

# The Incorporation of Moral Values through Buddhist Wise Reflection into a High-School English Course to Promote Morals and Reading Comprehension Skills

ผลการสอนแفارกคุณธรรมผ่านการคิดไตร่ตรองทางพุทธศาสนาเข้ากับรายวิชาภาษาอังกฤษ  
เพื่อส่งเสริมคุณธรรมอันพึงประสงค์ของนักเรียนมัธยมศึกษาไทยและทักษะการอ่าน  
เพื่อความเข้าใจ

Kittiya Mukdaprasert

Bussabamintra Chalauisaeng\*

กิตติยา มุกดปราชร์

บุษบาภินตร์ ฉลวยแสง

*Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand*

Corresponding author\*

e-mail: buscha@kku.ac.th

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## Abstract

This article studied the effect of incorporating moral values through Buddhist Wise Reflection (BWR) into an English course with the objective to promote Thai high-school students' eight fundamental moral characteristics (EFMC) and reading comprehension skills (RCS). The sample group comprised 30 students who were selected through a cluster random sampling method. They participated in a four-month semester course covering 40 periods (two periods for 100 minutes per week) in the first semester of the 2019 academic year. BWR's 10 ways of thinking were used as a framework for questioning techniques. Regarding the reading passages, 5 were from a coursebook and 5 were selected by the students. The passages highlighted on the 8 moral principles required by the Ministry of Education and were used both in class and as online self-study material. The qualitative data were gathered from the students' continuous self-progress reports, classroom observation, semi-structured interviews, and students' follow-up feedback. This set of information was presented through descriptive narration. Quantitative data was obtained from a pretest and posttest, and a continuous self-assessment which was presented through statistical principles. The study found several pleasant results and some weak points. The study recommends applying this innovative teaching to other relevant situations to reduce moral decline among the young generation. Teaching other desirable moral principles which can apply to other skills in other subjects are also recommended.

**Keywords:** moral values, Buddhist Wise Reflection, 8 fundamental moral characteristics, reading comprehension skill

## บทคัดย่อ

บทความนี้ศึกษาผลของการสอนแفارกคุณธรรมผ่านการคิดไตร่ตรองทางพุทธศาสนาเข้ากับรายวิชาภาษาอังกฤษ มีวัตถุประสงค์เพื่อส่งเสริมคุณลักษณะทางคือธรรมพื้นฐาน 8 ประการของนักเรียนมัธยมศึกษาไทยและทักษะการอ่านเพื่อความเข้าใจ โดยใช้กลุ่มตัวอย่าง 30 คน ใช้การคัดเลือกโดยการสุ่มแบบกลุ่ม ในรายวิชาภาษาอังกฤษที่มีระยะเวลา 4 เดือน 2 คาบต่อ

สปดาห์ หรือ 100 นาทีต่อสปดาห์ ครอบคลุม 40 คาบ ในภาคเรียนแรกของปีการศึกษา 2562 เพื่อให้บรรลุวัตถุประสงค์ของ การศึกษาดังกล่าว การสอนแทรกคุณธรรมผ่านการคิด ไตร่ตรองทางพุทธศาสนา ใช้วิธีคิด 10 ประการเป็นกรอบในการใช้ตั้งค่าตาม โดยใช้บทอ่าน 5 บทจากแบบเรียน และอีก 5 บทจากการคัดเลือกตามความต้องการของนักเรียน ที่เน้นคุณธรรม 8 ประการยึด ตามกรอบทรงศึกษาชิการ นำไปใช้ทั้งในห้องเรียนและศึกษาด้วยตนเองทางออนไลน์ ข้อมูลเชิงคุณภาพมาจากการรายงาน ความก้าวหน้าของตนเองอย่างต่อเนื่อง การสังเกตในห้องเรียน การสัมภาษณ์แบบกึ่งโครงสร้าง และผลตอบรับของนักเรียนใน การศึกษาติดตามผล ข้อมูลชุดนี้นำเสนอด้วยการบรรยายเชิงพรธรรมชาติ ขณะที่ข้อมูลเชิงปริมาณมาจากการทดสอบก่อนเรียนและ การทดสอบหลังเรียนและการประเมินตนเองอย่างต่อเนื่องที่ถูกนำเสนอโดยใช้หลักสถิติ ผลการศึกษาแสดงให้เห็นถึงผลอันเป็น ประสงค์หลักที่มีผลต่อการและจุดด้อยบางประการ การศึกษาแนะนำให้นำวัตถุประสงค์สอนนี้ไปใช้ในสถานการณ์อื่น ๆ ที่เกี่ยวข้อง เพื่อแก้ปัญหาความเสื่อมทางศีลธรรมของคนรุ่นใหม่ด้วยศีลธรรมอันเป็นประสงค์ด้านอื่น ๆ และส่งเสริมในทักษะอื่น ๆ ในวิชาอื่น ๆ

**คำสำคัญ:** คุณธรรม การคิดไตร่ตรอง คุณธรรมพื้นฐานแปดประการอันเป็นประสงค์ ทักษะการอ่านเพื่อความเข้าใจ

## Introduction

The Thai Ministry of Education has implemented a policy reforming the education system requiring all levels of educational institutions to instill their students with eight fundamental moral values set in the Basic Education Core Curriculum 2008 (Ministry of Education, 2008). These consist of the goals of achieving holistic human development with morality/ethics, knowledge and skills for communication and thinking including problem-solving capacity, and essential attributes for participation in the competitive global workforce, such as language application.

In fact, the course incorporating moral values through students' social responsibility and consciousness was excluded from the mainstream curriculum of Mathayomsuksa 6 in Thailand, although it was claimed that moral values were incorporated into other courses, such as a Social Studies. This implied that the absence of moral values could be inferred.

