



Do Learning Strategies Lead to Improved English Proficiency? A Study of University Students in Thailand

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Introduction

Since the 1980s, English proficiency has been a primary focus of English language teaching and learning in Thailand. Annual surveys from international educational institutions, such as Education First (2021), indicate that Thai test takers have extremely low levels of English proficiency. Thai learners' average scores were placed 22nd out of 24 Asian countries. Furthermore, Waluyo (2019) reported that 77.3% of Thai university students were at A1 and A2 levels, indicating that they were deemed basic users of English. These levels correspond to the abilities of primary and junior high school students, according to Thai Ministry of Education criteria (The Ministry of Education, 2014). At this point, students should have reached B1/B2 levels as independent English users, but the study found that only 19.2% of students reached B1, and 3.5% reached B2. It highlights the persistent problem of low English proficiency among Thai EFL learners.

There is a wealth of research indicating that the application of suitable learning strategies can help learners improve their situation and become more adaptable in their proficiency development (O'Malley & Chamot, 1990). Learning strategies are the actions that students take to make their learning more enjoyable and effective (Oxford, 1990). Previous studies have proven a significant relationship between students' learning strategies and their English proficiency (Gu et al., 2005; Park, 1997). Numerous studies have discovered differences in the way low-and high-proficient learners employ learning strategies (Lai, 2009; Rao, 2016).

Although the body of knowledge about learning strategies has grown in recent years, some unsolved concerns remain. On the one hand, more research into the use of learning strategies across cultural contexts is required (Hu & Chen, 2007). In the Thai context, little is known regarding the association between students' learning strategies and English proficiency. The level of English proficiency has a significant impact on the development of both receptive and productive skills (Waluyo & Panmei, 2021). In a broader sense, Choomthong (2014) argues that with the arrival of the ASEAN economic community in 2015, there has been a demand for Thai students to be able to speak English in the workplace. This study initiated research on Thai students' learning strategies and English proficiency. It looked at the learning strategies of Thai university students with varying levels of English proficiency. The outcomes of this study could



have important implications for teachers' efforts to improve students' learning strategies to increase their English proficiency.

Literature Review

Learning Strategies

Learning strategies drew the attention of scholars who were studying the acquisition of a second language in the 1990s (McDonough, 1999). Oxford (1990) defines learning strategies as acts made by a learner to make learning more efficient, pleasurable, self-directed, effective, and transferable to other settings. A learning strategy, according to other scholars, is the process of employing explicit methods and abilities to tackle challenges that students face during their internal learning process (Wen & Wang, 2004). According to the definitions, learning strategies are the activities that students carry out to increase the efficiency of their learning process, such as "acquiring," "processing," "storing," and "retrieving."

Learning strategies have been conceived and classified in a variety of ways by scholars working in the field of SLA. Dansereau (1985) enhanced the classification of learning strategies and clarified the difference between primary strategies and support strategies. Many studies on learning strategies have been inspired by the classification. However, it fails to provide information on effective learning strategies for students, particularly those with lower levels of proficiency (Wang et al., 2021). Later, Oxford (1990) expanded on this paradigm by integrating memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies, as depicted in Figure 1, and developed an instrument called the *Strategy Inventory for Language Learning* (SILL). The instrument has been used in a number of studies around the world to identify language learners' strategy preferences (Ardasheva & Tretter, 2003; Mizumoto, 2018; Tam, 2013).

