

**THE EFFECTIVENESS OF
THE FLIPPED CLASSROOM IN ENHANCING
THAI EFL UNDERGRADUATES'
READING COMPREHENSION ABILITY,
LEARNER AUTONOMY, AND INTERACTION**

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by

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LIST OF ABBREVIATIONS

ANCOVA	Analysis of Covariance
CEFR	Common European Framework of Reference for Languages
CG	Control Group
EFL	English as a Foreign Language
EG	Experimental Group
ELT	English Language Teaching
EMM	Estimated Marginal Mean
ESL	English as a Second Language
ESP	English for Specific Purposes
FLN	Flipped Learning Network
GAT	General Aptitude Test
HOTS	Higher Order Thinking Skills
ICR	Intercoder Reliability
ICT	Information and Communication Technology
IOC	Index of Item-Objective Congruence
LMS	Learning Management System
LOTS	Lower Order Thinking Skills
M	Mean
MKO	More Knowledgeable Other
PI	Principal Investigator
READS	Reading Evaluation and Decoding System
SD	Standard Deviation
SEM	Standard Error of the Mean

SPSS	Statistical Package for the Social Sciences
TESOL	Teaching English to Speakers of Other Languages
ZPD	Zone of Proximal Development

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**KEBERKESANAN FLIPPED CLASSROOM DALAM MENINGKATKAN
KEUPAYAAN PEMAHAMAN MEMBACA, AUTONOMI PELAJAR DAN
INTERAKSI PRASISWAZAH EFL THAI**

ABSTRAK

Flipped classroom, suatu pendekatan yang berpusatkan pelajar, telah dikaji dalam pelbagai konteks EFL untuk menyelesaikan isu kebolehan pemahaman membaca yang rendah, autonomi pelajar, dan interaksi, yang juga berlaku di Thailand disebabkan oleh pengajaran guru yang tidak berkesan. Walau bagaimanapun, kurang kajian yang memfokuskan kepada pelaksanaan flipped classroom untuk meningkatkan kebolehan pemahaman membaca, autonomi pelajar, dan interaksi pelajar EFL Thai. Oleh itu, kajian kuasi-eksperimen ini dijalankan dengan lima objektif untuk: (a), mereka bentuk dan membangunkan plan dan bahan pengajaran berasaskan flipped classroom untuk mengajar membaca kepada pelajar EFL Thai (b) menyelidiki keberkesanan flipped classroom dalam meningkatkan kebolehan pemahaman membaca pelajar EFL Thai, (c) menyelidiki keberkesanan flipped classroom dalam meningkatkan autonomi pelajar dalam kalangan pelajar EFL Thai, (d) menyelidiki keberkesanan flipped classroom dalam meningkatkan interaksi pelajar EFL Thai, dan (e) meneroka pengalaman pelajar EFL Thai dalam menggunakan flipped classroom. Kajian ini menggunakan reka bentuk penyelidikan kaedah campuran. Peserta kajian, 40 pelajar tahun pertama yang dipilih secara mudah dari sebuah universiti awam di Thailand. Kumpulan eksperimen terdiri daripada 20 pelajar daripada program Bahasa Jepun Perniagaan manakala, kumpulan kawalan adalah 20 pelajar dari program Bahasa Cina untuk Industri. Flipped classroom

dilaksanakan untuk kumpulan eksperimen, manakala non-flipped classroom dilaksanakan untuk kumpulan kawalan. Sebelum dan selepas intervensi, ujian pra dan pasca pemahaman membaca dan soal selidik pra dan pasca autonomi pelajar dan interaksi diambil oleh semua pelajar. Selain itu, sembilan pelajar dalam kumpulan eksperimen dipilih secara bertujuan untuk temubual mendalam, separa berstruktur. Penemuan menunjukkan bahawa skor min yang diselaraskan pada ujian pasca pemahaman membaca kumpulan flipped classroom adalah lebih tinggi berbanding kumpulan non-flipped classroom, seperti yang dibuktikan dalam keputusan ANCOVA. Walau bagaimanapun, ANCOVA menunjukkan bahawa skor min terlaras pada skala autonomi pelajar kumpulan flipped classroom tiada perbezaan secara signifikan berbanding kumpulan non-flipped classroom. Berkaitan dengan interaksi, ANCOVA menunjukkan bahawa skor min terlaras pada skala interaksi kumpulan flipped classroom adalah lebih tinggi daripada kumpulan non-flipped classroom. Oleh itu, penemuan kuantitatif menunjukkan bahawa flipped classroom adalah lebih berkesan secara signifikan berbanding non-flipped classroom dalam meningkatkan kebolehan pemahaman membaca dan interaksi pelajar. Manakala hasil kualitatif, data temubual yang dianalisis melalui analisis tematik menunjukkan bahawa pelajar flipped classroom mempunyai pengalaman positif dan negatif dalam menggunakan flipped classroom. Kajian ini menyediakan beberapa implikasi pedagogi dan cadangan untuk penyelidikan masa depan.

