
Vocabulary matching	37	41.6
Fill-in-the-blank exercises	30	33.7
No exercises required	5	5.6
Other responses	2	2.2

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

Multiple-choice questions (55.1%) and short-answer questions (53.9%) were the most preferred exercise types, followed by vocabulary matching (41.6%) and fill-in-the-blank exercises (33.7%).

Table 4.11 Preferred Contexts for Using English (N = 89)

Preferred Contexts for Using English	Frequency (f)	Percentage (%)
Reading Buddhist academic articles	41	46.1
Preparing for university English examinations	34	38.2
Writing research papers	29	32.6
Communicating in academic conferences	28	31.5
Teaching foreign visitors	26	29.2
Other responses	3	3.3

Note: Respondents could select more than one option; therefore, the total percentage exceeds 100 percent.

The principal intended contexts were reading Buddhist academic articles (46.1%), preparing for university English examinations (38.2%), writing research papers (32.6%), communicating at academic conferences (31.5%), and teaching foreign visitors (29.2%).

4.1.1.5 Open-Ended Suggestions

Forty-one respondents provided open-ended suggestions. Content analysis produced six recurring themes:

- simple language, short passages, step-by-step explanations, and examples;
- opportunities to connect reading with speaking, presentation, and communication;

- vocabulary cards, glossaries, dictionaries, Thai meanings, and contextual examples;
- Buddhist topics, daily-life situations, short stories, and practical communication contexts;
- illustrations, digital books, videos, audio resources, and other supplementary media; and
- regular practice through exercises, classroom activities, discussion, and application tasks.

These responses were treated as design evidence rather than as requirements to incorporate every requested feature. Features were selected according to their relevance to the research objectives, target proficiency, print-based scope, and feasibility.

4.1.2 D1: Design Requirements and Master Blueprint

4.1.2.1 Topic Selection and Unit Structure

The R1 evidence was synthesized into topic, language, support, activity, and presentation requirements. Table 4.12 shows how the identified needs informed the eight broad topics, while Table 4.13 presents the resulting unit structure.

Table 4.12 Relationship Between Needs Analysis Findings and Selected Topics

Unit/Topic	Need Analysis Source	Justification
Daily Life of a Monk	Daily Life of Monks (33.7%)	Directly reflects learners' daily experiences
Basic Buddhist Teachings	Buddhist Teachings (40.4%)	Most preferred topic
Meditation Practice	Meditation Practice (22.5%)	Frequently selected Buddhist topic
Buddhist Culture and Traditions	Buddhist Culture and Traditions (31.5%)	Directly identified by respondents

Unit/Topic	Need Analysis Source	Justification
Communicating with Foreign Visitors	Communication with Foreigners (33.7%), Foreign Visitors (36.0%)	Supports practical communication needs
Giving a Simple Dhamma Talk	Dhamma Talks (18.0%), Teaching Dhamma (15.7%)	Supports religious communication
Buddhist Etiquette and Temple Activities	Daily Monastic Life + Communication with Visitors	Supports authentic temple interactions
Buddhist Education and Academic Reading	Study/Education (79.8%), Academic Reading (46.1%)	Supports academic and professional needs

Table 4.13 Structure of the Developed Reading Materials

Unit	Topic
1	Daily Life of a Monk
2	Basic Buddhist Teachings
3	Meditation Practice
4	Buddhist Culture and Traditions
5	Communicating with Foreign Visitors
6	Giving a Simple Dhamma Talk
7	Buddhist Etiquette and Temple Activities
8	Buddhist Education and Academic Reading

The eight topics covered monastic life, basic Buddhist teachings, meditation, Buddhist culture, communication with foreign visitors, a simple *Dhamma* talk, temple etiquette, and Buddhist education and academic reading. The topics reflected both frequently selected interests and the academic and professional purposes identified in R1.

4.1.2.2 Learning Components

The design requirements also determined the instructional components included in each unit. Simple language, vocabulary support, visual assistance, comprehension practice, and practical application were converted into a consistent instructional sequence.

Table 4.14 Relationship Between Needs Analysis Findings and Learning Components

Needs Analysis Findings	Learning Component	Design Rationale
Simple and easy-to-understand sentences (50.6%)	Reading Passage	To provide learners with accessible reading texts appropriate for CEFR A2–B1 proficiency levels and reduce comprehension difficulties caused by complex language.
Key vocabulary with Thai translations (38.2%)	Key Vocabulary	To support vocabulary acquisition and facilitate comprehension of reading passages.
Illustrations (21.3%) and suggestions emphasizing the use of pictures and visual aids	Visual Support (Illustrations)	To enhance comprehension, maintain learner engagement, and provide contextual support for reading materials.
Comprehension questions (27.0%)	Reading Comprehension Questions	To assess learners' understanding of the reading passages and reinforce reading comprehension skills.

Needs Analysis Findings	Learning Component	Design Rationale
Multiple-choice questions (55.1%)	Reading Comprehension Questions	To provide learners with a familiar and preferred assessment format for checking comprehension.
Short-answer questions (53.9%)	Reading Comprehension Questions	To encourage learners to demonstrate understanding through written responses.
Vocabulary matching activities (41.6%)	Vocabulary Exercises	To reinforce vocabulary learning through guided practice activities.
Fill-in-the-blank exercises (33.7%)	Vocabulary Exercises	To promote vocabulary retention and contextual language use.
Post-reading exercises (28.1%)	Post-reading Activities	To provide opportunities for learners to apply knowledge gained from reading passages.
Communication with foreigners (33.7%) and communication with foreign visitors in monasteries (36.0%)	Post-reading Activities	To encourage practical language use and communicative application in authentic Buddhist contexts.
Suggestions emphasizing practice, presentations, discussion, and continuous language use	Post-reading Activities	To promote active learning and communicative competence beyond reading comprehension.

Needs Analysis Findings	Learning Component	Design Rationale
Need for clear learning goals and systematic progression (identified from open-ended responses)	Unit Introduction and Learning Objectives	To provide learners with clear learning objectives and instructional direction at the beginning of each unit.

Table 4.15 Components of Each Learning Unit

Component	Description
Unit Introduction	Introduces the topic and provides a brief overview of the content to activate learners' background knowledge and prepare them for the reading task.
Learning Objectives	States the expected learning outcomes of the unit, including reading, vocabulary, comprehension, and communicative objectives.
Reading Passage	Provides a CEFR A2–B1 level reading text based on Buddhist-context topics relevant to learners' academic, religious, and professional needs.
Reading Comprehension Activities	Includes multiple-choice questions, true/false statements, sequencing tasks, and other reading-focused activities designed to assess learners' understanding of the reading passage.
Vocabulary Builder (with Visual Support)	Presents key vocabulary from the reading passage, accompanied by meanings, example sentences, and visual illustrations where appropriate to facilitate comprehension and retention.

Component	Description
Vocabulary Exercises	Reinforces vocabulary acquisition through matching activities, fill-in-the-blank exercises, and contextualized vocabulary practice.
Reading-to-Communication Task	Provides opportunities for learners to use information from the reading passage in practical communication activities such as role-plays, discussions, presentations, or explanations related to Buddhist contexts.

Each unit therefore moved from topic orientation and learning outcomes to a reading passage, comprehension activities, vocabulary presentation and practice, communication, real-life application, and an answer key. ADDIE guided instructional-design decisions within D1 without functioning as a separate research methodology.

4.1.2.3 Master Blueprint

The master blueprint specified the relationship among unit topics, needs-analysis evidence, CEFR alignment, reading focus, vocabulary focus, language features, and learning outcomes.

Table 4.16 Master Blueprint of the CEFR-Aligned Buddhist Context-Based Reading Materials

Unit	Topic	Need Analysis Source	CEFR Alignment	Reading Focus	Vocabulary Focus	Language Features	Learning Outcome
1	Daily Life of a Monk	Daily Life of Monks (33.7%)	A2	Identifying basic information	Daily monastic vocabulary	Present Simple for Daily Routines	Learners can understand and describe basic daily activities of a Buddhist monk.
2	Basic Buddhist Teachings	Buddhist Teachings (40.4%)	A2	Identifying main ideas	Basic Buddhist terminology	Present Simple for Definitions and Explanations	Learners can understand basic Buddhist concepts and teachings.
3	Meditation Practice	Meditation Practice (22.5%)	A2	Understanding sequences and instructions	Meditation-related vocabulary	Imperatives and Sequencing Expressions	Learners can understand and follow simple meditation instructions.

Unit	Topic	Need Analysis Source	CEFR Alignment	Reading Focus	Vocabulary Focus	Language Features	Learning Outcome
4	Buddhist Culture and Traditions	Buddhist Culture and Traditions (31.5%)	A2	Identifying details and cultural information	Cultural and religious vocabulary	Present Simple for Cultural Descriptions	Learners can understand basic Buddhist traditions and cultural practices.
5	Communicating with Foreign Visitors	Communication with Foreigners (33.7%)	A2–B1	Reading dialogues and functional language	Communication vocabulary	Question Forms and Functional Expressions	Learners can understand common communication situations in Buddhist temples.
6	Giving a Simple Dhamma Talk	Dhamma Talks and Sermons (18.0%)	A2–B1	Identifying key messages	Dhamma-related vocabulary	Linking Words and Simple Explanatory Structures	Learners can understand simple Dhamma presentations and key messages.

Unit	Topic	Need Analysis Source	CEFR Alignment	Reading Focus	Vocabulary Focus	Language Features	Learning Outcome
7	Buddhist Etiquette and Temple Activities	Monastic Life + Foreign Visitors	A2–B1	Reading instructions and behavioral guidelines	Etiquette and temple vocabulary	Modal Verbs for Advice and Instructions (should / should not)	Learners can understand appropriate behavior and temple activities.
8	Buddhist Education and Academic Reading	Study/Education (79.8%), Academic Reading (46.1%)	A2–B1	Reading academic-style texts	Academic Buddhist vocabulary	Simple Academic Sentence Structures	Learners can understand simplified Buddhist academic texts and educational materials.

4.1.3 D1 Result: First Draft of the Materials

D1 produced the first draft of an eight-unit instructional book. The passages and tasks were developed around an accessible A2 core with selected progression toward B1. A1-level support was used only where needed to assist less-proficient learners. Specialized Buddhist vocabulary was retained when necessary for ESP authenticity and was supported through Thai meanings, English examples, illustrations or image placeholders, recycling activities, and contextualized practice.

The first draft contained consistent section headings, reading passages, six objectively scored exercise components, vocabulary support, communication activities, real-life practice, and unit answer keys. This draft became the product evaluated in R2.

4.2 Objective 2 and Cycle R2–D2: Expert Evaluation and Revision

Objective 2: “To revise and refine the developed reading materials based on evaluation results for instructional use in Buddhist professional contexts.”

R2 obtained quantitative ratings and written recommendations from three materials-evaluation experts. These experts were distinct from the three IOC-validation experts who examined the Needs Analysis Questionnaire. D2 analyzed the expert evidence, documented each revision decision, and produced Revision 1 for the learner try-out.

4.2.1 R2: Expert Evaluation Results

The first draft was evaluated through 21 five-point items organized into Content Appropriateness, Language and Readability, Learning Activities, Organization and Design, and Overall Evaluation. The ratings were summarized using the mean and standard deviation.

Table 4.17 Expert Evaluation Results by Evaluation Item (n = 3)

Evaluation Criteria	M	S.D.	Interpretation
A. Content Appropriateness			

Evaluation Criteria	M	S.D.	Interpretation
1. The content is relevant to Buddhist professional contexts.	4.67	0.58	Highest
2. The selected topics reflect the learning needs of the target learners.	4.33	0.58	High
3. The content is appropriate for ESP learners at Mahachulalongkornrajavidyalaya University.	4.67	0.58	Highest
4. The Buddhist information presented in the materials is accurate and appropriate.	4.00	0.00	High
5. The reading passages support learners' understanding of Buddhist concepts and practices.	4.33	0.58	High
B. Language and Readability			
6. The language used in the reading passages is appropriate for the target learners.	5.00	0.00	Highest
7. The vocabulary is appropriate for the learning objectives of each unit.	5.00	0.00	Highest
8. The instructions and explanations are clear and easy to understand.	4.67	0.58	Highest
9. The language supports the development of reading comprehension skills.	4.33	0.58	High

Evaluation Criteria	M	S.D.	Interpretation
10. The specialized Buddhist vocabulary is presented appropriately.	4.67	0.58	Highest
C. Learning Activities			
11. The reading comprehension activities are appropriate for the content of each unit.	4.00	1.00	High
12. The vocabulary exercises effectively reinforce vocabulary learning.	4.33	1.15	High
13. The communication tasks encourage meaningful language use.	4.00	1.00	High
14. The activities support learners' engagement and participation.	3.67	1.53	High
15. The activities are appropriate for instructional use in Buddhist educational settings.	4.00	1.00	High
D. Organization and Design			
16. The organization of the units is logical and systematic.	4.33	1.15	High
17. The sequence of topics supports progressive learning.	4.00	1.00	High
18. The structure of each unit is clear and consistent.	4.00	1.00	High
19. The materials are practical and user-friendly.	3.67	1.53	High

Evaluation Criteria	M	S.D.	Interpretation
20. The overall design supports effective learning.	4.00	1.00	High
E. Overall Evaluation			
21. Overall, the developed reading materials are suitable for instructional use in Buddhist professional contexts.	4.00	1.00	High

Table 4.18 Summary of Expert Evaluation Results by Dimension (n = 3)

Evaluation Dimension	Number of Items	M	S.D.	Interpretation
A. Content Appropriateness	5	4.40	0.49	High
B. Language and Readability	5	4.73	0.33	Highest
C. Learning Activities	5	4.00	0.26	High
D. Organization and Design	5	4.00	0.26	High
E. Overall Evaluation	1	4.00	1.00	High
Overall	21	4.27	0.28	High

The overall evaluation was high ($M = 4.27$, $S.D. = 0.28$). Language and Readability received the highest dimension mean ($M = 4.73$, $S.D. = 0.33$), followed by Content Appropriateness ($M = 4.40$, $S.D. = 0.49$). Learning Activities and Organization

and Design each received $M = 4.00$ ($S.D. = 0.26$), while Overall Evaluation received $M = 4.00$ ($S.D. = 1.00$).

The two highest-rated items concerned the appropriateness of the language and vocabulary ($M = 5.00$, $S.D. = 0.00$). The comparatively lowest items concerned activities supporting engagement and participation and the practicality and user-friendliness of the materials; both obtained $M = 3.67$ ($S.D. = 1.53$). These ratings indicated areas for refinement but did not constitute a measure of instructional effectiveness.

4.2.2 R2: Experts' Written Feedback

The written feedback identified four principal areas: visual presentation, language and content, learning activities, and instructional consistency. The experts regarded the Buddhist topics, general language level, and CEFR orientation as appropriate, while recommending clearer terminology, consistent headings, more natural wording, improved instructions, stronger matching exercises, and an expanded bibliography.

The experts also recommended completed illustrations, phonetic transcription, grammar support, sentence patterns, and additional production support. The researchers distinguished changes required for Revision 1 from enhancements outside the evaluated reading scope. Pronunciation guidance was recorded for future development because pronunciation was not a measured outcome of the present research.