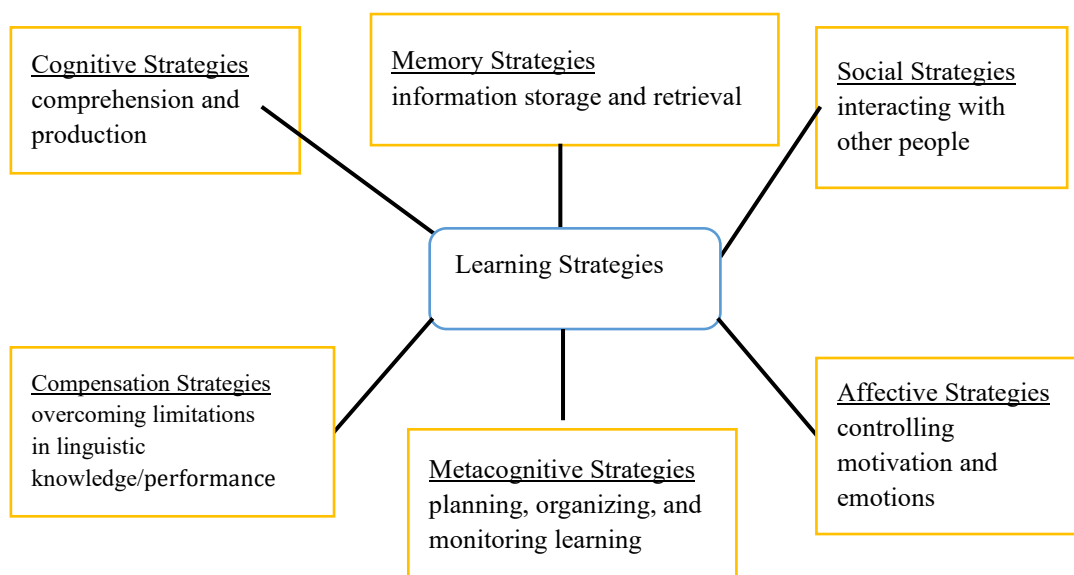


Figure 1. Learning strategies (Oxford, 1990).

Learning Strategies and English Proficiency

Several studies have been undertaken to investigate L2/EFL learners' learning strategies, with various aspects of learning strategies being focused on. Psaltou-Joycey and Kantaridou (2009), for instance,

conducted a study with university students in Greece. The study indicated that there were substantial variations in the usage of learning strategies between more and less proficient students, with a focus on cognitive, metacognitive, and social strategies. In Hong Kong, Tam (2013) observed a positive correlation between compensation, cognitive, and social strategies and students' language proficiency. Moreover, in the context of elementary and middle school students in the United States, Ardasheva (2016) showed that more proficient learners tended to use metacognitive strategies than other learning strategies. Furthermore, Rao (2016) and Lai (2009) discovered that more skilled students used learning strategies more frequently than less proficient students.

Studies on learning strategies and English proficiency among Thai students are relatively few. Suwanarak (2019), for example, discovered no significant differences in students' learning strategies in general or in English learning. In addition, a positive relationship was observed between students' learning strategies and their English learning achievement. Another study revealed that public school students employed more learning strategies than international school students, especially on compensation strategies (Iamudom & Tangkiengsirisin, 2020). The most recent study by Koad and Waluyo (2021) reported there was a significant difference in the use of learning strategies between more and less proficient Thai EFL learners.

Due to the fact that English proficiency is a significant issue in Thailand and most prior studies were conducted in contexts other than the Thai one, the current study will investigate the learning strategies employed by university students in Thailand at various levels of English proficiency as well as their relationship to the students' English proficiency. This study is guided by the research questions listed below.

1. How different is Thai university students' use of learning strategies by English proficiency level?
2. How do Thai university students' learning strategies correlate with their English proficiency?
3. What predictive roles do Thai university students' use of learning strategies play in their English proficiency?

Methodology

Research Design

The objectives of this study were to investigate and quantify the correlations between Thai university students' learning strategies and their English proficiency using a quantitative research design. The research design is described in Figure 2.