**THE EFFECTIVENESS OF THE FLIPPED CLASSROOM IN ENHANCING
THAI EFL UNDERGRADUATES' READING COMPREHENSION ABILITY,
LEARNER AUTONOMY, AND INTERACTION**

ABSTRACT

The flipped classroom, a student-centered approach, has been explored in various EFL contexts to address issues of students' low reading comprehension ability, learner autonomy, and interaction, which are also prevalent in Thailand due to ineffective teacher-dominated instruction. However, little research has focused on the implementation of the flipped classroom to improve Thai EFL undergraduates' reading comprehension ability, learner autonomy, and interaction. Therefore, this quasi-experimental study was conducted with five objectives: (a) to design and develop instructional plans and materials based on the flipped classroom for teaching reading to Thai EFL undergraduates, (b) to investigate the effectiveness of the flipped classroom in enhancing Thai EFL undergraduates' reading comprehension ability, (c) to investigate the effectiveness of the flipped classroom in enhancing Thai EFL undergraduates' learner autonomy, (d) to investigate the effectiveness of the flipped classroom in enhancing Thai EFL undergraduates' interaction, and (e) to explore Thai EFL undergraduates' experiences with the flipped classroom. The study employed a mixed-methods research design. The participants included 40 first-year students conveniently selected from a public university in Thailand. Randomly assigned, the experimental group comprised 20 students from the Business Japanese program,

whereas the control group included 20 students from the Chinese for Industry program. The flipped classroom was implemented for the experimental group, and the non-flipped classroom was implemented for the control group. Before and after the interventions, all students took a reading comprehension pretest and posttest and completed a learner autonomy and interaction questionnaire. Additionally, nine students in the experimental group were purposively selected for in-depth, semi-structured interviews. The findings revealed that the adjusted mean score on the reading comprehension posttest of the flipped classroom group was greater than that of the non-flipped classroom group, as evidenced by the ANCOVA results. However, the ANCOVA showed that the adjusted mean score on the learner autonomy scale of the flipped classroom group was not significantly different from that of the non-flipped classroom group. Regarding interaction, the ANCOVA revealed that the adjusted mean score on the interaction scale of the flipped classroom group was greater than that of the non-flipped classroom group. Thus, the quantitative findings indicated that the flipped classroom was significantly more effective than the non-flipped classroom in enhancing students' reading comprehension ability and interaction. Thematic analysis of interview data showed that students had both positive and negative experiences with the flipped classroom. The study offers pedagogical implications and recommendations for future research.

CHAPTER 1

INTRODUCTION

1.1 Introduction

English serves as a global lingua franca and is widely recognized as a crucial medium for international communication, education, and professional advancement. As such, English Language Teaching (ELT) has become a significant educational priority worldwide, and Thailand is no exception. In the Thai context, English is taught as a foreign language (EFL), with considerable emphasis placed on developing students' proficiency across the four language skills. However, despite global shifts toward more dynamic, learner-centered pedagogical models, many English language classrooms in Thailand continue to rely heavily on traditional, teacher-centered instructional methods (Chen Hsieh et al., 2017). In such environments, students are often expected to learn at the same pace through lectures delivered in teacher-dominated settings, with minimal opportunity for differentiated instruction or active engagement.

This issue is particularly evident in English reading classes, where conventional practices such as the grammar-translation method and lecture-based teaching remain prevalent (Sawangsamutchai & Rattanavich, 2016). Although there is growing awareness of the need for student-centered approaches, the actual classroom reality suggests that many instructors continue to prioritize teacher-led instruction, limiting students' engagement with texts and their opportunities for meaningful interaction.

The continued reliance on traditional methods in Thai EFL classrooms has raised concerns regarding their effectiveness, particularly in fostering reading comprehension skills. Reading comprehension—the process through which learners construct meaning from text through interaction and interpretation—is an essential

competency for academic success in English (Snow, 2002). Yet, research has consistently shown that Thai EFL students struggle with reading comprehension, and this struggle has been attributed, at least in part, to the limitations of teacher-centered instruction (Sawangsamutchai & Rattanaich, 2016; Akkakoson, 2013; Akkakoson, 2011; Tamrackitkun, 2010). Traditional teaching practices often restrict learners' active involvement with texts and reduce opportunities for critical thinking and discussion, which are necessary for deeper comprehension.

Beyond impairing reading comprehension development, traditional teacher-led approaches have also been found to hinder two other essential components of successful language learning: learner autonomy and learner-learner interaction (Yiamkhamnuan, 2016; Yimwilai, 2019). Learner autonomy, as defined by Holec (1979), refers to the ability of learners to take responsibility for their own learning by setting goals, selecting strategies, and evaluating their progress. Learner-learner interaction, as conceptualized by Moore (1989), encompasses the communicative and collaborative exchanges that occur between students, contributing to deeper understanding and engagement. Both autonomy and peer interaction are integral to effective language learning and are particularly relevant in developing reading comprehension, as they encourage students to take ownership of their learning and engage in knowledge co-construction through collaboration.

However, these critical aspects of language development are often overlooked in teacher-centered classrooms, where students have limited opportunities to self-direct their learning or engage in meaningful dialogue with peers. The one-size-fits-all nature of traditional instruction fails to accommodate students' diverse learning needs, preferences, and paces. This highlights the urgent need for pedagogical innovations that prioritize active, personalized, and collaborative learning experiences. To address these

challenges, there is a growing recognition of the importance of adopting alternative teaching approaches that align with the learning preferences of 21st-century students and promote deeper cognitive engagement.

