Metastrategies Used by EFL Students in Learning English Writing: Self-reflection

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Abstract

This study aimed to investigate EFL students' metastrategies in learning English writing. The participants were 34 undergraduate non-English major students taking a paragraph writing course at a university in southern Thailand during the semester 2/2017. Text analysis method was employed. Students' self-reflection at the end of the course was analyzed to examine their metastrategies in cognitive, social, affective, and motivational domains in four phases of learning, namely, forethought, performance, self-reflection, and beyond-class. The uses of each student's metastrategies were quantified and the content of the metastrategies was categorized and reported interpretively. The findings revealed that the students were likely to deploy a wide range of metastrategies when learning writing. Cognition was found to be the most frequently used domain in all phases of task. This study suggests the students tended to be strategic learners and their self-regulatory learning tendency is likely to be influenced by the class environment where they were required to engage in cooperative learning provided with some freedom in their learning.

Keywords: metastrategies, English writing, self-reflection

Introduction

The concept of learning strategies became recognizable in the 1970s and has been widely studied afterwards. Learning strategies are considered a crucial tool for successful students because of their contribution to developing students' language competence and promoting responsible students (Cohen, 2011; Scharle & Szabo, 2000). They are viewed as unobservable but conscious mental behaviors and actions taken by students to achieve their learning goals. The dynamic nature of learning strategies allows strategic students to be flexible in selecting strategies appropriate to specific tasks (Chamot, 2004; Cohen, 2011; White, Schramm, & Chamot, 2007).

Learning strategies are key elements students use in their learning. Successfully regulated students constantly set goals, activate their cognitive, affective, and motivational strategies, and monitor as well as evaluate their own performance in order to achieve their learning goals within a constraint of contextual factors in a particular learning environment (Pintrich, 2000).

Among different types of strategies classified by function, metacognition is considered useful and mostly employed by successful students (Chamot, 2004; Flavell, 1979; Vandergrift & Tafahodtari; 2010). Numerous scholars regard metacognition as having an executive role that students use to control their cognition by planning, organizing, monitoring and evaluating their strategy use (Cohen, 2011; Cohen & Wang, 2018; Macaro, 2001; O'Malley & Chamot, 1990). However, Oxford (2011, 2017) viewed that metacognition does not include only control of cognition but also emotion and social interaction; thus, she proposed the term 'metastrategy' to offer a broader view and include metacognition as one of its components.

According to Oxford (2011, 2017), metastrategies subsume four dimensions, namely, cognition, affect, motivation, and social interaction. Each dimension includes four

metastrategy sets which allow students to pay attention, plan, organize learning and obtain resources, and monitor and evaluate their learning process mediated in multidimensional contexts. Engaging in this self-regulatory process can facilitate them to achieve learning goals in specific tasks within a particular learning context (Oxford, 2017; Zimmerman, 2000, 2008; Zimmerman & Kitsantas, 2014).

When focusing on a task, students are believed to regulate their learning in three task phases: forethought, performance, and self-reflection (Zimmerman, 2008; Oxford, 2011, 2017). The forethought phase includes strategies that students employ to manage their learning before engaging in the task during the performance phase. The self-reflection phase reflects students' self-evaluation of their performance after finishing the task (Zimmerman, 2000, 2008; Oxford, 2011, 2017).

In learning English writing, students are required to mediate their learning within the four dimensions to achieve their writing goal. Much of students' cognitive processing is needed to produce logical organization of ideas and systematic linguistic construction (Hyland, 2003; Hochman & Wexler, 2017). Also, students have to engage in complex mental writing activities by regulating their emotion and motivation with consideration of contextual factors. In other words, they have to be focused and motivated to write, plan the writing, monitor the use of resources and evaluate their work within a learning circumstance that may provide them with social interaction with others (Karlen & Compagnoni, 2017; Lei, 2016).

Research that links strategy use and writing skills mostly focuses on strategies students use when constructing writing composition (e.g., Bai, Hu, & Gu, 2014; Hu & Chen, 2007). Some research looks into students' writing development through strategy instruction (Bai, 2015; De Silva & Graham, 2015). Other research studies investigate the relationship between strategy use and a number of concerning factors such as motivation and learning resources (Lei, 2016; Yeung, 2016). These research studies tend to emphasize overall strategies used to facilitate students' knowledge acquisition. However, research that focuses only on students' metacognition or the control of their learning in writing seems scarce.