Similarly, a challenge faced by all levels of educational institutions, particularly high schools, was to implement programs or interventions that improve students' skills, including reading. A low reading proficiency in English of Thai high-school students has been shown through the results of the Ordinary National Education Test (O-Net), in which the average score for English has been below 50% for almost 17 consecutive years since the O-Net test was introduced in 2005. According to an annual report from the English department in the target context, the student's achievement in English, especially in the General English course E33101, the target course for Grade 12 at a selected school in this study, has gradually dropped (Sakolrajwittayanukul School, 2017).

Purposively, the study was conducted in the general English reading course because thinking and reading are intertwined. Reading in a foreign language is linked with thinking in that language, which plays the most important part of any culture for communicating, building relationships, and creating a sense of community (Kaya, 2015). Thus, the relationship between language and culture is deeply rooted and intertwined (Emmitt & Pollock 1997), and teachers must assume the responsibility of teaching language culture in a language class (Byram 1988). Thus, the main reason why moral values were incorporated through BWR into an English course was to promote the students' EFMC and RCS. Both are really close to their lives in order to challenge conventional wisdom, which encourages students to use critical thinking and a sense of agency. If the moral and ethical standard instilling process in younger generations fails, numerous problems may become worse, i.e., significant increases in misconduct or crime, or a substantial rise in cases of depression or suicide among highly educated young people despite their worldly successes (Khidhir, 2019).

The youth are seen as the future of a nation; therefore, it is traditionally considered as one of the most at-risk groups suffering from any major social transformation (Thaiarry, 1998).

The students in the target context are mostly Thai Buddhists, so Buddhist principles would seem to be a suitable approach to human development in the context of culturally sensitive education. As a result, within Thai Buddhist culture, the principle of BWR to promote the students' EFMC and RCS within this English course is regarded as a suitable factor to support underpinning morality for the target context. This cultivation and development were also in accordance with the goals of the Ministry of Social Development and Human Security of Thailand (2018) which strive for quality human and social development thereby leading to full potential and immunity for changes, which were the expected outcomes of this study.

In addition, the link between BWR or a critical ordered thinking process was adopted. Ten ways of thinking in Buddhist ways (P.A. Payutto, 1995) based on Yonisomanasikara such as searching for causes and conditions, thinking by way of analysis, and thinking in terms of benefit and harm (Payutto, 2013) were used in the study. BWR was adopted to develop students' higher-order thinking in reading English to improve their reading comprehension skills. Higher-order thinking skills play a vital role in cultivating morality, which was strongly confirmed by Paul (1993) and Paul & Elder (2008) who clearly stated that critical thought, moral integrity, and responsible citizenship are interconnected, and could be fully developed together in an atmosphere that encourages interdependent intellectual virtues including courage, empathy, good faith or integrity, perseverance, fair-mindedness, and faith in reason.

Also, Scriven & Paul (1987) simply defined critical thinking as the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. They also stated that successful critical thinking is assumed to lead to self-directed, self-disciplined, self-monitored, and self-corrective thinking. It could be inferred that it entails effective communication and problem-solving abilities and a commitment to overcome egocentrism and sociocentrism.

As mentioned earlier, reading and thinking is intertwined and reading comprehension development is closely linked with critical thinking at high order thinking level. BWR is considered as high order thinking as it involves evaluation and appreciation. Indeed, thinking capacity is vital for all kinds of achievement (Sulaiman et al., 2008) but only 2.09% of 6,235 Thai students could pass the test assessing thinking capacity, such as logical thinking and analytical skills, conducted by the Thailand Research Fund (TRF) (Rujivanarom, 2016). This is in spite of thinking capacity like critical thinking skills being the key pillar in the goal for a new, knowledge-based economy under Thailand 4.0 (Jones & Pimdee, 2017). This justifies the call for the development of thinking capacity through BWR, which fits with the students' educational Buddhist tradition and culture.

More importantly, thinking capacity is one of the five Learners Key Competencies in the Development of Learners' Quality based on The Basic Education Core Curriculum. Underpinning this study is Thinking Capacity, which covers "the capacity for analytical, synthetic, constructive, critical and systematic thinking, leading to the creation of bodies of knowledge or information for judicious decision-making regarding oneself and society". It also includes Problem-Solving Capacity, which covers "the capacity to properly eliminate problems and obstacles, based on sound reasoning, moral principles and accurate information; appreciation of relationships and changes in various social situations; ability to seek and apply knowledge to prevent and solve problems; and the ability for judicious decision-making, bearing in mind possible negative effects on oneself, society and the environment." (The Basic Education Core Curriculum B.E. 2511, 2008 : 11).

As a result, BWR with ten ways of thinking was applied as a questioning technique to develop higher-order thinking skills because it plays an important part in reading comprehension. This development goes far beyond simple memorization and regurgitation of facts and involves complicated cognitive activities, ranging from formulating hypotheses; elaborating, interpreting, and analyzing information; applying multiple criteria; constructing arguments; making comparisons and inferences; integrating and synthesizing information to yielding multiple solutions (Bradley et al., 2007).

