

Exploring Learning Strategies and Self-efficacy in Writing among Thai Undergraduate Students

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Abstract

The present study examines the relationship between Thai college EFL (English as a Foreign Language) students' writing self-efficacy and their reported use of learning strategies. A total of 60 undergraduate non-English major students participated in the study. Data was collected from three sources: a learning strategy questionnaire, a writing self-efficacy questionnaire, and semi-structured interviews. The results of this study suggested that students mostly used metacognitive and social strategies, while affective and memory strategies were used least frequently. In addition, there was a statistically strong positive correlation between writing self-efficacy and learning strategies. Similarly, Chi-square tests revealed that high self-efficacy students were likely to use learning strategies more frequently than students with medium self-efficacy. The results are meant to draw attention to the importance of self-efficacy and learning strategies in English as a foreign language writing classrooms.

Keywords: learning strategy, self-efficacy, English writing

บทคัดย่อ

งานวิจัยชิ้นนี้มุ่งศึกษาความสัมพันธ์ระหว่างการรับรู้ความสามารถของตนเองด้านการเขียนภาษาอังกฤษและการใช้กลวิธีการเรียนภาษาของนักศึกษาระดับชั้นปริญญาตรีชาวไทยที่เรียนภาษาอังกฤษเป็นภาษาที่สอง นักศึกษาระดับปริญญาตรีที่ไม่ใช่สาขาวิชาเอกภาษาอังกฤษ จำนวน 60 คน เข้าร่วมในการศึกษาครั้งนี้ ข้อมูลวิจัยมาจากแหล่งข้อมูล 3 แหล่ง คือ แบบสอบถามการใช้กลวิธีการเรียนภาษา แบบสอบถามเรื่องการรับรู้ความสามารถของตนเองด้านการเขียน และการสัมภาษณ์แบบกึ่งโครงสร้าง ผลการวิจัยพบว่านักเรียนใช้กลวิธีเชิงอภิปรายและกลวิธีทางด้านสังคมมากที่สุดเป็นสองลำดับแรก ในขณะที่ใช้กลวิธีทางอารมณ์และกลวิธีการจดจำน้อยที่สุดตามลำดับ นอกจากนี้ ผลการวิจัยยังพบค่าสหสัมพันธ์ทางบวกอย่างมีนัยสำคัญทางสถิติระหว่างการรับรู้ความสามารถของตนเองด้านการเขียนและกลวิธีการเรียนภาษา ในทำนองเดียวกัน ผลการทดสอบไคสแควร์ยังระบุว่านักศึกษาที่มีการรับรู้ความสามารถของตนเองในระดับสูงมีแนวโน้มที่จะใช้กลวิธีการเรียนภาษาบ่อยครั้งกว่าผู้ที่มีการรับรู้ความสามารถของตนเองในระดับปานกลาง ผลจากงานวิจัยชิ้นนี้แสดงให้เห็นถึงความสำคัญของการรับรู้ความสามารถของตนเองและการใช้กลวิธีการเรียนภาษาในการเรียนการเขียนภาษาอังกฤษเป็นภาษาต่างประเทศ

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1. Introduction

English writing has posed a difficult challenge to Thai college students for a long time. These novice writers, especially non-English majors, struggle with English writing as they need to apply their English knowledge, such as sentence structure, word choice, and grammar, to their writing. The complexity of writing tasks often heightens anxiety levels in students. They often find writing demanding and difficult. In order to cope with such challenges, they have to combine whatever learning strategies they possess to attend to a given writing task.

The development of students' confidence in writing skills is undeniably another factor that influences their success in writing classes. As Zimmerman and Bandura (1994) noted, writing presents special challenges to students because writing is an activity that is performed alone and requires sustained effort in editing and revising over a long period of time and sometimes with a result that is less than satisfying. Students need to be motivated to sustain their perseverance to overcome writing obstacles. Many researchers have indicated that learners' affective domain, their motivational orientations and their learning strategies play important roles in language instruction (Brown, 1994). Students who have high self-efficacy will have more motivation to exert more effort to complete a demanding task (Bandura, 1994). Motivational and affective factors have long been considered relevant to student success (Dornyei, 1994). Oxford and Shearin (1994) suggest that motivation directly affects students' learning and their use of language learning strategies. Self-efficacy is believed to have impact on students' use of strategies that help them learn English (Bandura, 1993). Even though self-efficacy and learning strategies are recognized as important in writing classes, few studies have examined the association between self-efficacy and language learning strategies among Thai undergraduate students. This study, therefore, planned to add to the body of existing knowledge in the areas of self-efficacy and language strategies in writing, especially at tertiary level in Thailand where research is lacking.

The study was initiated to investigate how Thai undergraduate non-English majors use self-efficacy and language learning strategies to cope with writing needs. The purpose of this study was three-fold: (a) to identify the most frequently used learning strategies reported by the students; (b) to examine whether there is a relationship between self-efficacy and language learning strategies; and (c) to investigate whether students with different levels of self-efficacy use learning strategies more or less frequently.

