

## ENGLISH-MAJORED STUDENTS' USE OF SELF-REGULATED LEARNING STRATEGIES IN ENGLISH WRITING COURSES AT TERTIARY LEVEL

Le Van Tuyen\* and Tran Nhat San

*Faculty of English Language, Ho Chi Minh City University of Technology*

**Abstract.** Over the past three decades, self-regulated learning (SRL) has been considered a powerful new learning theory that enables students to apply knowledge and skills in real-life situations and make them more autonomous and independent in language learning. It is of vital importance to explore how students use SRL strategies in learning language skills. The current study aims to investigate the use of SRL strategies in English writing courses at the tertiary level. The study was conducted at Ho Chi Minh City University of Technology (*HUTECH University*) in Vietnam with the participation of 154 second-year English-majored students. Both quantitative and qualitative data were gathered via the employment of the questionnaire and interview. Descriptive statistics and content analysis were employed for data analysis. The findings of the study revealed that all the 9 categories with 40 SRL strategies reflecting the four dimensions of regulation, namely cognition, metacognition, social-behavior, and motivation were used by the English-majored students with a rather high frequency. The highest frequently utilized category was “feedback handling strategies” and the least frequently used categories were “goal-oriented monitoring and evaluating” and “peer-learning”. The findings of the study also offer several pedagogical implications for teachers, students and researchers. It is expected that the findings of the study would partly contribute to the existing knowledge of the study field and shed light on the importance of the use of SRL writing strategies in English education at HUTECH University in particular and at the Vietnamese tertiary level in general.

**Keywords:** SRL strategies, English-majored student, language skills, writing course, tertiary level.

### 1. Introduction

During the past two decades, a number of theories have been proposed to describe how students become autonomous learners and regulators of their own learning in various disciplines at different levels of education, including learning EFL at the tertiary level. The ultimate goal of learning English is communication, and self-regulated learning is believed to have positive influences on students' written communication. Developing students who can effectively use strategies in the writing process to produce clear, accurate written English sentences, passages, paragraphs or texts is of vital importance for any EFL teacher. Achieving this goal requires a deep understanding of the students' perceptions and attitudes towards the use of self-regulated strategies in learning English writing skills. SRL strategies facilitate EFL students in learning both language knowledge and skills including writing skills. Using SRL strategies helps them set the learning goals, monitor, and evaluate their own performance on the learning tasks. In addition, self-regulated learning helps enhance students' motivation and confidence in the process of learning

---

Received October 11, 2021. Revised November 4, 2021. Accepted December 5, 2021.

Contact Le Van Tuyen, e-mail address: [lv.tuyen@hutech.edu.vn](mailto:lv.tuyen@hutech.edu.vn)

[1]. Individual students use various cognitive, metacognitive learning strategies and methods when they are assigned to do writing tasks. Understanding aspects of SRL strategies also enables teachers to reduce domination over the students, but give them more independence in learning. It also helps teachers to form student-centered English writing classes more easily. Concerning the context of the study, to achieve the expected learning outcomes of the English language program, the English-majored students are required to complete 4 courses of academic writing skills in the first two years. Nonetheless, the student's proficiency level is not homogeneous. Some of them encounter difficulties in learning these writing courses, resulting in low grades in the end-of-course exams. They may know different SRL strategies, but they may not know which strategies are effective and how to employ those strategies in learning. That is why investigating students' use of SRL strategies is necessary and practical for the practitioners in the context.

So far in the context of Vietnam, several studies have been conducted in terms of SRL strategies used by EFL students including, for example: SRL strategies in oral communication [2], SRL strategies in learning EFL in general [3, 4], SRL strategies in listening achievement [5]. Nonetheless, little literature related to the use of SRL strategies in learning English writing skills has been found; and almost no previous studies have been conducted in the context of the study (*HUTECH University*).

Therefore, the current study aimed to fill the need for a study in this field-exploring what self-regulated learning strategies English students use in their writing courses at tertiary level. The study attempted to address two research questions as follows:

1. What SRL strategies do English-majored students employ in their academic English writing courses at tertiary level?

2. What are the top five most common and least common SRL strategies employed by the students in their English writing courses at tertiary level?

It is expected that this study will contribute to the overall research literature with empirical findings on the use of SRL strategies in learning English writing skills by EFL students at tertiary level.

## **2. Content**

### **2.1. Literature Review**

#### **2.1.1. Self-regulated learning**

So far researchers and educators have defined SRL in several ways. Accordingly, SRL refers to self-generated thoughts, feelings, and behaviors, or self-directive process [6, 7, 8], or students' use of different cognitive, metacognitive, and resource-management strategies, and motivational orientation [9, 10]. In other different ways, SRL is defined as an active, constructive process whereby students set goals for their learning [11], or as a multidimensional construct, including cognitive, metacognitive, motivational, behavioral, and environmental processes [12, 13], or as the ability of students to control the factors or conditions affecting their learning [14, 15], or as a goal-driven process in which the student monitors and regulates internal abilities and responses to negotiate external environments [16, 17].