In particular, the higher-order thinking skills in this study are based on five levels of reading comprehension: 1) Literal comprehension 2) Reorganization, 3) Inferential comprehension, 4) Evaluation and 5) Appreciation (Barrett, 1968). This was originally designed for reading to assist classroom teachers in developing questions for testing and developing learners' reading comprehension skills. It aimed at solving the lack of higher-order thinking skills, which was the root cause of low reading proficiency in English due to the intertwined nature of the two. Also, as English reading is compulsory at all Thai educational levels, incorporating moral values into an English reading course is easily accessible and BWR is suitable for this context of culturally sensitive education in a Buddhist culture. In sum, the current study begins to address challenges pertaining to the application of BWR's ten ways of thinking to develop EFMC and RCS of the target students by incorporating moral values into English lessons to solve not only the problems of English reading proficiency but also a perceived decline in moral values. As BWR is considered as critical thinking (P.A. Payutto, 1995), it was purposively adopted to develop not only the target students' EFMC required by the Ministry of Education in the Basic Education Core Curriculum (Ministry of Education, 2008) but also their RCS in English. This is because thinking and reading are intertwined as reading in a foreign language is directly linked with thinking in that language and the language itself plays the most important part of any culture for communicating, building relationships, and creating a sense of community. Therefore, BWR as critical thinking was employed to serve this specific research purpose as critical thought, moral integrity, and responsible citizenship are interconnected (Paul, 1993; Paul & Elder, 2008).

To date, very few empirical research studies have directly incorporated moral values into an English reading course through BWR to promote EFMC and RCS of Thai high-school students to address the perceived decline in their morals and English reading proficiency. Thus, this research study would address challenges and opportunities to investigate the effects of incorporating required moral values into English language education through BWR to promote students' EFMC and RCS.

## Definitions

Three main definitions specifically for this study are:

1. Moral values refer to the eight fundamental moral characteristics (EFMC) required by the Thai Ministry of Education in the Basic Education Core Curriculum 2008 (Ministry of Education, 2008). These cover as follows: 1. Diligence: A diligent person is one who is determined to engage in positive and proper endeavors. 2. Frugality: A frugal person is one who leads a simple life and in awareness of one's status. 3. Honesty: An honest person is one who remains true to their duties and profession. 4. Discipline: A disciplined person is one who acts within the boundaries of regulations imposed by educational institutions, other agencies, and the nation. 5. Politeness: A polite person is one who acts humbly in accordance with circumstances. 6. Cleanliness: A clean person is one who keeps their body and mind clean. 7. Unity: A united person is one who openminded to the opinions of others. 8. Generosity: A generous person is one who concerns themselves with others' interests, not only their own (Ngammuk, 2011).

2. Reading comprehension skills (RCS) refer to the thinking process through which readers become aware of an idea understand it in terms of their experiential background, and interpret it in relation to their own needs and purposes critically based on the levels of reading comprehension of Barrett's taxonomy (Barrett, 1968; Alderson & Uquart, 1984). This ranges from 1) literal comprehension in understanding, remembering information presented in a text, 2) recalling information explicitly presented in a text, 3) interpretive or inferential comprehension for finding implied information through their experience or intuition, 4) evaluative or critical comprehension for comparing the information with their own background knowledge and values, and lastly, 5) appreciative comprehension for obtaining an emotional or other kinds of valued response from the text (Richard & Schmidt, 2002; Davis & Lass, 1996).

3. Buddhist wise reflection refers to ten ways of thinking based on Yonisomanasikara. Critical thinking in Buddhist ways (P.A. Payutto, 1995) consists of thinking by 1) searching for causes and conditions, 2) analyzing, 3) realizing and accepting the normal truth of all existing with three marks of all existence i.e., impermanence, non-self, and unsatisfaction, 4) problem solving, 5) considering principles and intentions, 6) considering in terms of benefit and harm, 7) considering real value vs. fake value, 8) thinking in terms of raising ethical and moral awareness, 9) being aware of acting in the present moment with conscious mindfulness, and lastly, 10) classifying all interrelated factors of things or phenomena by considering their causal relationships to ascertain the causes (P. A. Payutto, 2013).

### **Conceptual framework of the study**

To solve the problems of students' declining moral values and English reading proficiency within Thai Buddhist educational culture, BWR's ten ways of thinking were adopted as a framework of a questioning technique to promote students' EFMC of the students. This is because language is an essential part of any culture for communication (Emmitt & Pollock, 1997).

The questioning technique based on BWR's ten ways of thinking was applied to promote students' EFMS and RCS. This was because questions either from teachers or other sources such as in exercises in texts or courses are indispensable for all learners' educational experience. Questions that prompt recall of information, shape understanding, and encourage reflection play an important role in the learning process as question-asking one of the most important intellectual tools that help shape students' comprehension and important text concepts (Morgan & Saxton, 1994), develop concepts, build background, clarify reasoning processes, and even lead students to higher levels of thinking (Gunning, 2000 : 260).

In this study, all specifically designed questions were based on BWR's ten types of thinking within four levels of reading comprehension of Barrette's taxonomy ranging from literal comprehension, interpretive or inferential comprehension, evaluative or critical comprehension to appreciative comprehension. Clearly, all ten ways of thinking of BWR based on Yonisomanasikara, critical thinking in Buddhist ways (P.A. Payutto, 1995), mainly cover higher-order thinking. In particular, evaluative or critical comprehension is covered for comparing information with students own background knowledge and values and appreciative comprehension for obtaining an emotional or other kinds of valued response from the text (Richard & Schmidt, 2002; Davis & Lass, 1996).

Some research studies have focused on incorporating religious principles into Thai teaching practices in various high-school subjects in hope of bringing about a positive school environment that strongly correlates with increased student achievement, motivation, and morality levels (Prommak, 2019). However, little attention has been paid to the practical impact of BWR can have to enhance learners' moral values, especially the EFMC required by the Ministry of Education in the learning process of EFL reading classrooms to be more effective. It is justified for this study

to incorporate these certain moral values into English reading learning to fill the research gap. This research conceptual framework could be summarized and presented in **Figure 1** below.