In recent years, the flipped classroom has emerged as a promising student-centered instructional model that offers an alternative to conventional teaching methods. Gaining popularity across educational contexts, the flipped classroom has been widely embraced by educators and scholars as a response to the evolving demands of modern learners (Turan & Akdag-Cimen, 2020). Grounded in the principle of reversing traditional instruction, this model shifts direct content delivery—typically conducted during class time—to the pre-class phase through videos or other digital materials, thereby reserving class time for interactive, problem-based, and higher-order learning activities (Nouri, 2016).

The flipped classroom is particularly well-suited to EFL contexts, as it supports the principles of active learning and encourages greater student engagement. As Chen Hsieh et al. (2017) argue, this approach aligns with the pedagogical needs of language learners by fostering active participation and enabling flexible, self-paced learning. Empirical evidence from numerous studies has highlighted several pedagogical benefits of flipped learning. One of the most consistently reported outcomes is the enhancement of learner autonomy. In flipped settings, students are responsible for reviewing video lectures and learning materials prior to class, which fosters self-regulation and independent learning habits (Burak et al., 2017; Han, 2015; Huang & Hong, 2016). The ability to pause, rewind, and replay instructional videos empowers learners to control their pace of learning, thereby accommodating individual differences in learning speed and style (Huang, 2020; Phung & Yen, 2020).

In addition to promoting autonomy, the flipped classroom also enhances opportunities for interaction. By shifting direct instruction outside the classroom, more time is made available during class for group work, discussion, and collaborative problem-solving—activities that are often absent in traditional lecture-based formats (Bergmann & Sams, 2012; Lo, 2018; Ruengkul & Jaiprasong, 2021). These peer interactions not only support social learning but also help students to co-construct meaning, share perspectives, and practice communication skills in context.

Importantly, recent research conducted in EFL settings has demonstrated the positive impact of the flipped classroom on students' reading comprehension ability (Mohammaddockht & Fathi, 2022; Farsi et al., 2020; Safiyeh & Farrah, 2020; Chavangklang & Suppasetsee, 2018; Abaeian & Samadi, 2016). The flipped model allows students more time before class to engage with texts, explore vocabulary, and grasp main ideas, thereby increasing their preparedness and confidence for in-class discussions and activities. As a result, in-class time can be used more effectively for addressing higher-order comprehension tasks, clarifying misunderstandings, and engaging in collaborative reading exercises that promote deeper textual engagement.

Given these pedagogical advantages, the flipped classroom presents a valuable alternative for improving English reading instruction in Thailand. In particular, it offers a pathway to address the pressing concerns surrounding Thai EFL students' limited reading comprehension skills, low levels of learner autonomy, and insufficient peer interaction. As the Thai educational system continues to seek strategies for reforming language education to meet the demands of the 21st century, the flipped classroom stands out as a promising and evidence-based approach to promote active, autonomous, and collaborative learning.

1.2 Background of the Study

English is widely recognized as the global lingua franca and a vital tool for international communication in academia, business, science, technology, and tourism. As a result, the language is taught and learned extensively around the world, including in countries where English is not an official or native language. In Thailand, English is taught as a foreign language (EFL) and has been integrated as a compulsory subject at all levels of education, from primary to tertiary institutions (Srisang & Everatt, 2021; Rungwaraphong, 2020; Hayikaleng et al., 2016; Darasawang, 2007; Sroinam, 2005). However, the practical use of English in daily life remains limited among Thai people, particularly outside academic or professional contexts. English is not widely spoken in everyday communication, nor is it designated as an official language, which contrasts starkly with English as a Second Language (ESL) settings where learners are surrounded by English input in social, academic, and professional domains (Hayikaleng et al., 2016). Consequently, Thai learners of English must rely primarily on classroom instruction to access and use the language, which inherently limits the opportunities for authentic language exposure and meaningful language use outside the classroom.

At the university level, English proficiency continues to be emphasized as a critical skill for Thai students to compete in the ASEAN and global job markets. Undergraduate students in Thailand are typically required to complete at least twelve English credits as part of their degree programs, regardless of their major (Darasawang, 2007). In addition to coursework, many institutions mandate that students pass an English proficiency test as a graduation requirement, highlighting the institutional focus on English language development as an academic and professional competency. The students participating in this study are first-year undergraduates enrolled in the Business Japanese and Chinese for Industry programs at a public university in Bangkok.

Although they are not majoring in English, their programs are language-focused, and they are required to take two general English foundation courses along with two English for Specific Purposes (ESP) courses over the course of their studies. Before completing their degree programs, they must also meet an institutional benchmark by passing an internally administered English proficiency test. These requirements underscore the importance placed on English proficiency, even for non-English majors.

Among the four core language skills—listening, speaking, reading, and writing—reading tends to receive the most attention in Thai university classrooms, particularly in EFL contexts. This emphasis is largely because reading serves as the primary means by which students can access academic texts, online resources, and professional documents written in English (Akkakoson, 2011; Channuan, 2012). Reading comprehension, therefore, plays a central role in the academic success of EFL learners in Thai higher education institutions, as it allows them to engage with course materials, complete assignments, and prepare for examinations. In many university-level English assessments, reading comprehension is the most frequently tested skill, further reinforcing its importance in English language instruction in Thailand.