In Thailand, where students are usually described as having a passive role in learning, English writing is one skill considered very difficult for them. The literature repeatedly reported students' several problems ranging from linguistic features to rhetorical ones (Kaweera & Usaha, 2008; Phoocharoensil et al., 2016; Siengsawang, 2006; Todd, Khongput, & Darasawang, 2007). These problems urge teachers to encourage students to learn and develop their writing skills by introducing them to the same sets of strategies. However, the way students interact and employ the strategies are possibly different depending on other factors.

As revealed in various research studies, students' use of strategies are influenced by a number of factors concerning the learner's personal attributes such as gender, cultural and educational background, learning styles, and motivation, and other socio-cultural learning factors such as the nature of the task and a specific learning goal (Cohen & Macaro, 2007; El-dib, 2004; Lee & Oxford, 2008; Wong & Nunan, 2011; Yang, 2007). Accordingly, students' choice of strategy use can be different and mediated in a complex way according to situational and sociocultural factors (Hu, 2016; Oxford, 2017).

Also, numerous research studies have found that students' proficiency level relates to how they use strategies. When mediating with a learning task, successful students tend to autonomously deploy a wider range of strategies than those who are less successful (Bai, Hu, & Gu, 2014; Chen, 2011; Griffith, 2003; Riazi, 2007; Wong & Nunan, 2011). These previous research studies tend to suggest that successful students have operationalized strategies in a different way from unsuccessful ones. Setting off from this point, this study was set out to investigate metastrategies used by EFL students considered successful in learning English paragraph writing.

Methodology

This study employed a qualitative research approach to offer deep understanding of students' use of metastrategies in their learning of writing.

Participants

The participants in this study were 34 non-English major students purposively selected from 72 students taking a writing course offered as an elective course at a university in southern Thailand in the second semester of academic year 2017. They were selected because they were considered successful students in writing, identified by their scores in the individual final writing task. Initially, 30 students with the highest scores of the final writing task were targeted. However, after ranking all students according to the scores received, five students were found to gain the same score in the bottom rank of the group. All of them were then included as the participants of this study, making the total number of 34 participants. The selected participants were heterogeneous in terms of faculty and year of study. Their demographic information is illustrated in Table 1.

Table 1: The participants' demographic information (n = 34)

Faculty	Year of study				No. of participants
	1	2	3	4	
Agro-industry				2	**2**
Economics				1	**1**
Engineering			3	2	**5**
Liberal Arts				1	**1**
Management Sciences		1	6	3	**10**
Natural Resources				1	**1**
Science	1		2	11	**14**
No. of participants	**1**	**1**	**11**	**21**	**34**

Writing Course Context

The writing course aimed to improve students' paragraph writing abilities. Its content covered a review of sentence structures, the introduction of common writing errors, parts of a paragraph, and two text types of the paragraph. In the teaching and learning process, the researcher teacher explicitly taught the lessons and let the students practice through various activities such as individual exercises, online quizzes, and pair/group exercises. Throughout the course, group work activities were constantly employed and the group members were randomly assigned by the teacher. As the course took place in a computer room, the students were taught to use Google applications, namely, Google Drive and Google Docs as tools to assist their pair writing and peer feedback provision. They could also freely access learning resources suggested by the teacher on a Learning Management System and other online resources. When practicing writing paragraphs, the students were asked to write paragraphs in pairs from the pre-writing stage through to making the final draft, which mostly occurred in class. During the process of writing for each writing task, they were assigned to engage in 2-3 peer feedback activities according to steps in their writing process. Two pairs of writers were randomly matched up by the teacher to review each other's paragraph according to prompts given based on the focused course content they had been taught before, for example, the paragraph structure, the paragraph unity, and the use of transitional expressions. The paired reviewers had to make comments on the paragraph in the form of suggestions for

revision or corrections of the language in any part of the paragraph. The time allocation for each peer feedback session was 1-1.5 hour of the class time. The pair writers were autonomous in deciding to accept or reject the reviewers' comments. Throughout the course, the students were required to submit two writing assignments in pairs and write the final writing task individually. All students' final writing tasks were scored by two raters, the researcher and an experienced teacher of English writing. The average scores of the tasks were used to identify the participants of this study. During the 15-week long course, the students were also asked to write nine self-reflection reports, each with half a page in length, at the end of main class activities such as writing assignments. At the end of the course, they were then asked to write a final self-reflection report for the whole course.