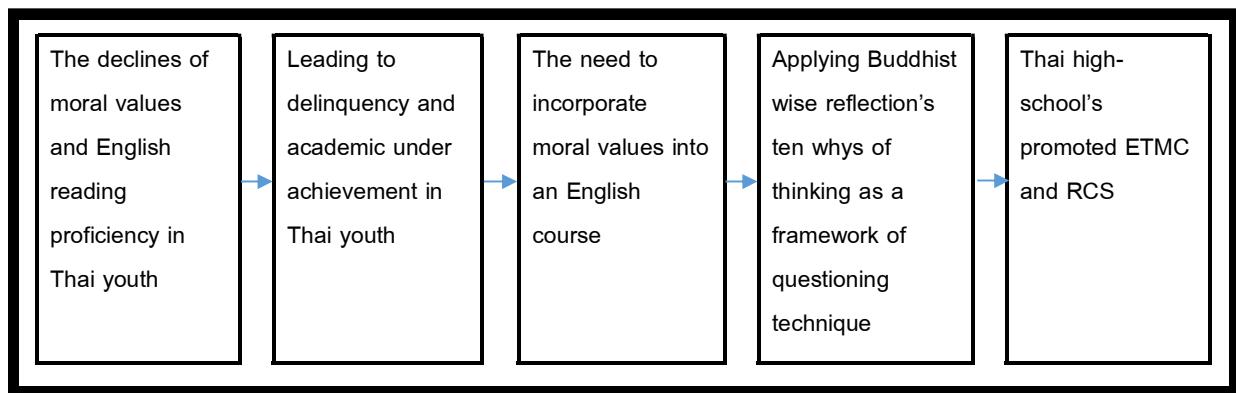


Figure 1 Conceptual framework of the study

### Research objectives

Based on the problems and the research gap and justification, the research attempted to investigate the effects of incorporating moral values into a general English course through BWR's ten ways of thinking as a framework of questioning technique in the teaching process. The research aimed to promote both Thai high-school students' eight fundamental moral characteristics (EFMC) and reading comprehension skills (RCS) at a selected provincial school in Sakon Nakhon Province.

### Research Methodology

The study was conducted in the first semester of the academic year 2019 covering 40 periods (50 minutes per period/ 2 periods per week) for a four-month semester. The course consisted of five general reading passages from a school commercial coursebook: Bridge 6 (Bideleux, Boyle, Finnie, Mackie, McGavigan, & Stephens, 2007). This included five specifically-selected moral-raising passages from various online sources based on students' needs analysis for online self-study. These reading texts were attached with different questions which were specifically designed based on BRW's ten ways of thinking within five levels of Barrett's Taxonomy Reading comprehension (1968) with the aim to reach the research objectives. They were used to challenge the text through their experiences and/or external standards requiring analytical skills as suggested by Davis & Lass (1996) i.e., (Why or why not, or Do I agree? or so what?). This aimed at incorporating moral values into the target course to promote their wise reflection or critical thinking for predominantly developing their EFMC and RCS. These questions were integrated into each reading lesson through asking, discussing, and presenting both individuals and group work.

Thirty samples were taken with 19 Buddhists and 1 Catholic student aged between 17 and 19 years old studying at Grade 12 in a co-educational school system in the Science, Math, Technology, and Environment (SMTE) program, not in a language program. Therefore, this could be inferred that their English proficiency in general was relatively low. All of them were handed a Human Research Ethics (HRE) form informing research procedures along with informed consent for voluntary participation to complete before the research commencement. During the study, the data collected was kept strictly private and confidential. After five years, all information is destroyed per the institution's HRE policy.

The quantitative data were the results of the 40-item pre-test used for measuring the students' reading comprehension within five levels, especially the higher levels like evaluative and appreciative ones. These results were intentionally used at the beginning of the study for classifying the participants into three groups of ten students per each based on their scores ranging from high scores (Group One with more able students), average scores (Group Two with averagely able students) to low scores (Group Three with less able students), respectively. Each set of data was representative or the samples of the population. They were 15 samples (five out of each group). This included 15 peers, 15 parents or guardians, a homeroom/discipline teacher, and a researcher/an English teacher.

The qualitative data reflecting the development of the students' desirable moral characteristics were collected from an ongoing self-progress report, a classroom observation sheet, semi-structured interviews for the perceptions, and the feedback from the students in the follow-up studies, which were analyzed through content and narration analyses presented through descriptive narration due to their abstract nature. On the other hand, the quantitative data representing their improved English reading comprehension skill were drawn from the pretest/posttests as mentioned above and an ongoing self-assessment, which were statistically analyzed and presented in the forms of T-test, mean, standard deviation, and percentage as shown in the following section.

## Findings

The main findings in terms of the effects of the promotion of students' EFMC and RCS were gleaned from rich qualitative data with intangible benefits of human quality development reflected through the students' own perceptions and feedback. This derived from ongoing self-progress reports, perceptions of the informants and class observation. There were also follow-up studies through a face-to-face semi-conversational interview right after the course and a telephone interview six months after the course, focusing on the effects of the implementation on their moral and reading comprehension improvement. The qualitative data were processed through the content and narrative analyses. The findings highlighted the results of the qualitative data which reflect the students' EFMC promotion, so they were presented first as follows:

### 1. The qualitative findings

The qualitative data have mainly reflected the effects of the implementation in terms of students' EFMC promotion. The findings were derived from four main sources of data as follows:

#### 1.1 The findings from the ongoing self-progress reports

The ongoing self-progress reports were considered as reading assignments for students to self-study through a Google form. The students undertook each of the reading assignments after finishing each reading text by answering ten questions attached to each reading text throughout the course, which they could use to measure their progress from the beginning of the course until the end of the course.