4.2.3 D2: Revision Decisions and Revision 1

Each recommendation was reviewed in relation to the research objectives, intended proficiency range, evidence, instructional value, and project scope. Table 4.19 records the resulting decision and action.

Table 4.19 Expert Evidence, Revision Decisions, and Revision 1

No.	Expert Recommendation	Revision Made	Action Taken
1	Replace participants with respondents in the Needs Analysis section.	The terminology was revised throughout the needs analysis section to accurately reflect questionnaire respondents.	Revised
2	Replace What You Will Learn with Expected Learning Outcomes.	The heading was standardized across all eight learning units.	Revised
3	Use plural forms such as Buddhist monks where appropriate.	Singular and plural forms referring to Buddhist monks and related terms were revised where appropriate to improve grammatical consistency throughout the materials.	Revised
4	Revise vocabulary exercise instructions (e.g., from the words given).	Activity instructions were revised for greater clarity and consistency.	Revised

No.	Expert Recommendation	Revision Made	Action Taken
5	Improve the wording of selected reading passages.	Selected reading passages were revised to improve clarity, naturalness, and consistency. The revisions included refining the opening paragraph in Unit 1, improving expressions in the description of monks' daily routines, revising the concluding section of Unit 3 for greater readability, and making minor wording improvements throughout the materials where appropriate.	Revised
6	Improve the consistency and appropriateness of unit titles.	Several unit titles were revised to more accurately reflect the instructional content. For example, Types of Buddhist Meditation was revised to Samatha and Vipassanā Meditation, and A Short Dhamma Talk: The Importance of Kindness was shortened to The Importance of Kindness for greater clarity and consistency.	Revised

No.	Expert Recommendation	Revision Made	Action Taken
7	Revise terms such as Thai Buddhist ways of life.	The wording was revised throughout the materials to improve the naturalness of English expressions. Terms such as “Thai Buddhist ways of life” were replaced with more appropriate expressions, including Thai Buddhist culture, Buddhist life, and other context-appropriate terminology where necessary.	Revised
8	Expand the bibliography.	Additional academic sources were incorporated into the bibliography to strengthen the academic foundation of the reading materials.	Revised
9	Add IPA (phonetic transcription) for key vocabulary.	Recognized as a valuable enhancement for future editions of the materials.	Future Development

No.	Expert Recommendation	Revision Made	Action Taken
10	Revise matching exercises.	The matching exercises were revised by rearranging the answer options in Column B to avoid direct positional correspondence between the items and their matching definitions. This modification was made to improve the quality and validity of the vocabulary matching activities in accordance with the experts' recommendations.	Revised
11	Add Grammar Focus sections.	Recognized as a valuable enhancement requiring substantial revision across all units.	Future Development
12	Include sentence patterns for communication practice.	Planned as a future enhancement to strengthen communicative language support.	Future Development
13	Add question patterns to support language production.	Planned as a future enhancement for future editions.	Future Development

No.	Expert Recommendation	Revision Made	Action Taken
14	Replace illustration placeholders with completed illustrations.	To improve the visual presentation of the pilot version, the original text placeholders were refined by incorporating image placeholders accompanied by descriptive text indicating the intended illustrations. In addition, placeholder cover pages were created for each instructional unit to improve the organization and presentation of the pilot materials used for learner evaluation. Completed illustrations, finalized cover page designs, and final page layout will be incorporated into the final version.	Final version

Revision 1 corrected terminology, plural forms, wording, instructions, headings, unit titles, matching activities, and supporting references. It also improved the organization and presentation of the version used in R3. Recommendations requiring new pronunciation, grammar, or expanded multimedia components were deferred. The resulting Revision 1 retained the eight-unit structure, accessible language, Buddhist context, and central reading focus.

4.3 Objective 3 and Cycle R3–D3: Learner Try-Out, Evaluation, Revision 2, and Final Product

Objective 3: “To evaluate learner reading comprehension, perceived readability, and attitudes toward the developed reading materials.”

R3 implemented Revision 1 with 12 learners and collected two forms of evidence: performance on embedded reading and vocabulary exercises and responses to a post-use questionnaire. D3 interpreted the evidence descriptively, completed Revision 2, audited the full instructional product, and prepared the final version.

4.3.1 R3: Learner Try-Out and Data Structure

Each of the 12 participants completed two assigned units. This produced 24 completed unit-level exercise sets, with each of the eight units completed three times. The 24 sets were repeated unit-level observations from 12 participants and were not treated as data from 24 learners.

Each unit contained six scored components worth five points each: multiple-choice questions, true-or-false statements, sequencing, vocabulary matching, fill-in-the-blank items, and word choice. The maximum score was 30 points per completed unit. Eleven of the 12 participants returned the anonymous learner-evaluation questionnaire. Because the exercise materials and questionnaires contained no common identifying code, performance scores could not be linked to questionnaire responses at the individual level.

4.3.2 Unit-Level Exercise Performance

Table 4.20 Overall Unit-Level Exercise Performance (n = 24 Completed Unit Sets)

Performance Measure	Result
Number of completed unit sets	24
Total score obtained	673
Total possible score	720
Mean score	28.04
Standard deviation	2.91
Mean percentage	93.47
Minimum score	20

Performance Measure	Result
Maximum score	30
Completed unit sets receiving full scores	12 (50.00%)

The 24 completed unit sets produced a combined score of 673 out of 720. The mean was 28.04 out of 30 (S.D. = 2.91), equivalent to 93.47 percent. Scores ranged from 20 to 30, and 12 sets received a full score.

Table 4.21 Unit-Level Exercise Performance by Instructional Unit

Unit	Instructional Unit	n	M	S.D.	Percentage
1	A Day in the Life of a Buddhist Monk	3	26.67	5.77	88.89
2	The Threefold Training	3	25.00	5.00	83.33
3	Samatha and Vipassanā Meditation	3	27.00	1.00	90.00
4	Merit-Making in Thai Buddhist Culture	3	29.33	1.15	97.78
5	A Visit to a Buddhist Temple	3	30.00	0.00	100.00
6	The Importance of Kindness	3	29.00	1.00	96.67
7	Temple Etiquette for Visitors	3	28.67	2.31	95.56
8	Learning Buddhism Through Reading	3	28.67	1.15	95.56
Over all		24	28.04	2.91	93.47

Mean percentages exceeded 80 percent for every unit. Unit 5, “A Visit to a Buddhist Temple,” obtained the highest mean ($M = 30.00$, $S.D. = 0.00$). Unit 2, “The Threefold Training,” obtained the lowest mean ($M = 25.00$, $S.D. = 5.00$), followed by

Unit 1, “A Day in the Life of a Buddhist Monk” ($M = 26.67$, $S.D. = 5.77$). Because each unit was represented by only three completed sets, these results were interpreted descriptively.

Table 4.22 Unit-Level Exercise Performance by Component (n = 24 Completed Unit Sets)

Exercise Component	Full Score	M	S.D.	Percentage
Part A: Multiple-Choice Questions	5	4.63	1.17	92.50
Part B: True or False	5	5.00	0.00	100.00
Part C: Sequencing Task	5	4.04	1.78	80.83
Vocabulary Exercise 1: Matching	5	4.71	1.08	94.17
Vocabulary Exercise 2: Fill in the Blanks	5	4.67	0.76	93.33
Vocabulary Exercise 3: Choose the Correct Word	5	5.00	0.00	100.00

True-or-False and Choose the Correct Word each obtained $M = 5.00$ ($S.D. = 0.00$). Sequencing produced the lowest component mean ($M = 4.04$, $S.D. = 1.78$; 80.83%) and the greatest variation. This pattern led to a targeted review of instructions, item order, and answer-key presentation rather than removal of the sequencing task.

The high exercise scores represented performance on the selected unit tasks during the try-out. They did not establish long-term reading improvement or comparative effectiveness because the study did not employ pretest–posttest measurement, a control group, or individual linkage between performance and questionnaire data.

4.3.3 Learner Questionnaire Findings

4.3.3.1 Response Rate and Respondent Profile

Table 4.23 Learner Questionnaire Response Rate

Questionnaire Response	Frequency (f)	Percentage (%)
Completed the questionnaire	11	91.67
Did not complete the questionnaire	1	8.33
Total	12	100.00

Table 4.24 Learner Questionnaire Respondent Profile (n = 11)

Respondent Characteristic	Frequency (f)	Percentage (%)
Gender		
Male	4	36.36
Female	7	63.64
Self-Rated English Proficiency		
A2	1	9.09
B1	5	45.45
B2 or above	5	45.45
Total	11	100.00

Eleven participants returned the questionnaire, a response rate of 91.67 percent. One respondent (9.09%) reported A2 proficiency, five (45.45%) reported B1, and five (45.45%) reported B2 or above. Thus, 10 respondents reported B1 or higher proficiency. This profile was considered when interpreting the high scores and ratings.

One B1 respondent displayed a consistently lower rating pattern than the other respondents. The possibility of misunderstanding the rating direction could not be confirmed because the questionnaire was anonymous. The recorded responses were

therefore retained without reversal, exclusion, or alteration, and the pattern was treated as a limitation in interpretation.

4.3.3.2 Perceived Reading Comprehension

Table 4.25 Learners' Self-Assessed Reading Comprehension (n = 11)

Evaluation Item	M	S.D.	Interpretation
5. I could understand the main ideas of the reading passages.	4.18	1.25	High
6. I could understand most of the important information presented in the reading passages.	4.09	0.94	High
7. I could complete the reading activities without much difficulty.	4.27	0.90	High
8. Overall, I could understand the developed reading materials.	4.36	1.03	High
Overall	4.23	1.03	High

Self-assessed reading comprehension was high overall ($M = 4.23$, $S.D. = 1.03$). The highest-rated item concerned overall understanding of the materials ($M = 4.36$, $S.D. = 1.03$), while understanding most important information received the lowest mean in this dimension ($M = 4.09$, $S.D. = 0.94$). These ratings represented learner perceptions and were not treated as direct achievement scores.

4.3.3.3 Perceived Readability

Table 4.26 Learners' Perceptions of Readability (n = 11)

Evaluation Item	M	S.D.	Interpretation
9. The language level was appropriate for my English proficiency.	3.73	1.19	High

Evaluation Item	M	S.D.	Interpretation
10. The vocabulary was appropriate and easy to understand.	4.09	1.04	High
11. The reading passages and activity instructions were clear and easy to follow.	4.00	1.26	High
12. The overall organization of each unit made the materials easy to use.	3.82	0.98	High
Overall	3.91	1.12	High

Perceived readability was high overall ($M = 3.91$, $S.D. = 1.12$). Vocabulary appropriateness and comprehensibility received the highest mean ($M = 4.09$, $S.D. = 1.04$). Appropriateness of the language level received the lowest mean ($M = 3.73$, $S.D. = 1.19$) but remained high. These findings concern perceived readability rather than a readability score calculated through a linguistic formula.

4.3.3.4 Attitudes toward the Materials

Table 4.27 Learners' Attitudes toward the Reading Materials (n = 11)

Evaluation Item	M	S.D.	Interpretation
13. The topics were interesting and relevant to Buddhist professional contexts.	3.82	1.08	High
14. The learning activities helped improve my English reading skills.	3.73	1.10	High
15. Overall, I am satisfied with the developed reading materials.	3.91	0.94	High

Evaluation Item	M	S.D.	Interpretation
16. I would recommend these reading materials to other learners studying English in Buddhist educational contexts.	4.00	1.00	High
Overall	3.86	1.00	High

Learner attitudes were high overall ($M = 3.86$, $S.D. = 1.00$). Willingness to recommend the materials received the highest mean ($M = 4.00$, $S.D. = 1.00$), while the perceived contribution of the activities to English reading development received the lowest mean ($M = 3.73$, $S.D. = 1.10$). The latter rating was interpreted as a learner perception rather than evidence of measured improvement.

4.3.3.5 Open-Ended Feedback

Table 4.28 Summary of Learners' Open-Ended Feedback and Suggestions

Category	Recurring Theme	Summary of Feedback
Positive feedback	Buddhist-context content and interesting topics	The respondents appreciated the inclusion of Buddhist terminology and topics related to Buddhist teachings, stories, history, and other relevant areas. One respondent specifically mentioned learning terms such as <i>sīla</i> , <i>samādhi</i> , and <i>paññā</i> together with their English meanings.
Positive feedback	Clarity and ease of understanding	Several respondents described the materials as easy to read and understand. They noted that the vocabulary was generally accessible, the exercises were not overly complicated, and the answers could be located in the reading passages.

Category	Recurring Theme	Summary of Feedback
Positive feedback	Visual support	The illustrations were considered helpful for understanding specialized vocabulary and supporting reading comprehension. Respondents indicated that the pictures made the materials clearer and more effective for learning.
Positive feedback	Interest and suitability	Some respondents considered the topics and activities interesting and appropriate for their English proficiency. One respondent stated that no improvement was required because the materials were well suited to their level.
Suggestions for improvement	Vocabulary and matching exercises	Several comments focused on the vocabulary sections, particularly the clarity of some word meanings and matching activities. Some vocabulary items were perceived as confusing or insufficiently clear, and one respondent suggested providing more English-language explanations in the vocabulary section.
Suggestions for improvement	Level of challenge and variety	Some respondents considered the questions relatively easy or repetitive, particularly for learners with higher English proficiency. They suggested increasing the difficulty of the vocabulary, questions, and content, as well as providing a wider variety of reading passages.

Category	Recurring Theme	Summary of Feedback
Suggestions for improvement	Extended reading and writing activities	The respondents suggested including additional writing tasks after reading, such as rewriting information, composing short stories or essays, and applying information from the passages in written form.
Suggestions for improvement	Real-life and higher-order activities	Suggestions included adding more real-life examples, critical-thinking questions, discussion activities, and pair or group tasks to encourage deeper understanding and more active learner participation.
Suggestions for improvement	Digital and multimedia support	Several respondents recommended supplementing the printed materials with online resources, websites, interactive activities, and QR-linked supplementary learning resources.
Suggestions for improvement	Additional examples and illustrations	Some respondents suggested adding further examples and pictures to clarify the content and enhance the visual presentation of the materials.

The learners valued the Buddhist content, accessible passages, vocabulary explanations, and visual support. Suggested improvements concerned clearer vocabulary distinctions and matching items, greater activity variety, practical application, additional challenge for more-proficient learners, and supplementary digital or multimedia support. The suggestions were reviewed together with performance and rating evidence rather than adopted automatically.

4.3.4 D3: Revision 2

D3 compared performance evidence, questionnaire ratings, written feedback, expert recommendations, the intended A2–B1 range, and the researchers' audit of all

eight units. Verified problems were corrected; effective features were retained; and suggestions outside the print-based reading scope were deferred. Table 4.29 records the resulting Revision 2 decisions.

Table 4.29 Evidence, Revision Decisions, and Revision 2

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
1	The sequencing tasks received the lowest mean score and showed the greatest variation in learner performance.	All sequencing tasks in the eight units were reviewed against the organization of their respective reading passages. Instructions were clarified where necessary. For example, the instruction in Unit 1 was revised to tell learners explicitly to write numbers 1–5 in the blanks according to the order in which the activities occurred in the passage.	The sequencing-task format was retained, but its instructions and answer presentation were clarified.