However, despite the recognized importance of reading comprehension, Thai EFL students often struggle to master this skill. This difficulty is rooted in several factors. First, reading in a foreign language requires the integration of complex linguistic competencies, including vocabulary knowledge, grammatical understanding, textual coherence, and inferential reasoning (Nation, 2009). Students must not only decode unfamiliar words and sentence structures but also understand the meaning of texts as cohesive wholes. Second, because students in Thailand have limited exposure to English in their daily lives, they are less likely to develop the background knowledge and contextual familiarity that native speakers or ESL learners might draw upon during

reading tasks. For many Thai EFL learners, their primary or sole exposure to English texts occurs in the classroom setting, often through selected reading passages that may not reflect authentic language use or real-world relevance.

Moreover, traditional pedagogical practices in Thai EFL classrooms continue to emphasize teacher-centered instruction, particularly in reading comprehension courses (Sawangsamutchai & Rattanavich, 2016). At the university where this study was conducted, the dominant approach to English reading instruction is still rooted in the grammar-translation method and lecture-based teaching. Instruction in the English foundation courses is typically divided into two components: one focusing on speaking and listening skills and taught by native or near-native English-speaking instructors, and the other focusing on reading and writing skills, taught by Thai instructors. In the reading and writing sessions, the common practice involves students reading short passages followed by vocabulary exercises, grammar drills, and paragraph writing. Classroom interactions are generally teacher-led, with limited opportunities for student discussion, collaboration, or problem-solving. Homework is often assigned via online platforms such as English Discoveries, which offer self-paced digital content but minimal interactivity. These practices reflect a traditional, passive learning environment in which students are largely recipients of knowledge rather than active participants in the learning process.

Although Thailand's National Education Act of 1999 advocated for the integration of learner-centered approaches and the use of information and communication technology (ICT) in teaching, these reforms have not been fully implemented in practice (Darasawang, 2007). Many English instructors still rely on didactic methods of teaching, and while ICT tools such as Microsoft Teams and LINE are commonly used for administrative communication or assignment submission, they

are rarely employed to foster deeper engagement or peer collaboration (Akkakoson, 2013; Channuan & Wasanasomsithi, 2012). The result is a learning environment that remains highly dependent on the teacher, with students rarely encouraged to take initiative, collaborate with peers, or critically engage with content. This teacher-dominated context is a significant obstacle to the development of learner autonomy—a key component of successful language learning.

Learner autonomy, as originally defined by Holec (1979), refers to the capacity of learners to take responsibility for their own learning by setting goals, selecting learning strategies, monitoring progress, and evaluating outcomes. In the Thai EFL context, the level of autonomy among students appears to vary. Research indicates that non-English majors tend to exhibit a moderate level of learner autonomy (Koad & Waluyo, 2021), whereas English majors generally demonstrate higher levels of self-directed learning (Treesattayanmunee & Baharudin, 2024). Nonetheless, most Thai students have been socialized in a culture of education that emphasizes obedience to authority, respect for teachers, and conformity to rules, which may inhibit their willingness or ability to take initiative in learning (Rungwaraphong, 2012). Many students still prefer teacher guidance and share responsibility for learning outcomes with their instructors (Koad, 2022). In such contexts, fostering greater learner autonomy becomes not only necessary but also challenging.

Autonomy is widely regarded as essential for effective language learning, especially in EFL environments where exposure to English is limited. Numerous studies have demonstrated a strong correlation between learner autonomy and reading comprehension ability (Zafarian & Nemati, 2016; Bayat, 2011; Zarei & Gahremani, 2010). Autonomous learners are more likely to read independently, seek out supplementary materials, and apply metacognitive strategies that enhance reading

comprehension. However, autonomy should not be misconstrued as isolation. As Little (1991) argues, learner autonomy is a socially constructed phenomenon that develops through interaction with teachers, peers, and learning materials. In other words, learners need opportunities for collaboration and dialogue in order to internalize and apply the strategies of autonomous learning (Murray, 2014).

Interaction, particularly peer interaction, thus plays a critical role in supporting both reading comprehension and the development of learner autonomy. This link led to the decision to examine interaction in this research, along with learner autonomy and reading comprehension ability. In educational settings, interaction can occur between learners and content, learners and instructors, or among learners themselves (Moore, 1989; Wagner, 1994). In Thai EFL classrooms, learner-instructor and learner-content interactions are usually well-established through lectures, reading assignments, and teacher feedback. However, learner-learner interaction is often limited or overlooked (Treesattayanmune & Baharudin, 2024). This lack of peer interaction is problematic, as it deprives students of opportunities to share knowledge, ask questions, engage in collaborative problem-solving, and learn from one another's perspectives. Research has shown that peer interaction significantly contributes to reading comprehension by enabling learners to clarify meanings, build vocabulary, and apply reading strategies in real-time discussions (Farrah & Jabari, 2020; Sajib & Nahar, 2020; Rattanasak, 2023). Furthermore, learner-learner interaction helps students develop a sense of shared responsibility and agency, which are crucial for both academic success and lifelong learning.