Final Self-reflection Report

At the end of the course, all students were required to write at most three pages of a final self-reflection report (either in Thai or English) to show their overall reflection of the course regarding four main points:

- self-evaluation of their understanding of the concepts and applications of writing in the whole course
- self-evaluation of their writing development (from all assignments they have done)
- self-evaluation of their problems on writing
- self-suggestions of how to improve their writing

The final self-reflection report was used as the instrument in this study as it can collect the participants' thought processes while trying to achieve their learning goals (i.e., learning English writing skill), allowing the researcher to observe how they regulate their own learning through their views of learning progress, a shift in their beliefs about learning, and a shift in their psychological needs (Boekaerts & Cascallar, 2006).

Data Analysis

The students' self-reflection reports were coded by the researcher (Coder 1) using the coding scheme adapted from Oxford's (2017) metastrategy sets (See Appendix 1). One experienced teacher of English (Coder 2) was asked to recode 25% of the data to see the reliability of the coding scheme. The reliability between the two coders was then calculated using Miles and Huberman's (1994) formula exemplified by McAlister, Lee, Ehlert, Kajfez, Faber, & Kennedy (2017). That is, the reliability is determined by dividing the number of codes the two coders agreed on with the total number of codes as shown in the following formula.

$$\text{reliability} = \frac{\text{number of agreements}}{\text{number of agreements} + \text{disagreements}}$$

As suggested by McAlister, et al. (2017), the reliability values should be calculated using each coder's total number of codes in order to ensure reliability between coders with the different number of total codes. Taking Coder 1's total number of codes into account, the reliability level reached 70.64% and it reached 80.20% with Coder 2's total number of codes.

The frequencies of metastrategies used were then reported according to the three task phases suggested by Zimmerman (2000). However, as this study aimed to provide an overall view of metastrategy use in the whole writing course, the concept of the task phases was employed in a slightly different way. The 'task' was adopted to refer to the whole learning

course rather than a particular task in the lessons. The forethought phase, hence, was used to refer to the beginning of the course; the performance phase was meant to be the lessons of the whole course and the reflection phase was the reflection of students' overall learning. As the prompt of self-reflection in this study asked students to suggest self-improvement in writing and the students reflected their learning by suggesting their further actions after the course, the researcher then decided to add 'beyond class' as the fourth task phase.

To gain in-depth information about how students employed metastrategies, qualitative data analysis was undertaken to analyze metastrategy use in each task phase and presented in an interpretive way.

Results

Students' Metastrategies

The metastrategies employed in the students' self-reflection reports are shown in Table 2.

Table 2: Percentages of students employing metastrategies (n = 34)

Domains / Metastrategy sets	Cognitive (C) (%)	Affective (A) (%)	Social (S) (%)	Motivational (M) (%)
Paying attention (PA)	11.8	**44.1**	11.8	29.4
Planning (PL)	23.5	2.94	2.94	5.88
Organizing learning and obtaining resources (OO)	**47.1**	0	32.4	2.94
Monitoring and evaluating (ME)	**100**	32.4	**44.1**	5.88

Table 2 revealed that the students deployed all metastrategy sets. The most frequently used metastrategy is monitoring and evaluating cognition (100%), followed by organizing learning and obtaining resources in cognitive domain (47.1%) and paying attention to affects (44.1%) and monitoring and evaluating social factors (44.1%). Interestingly, the students did not show metastrategies in organizing learning and obtaining resources in affective domain.

Patterns of Metastrategy Use

The patterns of metastrategies used by the participants are disclosed in Figure 1. Looking across all phases of tasks, it was revealed that four metastrategies were employed in all phases, namely, paying attention to affects (A-PA), paying attention to motivation (M-PA), organizing learning and obtaining resources in cognitive domain (C-OO), and monitoring and evaluating cognition (C-ME).