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
2	The answer keys for the sequencing tasks did not always show clearly how the randomized statements corresponded to the correct sequence.	The answer keys were standardized to present both “Answers in the order presented” and the complete “Correct sequence.” This enabled learners and instructors to distinguish between the numbers written beside the randomized statements and the chronological or organizational order of the information.	Revised in all units to improve answer-key clarity and usability.
3	Units 1, “A Day in the Life of a Buddhist Monk,” and 2, “The Threefold Training,” showed comparatively lower mean scores and greater score variation.	The passages, comprehension questions, sequencing statements, vocabulary exercises, distractors, and answer keys in both units were systematically rechecked. Selected instructions and item wording were refined. In Unit 2, the Real-Life Practice question was revised from the less natural “What are the Threefold Trainings in Buddhism?” to “What are the three parts of the Threefold Training?”	The principal passages and learning outcomes were retained because the review did not reveal a need for major content revision.

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
4	A learner reported difficulty distinguishing “education” from “academic” in Unit 8.	The relevant definitions, examples, matching choices, and sentence contexts were reviewed. The exercise instruction was made more explicit, and the sentence “Reading is an important part of academic learning” was revised to “Reading is an important part of academic study” to provide a clearer and more natural collocational context for the adjective “academic.”	Selective vocabulary clarification was made without removing either target word.
5	Some exercise instructions and response formats could be made more consistent across the units.	Instructions for matching, fill-in-the-blank, multiple-choice, and sequencing exercises were standardized. Matching instructions now specify that learners should write the correct letter in each blank, while fill-in-the-blank and word-choice instructions identify the required response more directly.	Minor inconsistencies were corrected while the existing exercise types were retained.

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
6	The systematic post-pilot review identified a discrepancy in an answer key.	All answer keys across the eight units were audited. In Unit 5, “A Visit to a Buddhist Temple,” the answer key for Vocabulary Exercise 1: Matching was corrected from 1-d, 2-e, 3-a, 4-c, and 5-b to 1-b, 2-d, 3-a, 4-c, and 5-e.	The incorrect key was corrected before preparation of the final version.
7	Learner feedback indicated that vocabulary support was useful, although selected vocabulary items required clearer presentation.	Definitions, Thai meanings, examples, exercise items, and answer choices were rechecked. A consolidated glossary was also prepared for the key vocabulary introduced in Units 1–8. Repeated vocabulary was combined into single entries, with Thai meanings and the relevant unit numbers provided.	Vocabulary support was strengthened without substantially increasing the vocabulary load of individual units.

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
8	Questionnaire feedback indicated that unit organization and usability could be made more consistent.	Page breaks, spacing, table alignment, headings, exercise placement, and visual separation between instructional components were reviewed. Instructions and activities were kept together where possible, and answer-key sections were arranged consistently after their respective units.	Editorial and layout inconsistencies were corrected throughout the materials.
9	Learners positively evaluated visual support and also requested additional illustrations and examples.	The remaining vocabulary-image and unit-cover placeholders were replaced with completed illustrations. Image size and placement were standardized, and descriptive placeholder text was removed from the picture columns so that these columns functioned entirely as visual support.	Visual support was completed within the scope of the printed materials.

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
10	Some respondents requested more varied, practical, and communicative activities.	The wording of selected Real-Life Practice and “Let’s Communicate” tasks was refined to clarify their relationship to the reading passages. The existing tasks already required learners to explain Buddhist concepts, discuss practical situations, and apply information from the passages.	The application tasks were retained and selectively refined rather than adding an additional activity section to every unit.
11	The high scores and the proficiency profile of the pilot group suggested that some activities might have been relatively easy for B1-level learners and above.	The accessible core tasks were retained. The overall difficulty of the passages and exercises was not increased, and a separate Optional Challenge component was not added. The final materials maintained an accessible A2-level core while including selected language and tasks appropriate to A2–B1 learners.	No major increase in difficulty was made because it could disadvantage learners at the lower end of the intended proficiency range.

No.	Evidence or Area Identified	Revision Actually Implemented	Final Decision
12	QR codes, audio materials, websites, interactive online activities, and other interactive digital applications were suggested.	These suggestions were recorded as directions for future development because they would require additional production, implementation, and evaluation beyond the scope of the present printed materials.	Deferred for a subsequent digital or multimedia edition.
13	The Buddhist content, general unit structure, accessible passages, and vocabulary support received positive learner feedback.	The eight-unit structure, Buddhist-context orientation, principal reading passages, six core exercise components, and reading-to-communication activities were retained.	Effective instructional features were preserved without unnecessary alteration.

Revision 2 clarified sequencing instructions and answer-key presentation, rechecked Units 1 and 2, revised selected vocabulary contexts, corrected the Unit 5 matching answer key, standardized exercise instructions, prepared the consolidated glossary, completed the illustrations, and corrected layout inconsistencies. The accessible core was retained rather than made uniformly more difficult for the predominantly B1-or-higher pilot group.

4.3.5 D3 Result: Final Research Product

The final instructional book comprised 103 A4 pages, including the covers, title page, front matter, eight instructional units, glossary, and bibliography. The eight units occupied pages 1–88, followed by the glossary on pages 89–93 and the bibliography on pages 94–95.

Table 4.30 Organization of the Eight Units in the Final Version

Unit	Final Unit Title	Principal Content and Application
1	“A Day in the Life of a Buddhist Monk”	Daily monastic routines, meditation, chanting, alms round, study, temple duties, and the sequencing of daily activities
2	“The Threefold Training”	The relationship among morality (Sīla), concentration (Samādhi), and wisdom (Paññā), together with their application in daily life
3	“Samatha and Vipassanā Meditation”	The purposes and characteristics of Samatha and Vipassanā meditation and their relationship to concentration, mindfulness, and insight
4	“Merit-Making in Thai Buddhist Culture”	Common merit-making practices, Buddhist values, Thai cultural traditions, and practical participation in temple activities
5	“A Visit to a Buddhist Temple”	Communication with foreign visitors, explanations of Buddhist practices, temple visits, and intercultural communication
6	“The Importance of Kindness”	Kindness or Mettā, helping others, positive relationships, peaceful communities, and the application of Buddhist values
7	“Temple Etiquette for Visitors”	Appropriate behavior, respectful communication, modest clothing, religious practices, and guidelines for visiting Buddhist temples
8	“Learning Buddhism Through Reading”	Reading as a means of gaining Buddhist knowledge, developing vocabulary and comprehension, and engaging in lifelong and academic learning

Table 4.31 Standard Instructional Structure of Each Unit

Component	Content and Instructional Function
Unit Cover	Introduces the unit number and title through a completed thematic illustration.
About This Unit	Provides a brief orientation to the topic and explains what learners will study.
Expected Learning Outcomes	States four observable outcomes involving reading comprehension, vocabulary, content understanding, and practical language use.
Reading Passage	Presents a newly developed Buddhist-context passage using language and organization appropriate to the intended learners.
Check Your Understanding	Contains five multiple-choice questions, five true-or-false statements, and a five-item sequencing task, for a total of 15 reading-comprehension items.
Learn New Words: Part A	Introduces seven words or phrases through illustrations, Thai meanings, and English example sentences.
Learn New Words: Part B	Presents eight additional Buddhist, thematic, communicative, or academic terms with Thai meanings and contextualized examples.
Practice Vocabulary	Provides five matching items, five fill-in-the-blank items, and five word-choice questions, for a total of 15 vocabulary items.
Let's Communicate	Connects the reading content to pair work, role-play, guided questions, useful expressions, and an example dialogue.
Real-Life Practice	Requires learners to explain, summarize, or apply the unit content in a practical Buddhist or communicative situation.

Component	Content and Instructional Function
Unit Answer Key	Provides answers to the 30 objectively scored reading and vocabulary items, including both the answers as presented and the complete correct order for sequencing tasks.

The final product maintained an accessible A2 core and controlled progression toward B1. It combined Buddhist-context passages, explicit outcomes, 30 objectively scored reading and vocabulary items per unit, bilingual vocabulary support, completed visual support, communication tasks, real-life application, and standardized answer keys.

4.4 Knowledge Derived from the Research

Beyond the findings corresponding to the three research objectives, the study generated knowledge concerning how CEFR-aligned Buddhist context-based reading materials could be developed through a systematic relationship among research evidence, development decisions, evaluation, and revision. This knowledge was derived directly from the documented connections among the needs analysis, design requirements, expert evaluation, learner try-out, revision records, researcher audit, and final instructional product.

The knowledge presented in this section should be understood as a synthesis derived from the present study. It is not proposed as an independently validated or universally applicable materials-development model. Its possible application to another group of learners, institution, ESP domain, or delivery format would require a new analysis of the intended learners, purposes, context, and instructional conditions.

4.4.1 The Three-Cycle R&D Process

The completed development process consisted of three linked research-and-development cycles. In each cycle, a research stage generated evidence for a corresponding development stage. The process therefore connected data collection and analysis with specific design, revision, and production decisions rather than treating research and materials development as separate activities.

In Cycle 1 (R1–D1), R1 examined relevant documents and literature and collected needs-analysis data from 89 respondents. The evidence identified the respondents' English-use purposes, reading needs, Buddhist-topic interests, reading difficulties, preferred learning support, and expectations toward the materials. D1 converted these findings into design requirements, a master blueprint, a standard unit structure, and the first draft of eight CEFR-aligned Buddhist context-based reading units.

In Cycle 2 (R2–D2), R2 evaluated the first draft through ratings, written comments, and recommendations from three materials-evaluation experts. The evidence addressed content appropriateness, language and readability, learning activities, organization and design, terminology, illustrations, exercises, and supporting references. D2 examined each recommendation in relation to the research objectives, intended learners, and scope of the printed reading materials. The accepted and modified recommendations were incorporated into Revision 1, which was subsequently prepared for the learner try-out.

In Cycle 3 (R3–D3), R3 implemented Revision 1 with 12 learners. The evidence comprised 24 completed unit-level exercise sets, 11 completed evaluation questionnaires, open-ended responses, and records from the implementation. D3 combined this evidence with the previously documented expert recommendations and a systematic researcher audit of all eight units. The resulting Revision 2 clarified sequencing instructions, vocabulary contexts, exercise directions, response formats, and answer-key presentation; corrected a verified answer-key discrepancy; completed the illustrations and consolidated glossary; and improved consistency in layout and instructional organization. These revisions produced the final research product.

Figure 4.1 presents the relationship among R1–D1, R2–D2, and R3–D3, while Table 4.32 summarizes the evidence, actions, and principal outputs of the three cycles.

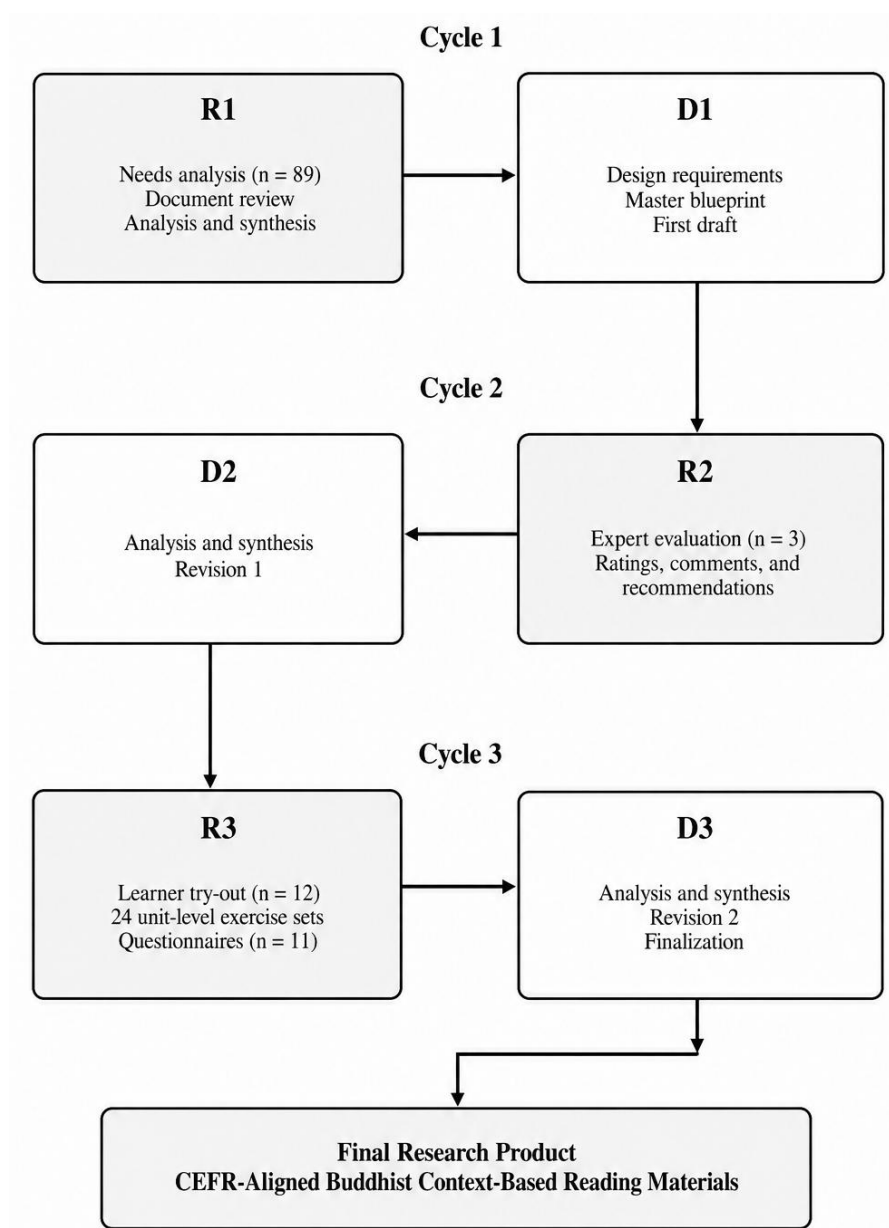


Figure 4.1 Three-Cycle Research and Development Findings

Table 4.32 Summary of the Three-Cycle R&D Findings

Stage	Evidence and Action	Primary Output
R1	Review of literature and documents; administration and analysis of the Needs Analysis Questionnaire with 89 respondents	Needs profile and design evidence

Stage	Evidence and Action	Primary Output
D1	Synthesis of CEFR, ESP, Buddhist-context, language, content, and task requirements	Master blueprint and first draft
R2	Evaluation of the first draft by three materials-evaluation experts using ratings, comments, and recommendations	Expert evaluation evidence
D2	Analysis of expert evidence and documented revision decisions	Revision 1 for learner try-out
R3	Learner try-out with 12 participants; 24 completed unit-level exercise sets and 11 questionnaire responses	Performance, perception, and feedback evidence
D3	Analysis of try-out evidence, Revision 2, consistency audit, and final production	Final CEFR-aligned Buddhist context-based reading materials

The three-cycle process was evidence-responsive rather than a strictly linear sequence. Evidence at each stage was used to determine whether a material feature should be revised, retained, or deferred. Verified language, instruction, answer-key, visual, and layout problems were corrected; features supported by the findings were retained; and proposals involving audio, digital resources, and expanded multimedia applications were deferred because they required additional development and evaluation beyond the scope of the present printed materials. Consequently, the final product can be traced to the evidence and decisions generated throughout the three cycles.