Although the integration of ICT has expanded access to learning materials and communication tools, it has not automatically resulted in improved peer interaction. Studies reveal that Thai university students tend to engage more with instructors and

content than with peers in online environments, indicating a need to design learning experiences that actively promote interaction (Jitpaisarnwattana et al., 2021; Mayanondha & Soontornwipast, 2020). Without structured opportunities for collaboration, students may revert to passive learning habits, even in technology-enhanced environments.

In response to these challenges, educators in Thailand and worldwide have explored alternative instructional approaches that promote active learning, learner autonomy, and interaction. One such approach is the flipped classroom model. According to the Flipped Learning Network (FLN, 2014), the flipped classroom is a pedagogical model in which direct instruction is delivered outside the classroom—typically through videos or online materials—while class time is used for interactive, collaborative, and higher-order learning activities. In this model, the learning environment is restructured to allow students greater control over the pace and place of initial content acquisition, while teachers serve as facilitators and guides during in-class application. The flipped classroom thus supports both independent learning and collaborative engagement, aligning well with the goals of learner autonomy and interaction (Chen Hsieh et al., 2017; Phung & Yen, 2020).

In the Thai context, the flipped classroom has gained popularity in recent years as an innovative and effective teaching model in EFL education. Empirical studies have shown that the flipped classroom can improve students' reading comprehension performance (Chavangklang & Suppasetseree, 2018), enhance learner autonomy (Santikarn & Wichadee, 2018), and increase student engagement and motivation (Thaichay & Sitthitikul, 2016; Li & Suwanthep, 2017; Katchamat, 2018). These outcomes suggest that the flipped classroom may serve as a promising pedagogical

strategy to address the limitations of teacher-centered instruction, especially in large EFL classes where individualized attention is difficult to achieve.

Given the challenges faced by Thai EFL undergraduates in reading comprehension, learner autonomy, and peer interaction, the present study investigates the effectiveness of the flipped classroom in enhancing these three interrelated dimensions of English learning. It aims to contribute to the growing body of research on flipped learning in EFL contexts and to offer practical insights for educators seeking to implement more interactive, student-centered approaches in Thai higher education.

1.3 Problem Statement

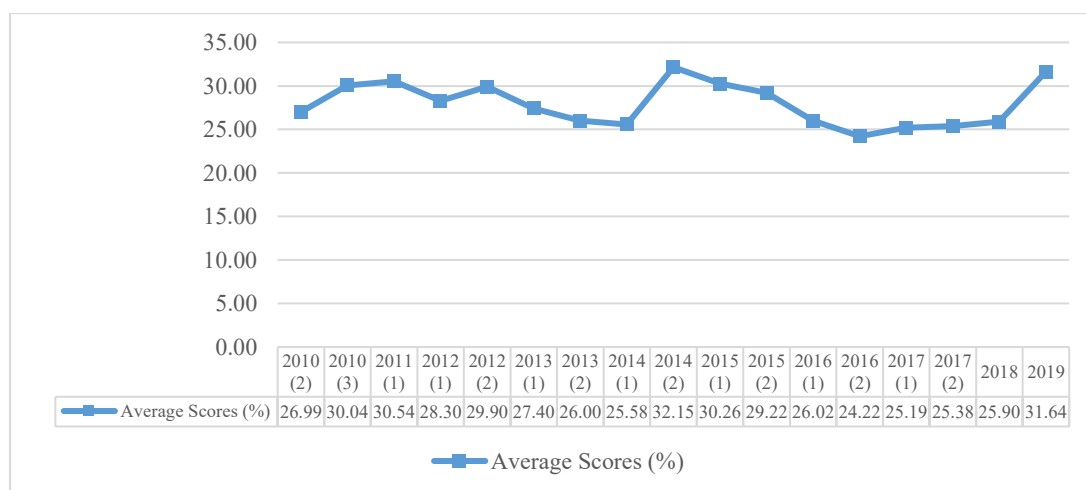
One of the most challenging English language skills for Thai EFL students at the tertiary level is reading (Hui et al., 2020; Sroinam, 2005). Like undergraduate students in other contexts, Thai EFL undergraduates are required to engage with a wide range of academic materials in English—such as textbooks, academic articles, and scholarly publications—to gain knowledge in their field of study. Without adequate English reading comprehension ability, these students struggle to make sense of the materials necessary for their academic success. However, numerous studies in Thailand have reported that Thai EFL undergraduates continue to demonstrate weak reading comprehension skills (Suknantapong et al., 2002; Yimwilai, 2008; Chawwang, 2008; Akkakoson & Setobol, 2009; Sawangsamutchai & Rattanavich, 2016; Hui et al., 2020). Many of them find English reading difficult and remain far from proficient in comprehending texts (Chomchaiya & Dunworth, 2008; Akkakoson & Setobol, 2009; Chomchaiya, 2014).

Indeed, Thai students' difficulties in English reading have persisted for years. Data from the General Aptitude Test II (GAT II), specifically Section IV: Reading Comprehension, for students in Grade 11 and higher across the nation from the

academic years 2010 to 2019, as depicted in Figure 1.1, reveal consistently low and below-standard performance (NIETS, 2019). These results signal an urgent and ongoing issue that needs to be addressed at the pedagogical level.