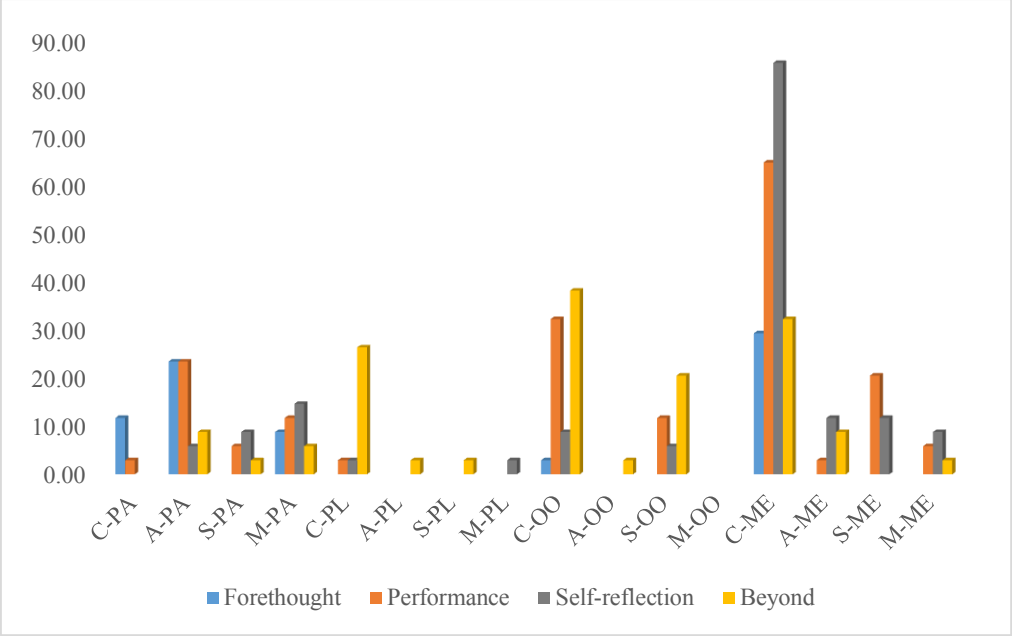

Figure 1: Frequency of metastrategy sets in different phases of the course (n = 34)

When considering metastrategies in each phase, it was found that the students employed more various metastrategies in the performance, reflection and beyond-class phases than the forethought phase. In the performance phase, the most frequently used metastrategy was C-ME (64.71%), followed by C-OO (32.35%) and A-PA (23.53%). As regards the reflection phase, the most frequently used metastrategy was C-ME (85.29%), followed by M-PA (14.71%), monitoring and evaluating affects (A-ME) (11.76%) and monitoring and evaluating social interaction (S-ME) (11.76%). Regarding the beyond-class phase, the data showed that C-OO was the most frequently employed metastrategy (38.24%), followed by C-ME (32.35%) and planning for cognition (C-PL) (26.47%).

The Use of Metastrategies

The qualitative data illustrated a variety of metastrategies deployed in each of the four task phases. In *the forethought phase*, it was found that the students mostly focused on their cognition. Specifically, they were likely to emphasize their lack of background knowledge in writing a paragraph and how it affected their writing. Some students also expressed their negative motivation about their own learning.

> At the beginning of the course, I wrote with errors and I took time to write because I didn't have sufficient knowledge. (Student 1)
>
> Before learning, I didn't understand how to differentiate compound and complex sentences. (Student 5)
>
> In the beginning, I didn't have enough writing skills. I lacked knowledge in grammar and sentence structures. The content looked unorganized. (Student 9)
>
> In the beginning, I was lazy. I thought I couldn't understand the lesson even when I read it. … From the first writing task, I didn't understand anything; I thought that I would just write to make it finish. (Student 15)

In *the performance phase*, the students tended to self-evaluate the problems they faced due to their cognition and how they organized their learning and obtained resources while in the learning process. They appeared to monitor their own writing abilities; some students also

focused on their negative feeling and monitored the benefits of social interaction occurring in the learning.