2. Literature Review

2.1 Learning strategies

Oxford and Crookall (1989) define learning strategies as steps taken by learners to facilitate the acquisition, storage, and retrieval of information. They help learners maintain involvement in the language learning process. They are also essential for improved proficiency and greater motivation (Oxford, 1990). Learning strategies help students understand, learn, and absorb new information more easily (O'Malley and Chamot, 1990). According to Oxford (1990), learning strategies facilitate learning to be more effective and enjoyable. Language learning strategies are divided into direct and indirect strategies. Direct strategies, involving strategies directly related to language learning, are subdivided into memory strategies, cognitive strategies, and compensation strategies. Indirect strategies, or strategies that support and manage learning, are subdivided into metacognitive strategies, affective strategies, and social strategies.

Oxford (1990) and Oxford and Burry-Stock (1995) further described each strategy as follow: memory strategies, such as grouping, structured review, and imagery, are used to understand and recall new information in order to be competent in the language being learned. Cognitive strategies, such as reasoning, analyzing, and summarizing, refer to strategies necessary to internalize new information of the language. Compensation strategies, such as guessing meanings from contexts, help learners overcome knowledge gaps when attempting to master a language. Metacognitive strategies, such as planning one's own learning and searching for practice opportunities, assist learners in regulating and evaluating their progress in learning. Affective strategies, such as self-encouragement and anxiety reduction, support learners in maintaining their effort needed for learning a language. Finally, social strategies, such as asking questions and cooperating with native speakers, provide interactions with native speakers and peers to communicate and learn the language.

These categories were further developed into a measure of learners' use of the strategies called 'Strategy Inventory for Language Learning' (SILL). The SILL has been widely used to measure language learning strategies among language learners (Green and Oxford, 1995). The survey comprised of 80 statements that asked for the frequency of strategy use on a 5-point Likert scale. According to Oxford and Burry-stock (1995), many studies reported a high Cronbach's alpha reliability coefficient for the SILL, ranging between .91 and .94.

A concept closely related to learning strategy is self-regulated strategies or self-regulation, which also refers to strategic learning. Self-regulation is how students select and combine

cognitive strategies in an effective way to help them learn (Boekaerts, 1999). It can also be described as the degree to which a person becomes metacognitively, motivationally, and behaviorally active in their own learning process (Zimmerman, 1986). Strategy use is one way students exercise self-regulation when they obtain new information when learning a language. Self-regulation is, therefore, a broader term of learning strategies which refers to the degree to which a person actively participates in their own learning (Dornyei and Skehan, 2003).

Several factors have been recognized as influences on the frequency of students' learning strategy use, including motivation, L2 proficiency, and academic background (Green and Oxford, 1995; Magogwe And Oliver, 2007; Oxford, 1990; Oxford, 1995; Oxford and Burry-Stock, 1995). Self-efficacy has also been identified as a factor to greater use of learning strategies and more successful academic learning. (Bandura, 1993; Bandura, Barbaranelli, Caprara and Pastorelli, 1996; Zimmerman, 1986; Zimmerman and Bandura, 1994; Zimmerman and Martinez-Pons, 1990). Zimmerman (1990) suggests that perceived self-efficacy is a key factor that can affect self-regulation strategies in learning.

2.2 Self-efficacy

Bandura (1986) defines self-efficacy as the perception of abilities to perform certain tasks at a particular context and level. Self-efficacy also influences decisions to exert efforts into a task, which in turn results in higher performance (Bandura, 1989). Dornyei (1994) describes self-efficacy as a student's judgment of his or her ability to perform a task. Pajares (2002) further explains that self-efficacy is a process where students engage in an activity, interpret the outcome of their actions, and use these interpretations to develop beliefs about their capability to engage in similar tasks. Self-efficacy influences motivation in that it determines goals and how much effort learners exert and how long they persevere when faced with difficulties (Bandura, 1993; Pajares, 2002; Schunk, 1984; Tremblay and Gardner, 1995). Bandura (1993) suggests that the ways people believe in their self-efficacy will control their stress and anxiety in difficult situations. In addition, self-efficacy is task and context specific (Zimmerman, 1995). Self-efficacy becomes more critical when domain-specific tasks become challenging, and writing is one such task.

Several studies report that self-efficacy is related to a greater use of learning strategies (Schunk, 1989; Zimmerman and Martinez-Pons, 1990). Self-efficacy may have a positive relationship with the use of learning strategies because when students believe that they can

accomplish a task, they may be more active in trying different ways to achieve their goals. Those “ways” may include learning strategies, such as planning before writing or seeking help from available resources (Zimmerman and Risemberg, 1997). Wang, Schwab, Fenn and Chang (2013) found that there was a strong relationship between self-efficacy, self-regulated strategies and English test scores among Chinese and German college students.