Figure 1.1

GAT II Section IV (Reading Comprehension) Results: Academic Years 2010-2019



A primary cause of Thai EFL students' low reading proficiency is the continued reliance on conventional, teacher-centered instructional approaches in English reading classes (Sawangsamutchai & Rattanavich, 2016). Most Thai teachers continue to use methods such as grammar-translation, which fail to support the development of deeper reading comprehension skills (Tamrackitkun, 2010; Akkakoson, 2011, 2013). This method focuses on surface-level decoding and literal translation, rather than fostering interpretation, inference, and analytical thinking—key components of reading comprehension (Sawangsamutchai & Rattanavich, 2016). Consequently, students may be able to pronounce English words or understand individual sentences, but they struggle to grasp the author's intended meaning and develop higher-order thinking skills related to texts.

In addition to poor reading outcomes, traditional teacher-centered pedagogy also restricts the development of learner autonomy (Yiamkhamnuan, 2016). While learner autonomy—the ability of learners to take responsibility for their own learning (Holec, 1979)—is essential for language development (Little, 2007; Najeeb, 2013), many Thai EFL students remain overly dependent on their instructors (Sanprasert, 2010). This is partly due to cultural perceptions of teachers as authoritative knowledge providers (Keyuravong & Maneekhao, 2006), which discourages students from becoming self-directed learners. When students are not encouraged to monitor their own learning or engage in self-study, their reading performance is likely to stagnate. As Chomchaiya and Dunworth (2008) pointed out, Thai EFL students often rely on external help—from teachers, parents, or dictionaries—rather than taking initiative to resolve reading challenges independently. Promoting learner autonomy, therefore, is key to improving reading comprehension and developing lifelong reading habits (Chanthap & Wasanasomsithi, 2019; Hedge, 2000).

Furthermore, conventional approaches also fail to foster peer interaction, which is another crucial component in language learning and reading development (Yimwilai, 2019). In teacher-dominated classrooms, students typically work in isolation with limited opportunities to collaborate, ask questions, or discuss ideas with peers (Al-Zu'be, 2013). Yet, interaction plays a vital role in the development of language skills, including reading, as it provides opportunities for knowledge exchange, feedback, co-construction of meaning, and social support (Naimat, 2011; Yu, 2008). In Thai classrooms, where the teacher often does most of the talking and translates nearly everything into Thai, students are not encouraged to share perspectives or participate in meaning-making discussions (Akkakoson & Setobol, 2009). Such non-interactive

instructional environments do not support the development of critical reading or communicative competence.

The above issues clearly highlight that the traditional teacher-centered approach to English reading instruction in Thailand is inadequate. It neither facilitates reading comprehension development nor promotes learner autonomy and peer interaction—skills that are essential in the 21st-century learning landscape. Therefore, it is imperative to adopt more innovative, student-centered teaching methodologies that better respond to learners' needs and create a more engaging and effective learning environment.

Among the various student-centered approaches available, the flipped classroom was selected for this study due to its unique capacity to address these three core challenges. Unlike other methods that may emphasize a single learning domain, the flipped classroom offers a comprehensive framework that promotes both independent and collaborative learning. By shifting direct instruction to the pre-class phase through video lectures and digital content, students are encouraged to take responsibility for their own learning and engage with texts at their own pace (Bergmann & Sams, 2012; Huang, 2020). This process not only nurtures learner autonomy but also enables class time to be used more effectively for discussion, group work, and inquiry-based tasks, thereby fostering interaction and deepening reading comprehension (Hung, 2017; Safiyeh & Farrah, 2020; Mohammaddokht & Fathi, 2022). Compared to other alternatives—such as task-based or project-based learning—the flipped classroom provides a balanced blend of content delivery and active learning opportunities, making it a particularly appropriate intervention for Thai EFL undergraduates. Given the promising outcomes reported in EFL contexts, this approach was chosen for the present study.

Although the flipped classroom has received increasing attention in educational research, comprehensive empirical investigations into its effectiveness in foreign language education remain limited (Turan & Akdag-Cimen, 2020). Specifically, there is a notable scarcity of studies examining its impact on reading comprehension ability, learner autonomy, and peer interaction in the Thai EFL context. Therefore, this study seeks to fill this gap by exploring the effectiveness of the flipped classroom in addressing these persistent challenges and improving English reading instruction for Thai EFL undergraduates.

1.4 Research Objectives

- RO1: To design and develop instructional plans and materials based on the flipped classroom for teaching reading to Thai EFL undergraduates.
- RO2: To investigate the effectiveness of the flipped classroom in enhancing Thai EFL undergraduates' reading comprehension ability.
- RO3: To investigate the effectiveness of the flipped classroom in enhancing Thai EFL undergraduates' learner autonomy.
- RO4: To investigate the effectiveness of the flipped classroom in enhancing Thai EFL undergraduates' interaction.
- RO5: To explore Thai EFL undergraduates' experiences with the flipped classroom.

1.5 Research Questions

- RQ1: Is there any statistically significant difference in reading comprehension ability between the flipped classroom students and the non-flipped classroom students?
- RQ2: Is there any statistically significant difference in learner autonomy between the flipped classroom students and the non-flipped classroom students?
- RQ3: Is there any statistically significant difference in interaction between the flipped classroom students and the non-flipped classroom students?

RQ4: What are the students' experiences with the flipped classroom?

1.6 Research Hypotheses

H₀1: There is no statistically significant difference in reading comprehension ability between the flipped classroom students and the non-flipped classroom students.