The purposively- selected sample data were the students' responses to ten purposively designed questions from the 3<sup>rd</sup> ongoing self-progress report out of five. It was the story about The Four Wives studied in the middle of the study when the students were assumed to be adequately familiar with this innovative teaching method with BWR. The incidents were presumed to well represent what really happened represented by each of the three groups of students to reflect their enhanced eight desirable moral characteristics as the moral values incorporated in this certain English reading lesson. Each student was given the following questions: 1) What have you generally learnt from your lesson

today?, 2) Which specific moral value have you learnt from today's lesson?, 3) What life lesson have you learnt from the main characters in this lesson?, 4) Which questions do you like most? and Why?, 5) Which level of question has helped you learn more effectively?, 6) Do you think the questions help you improve your wise reflection or critical thinking?, 7) Do you think the questions help you improve your reading comprehension skills?, 8) According to the five levels of thinking questions, which level better helps you improve your reading comprehension?, 9) Which level of happiness (from very happy to happy or not happy at all) do you feel about this lesson?, 10) What makes you happy with this lesson? Each student had enough time to complete each of their tasks as it was in the form of self-study, so they were well-informed and prepared to do this assignment effectively. Also, there were provided answers for some questions for them to make a choice or they could add possible answers based on their own interpretations.

All the data were analyzed by the combined methods of content and narrative analyses within five steps ranging from meaning units, condensed meaning units, code, category to themes (Erlingsson & Brysiewicz, 2017). The steps of analyzing this are shown in table 1 below.

**Table 1** Sample of analysis from manifest to latent content.

Higher levels of abstraction which reflect the interpreted, latent meanings of the text.	Overarching themes: Cultivation of student's wisdom, morality, and happiness by enhancing their higher-order thinking and English reading comprehension with the NTLT implementation through own and other's perceptions
	Themes Students' transformed behaviors or performances
	Category 1. Developed higher-order thinking/ English reading comprehension of the students 2. Cultivated wisdom/ morality/ happiness of the students
	Code Development / cultivation
Lower levels of abstraction which are close to the text and manifested content.	Condensed meaning units Integrated was learnt in class into a way of life/ be more mindful/ be more aware of the value of anger management/ helps avoid hurting others by verbal abuse to higher degrees.
	Meaning unit After completing the course, I have gradually integrated what I had learnt in class into my way of life. At present, I am more mindful. For example, I am more aware of the value of anger management. This helps me avoid hurting others especially by verbal abuse to higher degrees.

(Sources: Adapted from Erlingsson & Brysiewicz, 2017)

The outcome of the analysis was presented in the form of a descriptive narration as follows:

In particular to the student's responses to questions no.1, 2, and 3 about what major moral values they had learnt from the lesson and the main characters, the main theme of their answers to these three questions, was the value of true love with faithfulness for each other as an ideal couple (100%, 15 out of 15). This came with some impressive reasons out of students' evaluative inference like *"The one who truly loves us will stand by us in any situation."* and *"Being unfaithful or polygamous causes a broken family."* This indicated that the student's EFMC, especially honesty, was effectively promoted through BWR with the ability to think by searching for causes and conditions, analysis, considering benefit and harm as well as raising ethical and moral awareness. This also implied their improved RCS at evaluation and appreciation levels through their evaluative, good judgment.

Similarly, the findings in responding to questions no. 4 and 5 about their most favorite question with reasons reflected that all students (100%, 15 out of 15) preferred questions no. 2 and 3 most. They were about the major morals they had learnt from today's lesson and the main characters. They clearly stated that those learnt moral values really inspired them to convincingly apply them in their daily life in terms of being faithful or honest to others, especially their beloved ones. This also reflected the effects of the implementation through the students' promoted EFMC, especially honesty, and their RCS at evaluation and appreciation levels as the result of BWR application.

Furthermore, the findings in responding to questions no. 6, 7, and 8 strongly confirmed those findings as all of them (100%, 15 out of 15) agreed that the additional specifically- designed questions based on BRW effectively helped improve both their EFMC, especially honesty, and their RCS at evaluation and appreciation levels.

Finally, the findings in responding to questions no. 9 and 10, all students (100%, 15 out of 15) clearly stated that the main cause of their happiness with the lesson was from realizing the true love with genuine faithfulness the first wife has for her husband. This could be inferred that the student's EFMC, particularly honesty, was effectively enhanced through BWR's thinking in terms of analysis, benefit, and harm, raising ethical and moral awareness and realizing and accepting the normal truth of all existing with three marks of all existence i.e., impermanence, non-self and unsatisfaction with their better RCS through their impressive reasons.

### 1.2. The findings from the classroom observation sheets

The second set of results was from the classroom observation sheets noted by two observers i.e., the researcher as a teacher herself and the other observer, one of her colleagues. They were well informed of the research purposes so that they clearly understood the research objectives and the methodology. The observation focused on the responses of the samples to additional specifically- designed questions to see whether there was any sign of their promoted wise reflection or critical thinking by applying BWR's ten ways of thinking, which were assumed to lead to the development of their EFMC and RCS.

The observers had observed each of the five specifically designed reading lessons including others in the coursebook, so there were ten observation sheets in total, which were then finalized out of their 98 % consensus. The students' responses were mainly in English with some grammatical mistakes or wrong word choices, but they were later translated into correct and meaningful English by the researcher and approved by two language experts both in Thai and English. The samples of findings were from selected responses of additional specifically- designed questions in each reading lesson. The output of the content and narrative analyses was presented in the form of a descriptive narration as in this following sample.