Magogwe and Oliver (2007) found that self-efficacy beliefs significantly correlated with language learning strategy use and English proficiency of Botswana students in elementary, secondary, and college levels. An increase in self-efficacy was associated with an increase in the use of language learning strategies. Their findings correspond to the ones reported by Tang and Tian (2015) who found that learners’ beliefs about language learning affected their use of language learning strategies.

Bandura (1993) suggests that students with higher efficacy would exert more effort when completing a challenging task compared with less efficacious students. Kim, Wang, Ahn and Bong (2015) found that there was a correlation between students with low self-efficacy and their use of self-regulated learning strategies. Students with lower self-efficacy reported less use of self-regulated learning strategies while higher self-efficacy students reported more frequent use of learning strategies. Makinen and Olkinuora (2004) noted that students with high self-efficacy would regard a difficult task as a positive challenge.

2.3 Self-efficacy and writing

In writing, self-efficacy can make a difference to writing tasks (Schunk and Zimmerman, 2007). Zimmerman and Risemberg (1997) believe that learning to write requires a high level of self-regulation because “writing activities are usually self-planned, self-initiated, and self-sustained (p. 73)”. In order to write, students have to write alone, often over a long period of time; therefore, they need self-regulation strategies to help them achieve their writing goals. This self-regulatory process is directly associated with learner’s self-efficacy in writing in a reciprocal way (Zimmerman and Risemberg, 1997).

Students who have a higher belief in his or her ability to write will result in better writing performance (Bandura, 1986). Higher self-efficacy students tend to exercise more effort and have better use of learning strategies, and students with low-self efficacy may use less effort in learning (Brophy, 1998). Students with low self-efficacy were more likely to quit when they encountered difficulties (Schunk, 1990). Writing self-efficacy, therefore, is necessary for writers

to motivate them to sustain their efforts when facing with obstacles when writing (Zimmerman and Risemberg, 1997).

In order to measure students' writing self-efficacy, researchers use writing self-efficacy scales. Zimmerman and Bandura (1994) developed a Writing Self-Regulatory Efficacy Scale, comprising of 25 items that aimed to measure students' perceived capability in managing a writing task. A similar writing self-efficacy model proposed by Bruning, Dempsey, Kauffman, and McKim (2013) included three dimensions of writing: (a) writing ideation; (b) writing conventions; and (c) writing self-regulatory. Writing ideation is the ability to generate and shape ideas to write. Conventions refer to a set of standards required in writing, for example linguistic skills to express ideas in writing. The last category, which is writing self-regulation, indicates writers' confidence and anxiety control to manage writing tasks. These scales have the potential to assess self-efficacy in students' writing.

3. Research Questions

- 1) What are the most frequently used learning strategies reported by students?
- 2) Is there a relationship between students' perceived self-efficacy and their use of learning strategies?
- 3) What relationship exists, if at all, between students with different level of self-efficacy and their use of learning strategies?

4. Methodology

A mixed-methods design which combines quantitative and qualitative data is used in this study. This study was conducted at a public university in Thailand. A total of 60 college students (47 females and 13 males) participated in the study. They were enrolled in a basic writing course. They represented different academic majors in social sciences and humanities, including Russian, French, Spanish, Linguistics, Business, and Psychology. The participants were between 19-21 years old and had been studying English for at least 12 years, including six years in primary school, three years in middle school and three years in high school.

The basic writing course that the students were enrolled in required them to do paragraph writing on a variety of text genres, including narrative, descriptive, argumentative, and expository.

A process writing approach was used to encourage students to revise and edit their assignments according to teachers' and peers' comments.

5. Data Collection

Data was collected through two surveys and an interview. A 15-statement writing self-efficacy scale was developed based on the one used by Zimmerman and Bandura (1994), in which students rated their perceptions of their ability to complete writing tasks. The self-efficacy survey comprised a five-point Likert-type scale, ranging from always or almost always true of me, generally true of me, somewhat true of me (about half of the time), generally not true of me, and never or almost never true of me. Example items include: 'I can start writing with no difficulty' and 'I can find a way to concentrate on my writing even when there are many distractions around me'.

The participants also rated their use of language learning strategies on a five-point Likert-scale adapted from Oxford's Strategy Inventory for Language Learning (SILL) (Oxford, 1990). The learning strategy questionnaire consisted of 30 items, divided into six strategy categories, namely: cognitive, memory, compensation, metacognitive, affective, and social strategies. Each statement asked the participants to respond according to the extent to which they used the strategies. Each point indicating the following: 1) Always or almost always true of me, 2) for generally true of me, 3) for somewhat true of me (about half of the time), 4) for generally not true of me, and 5) for never or almost never true of me. Example items include: 'I use new English words in a sentence so I can remember them' and 'I write new English words several times'.

In addition, six participants were randomly selected for individual interviews to clarify and elaborate on their responses to the statements on both questionnaires. They were also encouraged to add their opinions on the topics. Semi-structured interviews were used to explore students' senses of self-efficacy in writing and experiences in using learning strategies.