4.4.2 Product, Process, and Decision Knowledge

The study generated three interconnected forms of knowledge: product knowledge, process knowledge, and decision knowledge. These forms of knowledge

were derived from the relationships among the developed materials, the development procedures, the evaluation evidence, and the revision decisions made during the study.

At the product level, the study identified the principal characteristics of accessible A2–B1 Buddhist context-based reading materials for ESP learners at Mahachulalongkornrajavidyalaya University. These characteristics included an accessible A2 core with controlled progression toward B1, topics connected with Buddhist educational and communicative purposes, manageable reading passages, explicit learning outcomes, bilingual vocabulary support, illustrations, structured reading-comprehension and vocabulary exercises, communication activities, practical application tasks, standardized answer keys, a consolidated glossary, and consistent unit organization. The findings also indicated that the quality of the product depended on alignment among the passages, vocabulary, activities, instructions, visual support, assessments, and answer keys rather than on any single component in isolation.

At the process level, the study demonstrated how needs analysis, expert evaluation, learner try-out, and systematic researcher auditing could be connected as cumulative sources of evidence. The needs analysis established the intended purposes, content, language support, and design requirements. The expert evaluation examined the instructional quality of the first draft and informed Revision 1. The learner try-out supplied evidence concerning exercise performance, perceived comprehension, perceived readability, attitudes, and actual usability. The final researcher audit identified inconsistencies that might not have been revealed through ratings alone. The development process therefore benefited from the combination of multiple evidence sources collected at different stages.

At the decision level, the study showed that revision should be selective, traceable, and proportionate to the available evidence. Revision did not require the researchers to accept every recommendation or redesign the materials whenever a comparatively low score or isolated comment appeared. Each proposed change was considered in relation to the research objectives, intended proficiency range, consistency of the evidence, instructional value, feasibility, and scope of the study. Verified problems were corrected, effective features were preserved, and suggestions requiring separate production and evaluation were recorded for future development.

This decision principle was particularly important because most questionnaire respondents reported proficiency at B1 or above, whereas the materials were designed around an accessible A2 core with progression toward B1. Increasing the difficulty of the complete book in response to the predominantly higher-proficiency pilot group could have reduced its accessibility for learners at the lower end of the intended range. The researchers therefore retained the accessible core while refining localized weaknesses and improving clarity, consistency, and instructional support.

Taken together, the central knowledge derived from the research is that the development of CEFR-aligned Buddhist context-based reading materials depends on coherence among evidence, context, design, evaluation, and revision. Learner needs establish the purposes and requirements of the materials; CEFR provides proficiency reference points; the Buddhist context supplies relevant disciplinary and communicative content; expert and learner evidence identifies strengths and weaknesses; and documented revision decisions connect the evidence with the completed instructional product. Within the boundaries of the present study, this coherence represents the principal contribution of the three-cycle R&D process.

4.5 Summary of the Research Findings

This chapter presented the research findings according to the three research objectives and the corresponding R1–D1, R2–D2, and R3–D3 cycles.

For Objective 1 and Cycle R1–D1, the needs analysis with 89 respondents identified the learners' profiles, English-use purposes, Buddhist-topic interests, reading difficulties, and preferences for accessible language, bilingual vocabulary support, exercises, illustrations, and practical reading activities. These findings were translated into design requirements, a master blueprint, a standard instructional structure, and the first draft of eight CEFR-aligned Buddhist context-based reading units.

For Objective 2 and Cycle R2–D2, three materials-evaluation experts evaluated the first draft at a high overall level ($M = 4.27$, $S.D. = 0.28$), with language and readability receiving the highest dimensional rating ($M = 4.73$, $S.D. = 0.33$). Their written feedback addressed language use, terminology, activities, organization,

matching tasks, illustrations, and supporting references. The researchers examined the recommendations and produced Revision 1 while deferring pronunciation support, expanded grammar instruction, and multimedia features that were beyond the scope of the printed reading materials.

For Objective 3 and Cycle R3–D3, 12 learners completed 24 unit-level exercise sets, and 11 learners returned the evaluation questionnaire. Overall exercise performance was 93.47 percent ($M = 28.04$, $S.D. = 2.91$), while perceived comprehension, perceived readability, and attitudes toward the materials were at high levels. The combined evidence guided Revision 2, including clarification of sequencing and exercise instructions, refinement of vocabulary contexts, correction and standardization of answer keys, preparation of the consolidated glossary, completion of the illustrations, and improvement of layout and instructional consistency. The resulting final research product comprised 103 A4 pages, including eight instructional units, a glossary, and a bibliography.

The three cycles established a traceable relationship from learner and contextual needs to design, from expert evidence to Revision 1, and from learner evidence and researcher auditing to Revision 2 and finalization. The study consequently generated product, process, and decision knowledge concerning the development of accessible A2–B1 Buddhist context-based reading materials. The interpretation of these findings in relation to relevant theories and previous studies is presented in Chapter 5.

Chapter 5

Conclusion, Discussion, and Recommendations

This chapter presents the conclusion, discussion, and recommendations of the research entitled “Development of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at Mahachulalongkornrajavidyalaya University.” The chapter is aligned with the three research objectives and the three research-and-development cycles reported in Chapters 3 and 4: R1–D1, R2–D2, and R3–D3. It first summarizes the findings without external references, then discusses their meaning in relation to relevant concepts and previous studies, and finally presents recommendations for applying the research findings and conducting further research.

The interpretation distinguishes carefully among evidence sources. Needs-analysis findings were obtained from 89 respondents; the first draft was evaluated by three materials-evaluation experts; and the learner try-out involved 12 participants, 24 completed unit-level exercise sets, and 11 completed evaluation questionnaires. The exercise scores indicate performance while using the materials, whereas the questionnaire results represent learner perceptions. Neither form of evidence is treated as proof of long-term learning gains or as independent certification of CEFR proficiency.

5.1 Summary of Research Findings

The findings are summarized according to the three research objectives and their corresponding R&D cycles. R1–D1 converted needs-analysis evidence into design requirements, a master blueprint, and the first draft. R2–D2 used expert ratings and written feedback to produce Revision 1. R3–D3 used learner performance, questionnaire responses, open-ended feedback, and a systematic researcher audit to produce Revision 2 and the final instructional product.

5.1.1 Objective 1 and Cycle R1–D1: Needs Analysis, Design Requirements, and First Draft

Objective 1: “To design CEFR-aligned Buddhist context-based reading materials for ESP learners at Mahachulalongkornrajavidyalaya University (MCU).”

R1 identified the learners’ English-use purposes, reading needs, difficulties, interests, and preferred forms of instructional support. Among the 89 respondents, study and education was the principal purpose for using English (79.8%), followed by reading Buddhist documents or academic articles (46.1%), communicating with foreign visitors (36.0%), and communicating with foreigners (33.7%). Their most frequently reported reading difficulties were understanding academic text structure (50.6%), understanding complex text organization (44.9%), and lacking effective reading strategies (34.8%).

The respondents preferred accessible language and practical support. Simple sentences were selected by 50.6%, key vocabulary with Thai meanings by 38.2%, post-reading exercises by 28.1%, repeated vocabulary by 27.0%, comprehension questions by 27.0%, and illustrations by 21.3%. Topic interests included Buddhist teachings, monastic life, meditation, Buddhist culture and traditions, communication with foreign visitors, and Buddhist education. These findings became direct design requirements rather than remaining descriptive background information.

D1 converted the R1 evidence into a master blueprint and the first draft. The materials were designed around an accessible A2 core with selected progression toward B1, while retaining essential Buddhist and academic vocabulary supported by Thai meanings, contextual examples, structured exercises, and visual support. The eight units progressed from familiar and concrete Buddhist contexts toward communicative and simplified academic reading. Each unit contained learning objectives, vocabulary preparation, a Buddhist-context reading passage, comprehension and vocabulary exercises, application activities, and an answer key.

The result of R1–D1 was a coherent first draft in which learner needs, CEFR-informed objectives, Buddhist content, reading skills, vocabulary, activities, and assessment components were linked through the master blueprint. This draft was

an initial product and remained subject to expert evaluation and subsequent learner try-out.

5.1.2 Objective 2 and Cycle R2–D2: Expert Evaluation and Revision 1

Objective 2: “To revise and refine the developed reading materials based on evaluation results for instructional use in Buddhist professional contexts.”

R2 obtained quantitative ratings and written recommendations from three materials-evaluation experts, who were distinct from the three IOC-validation experts who examined the Needs Analysis Questionnaire. The 21-item evaluation covered Content Appropriateness, Language and Readability, Learning Activities, Organization and Design, and Overall Evaluation. The first draft received a high overall rating ($M = 4.27$, $S.D. = 0.28$), and Language and Readability received the highest dimensional mean ($M = 4.73$, $S.D. = 0.33$). Item means ranged from 3.67 to 5.00.

The experts regarded the Buddhist topics, general language level, and CEFR orientation as broadly appropriate while identifying areas for improvement. Their written feedback addressed linguistic accuracy, terminology, vocabulary instructions, passage clarity, matching tasks, activity organization, answer keys, illustrations, and supporting references. Suggestions concerning pronunciation guidance, grammar support, and expanded multimedia features were recorded but were not treated as outcomes already achieved by the reading-focused product.

D2 analyzed the evidence and produced Revision 1. Selected passages were revised for clarity and naturalness; plural and grammatical forms were corrected; vocabulary instructions and terminology were standardized; matching items were rearranged to reduce predictable answer order; answer keys were rechecked; and supporting references were expanded. Recommendations were adopted, modified, or deferred according to their relevance to the objectives, target learners, feasibility, and the scope of the study. Revision 1 was then prepared for the learner try-out.

5.1.3 Objective 3 and Cycle R3–D3: Learner Try-out, Revision 2, and Final Product

Objective 3: “To evaluate learner reading comprehension, perceived readability, and attitudes toward the developed reading materials.”

R3 implemented Revision 1 with 12 learner participants. Each participant completed two assigned units, producing 24 completed unit-level exercise sets, with each of the eight units completed three times. Eleven participants returned the Learner Evaluation Questionnaire, representing a response rate of 91.67%. The evaluation therefore combined performance evidence with perceptions and open-ended feedback.

Across the 24 completed unit sets, the learners obtained 673 of 720 possible points. The mean was 28.04 out of 30 (S.D. = 2.91), equivalent to 93.47%, and 12 completed sets received full scores. Unit 5, “A Visit to a Buddhist Temple,” obtained the highest mean ($M = 30.00$), whereas Unit 2, “The Threefold Training,” obtained the lowest mean ($M = 25.00$). By component, true-or-false and word-choice exercises received full means of 5.00, while sequencing produced the lowest component mean ($M = 4.04$, S.D. = 1.78). These results described performance on the embedded unit exercises and did not establish learning gains.

The questionnaire showed high learner perceptions across the evaluated dimensions. Self-assessed reading comprehension was high overall ($M = 4.23$, S.D. = 1.03). Perceived readability was high ($M = 3.91$, S.D. = 1.12), with vocabulary appropriateness and comprehensibility receiving the highest item mean in that dimension ($M = 4.09$). Learner attitudes were also high overall ($M = 3.86$, S.D. = 1.00), and willingness to recommend the materials received the highest attitude mean ($M = 4.00$). The findings remained context-bound because 10 of the 11 questionnaire respondents reported proficiency at B1 or above and each participant used only two units.

D3 combined the exercise records, questionnaire findings, open-ended responses, previously documented expert feedback, and the researchers’ consistency audit. Revision 2 clarified sequencing instructions, vocabulary distinctions, and selected activity directions; corrected and completed answer keys; standardized response formats and instructional headings; added a consolidated glossary; replaced image placeholders with completed illustrations; and refined page organization. The final product comprised 103 A4 pages, including eight instructional units, a glossary, bibliography, learning activities, answer keys, and completed visual elements.

5.1.4 Knowledge Derived from the Three-Cycle R&D Process

The knowledge derived from the three-cycle R&D process, as presented in Section 4.4, comprised product, process, and decision knowledge. Product knowledge concerned the characteristics and components of accessible A2–B1 Buddhist context-based reading materials. Process knowledge concerned the connection among needs analysis, design requirements, expert evaluation, learner try-out, researcher auditing, and successive revision. Decision knowledge concerned the selective and traceable judgments through which recommendations were adopted, modified, retained, or deferred. This synthesis was grounded in the evidence and development decisions of the present study and was not treated as a separately validated instructional model.

5.2 Discussion of Findings

The findings are discussed in relation to needs-based ESP design, contextualized CEFR alignment, instructional-material development, and previous Buddhist-context reading studies. The discussion uses the learning-centered view that ESP materials should respond to target and learning needs,²⁰⁸ the position that CEFR alignment must be justified within a specific educational context,²⁰⁹ and the view of ADDIE as a product-development approach that supports systematic analysis, design, development, implementation, evaluation, and revision.²¹⁰ In the present research, R&D remained the research design, while ADDIE served only as a supporting guide for instructional-design decisions within D1.

²⁰⁸ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 53–64.

²⁰⁹ British Council, UKALTA, EALTA and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA and ALTE, 2022), pp. 11–14.

²¹⁰ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 2–4.

5.2.1 Needs-Based, CEFR-Informed, and Buddhist Context-Based Design

The central finding from R1–D1 was that the first draft emerged from the interaction of learner needs, CEFR-informed objectives, and Buddhist ESP contexts. The needs analysis was not used merely to describe the respondents. It determined the topics, language support, reading skills, activities, and sequence of the eight units. This is consistent with the ESP principle that target needs and learning needs should guide decisions about what learners need to do with English and how they can develop the required abilities.²¹¹ This relationship also reflects Dudley-Evans and St John’s position that ESP materials should be derived from learners’ target situations, professional purposes, and required communicative activities.²¹²

The importance of contextual needs is reinforced by Sarobol and Sudaruk, who found that students and stakeholders at a Buddhist university required English materials connected with Buddhist content and specific communicative purposes.²¹³ Although their study emphasized listening and speaking, the present findings extend this orientation to reading by linking academic-text difficulties, Buddhist topic interests, and English-use purposes with passage selection, vocabulary support, comprehension activities, and simplified academic reading.

The respondents’ preferences also affected the form of the product. Simple sentences, Thai meanings for key vocabulary, repeated vocabulary, comprehension questions, post-reading exercises, and illustrations became identifiable components of the first draft. This relationship reflects the principle that language-learning materials should be relevant, useful, engaging, and connected to learners’ purposes and likely

²¹¹ Tom Hutchinson and Alan Waters, **English for Specific Purposes: A Learning-Centred Approach**, (Cambridge: Cambridge University Press, 1987), pp. 53–64.

²¹² Tony Dudley-Evans and Maggie Jo St John, **Developments in English for Specific Purposes: A Multi-disciplinary Approach**, (Cambridge: Cambridge University Press, 1998), pp. 34–52.