H₀2: There is no statistically significant difference in learner autonomy between the flipped classroom students and the non-flipped classroom students.

H₀3: There is no statistically significant difference in interaction between the flipped classroom students and the non-flipped classroom students.

1.7 Significance of the Study

This study is significant for several reasons. First and foremost, it addresses a persistent and pressing issue in Thai EFL education: the low English reading comprehension ability among undergraduate students. Despite the necessity for Thai university students to engage with academic texts in English, many struggle with understanding such materials due to ineffective reading instruction. By introducing the flipped classroom—a student-centered pedagogical model—as an alternative to the traditional teacher-centered approach, this study proposes a practical solution to a long-standing problem in Thai EFL reading education.

Second, this study contributes to the growing but still limited body of research on the implementation of the flipped classroom in EFL contexts. While the flipped classroom has gained popularity in various educational fields, its application in EFL reading instruction, especially in Thailand, remains underexplored. This study thus fills a critical research gap by evaluating the effectiveness of the flipped classroom in enhancing not only reading comprehension ability but also learner autonomy and interaction—three interrelated aspects that are crucial for successful language learning but are rarely examined together.

Third, the study holds significant practical value for educators, curriculum designers, and policymakers in Thailand and similar EFL contexts. The instructional plans and materials developed and tested in this research provide a replicable model for improving reading instruction in higher education. By demonstrating how flipped instruction can benefit English language university students, the findings can inform efforts to modernize English language teaching in line with 21st-century educational goals.

Moreover, the study offers theoretical contributions by reaffirming the relevance of constructivist learning theories and learner autonomy frameworks in the context of EFL reading instruction. It highlights how active learning environments, supported by pre-class digital engagement and in-class interaction, can lead to deeper comprehension and more independent learning behaviors among EFL students.

Finally, although situated within the Thai tertiary education system, the implications of this study extend beyond national boundaries. Many EFL learners in other countries face similar challenges rooted in traditional pedagogies. As such, the results of this research may contribute to broader discussions on innovative, student-centered approaches to language instruction in global EFL settings.

1.8 Limitations of the Study

While this study was carefully designed to ensure both internal and external validity, certain limitations should be acknowledged when interpreting and generalizing the findings.

First, due to the researcher's accessibility and practical considerations, data collection was limited to the School of Liberal Arts at a single public university in Bangkok, Thailand. The sample consisted of 40 conveniently selected first-year students—20 from the Business Japanese program and 20 from the Chinese for Industry

program. As such, the sample may not be representative of the broader population of Thai EFL undergraduates, limiting the generalizability of the results.

Second, although the two groups were assigned to different programs, they were from the same campus and may have had informal opportunities to interact outside of class. This raises the possibility that participants in the control and experimental groups could have exchanged information about their learning experiences, which may have inadvertently influenced the outcomes of the study and affected internal validity.

Third, the implementation period for both the flipped and non-flipped classroom interventions was relatively short—spanning eight weekly sessions, with each session lasting 120 minutes, amounting to a total of 16 instructional hours. A more extended implementation may be required to fully capture the long-term effects of the flipped classroom on reading comprehension ability, learner autonomy, and interaction.

Lastly, the study relied on self-report questionnaires to gather data on participants' perceptions and experiences. As with all self-reported measures, the authenticity of responses cannot be guaranteed. There is a possibility that participants responded in socially desirable ways rather than providing truthful answers, which could affect the validity of the findings (Razavi, 2001).

1.9 Operational Definitions of Terms

This study employs five key terms: the flipped classroom, the non-flipped classroom, reading comprehension ability, learner autonomy, and interaction. The operational definitions of these terms are identified for a clear understanding as follows.

1.9.1 The Flipped Classroom

The flipped classroom or flipped learning is defined as a teaching approach where a lecture is transferred from a shared learning environment to an individual one, allowing the classroom to be transformed into an interactive setting where students

participate in the subject matter and apply what they have learned under the teacher's guidance (FLN, 2014). In this study, the flipped classroom refers to a teaching approach that rearranges the traditional classroom process by having students work together to complete activities and discuss issues under the teacher's guidance in a virtual classroom after they have studied online lecture materials in advance and completed online quizzes.

1.9.2 The Non-Flipped Classroom

As opposed to the flipped classroom, the non-flipped classroom in this study refers to a teaching strategy that starts with an in-class virtual session where students participate in a lecture, practice exercises, and take an online quiz to acquire knowledge before receiving assignments to complete during the out-of-class session.

1.9.3 Reading Comprehension Ability

Reading comprehension ability is demonstrated by readers in the process of interacting with written language and simultaneously creating and extracting meaning (Snow, 2002). According to Barrett's taxonomy (Barrett, 1976), reading comprehension ability in this study is defined as students' capacity to apply the first three levels of reading comprehension, namely literal comprehension, rearrangement, and inferential understanding.

1.9.4 Learner Autonomy

According to Holec (1979), “the ability to take charge of one's own learning” (p. 3) is what is meant by “learner autonomy,” or the capacity “to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning” (p. 3). These elements include establishing the goals, outlining the topics and steps, choosing the appropriate approaches and strategies, keeping an eye on the acquisition process, and assessing the knowledge gained. Inspired by Holec's (1979) definition, learner

autonomy is defined in this study as learners' perceptions of their capacity and responsibility to oversee their own education both inside and outside of the classroom in five aspects including identifying learning objectives, monitoring learning progress, choosing learning techniques, controlling learning processes, and evaluating learning and achievement.