6. Results and discussions

Data obtained from the writing self-efficacy and the learning strategy questionnaire together with the scripts from the interview sessions were used to answer the research questions.

Question 1: What are the most frequently used learning strategies reported by students?

Data obtained from the strategy survey and the interviews were used to answer this question. The mean scores were divided equally into three ranges: a mean in the range of 3.68 - 5.00 is thought to reflect high use of that strategy, 2.34 - 3.67 medium use, and 1.0 - 2.33 low use.

As Table 1 shows, the participants in this study utilized all the strategies stated in the survey. The students reported an average frequency of language learning strategy use ($M = 3.53$, $SD = .45$). Only metacognitive strategies ($M = 3.69$, $SD = .62$) and social strategies ($M = 3.68$, $SD = .60$) were used at a high rate. All other strategies on the survey, memory, cognitive, compensation, and affective strategies, were used by the students at medium frequency.

Table 1 Descriptive statistics for the students' reported use of learning strategies

Learning strategy category	Mean	SD	Level of use	Rank
1. Metacognitive strategies	3.69	.62	High	1
2. Social strategies	3.68	.60	High	2
3. Compensation strategies	3.65	.49	Medium	3
4. Cognitive strategies	3.53	.70	Medium	4
5. Memory strategies	3.36	.58	Medium	5
6. Affective strategies	3.28	.56	Medium	6

Table 2 Interview findings regarding learning strategies that students reported using

Types of strategies	Student A	Student B	Student C	Student D	Student E	Student F
1. Memory strategies	- Write new words on sticky notes and tape them on the closet doors for frequent viewing and memorization	- Incorporate new words in class assignments and when writing on social media - Writing new words	- Incorporate new words in class assignments and when writing on social media	- List new vocabulary in a notebook - Incorporate new words when writing on social media	- Incorporate new words when writing on social media	- Read new words out loud until remember

Types of strategies	Student A	Student B	Student C	Student D	Student E	Student F
		on paper several times				
2. Cognitive strategies	- Learn new words/structures from the Internet - Read English novels to learn more vocabulary	- Learn new words/structures from the Internet	- Learn new words/structures from handouts from previous courses and textbooks	- Learn new words/structures from handouts from previous courses and textbooks - Learn new words/structures from the Internet	- Learn new words/structures from the Internet	- Learn English from movies and the Internet
3. Compensation strategies	- Make up new words and try to explain in phrases when not able to find exact English words to describe ideas	- Make up new words and try to explain in phrases when not able to find exact English words to describe ideas	- Avoid words she was unsure of and use only words she knows	- Make up new words and try to explain in phrases when not able to find exact English words to describe ideas - Avoid words she was unsure of and use only words she knows	- Make up new words and try to explain in phrases when not able to find exact English words to describe ideas - Avoid words she was unsure of and use only words she knows	- Make up new words and try to explain in phrases when not able to find exact English words to describe ideas - Avoid words she was unsure of and use only words she knows

Types of strategies	Student A	Student B	Student C	Student D	Student E	Student F
4. Metacognitive strategies	<ul style="list-style-type: none"> - Recognize regular mistakes and try to correct them - Want to be able to write fluently - Plan time to do assignments 	<ul style="list-style-type: none"> - Plan to take more English writing courses in the future - Want to be a better writer 	<ul style="list-style-type: none"> - Don't use much metacognitive strategies 	<ul style="list-style-type: none"> - Recognize regular mistakes and try to correct them - Try to practice writing more often - Want to keep practicing writing in English 	<ul style="list-style-type: none"> - Recognize regular mistakes and try to correct them - Plan to take more English writing courses in the future 	<ul style="list-style-type: none"> - Recognize regular mistakes and try to correct them
5. Affective strategies	<ul style="list-style-type: none"> - Listen to the music while writing to reduce stress - Don't have much stress because the teacher is supportive 	<ul style="list-style-type: none"> - Talk to friends to reduce stress and anxiety 	<ul style="list-style-type: none"> - Don't have much stress because the teacher is supportive 	<ul style="list-style-type: none"> - Don't have much stress because she loves English and writing 	<ul style="list-style-type: none"> - Don't have much stress because she knows the teacher and classmates are supportive 	<ul style="list-style-type: none"> - Don't have much stress because she loves English and writing
6. Social strategies	<ul style="list-style-type: none"> - Ask senior students, friends, teachers to provide feedbacks 	<ul style="list-style-type: none"> - Ask senior students, friends, teachers to provide feedbacks - Search the Internet for information needed 	<ul style="list-style-type: none"> - Ask senior students, friends, teachers to provide feedbacks - Seek help from English textbooks 	<ul style="list-style-type: none"> - Ask native speaking friends to provide feedbacks 	<ul style="list-style-type: none"> - Ask senior students, friends, teachers to provide feedbacks - Search the Internet for information needed 	<ul style="list-style-type: none"> - Search the Internet for information needed

As shown in Table 1, the results indicated that metacognitive strategies received the highest score on the survey. The statement on the questionnaire that obtained the highest mean score of 4.05 (SD = .77) was 'I try to find out how to be a better learner of English'. Similarly, the second highest rating of 3.98 (SD = .83) was the statement that stated 'I notice my mistakes and use that information to help me do better'.