²¹³ Nopporn Sarobol and Phrakhrupalad Wisithakul Sudaruk, “Needs Analysis for Developing an English Textbook for Doctoral Students in the Context of Buddhism: Enhancing Listening and Speaking Skills,” **LEARN Journal: Language Education and Acquisition Research Network** Vol. 18 No. 2 (July–December 2025), pp. 119–124.

uses of the language.²¹⁴ The blueprint made these relationships traceable by connecting each need with a design response. Converting these preferences into objectives, content, sequencing, format, and assessment also follows Nation and Macalister's curriculum-design relationship among needs, principles, content, and evaluation.²¹⁵ Illustrations were retained as instructional support rather than decoration; Mayer's account of multimedia learning supports the selective use of visuals that directly clarify accompanying verbal information and intended meaning.²¹⁶

A comparable needs-to-design connection appears in Inkrungkao and colleagues' development of English content-based reading materials for MCU students, where findings concerning content, activities, and physical features informed material construction.²¹⁷ The present study added explicit CEFR-informed objectives and a controlled A2–B1 progression, thereby providing a more visible relationship among proficiency reference points, topic development, reading skills, and task demands.

The adoption of an accessible A2 core with selected progression toward B1 was appropriate for a mixed-proficiency population. At A2, readers are expected to understand short, simple texts on familiar matters; at B1, they are expected to understand straightforward factual texts related to their fields and interests.²¹⁸ The movement from familiar monastic and cultural topics toward communication and simplified academic reading reflected this progression without requiring every specialized word to belong to a general-language A2 list.

²¹⁴ Brian Tomlinson (ed.), **Materials Development in Language Teaching**, 2nd ed., (Cambridge: Cambridge University Press, 2011), pp. 11–12.

²¹⁵ I. S. P. Nation and John Macalister, **Language Curriculum Design**, (New York and London: Routledge, 2010), pp. 88–106.

²¹⁶ Richard E. Mayer, **Multimedia Learning**, 2nd ed., (Cambridge: Cambridge University Press, 2009), pp. 223–235.

²¹⁷ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, “Development of English Content-Based Reading Materials in a Buddhist Context,” **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), pp. 175–176.

²¹⁸ Council of Europe, **Common European Framework of Reference for Languages: Learning, Teaching, Assessment – Companion Volume**, (Strasbourg: Council of Europe Publishing, 2020), pp. 54–57.

This distinction is important because CEFR alignment is not a mechanical classification. The CEFR Alignment Handbook emphasizes that a CEFR claim requires contextual interpretation and continuing evidence rather than reliance on a label alone.²¹⁹ In this study, alignment was supported by relationships among needs, objectives, passage complexity, vocabulary support, tasks, and evaluation evidence. The exercise scores were therefore not interpreted as proof that learners had attained a particular CEFR level.

Retaining essential Buddhist and academic vocabulary strengthened ESP relevance but also introduced a potential source of difficulty. Buddhist English includes specialized terminology, translated *Pāli* concepts, and familiar English words used with context-dependent meanings.²²⁰ Removing these terms merely to simplify the texts would have reduced disciplinary authenticity. The materials instead used Thai meanings, examples, illustrations, repetition, and contextualized exercises to make the terms accessible.

The Buddhist contexts also allowed learners to draw on cultural and disciplinary background knowledge. Suphipat and Chinokul observed that Buddhist student monks benefited from reading materials whose content connected English learning with their existing knowledge and religious purposes.²²¹ The present study produced a similar relationship between familiar content and accessible reading, although the performance evidence cannot isolate background knowledge as the sole cause of the high scores.

The design also responded directly to reported difficulties with academic text structure and reading strategies. Nuttall's discussion of purposeful reading, skimming, and scanning supports the inclusion of activities for locating main ideas,

²¹⁹ British Council, UKALTA, EALTA and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA and ALTE, 2022), pp. 11–13.

²²⁰ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 3–10.

²²¹ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 2–4.

identifying specific information, recognizing sequence, and interpreting textual organization.²²² The Reading-to-Communication and selected post-reading tasks then required learners to use information from the passages for meaningful outcomes; this is consistent with Nunan's task-based view of activities organized around purposeful language use.²²³

Overall, R1–D1 demonstrates that needs, CEFR guidance, and Buddhist content should function together. Needs analysis establishes relevance; CEFR descriptors provide reference points for progression; and Buddhist content supplies the authentic disciplinary purposes of the ESP materials. The result was not a generic A2 textbook with Buddhist vocabulary added afterward, but a context-responsive reading product whose content and support features were derived from evidence.

5.2.2 Expert Evaluation and Evidence-Based Revision

The R2–D2 findings show that expert evaluation functioned as formative evidence rather than a final judgment of success. The high overall rating confirmed that the first draft had a sound foundation, while item-level variation and written recommendations identified specific weaknesses that required attention. This use of evaluation is consistent with formative revision in instructional development, where information is collected to improve a product before wider implementation.²²⁴ Morrison et al. similarly treat formative evaluation as a means of identifying instructional weaknesses and revising materials before wider implementation.²²⁵

The written recommendations were especially valuable because they translated broad judgments into actionable changes. Linguistic accuracy, terminology, vocabulary instructions, matching activities, passage clarity, answer keys, organization, and supporting references could be checked and revised directly. The

²²² Christine Nuttall, **Teaching Reading Skills in a Foreign Language**, 3rd ed., (Oxford: Macmillan Education, 2005), pp. 44–50.

²²³ David Nunan, **Task-Based Language Teaching**, (Cambridge: Cambridge University Press, 2004), pp. 35–71.

²²⁴ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 122–125.

²²⁵ Gary R. Morrison, Steven M. Ross, Howard K. Kalman, and Jerrold E. Kemp, **Designing Effective Instruction**, 7th ed., (Hoboken, NJ: John Wiley & Sons, 2013), pp. 328–344.

lower-rated issues involving learner engagement and practicality also encouraged the researchers to consider how the materials would function during actual use rather than relying only on the overall mean.

Revision was selective rather than mechanical. Immediate corrections were made when a recommendation corresponded with the research objectives and an identifiable weakness. Suggestions requiring extensive grammar instruction, pronunciation systems, audio production, or additional multimedia development were recorded for possible future work. Sukwitthayakul similarly used expert perspectives as a basis for selective refinement rather than assuming that every recommendation should be implemented in identical form.²²⁶

The separation between expert evaluation and learner try-out strengthened the development process. Suphipat and Chinokul also used expert validation, revision, and learner pilot testing in developing Buddhist-context reading materials.²²⁷ In the present study, expert evaluation preceded Revision 1, ensuring that identifiable linguistic, conceptual, and organizational problems were addressed before learners used the materials.

Learner evidence later complemented the expert evidence because actual users could reveal difficulties that were not fully visible in expert ratings. Confusion between education and academic, unanswered sequencing responses, and differences in expectations for task difficulty illustrated how materials may function differently in use than in professional review. Related material-development research has likewise combined expert perspectives with user evaluation to obtain evidence from more than one group.²²⁸

²²⁶ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 265–268.

²²⁷ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), p. 12.

²²⁸ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 118–120.

The distinction among the three expert groups must remain clear. The IOC-validation experts examined the congruence of the Needs Analysis Questionnaire before R1. The materials-evaluation experts examined the first draft in R2. The learner participants then used Revision 1 in R3. Keeping these roles separate prevents the IOC results from being misinterpreted as an evaluation of the instructional product and prevents the expert rating of the first draft from being confused with learner evidence.

R2–D2 therefore contributed more than a favorable evaluation score. It established a traceable relationship between evidence and revision decisions. Revision 1 retained positively evaluated features, corrected confirmed weaknesses, and documented suggestions that were outside the immediate scope. This prepared a more consistent and usable version for the learner try-out while preserving the needs-based A2–B1 design established in R1–D1.

5.2.3 Learner Try-out Outcomes and Finalization

The R3–D3 findings combined embedded exercise performance, self-assessed reading comprehension, perceived readability, attitudes, and open-ended feedback. Performance evidence and perception data served different purposes: exercise scores indicated what learners accomplished while using the assigned units, whereas questionnaire ratings indicated how they perceived comprehension, readability, relevance, and usability. Considering both forms of evidence provided a broader formative evaluation of the product.²²⁹

5.2.3.1 Reading Comprehension Performance

The overall exercise mean of 28.04 out of 30, equivalent to 93.47%, indicates that the participating learners generally understood the selected passages and completed the vocabulary and comprehension tasks successfully. The result was consistent with the accessible language, vocabulary preparation, familiar Buddhist contexts, structured unit organization, and objectively scored practice built into the materials. However, the scores combined several task types and should not be treated as a separate standardized measure of general reading proficiency.

²²⁹ Robert Maribe Branch, **Instructional Design: The ADDIE Approach**, (New York, NY: Springer, 2009), pp. 151–161.

Reading comprehension depends on interactions among linguistic knowledge, vocabulary, background knowledge, text organization, reading purposes, and task demands.²³⁰ The familiar Buddhist topics may have supported comprehension by allowing participants to connect English expressions with concepts already known through Buddhist study and experience. This interpretation is consistent with findings that Buddhist student monks valued materials that connected new English knowledge with prior religious knowledge.²³¹

The unit and component results also reveal why the overall mean should not be considered alone. Unit 2 had the lowest mean, sequencing showed the greatest variation, and some responses were unanswered. These patterns may reflect passage difficulty, task wording, response formats, or individual attention. They therefore supported clarification and standardization during Revision 2 rather than a conclusion that the entire language level was unsuitable.

Perfect means for true-or-false and word-choice activities suggest high accessibility, but they may also indicate a ceiling effect for the pilot group. Ten of the 11 questionnaire respondents reported proficiency at B1 or above, while the materials maintained an accessible A2 core. Increasing the difficulty of all core exercises would have risked reducing accessibility for A2 learners. Optional extension activities are a more appropriate response than uniformly raising the level.

The high scores cannot demonstrate improvement because the study did not employ pretests, posttests, a comparison group, or a standardized reading assessment. Each learner completed only two units, and each unit mean was based on three completed sets. Moreover, completion of CEFR-informed exercises is not equivalent to CEFR certification; alignment requires evidence connecting descriptors, objectives,

²³⁰ William Grabe, **Reading in a Second Language: Moving from Theory to Practice**, (New York: Cambridge University Press, 2009), pp. 198–219.

²³¹ Phatchareporn Suphipat and Sumalee Chinokul, “The Development of the English Content-Based Reading Materials for Buddhist Student Monks,” **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 14–15.

texts, tasks, and context.²³² The findings therefore provide preliminary performance and revision evidence rather than causal evidence of effectiveness.

5.2.3.2 Perceived Readability

Perceived readability was high overall ($M = 3.91$, $S.D. = 1.12$), indicating that the participating learners generally regarded the language, vocabulary, instructions, and organization as manageable. The term perceived readability is essential. The study did not calculate readability through sentence length, word length, lexical-frequency indices, or a grade-level formula. The questionnaire captured learner judgments after use of the materials.

This method differs from Suphipat and Chinokul's use of Flesch Reading Ease as one criterion for passage selection.²³³ Formula-based measures can provide useful textual information, but they do not account fully for Buddhist terminology, cultural background knowledge, instructional support, or the demands of particular activities. The present findings are therefore evidence of perceived accessibility, not an objective readability classification.

Vocabulary appropriateness and comprehensibility received the highest mean within the dimension. This supports the use of Thai meanings, contextual examples, repetition, illustrations, and structured vocabulary practice. Comparable Buddhist-context research also reported favorable learner responses to vocabulary and expressions connected with the religious field.²³⁴ At the same time, confusion over education and academic demonstrates that a strong overall rating can coexist with localized lexical problems.

Language-level appropriateness received the lowest mean within the dimension, although it remained high. The result is understandable in a group ranging from A2 to B2 or above. Material evaluation with heterogeneous users often produces

²³² British Council, UKALTA, EALTA and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA and ALTE, 2022), pp. 11–13.

²³³ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), p. 9.

²³⁴ *Ibid.*, pp. 13–14.

different judgments of suitability because the same text may be challenging for one learner and insufficiently demanding for another.²³⁵ This variation supports differentiated support and optional extension tasks rather than one uniform change in difficulty.

The convergence of high perceived readability and high exercise performance suggests that the materials were generally usable for the pilot group, but the outcomes are not identical. Perception ratings describe learner judgments, while exercise scores describe responses to selected tasks. The comparatively large standard deviation and a potentially inconsistent response pattern also require caution. The CEFR should remain a consultative resource whose application is monitored and adapted to the local group.²³⁶

5.2.3.3 Learner Attitudes

Learner attitudes were high overall ($M = 3.86$, $S.D. = 1.00$). Satisfaction and willingness to recommend the materials indicate that participants generally recognized the relevance and practical value of the Buddhist-context content. This is consistent with Inkrungkao and colleagues' finding that MCU learners responded positively to English content-based reading materials designed for their educational context.²³⁷

The Buddhist topics were not merely decorative. They supplied recognizable purposes for reading, specialized vocabulary, and situations in which English might be used for study, temple communication, and interaction with international visitors.

²³⁵ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 273–274.

²³⁶ British Council, UKALTA, EALTA and ALTE, **Aligning Language Education with the CEFR: A Handbook**, (British Council, UKALTA, EALTA and ALTE, 2022), p. 11.

²³⁷ Yasumin Inkrungkao, Boonmee Pansa, and Weerawong Phengkhomhug, "Development of English Content-Based Reading Materials in a Buddhist Context," **Journal of Local Management and Innovation** Vol. 4 No. 5 (October 2022), pp. 175–176.

Suphipat and Chinokul likewise found that meaningful content related to monastic life and religious purposes supported positive learner responses.²³⁸

The lowest attitude mean concerned the perceived contribution of the activities to reading-skill development. Although still high, this result suggests that some learners may have viewed the activities primarily as comprehension checks rather than explicit strategy instruction. Future use should therefore make the purpose of each task more visible, including identifying main ideas, locating details, sequencing information, interpreting vocabulary in context, and applying information from a text.

Open-ended responses revealed different expectations. Some learners valued accessibility, vocabulary support, illustrations, and activity variety, while others requested greater challenge, writing, discussion, collaboration, or critical-thinking tasks. Sukwitthayakul similarly found that users' different backgrounds influenced their evaluation of material features.²³⁹ These differences support optional extension activities while retaining an accessible core.

Taken together, the performance, perceived-readability, and attitude findings supported selective refinement rather than complete redesign. D3 retained the needs-based Buddhist orientation, general language level, vocabulary-support system, and principal activity structure while clarifying localized problems, completing visual elements, standardizing instructional features, and preparing the final product.

5.2.4 The Three-Cycle R&D Process and Knowledge Contribution

The knowledge identified in Section 4.4 is significant because it connects the completed instructional product with the evidence and decisions that shaped its development. Rather than treating the final book as the sole outcome, the study indicates that the development process and the criteria used to make revision decisions

²³⁸ Phatchareporn Suphipat and Sumalee Chinokul, "The Development of the English Content-Based Reading Materials for Buddhist Student Monks," **Suranaree Journal of Social Science** Vol. 13 No. 1 (January–June 2019), pp. 14–15.

²³⁹ Chirawan Sukwitthayakul, "A Development of Corpus-Based Reading Material for the English Pali Canon through a Multi-Perspective Approach," **Doctoral Dissertation in English Language Studies**, (Faculty of Liberal Arts, Thammasat University, 2022), pp. 273–274.

also constitute important research contributions. The resulting contribution can therefore be considered at the product, process, and decision levels.