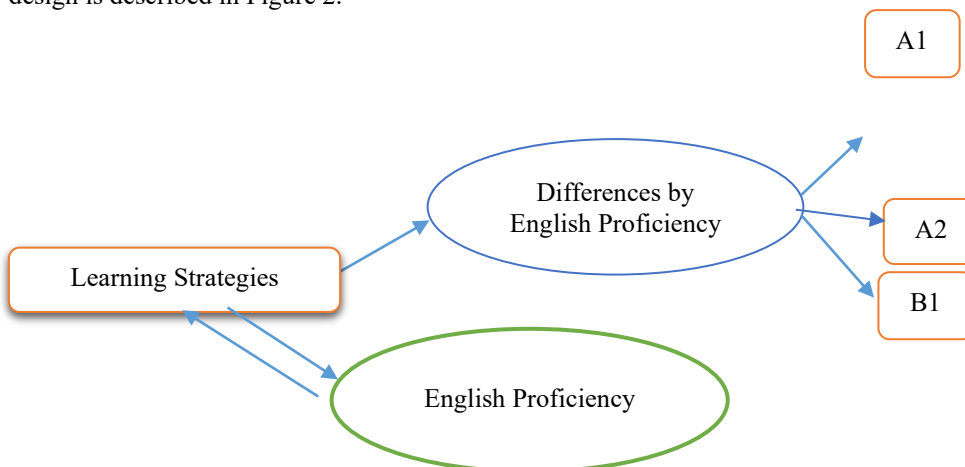


Figure 2. Research design.

Participants

This study involved undergraduate non-English major students at one university in Thailand. They were selected using both purposeful and random sampling methods. Initially, the approach of purposive sampling was utilized to select the inclusion criteria that best represented the major purpose of the study. This study aimed to evaluate the learning strategies utilized by Thai university students with varying English proficiency levels. As a result, three criteria were developed: participants were required to: 1) be undergraduates; 2) be not majoring in English; and 3) hold varying degrees of English competence. Following that, this study utilized a random sample method. This method emphasizes that all students in the target group have the same chance of being chosen for this study. The total number of participants was 710 students (73.1% female, 26.9% male) from 12 different schools, including Allied Health Sciences, Architecture and Design, Engineering and Technology, Informatics, Liberal Arts, Management, Medicine, Nursing, Pharmacy, Political Science and Law, Public Health, and Science. Most of the students' English proficiency levels were at A1 (53.2%), followed by A2 (39.2%), and B1 (7.6%).

Instruments

A Language learning strategies questionnaire, adapted from Ardasheva and Tretter (2013), was used to examine the learning strategies of Thai university students. Several items were altered to ensure their suitability for the subjects. In this study, the questionnaire included 22 items that assessed students' memory, cognitive, compensation, metacognitive, and affective strategies on a five-point Likert scale: 1 (never), 2 (seldom), 3 (sometimes), 4 (often), and 5 (always).

The questionnaire was translated into Thai to avoid confusion and to ensure that students could reply to all questions accurately. The construct validity was examined by using Exploratory Factor Analysis (EFA) as suggested by Stapleton (1997). The EFA procedures were based on a suggestion made by Phakiti (2018) in the field of applied linguistics research. Principal Axis Factoring (PAF) was chosen as the extraction method because it is considered robust and widely used (Fabrigar & Wegener, 2012). The number of factors to be retained was determined by a Kaiser criterion eigenvalue greater than one. The KMO and Bartlett's tests were used to determine whether the factors were extractable, with a sampling adequacy threshold of .50 (Field, 2018). Because some factors were assumed to be unrelated, orthogonal rotation, i.e. Varimax, was used. The cut-off point for accepted factor loadings was set at .30. The result was significant ($\chi^2 (231) = 3654.422, p < .001$) emphasizing the validity of the survey constructs for evaluating learning strategies.

The reliability of the questionnaire items was examined by using Cronbach's alpha. Cronbach's Alpha coefficient is .86, showing that the questionnaire's reliability is accepted. Following that, the data were checked for normality by examining Skewness and Kurtosis values between -2 and +2, as indicated by George and Mallery (2003). The results showed that the data had a normal distribution, indicating that they could be examined further using parametric tests.