The fifth reading lesson was called *Where's on Earth!* in which students were encouraged to apply their knowledge and skills learned throughout the course. Thus, one intended question was: *"If you were on your holiday at a national park, do you think it is acceptable to pick up natural flowers in the forest and why?"* A sample response was: *"No, of course not. It is not acceptable because it is a selfish deed. I would take a photo instead of picking it up to preserve nature for all. This is sustainable nature preservation."* This obviously represented their developed EFMC, especially discipline and frugality promoted through thinking by ways of analysis and benefit and harm and their improved RCS at evaluation and appreciation with sensible reasons and good judgement.

### 1.3 The findings about the perceptions of students provided by informants involving in students' lives

The perceptions of students were another set of qualitative data from the semi-structured interviews with the four sets of the informants such as an English teacher as a researcher, their homeroom teacher as a discipline teacher, and another subject, their peers, and parents or guardians. The semi-structured interviews focused on the development of the students' EFMC and RCS through BWR. These informants were considered as the inter-raters for triangulating

the finding reliability. The data were gleaned from semi-structured interviews supported by their school reports. In fact, the findings from each group were in the same trend as almost all the informants agreed that the innovative teaching method with BWR did help promote the students' EFMC and RCS, as in this sample which represented similar positive effects of the implementation.

A researcher as an English teacher said: *As a fast learner, he can promptly but politely answer questions correctly and confidently with impressive responses which reflected his promoted EFMC and RCS. Although once he seemed not willing to share any knowledge and skills with other friends because he always wanted to be at the top of the class, the transforming learning experiences appear to influence him to be more caring and sharing with politeness and better understanding. Now, he volunteers to help his friends improve their academic performance. This made him well accepted and highly recognized by his friends.* (Group One: Mainly acquired desirable characteristics: honesty, generosity, politeness, and unity).

A homeroom teacher as a discipline and a subject teacher said: *His school record indicates his overall improvement. However, the most significant area is the English reading course, which he has got an A. Also, as the course progresses, he appears to develop good manners. For example, he was more considerate with his behavior and words.* (Group One: Mainly acquired desirable characteristics: cleanliness, politeness, and discipline).

The student's peer reflected that: *He helps explain complicated points in our assignments and provides good comments for us with his thorough understanding, especially in English reading subject. Apparently, he used to be self-centered to some extent because of his excellent academic achievement, but now he is open-minded as he is ready and willing to help us by caring and sharing. Also, he could have been better managed or kept his temper more, so now he is more careful with his words and actions. In this way, he has easily won his friends' hearts.* (Group One: Mainly acquired desirable characteristics: generosity, unity, and politeness).

The student's parent or guardian said: *I have encouraged him to love English since he was young as I know it is very useful for his studies. Thus, he loves reading in English and his grade in English is always good. I observe that he has studied hard but he seems to know how to get a balance between schoolwork and housework as he always offers help for housework like doing washing-up and cooking before he enjoys himself with his dogs. He also appears to become a good listener which is a good sign of being more mature. I am proud of my son.* (Group One: Mainly acquired desirable characteristics: diligence, discipline, and unity).

The findings represented the effects of incorporating moral values through Buddhist wise reflection (BWR) into an English course which helped promote eight fundamental moral characteristics (EFMC) as desirable characteristics and reading comprehension skills (RCS). This resulted in both their self-development and academic excellence being well approved by their teachers, peers as well as parents. These findings were also reinforced by the following findings.

#### 1. 4 The findings of the students' feedbacks from two follow-up studies

To reveal the student's improvement in the forms of their promoted EFMC and RCS, the students' feedback was collected through the semi-structured interviews in two follow-up studies about six and ten months after the studies through face-to-face and telephone interviews respectively. The following is the sample of the findings.

*The former English course was useful for transforming me to be more mature. For example, the Buddhist wise reflection, especially thinking in terms of moral raising, enabled me to live in harmony with others in a new environment like a university dormitory by being helpful, friendly, and sincere. Also, as medical studies were very demanding, those transforming learning experiences really help me get a balanced life. By thinking in terms of analysis, I realized that my studies would lead to a good profession in which I would be able to help many patients to be free from their illness. This motivates me to succeed in my studies. Moreover, I still use the knowledge and skills in reading English from the former*

*English course by reading for pleasure from meaningful and inspiring passages with moral values for my medical studies because most of the texts and articles are in English. The more I read, the better my RCS. (Group One: Mainly acquired desirable characteristics: diligence, discipline, unity, politeness, honesty, and generosity)*

The qualitative findings signified that the students had effectively acquired fundamental moral characteristics (EFMC) through Buddhist wise reflection (BWR) throughout the course. Moreover, the success of the study from the findings derived from the qualitative data was strongly confirmed by the findings from the quantitative ones as follows:

## 2. The quantitative findings

The quantitative data mainly reflect the effects of the implementation in terms of students' RCS promotion. The findings were derived from two main sources of data as follows:

### 2.1 The finding from the pretest and posttest

The pretest and posttest were the same tests that were specifically designed to assess the students' development in RCS as the effects of the implementation. The pretest was administered one week before the study while the posttest was one week after the study. The test was approved by the testing experts after being tried out with relevant groups in the same school. It consisted of purposively chosen 40 test items out of 60 with the Index of Item-Objective Congruence (IOC) and the value of Coefficient Cronbach's Alpha of 0.91 for its high reliability including its Effectiveness Index (E.I.) at 0.7190 for its effectiveness. The findings of the pre and posttests are shown in Table 2 below.