The results from the interview confirm this finding when four out of the six interviewees reported that they regularly monitored their mistakes in writing and tried to find a way to improve them (see Table 2).

1) "I knew that I often made easy mistakes such as forgetting 's' or misspelling easy words. I will try to be more careful when I write." (Interview, Student A)

2) "I often wrote in casual English. I knew that I will have to learn more vocabulary so that my writing will be more formal." (Interview, Student F)

This indicated that learners in this study constantly monitored their own learning and attempted to do better. They monitored their progress in English writing and where they were encountering difficulties. By identifying the problems, learners can seek specific assistance to improve their writing. Metacognitive strategies have been found to highly correlate with language learning; these strategies are believed to help learners achieve better outcomes (Oxford, 1990; Zimmerman and Schunk, 2001).

In addition to monitoring their mistakes, four out of the six students interviewed had specific goals. Setting goals and objectives is important because learners without any objectives do not know "where they are going and might never get there" (Oxford, 1990, p. 157). The participants stated similar goals of being a better writer and trying to write without making many mistakes. Some planned to take more English writing courses in the future to improve their writing.

1) "I want to be a better writer. That's my goal. I think writing is very important." (Interview, Student B)

2) "I plan to take more English writing courses in the future. I definitely will." (Interview, Student E)

The second most highly rated strategy, with an overall rating of 3.68 (SD = .60), was social strategies. The item on the survey that received the highest rating was 'I try to learn about the culture of English speakers.' (M = 3.98, SD = .60). The second highest rating was the item that stated 'I ask for help from English speakers.' (M = 3.78, SD = .83). From the interview data,

all of the students asked more proficient peers, such as senior students or friends, to clarify words or grammar. Some asked people whom they felt most proficient, such as native speakers or teachers, for help. This supports the conclusions of Oxford (1990), that social strategies, such as asking for help from native speakers or cooperating with other learners, can aid language learning in terms of the sociocultural aspect (Oxford, 1990). Social strategies have been identified as helpful in assisting students improve their writing (Lee, 2002).

It is noteworthy that even though compensation strategies ($M = 3.65$, $SD = .49$) or the strategy used to bridge the gaps in the information learned and the target language, were used less frequently than metacognitive and social strategies, the data from the interviews indicated that all of the students used this strategy frequently (see Table 2). The item on the survey in this category that obtained the highest rating, of 4.15 ($SD = .76$), was 'If I can't think of an English word, I use a word or phrase that means the same thing'. The data from the interview confirms this particular method of strategy use as five out of six interviewees reported using phrases to describe an idea when they couldn't find exact English words.

1) "I often used phrases to explain my ideas when I couldn't find exact words."
(Interview, Student A)

2) "Sometimes when I really couldn't find exact words to describe my ideas, I used phrases to try to explain them." (Interview, Student D)

In addition, four of the six interviewees reported avoiding using the words they were not sure of.

1) "I definitely won't use words I'm not sure of. I will try to use only the words I know. Otherwise, I would get lower grades for the mistakes I made." (Interview, Student C)

2) "However, if I was not sure about the phrases that I used in my writing to explain my ideas, and if I thought that it would reflect badly on my writing scores, I would avoid using them altogether. I usually switched to other ideas that I knew how to explain." (Interview, Student D)

These compensation strategies were necessary for beginners and intermediate language learners (Oxford, 1990) who are faced with situations in which they had to make up for lack of grammatical or vocabulary knowledge.

Among the six categories, only the mean scores of the memory and affective strategies were below 3.5, suggesting that the participants in general did not resort to such strategies often. The strategies that were used the least were the affective strategies ($M = 3.28$, $SD = .56$), or

strategies used to control learning anxiety. That students used affective strategies least frequently can be partly explained by the interview data which revealed that five out six participants did not have much nervousness or anxiety toward writing. Some of the most frequently cited reasons behind this were that they knew that the teacher was supportive, and they loved English or English writing.

When asked whether they felt anxious when writing, some of the responses were:

1) “No. It was not that stressful. The teacher was nice, and I knew that I could ask her for help” (Interview, student C)

2) “I like writing even though I’m not good at it. I know that it’s useful. So, I’m not that stressed over writing” (Interview, student D)

3) “No, writing is not stressful. Like I said I can ask for help from the teacher and classmates. When I have problems in writing, I can ask my friends too” (Interview, Student E)

The participants’ low level of writing anxiety may explain the minimal use of affective strategies in this study. Likewise, another factor that might explain why the participants used affective strategies least frequently is their level of self-efficacy in writing. It was found that the participants in this study generally expressed positive reactions toward English writing through their medium level of self-efficacy ($M = 3.61$, $SD = .40$). As for affective strategies, their self-efficacy probably serves as one type of affective strategy to reduce anxiety. When students believe that they can accomplish a task, they probably feel calm and feel confident in their ability to accomplish it. Woodrow (2011) reported that highly anxious students make less effort studying English than less anxious students and with high efficacy. Martinez, Kock, and Cass (2011) also claimed that students with higher writing anxiety reported lower writing self-efficacy.