Moreover, the students' English proficiency levels were measured by using an English proficiency test designed by the university in accordance with the Common European Framework of Reference for Languages (CEFR) and Classical Test Theory (CTT). It tests the four most important English skills at the CEFR levels A1–C1: listening, speaking, writing, and reading. The students took the test prior to completing the survey questionnaire.

Data Collection and Analysis

The study was approved by the Ethics Committee in Human Research at Walailak University (WUEC-21-320-01). The research objectives were explained to the participants prior to data collection. They signed

a consent form to participate in this study. A Google Form was used to distribute the questionnaire. It took about 5–10 minutes to complete the questionnaire.

After the data was collected, it was analyzed using a statistical program. To investigate the learning strategies of Thai university students according to their English proficiency level, descriptive data such as means and standard deviation were evaluated. The ratings (Oxford, 1990) specified the criteria for evaluating the mean values of the students' responses, as explained in Table 1.

TABLE 1
Interpretation of the Mean Values

Responses	Mean Values	Interpretation of Learning Strategies Use
Never	1.00 – 1.49	Low
Seldom	1.50 – 2.49	Moderate
Sometimes	2.50 – 3.49	
Often	3.50 – 4.49	High
Always	4.50 – 5.00	

Additionally, to explore differences in the usage of learning strategies across English proficiency levels, one-way ANOVA was used to analyse the data. Pearson correlation analysis was performed to examine the relationship between students' learning strategies and their English proficiency. Finally, multiple regression analyses were conducted to ascertain the predictive value of Thai university students' learning strategies on English proficiency.

Results

Thai University Students' Learning Strategies by English Proficiency Level

Overall, the descriptive statistics in Table 2 indicated that students at the A1, A2, and B1 levels utilized learning strategies moderately in their English learning.

TABLE 2
The Use of Learning Strategies with Different English Proficiency Levels

English Proficiency Levels	Use of Learning Strategies		Level of Use
	Mean	SD	
A1	3.28	.42	Moderate
A2	3.30	.41	Moderate
B1	3.28	.40	Moderate

For particular learning strategies, as shown in Table 3, students at A1 and A2 levels shared similarities. They reported a high use of metacognitive strategies. However, for the other strategies, including memory, cognitive, compensation, and affective strategies, they reported that they employed the strategies moderately.

TABLE 3
The Use of Learning Strategies of A1 and A2 Students

Learning Strategies	A1			A2		
	Mean	SD	Level of Use	Mean	SD	Level of Use
Memory Strategies	3.34	.53	Moderate	3.40	.54	Moderate
Cognitive Strategies	3.02	.51	Moderate	3.06	.53	Moderate
Compensation Strategies	3.33	.56	Moderate	3.42	.52	Moderate
Metacognitive Strategies	3.78	.59	High	3.88	.59	High
Affective Strategies	2.95	.61	Moderate	2.72	.63	Moderate

Moreover, for B1 students, the results as presented in Table 4, showed that they practiced two learning strategies at a high level, which were metacognitive and memory strategies. For the other strategies, like A1 and A2 students, they reported a moderate use of cognitive, compensation, and affective strategies.

TABLE 4
The Use of Learning Strategies of B1 Students

Learning Strategies	B1		Level of Use
	Mean	SD	
Memory Strategies	3.50	.64	High
Cognitive Strategies	3.26	.49	Moderate
Compensation Strategies	3.24	.59	Moderate
Metacognitive Strategies	4.04	.56	High
Affective Strategies	2.37	.67	Moderate

Furthermore, the One-Way ANOVA results revealed that there were no significant differences in the use of overall learning strategies across the A1, A2, and B1 groups ($F(2, 707) = .085, p = .919$). Meanwhile, the findings of Post Hoc Tukey HSD revealed statistically significant differences in the application of cognitive strategies between A1 and B1 groups ($p = .005$), as well as between A2 and B1 groups ($p = .031$). The significant differences were also observed between A1 and B1 groups in the use of metacognitive strategies ($p = .007$). In addition, the results indicated that there were significant differences in the use of affective strategies between A1 and A2 groups ($p = .000$), A1 and B1 groups ($p = .000$) as well as A2 and B1 groups ($p = .001$).