At the product level, the contribution lies not only in the individual components of the materials but also in their internal alignment. Relevant Buddhist content, an accessible A2 core with controlled progression toward B1, bilingual vocabulary and visual support, structured reading passages, varied comprehension and vocabulary exercises, communication activities, practical application tasks, a consolidated glossary, and standardized answer keys functioned as an integrated instructional system. The findings suggest that the usability of the materials resulted from the relationship among these components rather than from any single feature in isolation. A passage could be linguistically accessible but still difficult to use if its instructions, vocabulary support, activities, illustrations, or answer keys were unclear or inconsistent.

At the process level, the contribution lies in connecting needs evidence, expert judgment, learner evidence, and systematic researcher auditing across successive development decisions. Each source of evidence served a different function. The needs analysis established the learners, purposes, difficulties, content interests, and preferred forms of instructional support. Expert evaluation examined the instructional quality and appropriateness of the first draft. Learner performance and perception data supplied evidence concerning actual use, task difficulty, accessibility, and attitudes. The researcher audit subsequently examined the consistency of the complete instructional product. The combination of these sources reduced dependence on any single score, comment, or evaluator and supported a more balanced basis for revision.

The process contribution also clarifies the relationship between R&D and ADDIE in the present study. R&D organized the generation and use of evidence through the three linked research-and-development cycles, whereas ADDIE supported instructional-design decisions within those cycles, particularly the movement from analysis to design, development, implementation, evaluation, and formative revision. ADDIE did not replace R&D as the research methodology and was not treated as an additional mixed-method research design. This distinction maintains methodological

consistency with Chapter 3 while recognizing the practical contribution of systematic instructional design to the development of the materials.

At the decision level, the study demonstrates that revision does not require the automatic acceptance of every recommendation or the reconstruction of the complete instructional product whenever a comparatively low score or isolated comment appears. Instead, revision should be selective, traceable, proportionate to the available evidence, and consistent with the intended learners and research scope. Verified language, instruction, answer-key, vocabulary, visual, and layout problems were corrected. Features supported by the evidence were retained, while suggestions involving audio materials, QR-linked resources, interactive exercises, and expanded digital applications were deferred because they required separate development and evaluation.

This selective approach was particularly important because most questionnaire respondents reported proficiency at B1 or above, whereas the materials were designed around an accessible A2 core with progression toward B1. Increasing the difficulty of the complete book in response to the proficiency profile of the pilot group could have reduced its accessibility for learners at the lower end of the intended range. The researchers therefore retained the accessible instructional core while refining localized weaknesses, strengthening vocabulary and visual support, and improving clarity and consistency across the eight units.

Taken together, the product, process, and decision contributions indicate that the central value of the three-cycle R&D process lies in coherence among evidence, context, design, evaluation, and revision. Learner needs established the purposes and conditions of the materials; CEFR provided proficiency reference points; ESP connected reading with meaningful Buddhist educational and communicative purposes; expert and learner evidence identified strengths and areas for improvement; and documented revision decisions linked the evidence with the final product.

The process should nevertheless be described as a synthesis derived from the present study rather than as an independently validated model. Its coherence is supported internally by the documented relationship among evidence, actions, revisions, and outputs, but its transferability has not been tested with another

population, institution, ESP domain, or materials-development project. Any future application should therefore begin with a new needs and context analysis and should be evaluated within the conditions of the intended learners and instructional setting.

5.2.5 Limitations of the Study

The findings must be interpreted within the boundaries of the research design and available evidence. First, the needs analysis relied partly on self-reported proficiency and preferences from 89 respondents. These data were appropriate for design decisions but did not constitute an independent proficiency assessment.

Second, the first draft was evaluated by three materials-evaluation experts. Their ratings and written feedback supplied focused formative evidence, but the small number limits the range of professional perspectives. The expert results should not be generalized as universal agreement about the materials.

Third, the learner try-out involved 12 participants, 24 completed unit-level exercise sets, and 11 completed questionnaires. Each participant completed only two of the eight units, and each unit mean was based on three completed sets. The 24 sets therefore must not be interpreted as 24 independent learners.

Fourth, the study did not use a pretest–posttest design, a comparison group, a standardized reading test, or a delayed measure. The exercise scores indicate immediate performance while using the materials and do not establish learning gains, comparative effectiveness, retention, or improvement in general reading proficiency.

Fifth, perceived readability was measured through learner ratings rather than an independent linguistic or formula-based analysis. The anonymous questionnaire also prevented individual exercise scores from being linked with proficiency and perception data. One response pattern may have reflected misunderstanding of the scale, but the response was retained because this could not be confirmed.

Sixth, most questionnaire respondents reported proficiency at B1 or above, although the materials were designed around an accessible A2 core. The favorable results may therefore not represent the experiences of a broader A2 population. In

addition, the questionnaire evaluated Revision 1; the completed final version after Revision 2 was not re-evaluated by the same learners.

Finally, the study did not separately validate the CEFR alignment claim or the synthesized three-cycle development process through an independent panel. The results support contextualized alignment and internal process coherence, but they do not certify every passage at a fixed CEFR level or establish the transferability of the process to other contexts.

5.3 Recommendations

The recommendations are divided into two groups in accordance with the research findings and the reviewer's guidance: recommendations for applying the research findings and recommendations for further research.

5.3.1 Recommendations for Applying the Research Findings

1. The materials should primarily be used with ESP learners whose English proficiency is approximately within the A2–B1 range. Instructors should consider learners' proficiency, Buddhist background knowledge, and purposes for using English before selecting the amount of guidance and extension required.

2. The eight units may be used as a short course, as supplementary reading materials, or as guided self-study. When the complete book is used, the established sequence should generally be maintained because the topics and reading demands progress from familiar contexts toward communication and simplified academic reading.

3. Instructors should make the targeted reading purpose of each activity explicit. Guidance should identify whether learners are locating main ideas, finding supporting details, sequencing information, interpreting vocabulary in context, or applying information from a passage.

4. Vocabulary support should be used actively through Thai meanings, contextualized examples, illustrations, recycling, and the consolidated glossary.

Potentially overlapping Buddhist or academic terms should be clarified through additional examples rather than memorized as isolated translations.

5. Instruction should be differentiated. A2 learners may require guided reading, repeated practice, and explanation of task formats, whereas B1-or-higher learners may be given optional summaries, open-ended questions, discussions, short writing, or application tasks without increasing the difficulty of the core materials for everyone.

6. Particular attention should be given to sequencing and other information-organization activities. Instructors should explain the response format, review unanswered items, and distinguish comprehension difficulty from misunderstanding of instructions.

7. The materials should initially be implemented on a monitored basis. Instructors should record recurring vocabulary, instruction, layout, answer-key, and activity problems and collect feedback from learners representing different proficiency levels before wider institutional adoption.

8. Future editions may include a teacher's guide, selective pronunciation or audio support for frequently used Buddhist terminology, QR-linked supplementary resources, and accessible digital exercises. These features should be developed and quality-checked separately and should not be described as outcomes already evaluated in the present study.

5.3.2 Recommendations for Further Research

1. Future research should evaluate the completed final version with a larger and more representative sample drawn from different MCU campuses, academic programs, monastic and lay groups, and proficiency levels. Participants should have sufficient opportunity to use all eight units.

2. An experimental or quasi-experimental study should use appropriate pretests, posttests, a comparison group, and validated reading assessments to examine learning gains. A delayed posttest would provide evidence concerning retention beyond immediate exercise completion.

3. The CEFR alignment of the objectives, passages, vocabulary, activities, and assessments should be examined independently by CEFR specialists. Learner performance at established proficiency levels should be included without treating embedded exercise scores as CEFR certification.

4. Readability should be investigated through multiple forms of evidence, including learner perceptions, lexical and syntactic analysis, passage length, lexical coverage, formula-based measures where appropriate, background knowledge, and actual task performance.

5. Future studies should compare A2, B1, and higher-proficiency learners using an independent proficiency measure. Anonymous participant codes should link performance, proficiency, perceived readability, and attitude data while protecting confidentiality.

6. Qualitative inquiry should examine how learners use vocabulary support, illustrations, instructions, and different exercise types. Observation, interviews, focus groups, think-aloud protocols, and learner journals may explain difficulties that scores and rating scales cannot identify.

7. Digital and audio adaptations should be evaluated in a separate study. Research may compare print and digital formats and examine usability, accessibility, motivation, guided pronunciation support, immediate feedback, and reading performance.

8. The synthesized R1–D1, R2–D2, and R3–D3 process should be reviewed independently and applied in other Buddhist educational or ESP contexts. Such research would determine which features are specific to the present project and which may be adapted to other materials-development settings.

In conclusion, the study produced a context-responsive instructional product and documented how successive evidence informed its development. The findings support continued use and careful further evaluation of the materials while requiring restraint in claims concerning effectiveness, CEFR certification, readability, and transferability. Wider implementation should therefore proceed together with monitoring, revision, and further research.

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Appendix

Appendix A: The Item-Objective Congruence (IOC) Form



มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย

แบบประเมินดัชนีความสอดคล้องของเครื่องมือวิจัย (IOC)

การวิจัยเรื่อง:	การพัฒนาเอกสารการอ่านเชิงบริบทพุทธศาสนาที่สอดคล้องกับ CEFR สำหรับการสอน ภาษาอังกฤษเฉพาะทางที่ มจร Development of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at Mahachulalongkornrajavidyalaya University
ผู้วิจัย:	พระมหาอาศิร วชิรนาโค พระเรืองวิทย์ อุดคธมโม, ดร.
วัตถุประสงค์:	แบบสอบถามฉบับนี้มีวัตถุประสงค์เพื่อสำรวจความต้องการ ความคาดหวัง และบริบทการใช้ภาษาอังกฤษด้านการอ่านของนิสิตมหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย ทั้งนิสิตบรรพชิตและคฤหัสถ์ เพื่อนำข้อมูลที่ได้ไปใช้เป็นฐานในการออกแบบและพัฒนา ชุดหนังสืออ่านภาษาอังกฤษเชิงเนื้อหาพุทธ (Buddhist Context-Based Reading Materials) ที่สอดคล้องกับกรอบอ้างอิงความสามารถทางภาษา CEFR สำหรับผู้เรียนภาษาอังกฤษเฉพาะทาง (ESP) ของมหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย
คำชี้แจง:	เชิญท่านพิจารณาข้อคำถาม สำหรับการวิจัยแต่ละข้อว่า มีความเหมาะสม ไม่ขัดจริยธรรม และสอดคล้องกับ นิยามเชิงปฏิบัติการ วัตถุประสงค์ ของตัวแปรที่ศึกษาหรือไม่ ถ้าพิจารณาแล้วเห็นว่า สอดคล้องให้เขียน ✓ ที่ช่อง +1 , ไม่แน่ใจ ที่ช่อง 0 , ไม่สอดคล้อง ที่ช่อง -1 และกรุณาให้คำแนะนำ



ข้อ	คำถามสำหรับการวิจัย	ความคิดเห็นของผู้ทรงคุณวุฒิ			
		+1	0	-1	ข้อเสนอแนะ
ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม					
1.	สถานะของผู้ตอบแบบสอบถาม (สามารถเลือกได้มากกว่า 1 ข้อ)				
	• พระภิกษุ (Monk)				
	• สามเณร (Novice Monk)				
	• แม่ชี / นักบวช (Nun / Religious Practitioner)				
	• นิสิต / นักศึกษา (Student)				
	• วิทยาสนาจารย์ / ผู้สอนสมาธิ (Meditation Instructor)				
	• ครูสอนพระพุทธศาสนา / ธรรมาจารย์ (Dhamma Teacher)				
	• บุคลากรทางการศึกษา (Educational Personnel)				
	• อื่น ๆ (โปรดระบุ) _____				
2.	ท่านใช้ภาษาอังกฤษบ่อยเพียงใด				
	• แทบไม่ได้ใช้เลย				
	• ใช้เป็นครั้งคราว				
	• ใช้ค่อนข้างบ่อย				
	• ใช้เป็นประจำ				
3.	วัตถุประสงค์หลักในการใช้ภาษาอังกฤษของท่าน (เลือกได้มากกว่า 1 ข้อ)				
	• การเรียน / การศึกษา				
	• การสอนธรรมะ				
	• การสอนหรืออบรมวิปัสสนา				
	• การสื่อสารกับชาวต่างชาติ				
	• การอ่านเอกสารหรือบทความทางพระพุทธศาสนา				
	• อื่น ๆ (โปรดระบุ) _____				
ส่วนที่ 2 ความสามารถด้านการอ่านภาษาอังกฤษ					
4.	ท่านประเมินความสามารถด้านการอ่านภาษาอังกฤษของตนเองอยู่ในระดับใด				
	• อ่านคำศัพท์และประโยคสั้น ๆ ได้ (ระดับ A1)				
	• อ่านบทอ่านสั้น ๆ ที่ใช้ได้ง่ายได้ (ระดับ A2)				
	• อ่านบทความทั่วไปได้พอสมควร (ระดับ B1 ขึ้นไป)				
	• ไม่แน่ใจ				
5.	เมื่ออ่านบทความภาษาอังกฤษ ท่านมักประสบปัญหาใดบ้าง (เลือกได้มากกว่า 1 ข้อ)				
	• คำศัพท์ยากหรือมากเกินไป				

ข้อ	คำถามสำหรับการวิจัย	ความคิดเห็นของผู้ทรงคุณวุฒิ			
		+1	0	-1	ข้อเสนอแนะ
	• ประโยคยาวและซับซ้อน				
	• อ่านแล้วจับใจความไม่ได้				
	• ต้องแปลทีละคำ				
	• เนื้อหาไม่คุ้นเคย				
	• อื่น ๆ (โปรดระบุ) _____				
ส่วนที่ 3 ความต้องการด้านเนื้อหา (Content Needs)					
6.	ท่านสนใจอ่านบทความภาษาอังกฤษเกี่ยวกับหัวข้อใดมากที่สุด (เลือกได้มากกว่า 1 ข้อ)				
	• ชีวิตประจำวันของพระหรือนักบวช				
	• การปฏิบัติวิปัสสนา				
	• หลักธรรมพื้นฐานทางพุทธศาสนา				
	• การแสดงธรรม / การสอนธรรม				
	• วัฒนธรรมและประเพณีพุทธศาสนา				
	• การสื่อสารกับชาวต่างชาติในวัด				
	• อื่น ๆ (โปรดระบุ) _____				
7.	รูปแบบบทอ่านแบบใดที่ช่วยให้ท่านเข้าใจได้ง่ายที่สุด				
	• เรื่องเล่าสั้น ๆ				
	• บทความสั้นพร้อมภาพประกอบ				
	• บทสนทนา (Dialogue)				
	• เนื้อหาอธิบายทีละขั้น				
	• ผสมหลายรูปแบบ				
8.	ปัญหาในการอ่าน (Reading Difficulties)(เลือกได้มากกว่า 1 ข้อ)				
	• ไม่เข้าใจโครงสร้างข้อความเชิงวิชาการ				
	• ไม่คุ้นเคยกับรูปแบบบทความวิชาการ				
	• ขาดกลยุทธ์การอ่าน (เช่น skimming / scanning)				
	• อื่น ๆ (โปรดระบุ) _____				
ส่วนที่ 4 รูปแบบหนังสือและแบบฝึกหัด					
9.	ท่านต้องการให้หนังสืออ่านภาษาอังกฤษมีลักษณะอย่างไร (เลือกได้มากกว่า 1 ข้อ)				
	• ประโยคสั้น อ่านง่าย				
	• ใช้คำศัพท์ซ้ำ ๆ เพื่อช่วยจำ				
	• มีคำศัพท์สำคัญพร้อมคำแปล				
	• มีคำถามตรวจสอบความเข้าใจ				

ข้อ	คำถามสำหรับการวิจัย	ความคิดเห็นของผู้ทรงคุณวุฒิ			
		+1	0	-1	ข้อเสนอแนะ
	• มีแบบฝึกหัดหลังบทอ่าน				
	• มีภาพประกอบ				
	• อื่น ๆ (โปรดระบุ) _____				
10.	แบบฝึกหัดประเภทใดที่เหมาะสมกับท่านมากที่สุด (เลือกได้มากกว่า 1 ข้อ)				
	• จับคู่คำศัพท์				
	• เติมคำในช่องว่าง				
	• เลือกคำตอบ (Multiple Choice)				
	• ตอบคำถามสั้น ๆ				
	• ไม่ต้องการแบบฝึกหัด				
	• อื่น ๆ (โปรดระบุ) _____				
11.	ท่านต้องการใช้ภาษาอังกฤษในบริบทใดมากที่สุด(เลือกได้มากกว่า 1 ข้อ)				
	• อ่านบทความวิชาการทางพุทธศาสนา				
	• เขียนงานวิจัย				
	• เตรียมสอบภาษาอังกฤษของมหาวิทยาลัย				
	• สอนชาวต่างชาติ				
	• สื่อสารในการประชุมวิชาการ				
	• อื่น ๆ _____				
ส่วนที่ 5 ข้อเสนอแนะเพิ่มเติม					
12.	ข้อเสนอแนะเพิ่มเติมเกี่ยวกับหนังสืออ่านภาษาอังกฤษที่ท่านต้องการ				
	(โปรดระบุ) _____				



ลงชื่อผู้ทรงคุณวุฒิ

(.....)