The strategy type that received the second lowest rating was memory strategy ($M = 3.36$, $SD = .58$). The statement that received the lowest rating was ‘I use flashcards to remember new English words.’ ($M = 2.88$, $SD = 1.06$) and ‘I review English lessons often’ ($M = 3.07$, $SD = .92$). Low usage of memory strategies might be because most writing tasks do not require memorization, so they do not often use memory strategies in writing a paper. However, interview data suggested that even though the students did not often use strategies to directly memorize words, most of them indicated using new words in their assigned writings so that they could remember them. Moreover, social media, such as Facebook, Twitter, and Instagram, was cited by four out six participants during the interviews as authentic contexts where they could practice using new

words/phrases. In their opinion, using new words in an authentic context enhance their retention of new words than rote memorization.

The last strategy type, ranked fourth in frequency of use, was cognitive strategy. It received an overall mean score of 3.53 (SD = .70). Even though students only reported average use of this strategy, the Internet was cited by five out of six interviewees as a source that students used frequently to search for new words and enhance grammatical knowledge. The interview data suggests that the participants cited convenience and ease of use as main reasons to employ the Internet as main resources to learn English.

In sum, the results seem to be congruent with some of the previous studies. Goh and Kwah (1997) reported that metacognitive and compensation strategies were the most frequently used whereas memory strategies were the least used among college Chinese students studying English in Singapore. Similarly, Bremmer (1999) found that students used compensation and metacognitive strategy most frequently. Oxford and Ehrman (1995) reported that the participants in their study used social strategies most frequently and affective strategies least frequently.

Question 2: Is there a relationship between students' perceived self-efficacy and their use of learning strategies?

All of the participants rated themselves as average on the self-efficacy scale (M = 3.61, SD = .40). At the specific-item level, Table 3 shows the top five statements that receive the highest mean scores and the bottom five statements that received mean scores lower than 3.5.

Table 3 The ranking of statements on the self-efficacy survey

Item number	Statements on the self-efficacy survey	M	SD
Highest mean scores			
2	I think that I can finish my paper before the deadline.	4.10	.77
15	I use several resources such as dictionary to help editing my paper.	4.05	.87
7	I can use examples to support my arguments.	3.88	.61
8	I can use transition words to link one sentence to another.	3.70	.74
9	I can refocus my concentration on writing when I find myself thinking about other things.	3.68	.72

Item number	Statements on the self-efficacy survey	M	SD
Lowest mean scores			
1	I can start writing with no difficulty.	3.17	1.08
3	I can adjust my style of writing to suit the needs of the audience.	3.30	.72
13	When I edit a paper, I can find and correct grammatical errors.	3.33	.91
4	I can find a way to concentrate on my writing even when there are many distractions around me.	3.42	.91

The results from the students' interviews were analyzed to explore in-depth information available about writing self-efficacy (stated as confidence in students' words). When asked how they perceived themselves as writers, four out of six students indicated that they felt capable of writing; however, they were not certain about grammatical correctness, especially when they had to write about unfamiliar topics.

1) "I felt somewhat confident that I can write in English, but it depends on the topic. If I'm familiar with the topic, I normally feel quite confident that I can write. However, if it's a topic I'm not familiar with, I would feel that I have to work hard on finding the words." (Interview, Student C)

2) "On a scale of 1 to 5, with 5 being someone who is good at writing, I think I would fall into 3. I know how to write and how to support my arguments, but I don't know if my writing is good enough". (Interview, Student E)

Regarding the research question as to whether there is a relationship between students' perceived self-efficacy in writing and their reported use of learning strategies. A Pearson correlation was computed, and the results show a strong correlation between the participants' strategy use and the level of their self-efficacy in English writing. As shown in Table 4, there was a strong positive correlation ($r = .695$, $p < .01$) between scores from the self-efficacy scale and the overall learning strategies. Positive relationships between self-efficacy and learning strategies were found for all types of strategy. These positive and significant correlations indicated that participants with high self-efficacy tended to use more learning strategies. Moreover, the strongest correlation was found between self-efficacy and metacognitive strategies, indicating that learners with high level of self-efficacy are very likely to use metacognitive strategies more frequently.