> The major problem in writing is a lack of vocabulary knowledge… I thought I looked up the words in the dictionary too often and this made my writing take time. (Student 8)

> Writing Assignments 1 and 2 made me realize that there are many patterns of paragraph writing….When writing Assignment 3, which I had to compose alone, I found that I could write a lot better. (Student 11)

> Sharing ideas with friends and friends' suggestions can help generate more ideas. (Student 13)

> I'm afraid that I would write incorrectly and not fluently. (Student 32)

In *the self-reflection phase*, it was discovered that the students reflected mostly about their cognition. They were likely to evaluate their improvement in writing, their learning styles, and their self-performance (i.e., their writing products). They also emphasized problems in writing and the application of their knowledge.

> I think now I can write better, use better words and be fluent... (Student 32)

> According to my learning in this course, I found that I can compose better writing, be able to analyze the text, understand writing better, and find my writing errors. (Student 30)

In the last phase, *the beyond-class*, the students gave suggestions about their future learning resources and actions they could do to develop their writing ability. Interestingly, some students commented on strategies they could use in relation to a course-oriented writing goal while some students appeared to plan strategies to develop their writing in the real world.

> [I could] use Google Translate and dictionaries the teacher provided on LMS, look up words in Cambridge Online Dictionary and check their examples and appropriateness in the required context, review contents according to peer feedback, [and] ask the teacher if the words are used correctly. (Student 34)

> [I will] write frequently. I'm thinking about writing a diary in English to revise [English]. [I could] check grammar and vocabulary using mobile phones and the Internet, practice English through YouTube, and try to read English articles and novels. (Student 28)

Discussion

The findings of this current study indicated that the students tended to deploy a wide range of metastrategies when learning writing. Among different domains, cognition was found to be the major focused metastrategy set in all phases of the task. The students were found to address the knowledge they had at the beginning, monitor the knowledge learned as well as identify their hindrances during the course, and assess their writing abilities at the end of the course. Coherently with Griffith's (2013) and Kunasaraphan's (2015) studies, metacognitive strategies play a large part in 'core strategies' preferred by good students. They are also seen as a crucial and basic tool that can help students achieve the learning goal, leading to their learning success (Oxford, 2017; Pipattarasakul & Singhasiri, 2018). The employment of metacognitive strategies by students in this study might indicate that they can plan, select strategy use and evaluate cognitive strategies while engaging in the task (Kobayashi, 2016).

The frequent occurrences of metacognitive strategies of monitoring and evaluating writing in conjunction with organizing and managing learning resources to assist learning could indicate that the students were goal-oriented. In the learning conditions which required

them to write on an online platform with full access to the Internet, they appeared to consult online learning resources to solve their concurrent problems in writing. While mediating with these resources, they may consciously and progressively notice others' language use and internally imitate it in their writing, leading them to become successful writers (Chang, 2012). Moreover, awareness of the advantages of social interaction in class was likely to take part in their learning success. Engaging in multiple peer feedback activities might offer them opportunities to develop their error awareness, leading them to cognitively monitor and evaluate their learning progress. When students engage in cooperative learning settings at a high level, they are likely to monitor themselves to achieve their learning goals (Hijzen, Boekaerts, & Vedder; 2006). Active and constructive interaction in class can also help them develop their regulation of strategy choices and actions (Boekaerts & Cascallar 2006; Oxford, 2017; Winne, 2018).

Students' awareness of learning resources and social interaction may not only be restricted to in-class learning. As revealed in the beyond-class phase, the students were likely to target at developing their writing abilities in the real world. They appeared to plan strategies they could use to further develop their writing abilities outside class. Learning resources and social interaction seemed to be perceived as two major factors that could strengthen their writing abilities. The two external factors students mediated with throughout the course possibly become informed choices of strategies they can use to further develop their writing skills in the real world, suggesting their readiness to be life-long learners.

Students' suggestions to improve their own writing may also indicate that they become more responsible for their learning. A major possible influence on this factor could be the learning environment provided by the teacher. The fact that the students have complete control of writing topics and fully engage in feedback provision and pair writing under the teacher facilitation possibly gives them some freedom and empower them to regulate their learning (Chang, 2012). While constructing their writing, they have to monitor their thinking about the knowledge to use, how to organize learning resources and when to seek help from others.