**Table 2** The results of the pretest and posttest

Types of test	N	Mean	S.D.	t	Sig	df
Posttest	30	36.566	1.851	16.478	.000**	29
Pretest	30	27.900	3.273			

p<.01

Table 2 shows the results of the pre and posttests which the statistical significance of t was 16.478, S.D. was 3.273, df29, p<.01, and the Effectiveness Index (E.I.), was 0.7190. This potentially indicated that the implementation significantly helped enhance the target students' higher-order thinking and English reading comprehension skills. This improvement was assumed to be the effects of various reading activities with a variety of reading passages and reading activities throughout the course. These reading activities had been offered both in-class and online through self-study which the students could complete at any place and any time they preferred. Also, the development might have come out of their interests and willingness. This was because the reading materials and the activities were specifically designed based on the results of their needs analyses through both a questionnaire and a semi-structured interview so that it directly served their needs. In short, the overall results of the pretest and posttest indicated a significant promotion of the students' RCS with the statistical significance presented above. These findings were strongly backed up by the following quantitative finding.

### 2.2 Findings from an ongoing self-assessment

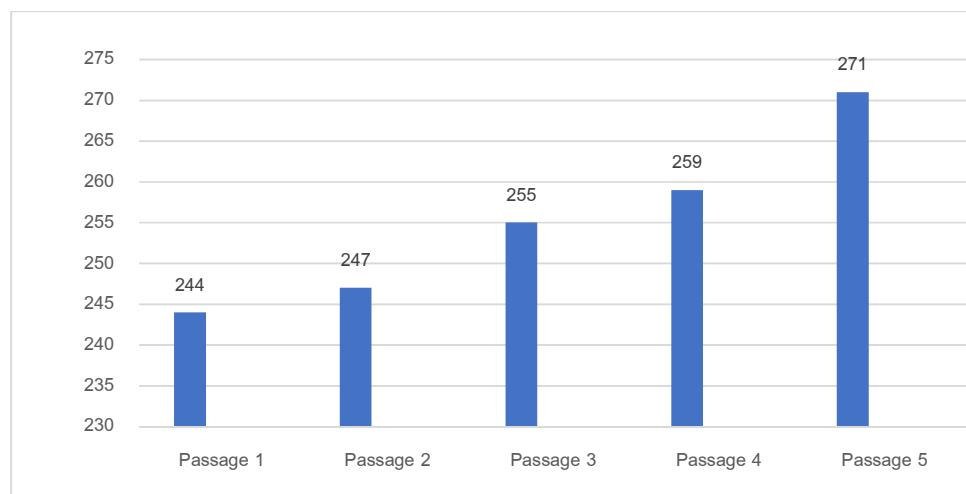
The other findings from the quantitative data were derived from the ongoing self-assessment in the forms of the five computer-based reading tasks with five series of quizzes through a Google form as an online self-study throughout the four-month course. A series of quizzes were attached to each of the five passages of reading

assignments. These five reading passages for the self-directed study were purposively selected based on learners' needs analysis through a questionnaire and semi-structured interviews to serve their needs and meet the study's objectives directly and appropriately. Each quiz was purposively designed based on ten ways of thinking of Buddhist wise reflection to reflect the efficiency of implementation in enhancing reading comprehension skills throughout the course. Each reading assignment was through an online self-study which the students undertook through Google Classroom every three weeks based on the reading passages selected by both the teacher/researcher and the students themselves. The findings of all quiz scores can be summarized in the table below. The test's efficiency was shown through the E1 and E2 of 85.00 and 91.41 respectively, which was higher than its normal criteria of 70/70 for foreign language testing. This signified the improvement of the students' RCS throughout the course.

**Table 3** The results of an ongoing self-assessment through a series of quizzes

Total No. Of students	Total scores of reading	Total scores of reading text no.1	Total scores of reading text no.2	Total scores of reading	Total scores of reading	Sum of all quiz scores	Sum of posttest scores
(30)	(10)	(10)	(10)	(10)	(10)		
<b>Total</b>	244	247	255	259	271	1,275	1097
<b>Mean</b>	8.13	8.23	8.5	8.6	9.0	42.5	36.566
<b>SD</b>	0.57	0.63	0.51	0.50	0.61	1.31	1.851
<b>%</b>	81.33	82.33	85.0	86.33	90.33	85.00	91.41
<b>E<sub>1</sub> = 85.00</b>							<b>E<sub>2</sub>=91.41</b>

In fact, this purposively designed series of five quizzes were used as a performance test to assess the development of the students' reading comprehension skills throughout the course. Thus, the result of all quizzes with the E1 and E2 of 85.00 and 91.41 (85.00/91.41) respectively, which were much higher than the normal criteria set at 70/70 clearly indicated the efficiency of the quizzes in assessing the development of the student's performance in both specific skills during the course. This significant improvement of the students' reading comprehension skills in English can be clearly demonstrated in the form of the bar graph in **Figure 2** below.



**Figure 2** The improvement of students' English reading comprehension skills

This finding revealed that the implementation significantly helped enhance students' English reading comprehension skills to a greater degree. This might have been from a wide range of opportunities to practice reading both in class (onsite) and online through Google Classroom by self-study. Especially, the easy access to the tasks and the quizzes online anywhere and anytime they wished with prompt results right after the quiz highly motivated them to be actively involved in the learning process with more learning satisfaction. The findings from both the pretest and posttest and the ongoing self-assessment clearly showed that the students' RCS had been significantly promoted while they were taking the course.