Table 4 The relationship between learners' self-efficacy and language learning strategies

		Self-efficacy	Learning strategies
Self-efficacy	Pearson Correlation	1	.695**
	Sig. (two-tailed)		.000
	N	60	60
Learning strategies	Pearson Correlation	.695**	1
	Sig. (two-tailed)	.000	
	N	60	60

** p< 0.01 (2-tailed)

Table 5 The relationship between learners' self-efficacy and each type of learning strategy use

Language learning strategies	Self-efficacy
Memory strategies	0.502**
Cognitive strategies	0.414**
Compensation strategies	0.585**
Metacognitive strategies	0.661**
Affective strategies	0.401**
Social strategies	0.578**

** p< 0.01

The results in this study are in line with those of O'Malley and Chamot (1990) who remarked metacognitive learning strategies were useful in writing tasks. In order to be successful writers, students may need to incorporate all of the metacognitive strategy processes, such as planning, monitoring, and setting specific goals, and self-efficacy. They have to develop the ability to self-regulate and self-monitor their writing performance. Their self-efficacy and motivation are also so closely related to their goals that it is difficult to differentiate the cause from the effect. These two factors may also influence participants' use of strategies, as mentioned in the previous section, while they are trying to achieve these goals. When they see progress in their work, they exert more effort as well. The qualitative data revealed that four out of five interviewees had clear goals to be better writers for educational and career opportunities in the future.

Furthermore, a person's view of the controllability over the environment plays a great role in his or her exercise of self-efficacy. In other words, if people believe that they can change

the environment they are in through perseverance and use of resources, they will figure out ways to exercise some control over difficult situations (Bandura, 1993). The students in this study seemed to believe that they were not totally powerless and could exert some control over their circumstances. This sense of self-efficacy and the ability to feel in control over their situation was reflected again in their use of social strategies, namely, asking for helps from peers and more proficient seniors (see Table 2). This suggests a recurrent theme across the data that involves students attempting to be in control of the situation by asking for assistance from others.

From the self-efficacy survey, the statement that obtained the highest rating was 'I think that I can finish my paper before the deadline'. The results from the interview revealed in-depth information for the reasons behind it. All of the interviewed students reported that they believed they could finish their writing assignments before the deadline. Assistance available for them was cited as the main reason why they were certain that they could accomplish the writing task on time. This type of support included the Internet, proficient peers, seniors, teachers and native speaking friends.

1) "I know that I can search for words or grammar from the Internet. I can also ask my friends to read my paper." (Interview, Student B)

2) "I'm not worried about completing my writing assignments because I have a native speaking friend. I can ask her for help." (Interview, Student D)

3) "I know that I can ask for clarification from the teacher or classmates if I don't understand what I have to do for a writing assignment. I can also ask seniors to comment on my writing" (Interview, Student E)

Question 3: What relationship exists, if at all, between students with different level of self-efficacy and their use of learning strategies?

The participants were categorized into two groups, representing students with high and medium self-efficacy on the basis of the scores obtained from the self-efficacy survey. The students whose mean scores fell between 3.68 and 5.0 were considered highly efficacious while those with mean scores between 2.34 and 3.67 were placed in the medium efficacy group. Likewise, mean scores below 2.33 would have been considered low-efficacy, however, none of the students received scores lower than 2.34, so there was no low self-efficacy group

in this study. Of the 60 participants, 33 (55%) were members of medium self-efficacy group, and 27 (45%) were members of high self-efficacy group.

Similarly, the students were divided into three groups - high, medium, and low - according to the mean scores received on the use of learning strategy survey. Mean scores of 3.68 - 5.0 were classified as *high strategy use*; mean scores of 2.34 - 3.67 were labeled as *medium strategy use*; and mean scores of 2.33 and lower were categorized as *low strategy use*. The learning strategy mean scores for all the categories are provided in Table 1.

Chi-square tests of independence were performed to investigate the relation between levels of self-efficacy and learning strategy use. If the tests showed a significant relationship between self-efficacy level and frequency of strategy use on a particular strategy category, it implies that the strategy was employed either more frequently or less frequently by higher efficacious students than medium efficacious students.

The results in this study suggest statistically significant relationships between self-efficacy level and frequency of strategy use in all categories, with the exception of affective strategies (see Table 6). In other words, higher self-efficacy was associated with higher use of five types of learning strategy. No relationship was found between the level of self-efficacy and affective strategy use, $\chi^2(2, N = 60) = 4.04, p = .133$. This indicated that the category of affective strategy represented a negative relation with level of self-efficacy. Students with high self-efficacy did not use affective strategies frequently. This particular finding is compatible with Pajares, Johnson, and Usher's 2007 study in which they found that anxiety is a predictor for writing self-efficacy. Klassen (2002) suggested that high anxious learners were found to have lower writing self-efficacy. The overall results that emerged suggest that the participants in this study seemed to have low anxiety on their writing and used affective strategies less frequently. Their high self-efficacy could possibly encourage them to be less apprehensive and become more relaxed when writing.