Apart from the cognitive domain and external factors, it was also observed that the students emphasized their internal attributes. They were found to pay attention to their affect and motivation throughout all task phases. Regarding the affective domain, it was evident that more students employed meta-affective strategies at the beginning of the course and during their learning than at the reflection and beyond-class phases. The reduction in affective aspect may imply that changes in the students' engagement occur. Some students might drop their initial strategies when their writing skills improve to a certain point and apply another strategy (Zimmerman, 2000). As revealed in the qualitative data, some students emphasized their negative feelings and uncertainties in their learning process at the beginning of the course. This might result from their past learning experiences that could trigger their avoidance of possible unfavorable learning results in order to maintain their well-being values (Boekaerts & Cascallar 2006). When the lessons unfold in an engaging learning environment, they might develop their independent control of knowledge and become more aware of strategies they can use to mediate with their tasks. As a result, they possibly turn from focusing on their well-being pathway to effectively mediate with other factors to put themselves in a growth pathway of achieving their learning goal (Boekaerts & Cascallar 2006).

Conclusion and Recommendations

This study sought students' ability to control their learning of writing by examining the employed metastrategies reported in the students' self-reflection report in a paragraph writing course. The findings revealed that the students in this study tended to be strategic learners. They were found to be goal-oriented and not likely to focus only on a course-related goal but also a goal to become better language learners. Their self-regulatory learning tendency seems to be largely influenced by the class environment where they were required to engage in cooperative learning provided with some freedom in their learning.

Despite the implicit introduction of metastrategies through activities in class, it could be claimed that students were able to acquire and develop the self-control of their learning. To make more positive results, explicit teaching of metastrategies in writing is recommended. As found by Tuckman and Kennedy (2011), university students taking a learning strategies course focusing on control of motivation and cognitive features for a semester were more successful than those in a non-strategic course in terms of knowledge retention and GPA. Implementing such similar courses for Thai undergraduate students could attain a similar result.

Although generalizability is not the aim of this qualitative research, the findings are likely to provide some insights to what non-English major Thai students under similar contexts of this study do and think about their own learning. These findings may be of interest to researchers to be used as a baseline to conduct further research in promoting self-regulation of students, especially non-English majors.

Even though this study drew only on data from students' self-reflection reports, it can shed some light on promoting students' control of their writing skill learning process. However, to provide more well-rounded findings on students' regulation in writing, it is recommended that a longitudinal study be conducted to examine the effects of metastrategy teaching intervention in a cooperative learning environment. In addition, more various data collection methods such as semi-structured interviews or stimulated recall interviews can be adopted. Also, collecting data from different groups of students in different universities may offer a more comprehensive understanding of Thai EFL students' self-regulation in writing.

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Appendix 1

The coding scheme for metastrategies (Adapted from Oxford's (2017) metastrategy sets)

Domains / Metastrategies	Cognitive	Motivational	Social	Affective
Paying attention	- Paying attention to the significance of the focused content - Paying attention to the task at hand - Paying attention to the task aim - Thinking about how to use own cognitive style to best advantage in learning the language	- Paying attention to motivation levels - Paying attention to activities/factors that rouse interests	- Paying attention to readers - Paying attention to bigger social contexts	- Thinking about emotions at the moment - Thinking about the feeling when starting the task - Thinking about how emotions affect motivation
Planning	- Setting goals - Planning how to do/approach tasks - Setting up study plans	- Planning for ways to increase motivation	-Planning to employ the knowledge gained in another social context	-Planning how to overcome negative feelings
Organizing learning and obtaining resources	- Looking for resources to assist learning	- Looking for resources that encourage their motivation	- Seeking help from others	- Finding ways to boost positive feelings
Monitoring and evaluating	- Evaluating own knowledge based on what learned -Thinking about problems faced and/or how to solve them - Thinking about the implication of the knowledge gained - Thinking about strategy use	- Monitoring motivation when doing a task	- Evaluating the effectiveness of social interactions in relation to knowledge gained - Reflecting on social strategy use	- Monitoring feelings when the task is complete. - Considering ways to avoid negative feelings - Monitoring feelings that have an effect on learning - Monitoring feelings influenced by learning