Relationship Between Learning Strategies and English Proficiency

Overall, as presented in Table 5, this study did not observe a significant relationship between Thai university students' learning strategies and their English proficiency. However, in specific learning strategies, significant and non-significant relationships were discovered. Positive significant correlations were found between the memory, metacognitive, and cognitive strategies of students and their English proficiency. In addition, a negative significant relationship was established between students' affective strategies and their English proficiency. However, no significant correlation was observed between compensation strategies and English proficiency.

TABLE 5
Results of Pearson's Correlation Analyses

	English Proficiency	Memory Strategies	Cognitive Strategies	Compensation Strategies	Metacognitive Strategies	Affective Strategies	Overall
English Proficiency	<i>r</i> 1	.081*	.103**	.018	.125**	-.255**	.009
	<i>p</i>	.031	.006	.629	.001	.000	.821
Memory Strategies	<i>r</i>	1	.546**	.507**	.456**	.400**	.783**
	<i>p</i>		.000	.000	.000	.000	.000
Cognitive Strategies	<i>r</i>		1	.472**	.364**	.473**	.765**
	<i>p</i>			.000	.000	.000	.000
Compensation Strategies	<i>r</i>			1	.441**	.370**	.753**
	<i>p</i>				.000	.000	.000
Metacognitive Strategies	<i>r</i>				1	.232**	.681**
	<i>p</i>					.000	.000
Affective Strategies	<i>r</i>					1	.694**
	<i>p</i>						.000
Overall	<i>r</i>						1
	<i>p</i>						

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Predictive Roles of Learning Strategies in English Proficiency

Multiple-linear regression was used to predict the English proficiency levels of Thai university students based on their learning strategies. The findings in Table 6 revealed memory strategies, cognitive strategies, metacognitive strategies, and affective strategies as significant predictors of students' English proficiency. Nonetheless, this study found that students' overall learning strategies and compensation strategies did not predict their English proficiency in a meaningful way.

TABLE 6
Results of Regression Analyses

Model	Unstandardized Coefficients		Standardized Coefficients Beta	<i>t</i>	<i>Sig.</i>	95,0% Confidence Interval for B	
	<i>B</i>	<i>Std. Error</i>				Lower Bound	Upper Bound
Memory Strategies	.094	.043	.081	2.168	.031	.009	.179
Cognitive Strategies	.125	.045	.103	2.755	.006	.036	.214
Compensation Strategies	.021	.043	.018	.483	.629	-.064	.105
Metacognitive Strategies	.133	.040	.125	3.363	.001	.055	.211
Affective Strategies	-.249	.036	-.255	-7.023	.000	-.319	-.180
Learning Strategies	.013	.057	.009	.226	.821	-.098	.124

Discussion

The purpose of this study was to explore Thai university students' learning strategies for English learning and how these strategies relate to and predict their English proficiency. The findings revealed three significant points worth discussing. First, this study found that Thai university students used the learning strategies at a moderate level, which is consistent with the findings of several scholars who have researched students in Asian countries, including Wharton (2000) in Singapore, Domakani et al. (2012) in Iran, and Wang et al. (2021) in Hong Kong. Additionally, this study indicated that there were no significant differences in the use of overall learning strategies in English learning among Thai university students with different English proficiency levels. The result is not in line with the finding of a previous study (Koad & Waluyo, 2021), which indicated that there was a significant difference in the use of learning strategies between more and less proficient learners. However, when it comes to specific learning strategies, this study discovered statistically significant differences in the use of cognitive and affective strategies among the A1, A2, and B1 groups. These findings partially support the previous study's findings by Psaltou-Joycey and Kantaridou (2009), who reported substantial differences in the use of cognitive strategies between less and more skilled learners.