Table 6 Frequency of students' use of learning strategies by levels of self-efficacy

Strategy categories	Frequency of strategy use	Self-efficacy level				χ^2	df	p
		Medium		High				
		Number of students	% of students	Number of students	% of students			
Memory						8.92	2	.012
	high	4	12.1	12	44.4			
	medium	27	81.8	15	55.6			
	low	2	6.1	0	0.0			
Cognitive						6.88	2	.032
	high	8	24.2	15	55.6			
	medium	20	60.6	11	40.7			
	low	5	15.2	1	3.7			
Compensation						19.46	1	.000
	high	8	24.2	22	81.5			
	medium	25	75.8	5	18.5			
Metacognitive						27.28	2	.000
	high	7	21.2	24	88.9			
	medium	25	75.8	3	11.1			
	low	1	3	0	0			
Affective						4.04	2	.133
	high	5	15.2	9	33.3			
	medium	26	78.8	18	66.7			
	low	2	6.1	0	0			
Social						10.88	1	.001
	high	8	24.2	18	66.7			
	medium	25	75.8	9	33.3			
Total						16.64	1	.000
	high	6	18.2	19	70.4			
	medium	27	81.1	8	29.6			

This finding supported Bandura's (1993) argument that self-efficacy affects students' use of strategies. There seems to be a significant correlation between a student's level of self-efficacy and learning strategies (Green and Oxford, 1995; Magogwe and Oliver, 2007). The results also confirms that motivation affects students' use of learning strategies (Oxford and Shearin, 1994) and influences the frequency and types of language learning strategies used (Nyikos and Oxford, 1993).

7. Classroom implications

The findings from the present study have therefore indicated that self-efficacy is an important factor in students' use of learning strategies. Many ESL students have a low sense of self-efficacy and lack learning strategies to help them gain proficiency in the language (Oxford and Shearin, 1994). These factors in turn undermine their motivation to learn and their performance. Teachers should increase student's self-efficacy, especially at tertiary level, in the hope that it will reduce their anxiety, increase motivation, and boost strategy use, all of which may help them achieve academic goals.

Increasing students' self-efficacy is essential to students' learning of English language and needs to be provided in classrooms (Wang et al., 2013). Teachers can help students develop their sense of self-efficacy by providing meaningful and achievable language tasks. In addition, teachers should help students build a strong sense of self-efficacy by providing training in self-regulated learning strategies for managing demanding tasks. These self-regulation skills can be taught either by integrating them into an existing language lesson plan or by providing them in a separate training course. After students received instruction to promote self-efficacy, they were found to be more persistent with their writing (Lee, 2002).

The results of the present study also suggest that instruction on metacognitive strategies in writing, such as planning, monitoring, and self-evaluation, are necessary for writers, especially at a beginner or intermediate level. Setting clearly achievable goals may also help increase their self-efficacy level. When students have a range of metacognitive strategies at their disposal, they should become more aware of their own learning and better equipped to become more successful learners.

In addition, assistance in the form of comments from teachers and peers can also help reduce students' anxiety. Teachers should make certain that students have access to both formal assistance, such as teachers' oral and written feedback, and informal assistance, such

as peer feedback or access to online resources. In turn, when students have lower anxiety, their level of efficacy could be heightened and thus possibly result in better writing performance.

Learning how to use learning strategies, it does not automatically mean that they will use them regularly, but among other things, self-efficacy can help promote motivation to use learning strategies more frequently (Zimmerman and Martinez-Pons, 1990). Likewise, Bandura (1993) suggests that self-efficacy provides the “staying power” that will increase the frequency of use of strategies. Therefore, our writing classrooms should be reconstructed to assist language learners to build up their own efficacy in writing and strategy skills.

8. Conclusion

The research findings from this study revealed the significance of students’ self-efficacy and learning strategies in writing classes. The results suggest a robust relationship exists between self-efficacy and learning strategy use. More efficacious students seem to use strategies more frequently than less efficacious students. Moreover, students seem to use metacognitive strategies most frequently while affective strategies were used least frequently.

Self-efficacy is therefore one of the factors pertinent to students’ success in language learning. Self-efficacy and learning strategies are believed to be predictors of academic outcomes (Magogwe and Oliver, 2007). Improving students’ self-efficacy is critical to their performance in writing. Students with high self-efficacy will have greater control over their anxiety when faced with difficulties or failures in writing classrooms. Language teachers should therefore develop students’ sense of efficacy by providing instruction and feedbacks in learning strategies. Guidance should be given in effective learning strategies in order to build a high level of efficacy in the learning process. In this way, students will be equipped with an intellectual tool that will prepare them to face academic challenges in the future.

9. Limitations and suggestions for further research

Although we found significant findings, this study had several limitations. The sample may be biased because the study sample was limited to 60 students who majored in social sciences and humanities at a prestigious public university in Thailand. These students do not represent the general population of Thai college students, and the results cannot be generalized to other populations either. Future research should consider students from more diverse educational backgrounds and institutions.

In addition, this study did not analyze academic achievement because only limited data was available on participants' English proficiency. It would be useful to conduct future research that examines students' proficiency achievements across self-efficacy profiles.

Another limitation is that this study was based on self-report accounts of strategy use and perceived self-efficacy which may not indicate the whole picture. The participants may not be entirely honest or truthful in reporting their feelings of self-efficacy. Data from other sources is needed to provide a more complete picture of the topics.

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