To sum up, both the qualitative and quantitative findings showed the positive effects of the implementation in incorporating moral values through Buddhist wise reflection (BWR) into an English course as it effectively helped promote both Thai high-school students' eight fundamental moral characteristics (EFMC) and reading comprehension skills (RCS). This could successfully solve the problems of their perceived moral and English reading proficiency declines as an expectation of the study.

## Conclusion and discussion

Based on the rich qualitative data as well as the significance of the quantitative ones, it was clear that the intangible benefits of human quality development were reflected through the students' EFMC and RCS development throughout the course. This proved the effectiveness of the study in incorporating moral values through Buddhist wise reflection into the target English course to promote Thai high-school students' eight fundamental moral characteristics and reading comprehension skills. Although the findings looked one-sided or only positive ones, they were derived from the majority of the subjects. Moreover, because the teacher is the main agent of change (Badley, 1986), the teacher as a researcher is a role model for the students in moral and reading comprehension improvement. The teacher in question has been teaching in this school for more than 30 years and they have a good rapport with the students, leading to good cooperation with them. Of course, there were some negative results out of the implementation but these were minor findings. For instance, there were some students who had different interpretations from their peers or the teacher which made them reluctant to express their opinions. However, the teacher tried to solve the problems through group discussion or even a private discussion with an individual if necessary. This happened in some questions which may have confused the students. The teacher as a researcher tried their best to accept all possible answers or ideas from each student based on their different backgrounds and experiences. In this way, the students could feel more comfortable to express their ideas to the teacher as well as later in their group as the teacher allowed all possible answers to be freely discussed with reasons. The teacher as a role model for the students could be considered as one of the concerns for the future study.

In terms of promoting the students' EFMC, the findings were absolutely in line with those of Ngammuk (2011) who studied eight fundamental moral characteristics among Thai undergraduate students, which showed that the students prioritized these eight moral characteristics ranging from politeness (4.35), generosity (4.14), honesty (3.96), unity (3.90) cleanliness (3.883), discipline (3.72), diligence (3.48) to frugality (3.46) respectively. This implied the need to promote frugality, especially in a modern materialistic and consumeristic world.

In this study, in the aspect of promoting reading comprehension skills through BWR as critical thinking directly addressed the root cause of the problems of Thai learners who could not read English with sufficient comprehension due to the lack of higher-order thinking and reading comprehension skills in reading English (Attaprechakul, 2013). These problems were evidently reflected through their low English reading proficiency both in national and international

exams like the Ordinary National Educational Test or O-NET (Lincharearn et al., 2009). Thus, this study has achieved not only developing Thai high-school students' reading comprehension skills (RCS) but also promoting eight fundamental moral characteristics (EFMC). These were the real effects of incorporating moral values through Buddhist Wise Reflection (BWR) into an English course.

Also, to the development of the students' RCS, BWR with ten ways of critical thinking directly influenced their RCS. This is because thinking and reading are intertwined (Kaya, 2015). Reading itself is considered as critical thinking as readers actively produce meaning while critical reading is related to critical thinking involving predicting, acknowledging, comparing, evaluating, and decision-making (Shihab, 2011). The findings in terms of the enhancement of students' RCS totally agreed with those of McKown & Barnett (2007) showing a significantly higher level of the development of the students' reading comprehension ability facilitated by critical thinking.

Furthermore, BWR could be considered as a schema or as cultural background knowledge for facilitating learners' reading comprehension. Thus, the findings did prove this true as it effectively helped accelerate their reading comprehension as it perfectly fits the cultural background of the target students within a Buddhist society. As a result, BWR is assumed to be suitable to develop the students' RCS in the context of culturally sensitive education because most of them are Buddhists. The current research findings completely agreed with those of Lu (2018) identifying the influence of cultural background knowledge on English reading, as well as the study by Sabatin (2013) showing the positive effect of cultural background knowledge on students' reading comprehension improvement.

In short, the effects of the implementation of BWR with ten ways of thinking as a framework for questioning technique positively influenced both their EFMC and RCS as questions simultaneously promoted RCS and critical thinking (Morgan & Saxton, 1994; Wixson, 1983). This is because when a teacher asks the right questions, s/he can lead students into all kinds of thinking skills and help them develop a variety of skills (Guszak, 1967) as the type of process of thought essential to answer the questions were pre-determined by the kind of questions asked (Cooke, 1970). Thus, this proves that well-designed questioning techniques significantly play a vital part in facilitating students' development not only in terms of language but also in thinking skill enhancement.

Potentially, the study has achieved the objective of incorporating moral values into an English course to promote Thai high-school students' EFMC and RCS through BWR's ten ways of thinking. This includes its significance as an innovative teaching method fostering students' eight fundamental moral characteristics, appreciation for moral considerations, moral and ethical values in students' minds, as well as RCS in English reading lessons.

## Recommendations and limitations

Although this innovative teaching method is exploratory in nature with its limited sample, it represents an attempt to promote students' EFMC and RCS within the context of Thai classroom culture with Buddhist influences in an English reading course at a high school level. This might limit the extent to which the conclusions can be generalized. However, the study suggests developing instructional models and activities both inside and outside of the classroom in a more targeted manner with desirable morals, and moral character development activities in relevant subjects and situations through developing integrative curricula. The study strongly recommends applying this innovative teaching in other relevant situations and other subjects or skills in order solve related social problems rooted in the perceived declines of morals such as morals involving social media exploitation through verbal abuse or drug addiction among younger generations. This includes systematic teacher training, especially as a role model for moral

characteristics with ongoing follow-up sessions for effectively promoting Thai students' EFMC and English RCS as well as a long-term follow-up study into their future life to see the real effect of the implementation in the long run.

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