Moreover, Thai university students at A1, A2, and B1 levels in this study shared similarities in which they reported metacognitive strategies as the most frequently used learning strategies. The finding is also different from previous studies (Apridayani et al., 2021; O'Malley & Chamot, 1990) suggesting that EFL or L2 learners tended to use cognitive strategies in their language tasks. Students employ metacognitive strategies to regulate their learning processes, such as planning and monitoring (Oxford, 1990). The finding signified that although the Thai university students in this study had varying levels of English proficiency, they were all aware of the significant role of planning and monitoring their English learning.

Second, in terms of the association between students' use of learning strategies and their English proficiency, the findings contradict a recent study (Suwanarak, 2019) that indicated a positive relationship

between students' use of learning strategies and their English learning achievement. There was no significant association discovered between students' overall learning strategies and their English proficiency in this study. When the correlation between certain learning strategies and English proficiency was examined, both significant and non-significant results were obtained. The findings somewhat corroborate prior research (Tam, 2013), indicating a positive relationship between compensation and cognitive strategies and students' language proficiency. This study demonstrated that not just cognitive strategies, but also memory and metacognitive strategies, had a positive correlation with students' English proficiency. However, this study observed that there was no significant relationship between compensation strategies and English proficiency.

In addition, a negative significant relationship was established between students' affective strategies and their English proficiency. The finding indicated that Thai university students who reported using affective strategies more frequently were less proficient. Affective strategies are the strategies whereby students manage their motivation and emotions during the learning process (Oxford, 1990). The result showed that the less proficient students in this study appeared to be conscious of their limited English proficiency. As a result, individuals may use the strategies more frequently than those with a greater level of English proficiency to control their motivation and emotions while studying English. Wang et al. (2021) emphasized that students' use of affective strategies could affect their interest in learning English.

The final finding addressed the question of whether students' learning strategies could predict their English proficiency. The study discovered that certain types of learning strategies, such as memory strategies, metacognitive strategies, cognitive strategies, and affective strategies, were significant predictors of students' English proficiency. The findings corroborate those of the current investigation (Koad & Waluyo, 2021; Maretha & Waluyo, 2022). However, the findings of the current investigation did not support Park's (1997) assertions regarding the importance of overall learning strategies and compensation strategies in predicting students' English proficiency.

Conclusion

This study highlighted that a variety of learning strategies, including memory strategies, metacognitive strategies, cognitive strategies, and affective strategies, all play a substantial influence on the English proficiency of Thai university students. Therefore, it is essential for teachers dealing with Thai university students to make earnest attempts to reinforce these learning strategies to assist students in improving their English language proficiency. The study indicated that the students had moderate-to-high-level use of the learning strategies in their English learning. This knowledge can be used to continue to support and grow students' usage of effective learning strategies until they become second nature. Integrating learning strategy practice into English teaching and learning can be done in a variety of ways, including task instructions and class activities (Apridayani, 2022; Apridayani & Teo, 2021). Additionally, the study's findings have significant implications for helping teachers comprehend the English learning strategies used by Thai university students and construct effective EFL teaching-learning activities, as well as plan and implement the English curriculum.

Despite the fact that this study seeks to provide a wealth of information, it is noted that there are some limitations that limit the interpretation of the findings. The present study was conducted at only one university in Thailand. Thus, the findings should not be generalized to all Thai university students or other contexts. A further limitation is that this study relied solely on quantitative data, which came from a survey questionnaire and an English proficiency test, implying that the inclusion of qualitative data such as group interviews and classroom observations, among other things, could have provided more in-depth insights. It is also recommended that future research investigate the various elements that influence students' learning strategies and English proficiency, particularly in the context of Thai EFL students.

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(Received December 10, 2022; Revised April 30, 2023; Accepted June 10, 2023)