วันที่เดือนพ. ศ.

Appendix B: Needs Analysis Questionnaire

แบบสอบถามความต้องการเพื่อการ ออกแบบสื่อการอ่านภาษาอังกฤษระดับพื้น ฐาน (CEFR A1–A2) ในบริบทพุทธศาสนา Needs Analysis Questionnaire for the Development of Basic English Reading Materials (CEFR A1–A2) in a Buddhist Context

แบบสอบถามนี้มีวัตถุประสงค์เพื่อศึกษาความต้องการ
ปัญหา และลักษณะการใช้ภาษาอังกฤษด้านการอ่านของผู้เรียน
เพื่อ นำข้อมูลไปใช้ในการออกแบบสื่อการอ่านภาษาอังกฤษระดับพื้นฐาน CEFR A1–A2 ในบริบทพุทธ
ศาสนา

ข้อมูลของท่านจะถูกนำไปใช้เพื่อการวิจัยเท่านั้น
และจะถูกรักษาเป็นความลับ

This questionnaire aims to
investigate learners' needs, problems, and patterns of English reading use in
order to develop CEFR A1–A2 level English reading materials within a Buddhist
context.

The information provided will be used solely for research purposes and
will be kept confidential.

* ระบุว่าเป็นคำถามที่จำเป็น

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม Part 1: General Information

1. สถานะของผู้ตอบแบบสอบถาม *

(สามารถเลือกได้มากกว่า 1 ข้อ)

1. Status of the Respondent

(You may select more than one option.)

- ☐ พระภิกษุ (Monk)
- ☐ สามเณร (Novice Monk)
- ☐ แม่ชี / นิกาย (Nun / Religious Practitioner)
- ☐ นิสิต / นักศึกษา (Student)
- ☐ วิทยสถานจารย์ / ผู้สอนสมาธิ (Meditation Instructor)
- ☐ ครูสอนพระพุทธศาสนา (Dhamma Teacher)
- ☐ บุคลากรทางการศึกษา (Educational Personnel)
- ☐ อื่นๆ: _____

2. ท่านใช้ภาษาอังกฤษบ่อยเพียงใด *

2. How often do you use English?

- ☐ แทบไม่ได้อีกเลย Rarely or never
- ☐ ใช้เป็นครั้งคราว Occasionally
- ☐ ใช้ค่อนข้างบ่อย Quite often
- ☐ ใช้เป็นประจำ Regularly

3. วัตถุประสงค์หลักในการใช้ภาษาอังกฤษของท่าน *

(เลือกได้มากกว่า 1 ข้อ)

3. What are your main purposes for using English?

(You may select more than one option.)

- ☐ การเรียน / การศึกษา Study / Education
- ☐ การบรรยายธรรม Teaching Dhamma
- ☐ การสอนหรืออบรมวิปัสสนา Teaching or training in Vipassana meditation
- ☐ การสื่อสารกับชาวต่างชาติ Communicating with foreigners
- ☐ การอ่านเอกสารเรียนหลวงทางพุทธศาสนา Reading Buddhist documents or articles
- ☐ อื่นๆ: _____

ถัดไป

ถ้ามีแบบฟอร์ม

ส่วนที่ 2 ความสามารถด้านการอ่านภาษาอังกฤษ Part 2: English Reading Ability

4. ท่านประเมินความสามารถด้านการอ่านภาษาอังกฤษของตนเองอยู่ในระดับใด *

4. How would you evaluate your English reading ability?

- ☐ อ่านคำศัพท์และประโยคสั้น ๆ ได้ (ระดับ A1) I can read vocabulary and short sentences. (A1 Level)
- ☐ อ่านบทความสั้น ๆ ที่ใช้คำง่ายได้ (ระดับ A2) I can read short passages with simple vocabulary. (A2 Level)
- ☐ อ่านบทความทั่วไปได้พอสมควร (ระดับ B1 ขึ้นไป) I can read general articles fairly well. (B1 Level or above)
- ☐ ไม่แน่ใจ Not sure

5. เมื่ออ่านบทความภาษาอังกฤษ ท่านมักประสบปัญหาใดบ้าง *

(เลือกได้มากกว่า 1 ข้อ)

5. What problems do you usually face when reading English texts?

(You may select more than one option.)

- ☐ คำศัพท์ยากหรือมากเกินไป Vocabulary is too difficult or excessive
- ☐ ประโยคยาวและซับซ้อน Sentences are long and complex
- ☐ อ่านแล้วจับใจความไม่ได้ Unable to grasp the main idea
- ☐ ต้องแปลทีละคำ Need to translate word by word
- ☐ เนื้อหาไม่คุ้นเคย Unfamiliar content
- ☐ อื่นๆ: _____

กลับ

ถัดไป

ล้างแบบฟอร์ม

ส่วนที่ 3 ความต้องการด้านเนื้อหา Part 3: Content Needs

6. ท่านสนใจอ่านบทความภาษาอังกฤษเกี่ยวกับหัวข้อใดมากที่สุด *

(เลือกได้มากกว่า 1 ข้อ)

6. Which English reading topics are you most interested in?

(You may select more than one option.)

- ☐ ชีวิตประจำวันของพระหรือนักบวช (Dail life of a monk)
- ☐ การปฏิบัติกรรมฐาน (Meditation practice)
- ☐ หลักธรรมทางพุทธศาสนา (Buddhist Teachings)
- ☐ การแสดงธรรม / การสอนธรรม (Dhamma Talk)
- ☐ วัฒนธรรมและประเพณีพุทธศาสนา (Buddhist Religious and Cultural Practices)
- ☐ การสื่อสารกับชาวต่างชาติในวัด (Interacting with Foreign Visitors in Monasteries)
- ☐ อื่นๆ: _____

7. รูปแบบเนื้อหาการอ่านแบบใดที่ช่วยให้ท่านเข้าใจได้ง่ายที่สุด *

7. Which type of reading format helps you understand most easily?

- ☐ เรื่องเล่าสั้น ๆ (short stories)
- ☐ บทความสั้นพร้อมภาพประกอบ (Short Article with Illustrations)
- ☐ บทสนทนา (Dialogue)
- ☐ เนื้อหาอธิบายทีละขั้น (Step-by-step instructions)
- ☐ ผสมหลายรูปแบบ (Multi-modal Content) A combination of different formats

8. ปัญหาในการอ่าน (Reading Difficulties) *

(เลือกได้มากกว่า 1 ข้อ)

8. Reading Difficulties

(You may select more than one option.)

- ☐ ไม่เข้าใจโครงสร้างข้อความเชิงวิชาการ Difficulty understanding academic text structures
- ☐ ไม่คุ้นเคยกับรูปแบบบทความวิชาการ Unfamiliarity with academic article formats
- ☐ ขาดกลยุทธ์การอ่าน (เช่น skimming / scanning) Lack of reading strategies (e.g., skimming / scanning)
- ☐ อื่นๆ: _____

กลับ

ถัดไป

ล้างแบบฟอร์ม

ส่วนที่ 4 รูปแบบเนื้อหาและแบบฝึกหัด Part 4: Content and Exercise Preferences

9. ท่านต้องการให้หนังสืออ่านภาษาอังกฤษมีลักษณะอย่างไร *

(เลือกได้มากกว่า 1 ข้อ)

9. What features would you like the English reading book to have?

(You may select more than one option.)

- ☐ ประโยคสั้น อ่านง่าย (Simple and short sentences)
- ☐ ใช้คำศัพท์ซ้ำ ๆ เพื่อช่วยจำ (Repetitive vocabulary)
- ☐ มีคำศัพท์สำคัญพร้อมคำแปล (Key vocabulary with translations)
- ☐ มีคำถามตรวจสอบความเข้าใจ (Comprehension check questions)
- ☐ มีแบบฝึกหัดหลังบทความ (Post-reading exercises)
- ☐ มีภาพประกอบ (With illustrations)
- ☐ อื่นๆ: _____

10. แบบฝึกหัดประเภทใดที่เหมาะกับท่านมากที่สุด *

(เลือกได้มากกว่า 1 ข้อ)

10. Which types of exercises are most suitable for you?

(You may select more than one option.)

- ☐ จับคู่คำศัพท์ (Vocabulary Matching)
- ☐ เติมคำในช่องว่าง (Fill in the blanks)
- ☐ เลือกคำตอบ (Multiple Choice questions)
- ☐ ตอบคำถามสั้น ๆ (Short answer questions)
- ☐ ไม่ต้องการแบบฝึกหัด (No exercises required)
- ☐ อื่นๆ: _____

11. ท่านต้องการใช้ภาษาอังกฤษในบริบทใดมากที่สุด *

(เลือกได้มากกว่า 1 ข้อ)

11. In which context would you most like to use English?

(You may select more than one option.)

- ☐ อ่านบทความวิชาการทางพุทธศาสนา Reading academic Buddhist articles
- ☐ เขียนงานวิจัย Writing research papers
- ☐ เตรียมสอบภาษาอังกฤษของมหาวิทยาลัย Preparing for university English examinations
- ☐ สอนชาวต่างชาติ Teaching foreigners
- ☐ สื่อสารในการประชุมวิชาการ Communicating in academic conferences
- ☐ อื่นๆ: _____

กลับ

ถัดไป

ล้างแบบฟอร์ม

แบบสอบถามความต้องการเพื่อการ ออกแบบสื่อการอ่านภาษาอังกฤษระดับพื้น ฐาน (CEFR A1–A2) ในบริบทพุทธศาสนา Needs Analysis Questionnaire for the Development of Basic English Reading Materials (CEFR A1–A2) in a Buddhist Context

ส่วนที่ 5 ข้อเสนอแนะเพิ่มเติม Part 5: Additional Suggestions

12. ข้อเสนอแนะเพิ่มเติมเกี่ยวกับสื่อการอ่านภาษาอังกฤษที่ท่านต้องการ
12. Please provide any additional suggestions regarding the English reading
materials you would like to have.

คำตอบของคุณ

กลับ

ส่ง

ล้างแบบฟอร์ม

ห้ามส่งรหัสผ่านใน Google ฟอร์ม

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ตัว

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Appendix C: Note on the First Draft of the Developed Reading Materials

First Draft of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Learners

Note

This draft was developed as the first version of the Buddhist context-based reading materials for ESP learners at Mahachulalongkornrajavidyalaya University. The materials consist of eight units developed based on the findings of the needs analysis, CEFR-aligned principles, and ESP approaches. The draft is submitted for expert evaluation and revision prior to pilot implementation.

Summary of Needs Analysis Findings

The development of these reading materials was informed by the findings of a needs analysis conducted with 89 participants, including Buddhist monks, students, and educational personnel at Mahachulalongkornrajavidyalaya University (MCU).

The findings indicated that English was primarily used for educational purposes, communication with international visitors, and reading Buddhist and academic materials. Most participants reported English proficiency levels ranging from A2 to B1.

The most preferred content areas included Buddhist teachings, communication with foreign visitors, daily life of Buddhist monks, Buddhist culture and traditions, meditation practice, and academic reading. Participants also reported difficulties related to understanding academic texts, recognizing text organization, identifying main ideas, and dealing with unfamiliar vocabulary.

Regarding instructional preferences, participants expressed a need for simple and clear language, key vocabulary with Thai meanings, comprehension questions, vocabulary practice activities, repeated exposure to important vocabulary, and visual support such as illustrations.

Based on these findings, the developed materials were designed using Buddhist-context topics, CEFR-aligned principles, and ESP approaches to support learners' reading comprehension, vocabulary development, and communicative competence in Buddhist professional contexts.

Appendix D: Expert Evaluation Form

Expert Evaluation Form

Evaluation of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Learners

Note for Evaluators

The reading materials were developed based on the findings of a needs analysis conducted with the target learners at MCU. A brief summary of the needs analysis findings is provided in the draft materials. Please consider these findings when evaluating the appropriateness of the content, language, activities, and overall design of the materials.

* ระบุว่าเป็นคำถามที่จำเป็น

Part I: Expert Information

This section aims to gather background information about the expert evaluators. The information provided will be used only for research purposes and will help describe the qualifications and areas of expertise of the evaluators. All responses will be treated confidentially and reported in aggregate form.

1. Name (Optional)

คำตอบของคุณ

2. Academic Qualification *

คำตอบของคุณ

3. Current Position / Academic Rank (Select all that apply) *

- ☐ Professor
- ☐ Associate Professor
- ☐ Assistant Professor
- ☐ Lecturer
- ☐ Researcher
- ☐ Curriculum and Materials Development Specialist
- ☐ CEFR Specialist
- ☐ Language Education Expert
- ☐ Educational Technology Specialist
- ☐ Administrator
- ☐ อื่นๆ: _____

4. Type of Affiliation *

- ☐ University
- ☐ Government Organization
- ☐ Research Institute
- ☐ Private Organization
- ☐ อื่นๆ: _____

5. Affiliation (Institution Name) *

คำตอบของคุณ _____

6. Areas of Expertise (Check all that apply) *

- ☐ English Language Teaching (ELT)
- ☐ English for Specific Purposes (ESP)
- ☐ Reading Instruction
- ☐ Curriculum and Instruction
- ☐ Measurement and Evaluation
- ☐ Educational Technology
- ☐ Buddhist Studies
- ☐ อื่นๆ: _____

7. Years of Professional Experience *

- ☐ Less than 5 years
- ☐ 5–10 years
- ☐ 11–15 years
- ☐ More than 15 years

ถัดไป

ล้างแบบฟอร์ม

Part II: Evaluation of the Reading Materials

Instructions

Please indicate your level of agreement with the following statements.