1.9.5 Interaction

According to Moore (1989), there are three different kinds of interaction: learner-content, learner-instructor, and learner-learner. The first two sorts of interaction, though, are outside the purview of this investigation. The only interaction type that is looked at is the learner-learner interaction. Within the framework of this investigation, interaction is defined as the degree to which students perceive their interactions with fellow students during the study's interventions.

1.10 Summary

This chapter presents the introduction and background of the study to provide a general understanding of the key variables and to describe the current state of English reading instruction in Thailand. It outlines the challenges faced by Thai EFL students in learning English reading and examines the limitations of traditional, teacher-centered approaches that negatively impact reading comprehension ability, learner autonomy, and peer interaction. The chapter also introduces the flipped classroom as a student-centered alternative with the potential to address these issues. The study's objectives, research questions, and hypotheses are clearly stated, followed by a discussion of the study's significance, including its contribution to understanding the implementation of flipped instruction in EFL reading contexts and its potential to offer a replicable model of flipped lesson plans and materials for higher education. Additionally, the chapter identifies limitations that may affect the generalizability of the findings, such as the use

of convenience sampling and the relatively short intervention period. Finally, operational definitions of key terms are provided to ensure clarity and consistency throughout the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed related studies from various sources to provide background information relevant to the present research. Key concepts associated with the study's variables and intervention were thoroughly discussed. In addition, the theoretical and conceptual frameworks were presented to illustrate the underpinning theories and clarify the relationships among the variables examined in this study.

2.2 Definitions of Reading

The concept of reading has been defined in various ways throughout the literature, reflecting its multifaceted nature. One of the earliest influential definitions was proposed by Goodman (1967), who described reading as “a psycholinguistic guessing game,” emphasizing the interaction between language and cognition. He conceptualized reading as a selective process that involves the partial use of minimal language cues drawn from perceptual input, based on the reader’s expectations. As the reading process unfolds, these cues are continuously processed, and tentative hypotheses are confirmed, modified, or rejected.

Drawing on Goodman’s perspective, Clarke and Silberstein (1977) characterized reading as a dynamic and interactive process, describing it as “a two-fold phenomenon involving process-comprehending and product-comprehension” (p. 137), thereby highlighting both the mental operations involved and the resultant understanding.

In his later work, Goodman (1988) reaffirmed reading as “a receptive language process” (p.12), reiterating that reading begins with the writer's encoded message and

ends with the reader's construction of meaning. This conceptualization underscores the psycholinguistic nature of reading, whereby readers actively interpret and reconstruct meaning from written language. Similarly, Nuttall (1996) emphasized the centrality of meaning in reading, arguing that any definition that omits this focus is incomplete. He posited that reading entails extracting the intended message from the text as fully as possible.

Building on these perspectives, Urquhart and Weir (1998) defined reading as the process of receiving and interpreting information encoded in language through print. This definition recognizes reading as a purposeful act of comprehension guided by written symbols.

Smith (2004) further advanced the understanding of reading by defining it as a cognitive act—"thought guided by written language." He stressed that reading is inseparable from the reader's purpose, prior knowledge, emotions, and the nature of the text, thereby situating reading within a broader contextual and personal framework.

Finally, a comprehensive and contemporary definition was offered by the National Assessment Governing Board (U.S. Department of Education, 2008), which defined reading as:

An active and complex process that involves understanding written text, developing and interpreting meaning, and using meaning as appropriate to the type of text, purpose, and situation (p. 2).

In summary, the definitions presented in this section illustrate the evolution of thought regarding reading, moving from early psycholinguistic models to more holistic and context-sensitive perspectives. The next section will explore various conceptualizations of reading comprehension, which delve deeper into how meaning is constructed from text.

2.3 Reading Comprehension

Reading comprehension is one of the key dependent variables examined in this study. It is widely recognized as a complex and multifaceted construct, influenced by a range of cognitive, linguistic, and contextual factors. Nonetheless, developing strong reading comprehension skills is essential for learners seeking to achieve proficiency in English (Chomchaiya & Dunworth, 2008). To gain a clearer understanding of this construct, the following sub-sections present various definitions and levels of reading comprehension as proposed in the literature.

2.3.1 Definitions of Reading Comprehension

A number of scholars have offered definitions of reading comprehension, reflecting its complexity and the diverse perspectives from which it can be approached. Snow (2002) defines reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p.11). This definition emphasizes the dual processes of decoding (extracting meaning) and interpretation (constructing meaning) in a dynamic interplay with the text.

Farris, Fuhler, and Walther (2004) similarly describe reading comprehension as “the process of understanding the message that the author is trying to convey,” and more simply as “making meaning from the text at hand” (p.321). This underscores the central goal of comprehension: to derive the author’s intended message.

Pardo (2004) expands on this by defining comprehension as a constructive process in which readers actively generate meaning through interaction with the text. This process involves integrating prior knowledge and personal experiences with the textual content, as well as considering the reader’s stance toward the text.