Scale:

5 = Strongly Agree

4 = Agree

3 = Neutral

2 = Disagree

1 = Strongly Disagree

A. Content Appropriateness *

	1	2	3	4	5
1. The content is relevant to Buddhist professional contexts.	☐	☐	☐	☐	☐
2. The selected topics reflect the learning needs of the target learners.	☐	☐	☐	☐	☐
3. The content is appropriate for ESP learners at Mahachulalongkornrajavidyalaya University.	☐	☐	☐	☐	☐
4. The Buddhist information presented in the materials is accurate and appropriate.	☐	☐	☐	☐	☐
5. The reading passages support learners' understanding of Buddhist concepts and practices.	☐	☐	☐	☐	☐

B. Language and Readability *

	1	2	3	4	5
6. The language used in the reading passages is appropriate for the target learners.	☐	☐	☐	☐	☐
7. The vocabulary is appropriate for the learning objectives of each unit.	☐	☐	☐	☐	☐
8. The instructions and explanations are clear and easy to understand.	☐	☐	☐	☐	☐
9. The language supports the development of reading comprehension skills.	☐	☐	☐	☐	☐
10. The specialized Buddhist vocabulary is presented appropriately.	☐	☐	☐	☐	☐

C. Learning Activities *

	1	2	3	4	5
11. The reading comprehension activities are appropriate for the content of each unit.	☐	☐	☐	☐	☐
12. The vocabulary exercises effectively reinforce vocabulary learning.	☐	☐	☐	☐	☐
13. The communication tasks encourage meaningful language use.	☐	☐	☐	☐	☐
14. The activities support learners' engagement and participation.	☐	☐	☐	☐	☐
15. The activities are appropriate for instructional use in Buddhist educational settings.	☐	☐	☐	☐	☐

D. Organization and Design *

	1	2	3	4	5
16. The organization of the units is logical and systematic.	☐	☐	☐	☐	☐
17. The sequence of topics supports progressive learning.	☐	☐	☐	☐	☐
18. The structure of each unit is clear and consistent.	☐	☐	☐	☐	☐
19. The materials are practical and user-friendly.	☐	☐	☐	☐	☐
20. The overall design supports effective learning.	☐	☐	☐	☐	☐

E. Overall Evaluation *

	1	2	3	4	5
21. Overall, the developed reading materials are suitable for instructional use in Buddhist professional contexts.	☐	☐	☐	☐	☐

[กลับ](#)
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Part III: Suggestions for Revision and Improvement

22. What are the strengths of the developed reading materials? *

คำตอบของคุณ

23. Which aspects of the materials should be revised or improved? *

คำตอบของคุณ

24. Are there any units, topics, vocabulary items, or activities that should be modified? Please explain. *

คำตอบของคุณ

25. Do you have any additional suggestions for improving the materials before implementation? *

คำตอบของคุณ

26. Additional Comments (Optional)

คำตอบของคุณ

กลับ

ส่ง

ล้างแบบฟอร์ม

ห้ามส่งรหัสผ่านใน Google ฟอร์ม

เนื้อหาไม่มีได้ถูกสร้างขึ้นหรือรับรองโดย Google - [ติดต่อเจ้าของแบบฟอร์ม](#) - [ข้อกำหนดในการให้บริการ](#) - [นโยบายความเป็นส่วนตัว](#)

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Appendix E: Informed Consent Form

Informed Consent Form

Research Title

Development of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at MCU

You are invited to participate in this research study. The purpose of this study is to evaluate learners' comprehension, readability, and attitudes toward the developed CEFR-aligned Buddhist context-based reading materials for English for Specific Purposes (ESP) instruction at Mahachulalongkornrajavidyalaya University (MCU).

If you agree to participate, you will be asked to:

- Read a **printed set of two assigned instructional units** from the developed reading materials.
- Complete the learning activities included in the assigned instructional units.
- Complete a **brief 19-item online evaluation questionnaire consisting of rating-scale questions and optional comments.**
- Return the printed materials to the researcher.

Your participation is **entirely voluntary**. You may withdraw from the study at any time without any penalty. All information collected will be kept **strictly confidential** and used solely for research purposes. The findings will be reported only in summary form, and no personally identifiable information will be disclosed.

Consent Statement

I have read and understood the information provided above. I voluntarily agree to participate in this research study.

Signature: _____

Participant's Name: _____

Date: _____

Appendix F: Pilot Version Cover Page

CEFR-ALIGNED BUDDHIST CONTEXT-BASED READING MATERIALS FOR ESP LEARNERS AT MCU

Pilot Version

This reading material contains 2 units out of total 8 units.

Participant Note

Thank you for participating in this pilot study.

Please complete the reading activities before filling in the evaluation questionnaire.

Scan the QR code below to access the Google Form.



Learner Evaluation Questionnaire

Appendix G: Learner Evaluation Questionnaire

Learner Evaluation Questionnaire

Evaluation of the CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at Mahachulalongkornrajavidyalaya University

Introduction

Thank you for participating in this study. The purpose of this questionnaire is to evaluate the developed CEFR-aligned Buddhist context-based reading materials based on your experience using the two assigned instructional units. Your responses will be used solely for research purposes and will be kept strictly confidential. Please answer all questions honestly based on your learning experience with the assigned materials. Your valuable feedback will contribute to the further improvement and refinement of the developed reading materials.

* ระบุว่าเป็นคำถามที่จำเป็น

Part I: Participant Information

Please provide your basic information. All information will be kept confidential and used only for this research.

1. Gender (optional)

- ☐ • Male
- ☐ • Female
- ☐ • LGBTQ
- ☐ • Prefer not to say

2. Status (Select all that apply.) *☐ • Undergraduate Student☐ • Graduate Student☐ • Monk☐ • Novice☐ • Bhikkhunī☐ • Nun☐ • Layperson☐ • Academic Staff☐ • Administrative Staff☐ อื่นๆ: _____**3. Faculty / Program ***คำตอบของคุณ
_____**4. Self-rated English Proficiency**

*

Please select the level that best describes your current English ability.☐ A1 (I can understand and use very basic English expressions and simple sentences.)☐ A2 (I can understand and communicate in simple everyday situations.)☐ B1 (I can understand the main points of familiar topics and communicate in most everyday situations.)☐ B2 or above (I can understand more complex texts and communicate fluently in academic or professional situations.)

ถัดไป

ล้างแบบฟอร์ม

Part II: Learner Evaluation

After completing the reading materials and learning activities, please evaluate your learning experience by selecting the response that best reflects your opinion for each statement.

Please indicate your level of agreement using the following scale:

5 = Strongly Agree

4 = Agree

3 = Neutral

2 = Disagree

1 = Strongly Disagree

A. Self-assessed Reading Comprehension *

	1	2	3	4	5
5. I could understand the main ideas of the reading passages.	☐	☐	☐	☐	☐
6. I could understand most of the important information presented in the reading passages.	☐	☐	☐	☐	☐
7. I could complete the reading activities without much difficulty.	☐	☐	☐	☐	☐
8. Overall, I could understand the developed reading materials.	☐	☐	☐	☐	☐

B. Readability *

	1	2	3	4	5
9. The language level was appropriate for my English proficiency.	☐	☐	☐	☐	☐
10. The vocabulary was appropriate and easy to understand.	☐	☐	☐	☐	☐
11. The reading passages and activity instructions were clear and easy to follow.	☐	☐	☐	☐	☐
12. The overall organization of each unit made the materials easy to use.	☐	☐	☐	☐	☐

C. Learners' Attitudes toward the Reading Materials *

	1	2	3	4	5
13. The topics were interesting and relevant to Buddhist professional contexts.	☐	☐	☐	☐	☐
14. The learning activities helped improve my English reading skills.	☐	☐	☐	☐	☐
15. Overall, I am satisfied with the developed reading materials.	☐	☐	☐	☐	☐
16. I would recommend these reading materials to other learners studying English in Buddhist educational contexts.	☐	☐	☐	☐	☐

[กลับ](#)
[ถัดไป](#)
[ล้างแบบฟอร์ม](#)

Part III: Open-ended Questions (optional)

Please write any comments or suggestions you have about the reading materials. Your feedback is valuable and will be used to improve the materials.

17. What did you like most about the developed reading materials?

คำตอบของคุณ

18. Which aspects of the reading materials should be improved?

คำตอบของคุณ

19. Please provide any additional comments or suggestions for improving the developed reading materials.

คำตอบของคุณ

กลับ

ส่ง

ล้างแบบฟอร์ม

ห้ามส่งรหัสผ่านใน Google ฟอร์ม

เนื้อหาที่นี่ได้ถูกสร้างขึ้นหรือรับรองโดย Google - [ติดต่อเจ้าของแบบฟอร์ม](#) - [ข้อกำหนดในการให้บริการ](#) - [นโยบายความเป็นส่วนตัว](#)

แบบฟอร์มนี้ดูน่าสงสัยใช่ไหม [รายงาน](#)

Google ฟอร์ม

Appendix H: Certificate of Human Research Ethics



ใบรับรองจริยธรรมการวิจัยของข้อเสนอการวิจัย
เอกสารข้อมูลคำอธิบายสำหรับผู้เข้าร่วมการวิจัยและยินยอม

หมายเลขข้อเสนอการวิจัย ว.๓๔๕/๒๕๖๙

ข้อเสนอการวิจัยนี้และเอกสารประกอบของข้อเสนอการวิจัยตามรายงานการแสดงด้านล่าง ได้รับการพิจารณาจากคณะกรรมการจริยธรรมการวิจัย มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัยแล้ว คณะกรรมการฯ มีความเห็นว่าข้อเสนอการวิจัยที่จะดำเนินการมีความสอดคล้องกับหลักจริยธรรมสากล ตลอดจนกฎหมาย ข้อบังคับและข้อกำหนดภายในประเทศ จึงเห็นสมควรให้ดำเนินการวิจัยตามข้อเสนอการวิจัยนี้ได้

ชื่อข้อเสนอการวิจัย: การพัฒนาเอกสารการอ่านเชิงบริบทพุทธศาสนาที่สอดคล้องกับ CEFR สำหรับการสอนภาษาอังกฤษเฉพาะทางที่ มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย (Development of CEFR-Aligned Buddhist Context-Based Reading Materials for ESP Instruction at Mahachulalongkornrajavidyalaya University)

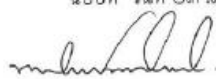
รหัสข้อเสนอการวิจัย: MCU RS 800769399

สถาบันที่สังกัด: สถาบันภาษา มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย

ผู้วิจัยหลัก: พระมหาอาศิร วชิรนาโค และคณะ

เอกสารที่พิจารณาพบ

- | | |
|---|-------------------------------|
| ๑. แบบเสนอโครงการวิจัย | ฉบับที่ วันที่ ๒๓ เมษายน ๒๕๖๙ |
| ๒. เอกสารชี้แจงข้อมูลผู้เข้าร่วมการวิจัย | ฉบับที่ วันที่ ๒๓ เมษายน ๒๕๖๙ |
| ๓. หนังสือแสดงเจตนายินยอมเข้าร่วมการวิจัย | ฉบับที่ วันที่ ๒๓ เมษายน ๒๕๖๙ |
| ๔. เครื่องมือที่ใช้ในการเก็บข้อมูล | ฉบับที่ วันที่ ๒๓ เมษายน ๒๕๖๙ |



(พระเมธาวิญญูสร, รศ.ดร.)

ประธานคณะกรรมการจริยธรรมการวิจัยในมนุษย์
มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย

๑๕ พฤษภาคม ๒๕๖๙

หมายเลขใบรับรอง: ว.๓๔๕/๒๕๖๙

วันที่ให้การรับรอง: ๑๕ พฤษภาคม ๒๕๖๙

วันหมดอายุใบรับรอง: ๑๕ พฤษภาคม ๒๕๗๐

Biography of the Researchers

1. Head of Researcher

- 1.1 Name-Surname:** Phramaha Ashir Vajiranāgo (Bajracharya)
- 1.2 Nationality:** Nepal
- 1.3 Present Position:** Acting Director for Academic Division, Language Institute of Language Institute of Mahachulalongkornrajavidyalaya University.
- 1.4 Institute:** Language Institute, Mahachulalongkornrajavidyalaya University, Wang Noi, Phra Nakhon Si Ayutthaya Province, Thailand.

1.5 Educational Background

- | | |
|---------|---|
| Present | Ph.D. (Candidate). (Buddhist Studies), International Buddhist Studies College, Mahachulalongkornrajavidyalaya University. |
| 2019 | M.A. (Career in English for International Communication), Thammasat University, MCU, 2021 |
| 2017 | B.A. (English), MCU, 2018 |

- 1.6 Areas of Expertise**
- English Language Teaching
- Language and Communication
- Buddhist Applied Knowledge

1.7 Research/Academic Works

- | | |
|------|--|
| 2019 | Attitudes Towards and Motivation in Learning English of Buddhist Novices at Phra Pariyattidhamma School in Bangkok” Master of Arts Thesis (CEIC), Language |
|------|--|

Institute, Thammasat University.

2024 Synergizing SDG's Focus on Quality Education with
Buddhist Principles to Reduce Communication
Apprehension in 21st Century Learners.

1.8 Address

Wat Nakprok, Thoet Thai 49 Road, Pakkhlong
sub- district, Phasichareon district, Bangkok 10160

2. Co-Researcher

2.1 Name-Surname	Phra Rungvit Aggadhammo (Phetkrai), Dr.
2.2 Nationality	Thai
2.3 Present Position	English Lecturer at Language Institute of Mahachulalongkornrajavidyalaya University (MCU); Ph.D. (Teaching English) Student, Faculty of Education, Mahachulalongkornrajavidyalaya University (MCU).
2.4 Institute	Language Institute, Mahachulalongkornrajavidyalaya University, 79 Mu 1, Lamsai Subdistrict, Wang Noi District, Phranakhon Si Ayutthaya Province 13170 Mobile Phone: 061-9462099 E-mail: rungvitukkhadhammo@ibsc.mcu.ac.th
2.5 Educational Background	Ph.D. (Buddhist Studies), IBSC, MCU, 2024 M.A. (Buddhist Studies), IBSC, MCU, 2021 B.A. (Buddhist Studies), MCU, 2019
2.6 Areas of Expertise	- Theravada Buddhism - English Teaching
2.7 Experiences Related to the Research	1) “A Study of Proper Saṅgha Dāna in Theravada Buddhism: A Study Based on Thai Buddhist Monks,” Master of Arts Thesis (Buddhist Studies), Graduate School, Mahachulalongkornrajavidyalaya University.

2) “The Process of Kamma Rectification for Sustainable Health and Longevity for Thai Buddhists,” Doctor of Philosophy Dissertation (Buddhist Studies), Graduate School, Mahachulalongkornrajavidyalaya University.

3) “The Integration of Ariyasacca Principles-Based Learning Management for Students of International Buddhist Studies College,” Research Project Funded By National Science, Research, and Innovation Promotion Fund (NSRF), Mahachulalongkornrajavidyalaya University, MCU RS 800768305

2.8 Address

Old Dormitory A, MCU