Researchers have also developed models of SRL. The first model was developed by Boekaerts [18]. It consists of six components, namely (a) domain-specific knowledge and skills, (b) cognitive strategies, (c) cognitive self-regulatory strategies, (d) motivational beliefs and theory of mind, (e) motivation strategies, and (f) motivational self-regulatory strategies. In addition, Winne and Hadwin's Model [19] consists of four phases, namely: (a) task definition, (b) goal setting and planning, (c) enacting study tactics and strategies, and (d) meta-cognitively adapting studying. According to Pintrich's model [20], SRL is formed by four phases: (a) Forethought, planning and activation, (b) monitoring, (c) control, and (d) reaction and reflection. All four

phases are combined with such aspects of regulation as cognition, motivation, behavior, and context to make a comprehensive picture of a significant number of SRL processes. Finally, Zimmerman's model [7, 21] is organized in three phases: forethought (e.g., analyzing tasks, setting goals, planning how to attain goals), performance (e.g., performing the task, monitoring the progress), and self-reflection (e.g., assessing the performance of the task).

Although theories and proposed models of self-regulated learning somewhat vary, it is generally understood that the construct of SRL consists of four major components: metacognitive, cognitive, behavioral, and motivational processes and strategies [22]. These components are necessary for a successful learning process. SRL frames strategies that students can use to enhance motivation and promote their engagement, persistence, and performance self-monitoring. Self-regulated learning strategies refer to actions and processes directed at the acquisition of information or skills that involve agency, purpose, and instrumentality perceptions by students [23]. Learning strategies are supposed to be context specific. They are applied differently in various tasks and are mainly developed by individual students.

Based on the above-mentioned models of SRL and the phases proposed by researchers, to enhance academic achievement, students need to do different tasks in different phases. They are required to be meta-cognitively, behaviorally and motivationally, and actively involved in the process of acquiring knowledge and skills. Metacognitive processes and strategies refer to the skills used to control and regulate students' cognition and the cognitive resources they can apply to meet the demands of particular tasks [24], including setting goals and planning, monitoring actions, evaluating progress. Metacognitive strategies can facilitate learning, thus contributing to better academic performance [25]. Cognitive processes and strategies refer to skills students use to process the information or knowledge in completing a task [26]. They help students construct, transform, and apply L2 knowledge [25], including text processing, managing the learning environment, using rehearsal, organizational, and elaboration learning strategies or seeking help from others. Social-behavioral strategies involve individuals' attempts to control their learning behavior under the influence of contextual and environmental aspects [21], including seeking help, feedback-handling and peer learning, etc.; and motivational processes and strategies include high self-efficacy, self-attributions, self-motivation, etc. [27]. Students should have beliefs in the importance of tasks and in their ability to perform the task [28].

The theoretical framework of the current study is based on the four processes and strategies of SRL mentioned above. Accordingly, students' SRL in writing courses is investigated via the use of strategies reflecting the four categories namely metacognition, cognition, behavior, and motivation.

### **2.1.2. Self-regulation and writing**

Self-regulation in writing has been investigated and mentioned by researchers for decades. Zimmerman and Risemberg [29] defined self-regulation in writing as the "self-initiated thoughts, feelings, and actions that writers use to attain various literary goals, including improving their writing skills as well as enhancing the quality of the text they create" (p.76). Zimmerman and Bandura [30] confirmed that SRL plays a big role in the attainment in writing courses and that SRL strategies that maintain intention by means of self-enhanced concentration, task management, and completion are crucial for success academically; and students' knowledge of writing strategies may affect how they plan their writing, including content generation, use of library sources, and even choosing to plan at all [31]. Moreover, when students master cognitive and meta-cognitive strategies in academic writing and develop autonomous self-regulated use of the strategies, they can manage their thoughts, behaviors, and emotions in order to successfully navigate their learning experiences [32, 33].

Through results of studies, researchers have proved that writing practices are more effective if English students use self-regulated strategies, and have positive attitudes towards and self-efficacy beliefs in writing. Especially, SRL strategies play the primary role in helping students improve their language proficiency in academic settings [25]; for example, Abadikhah, Aliyan and Talebi [34] conducted a study to investigate EFL university students' attitudes towards self-regulated learning strategies in writing academic papers. The findings indicated that certain writing strategies were employed by the students, and that the fourth-year students more frequently employed self-regulatory learning strategies in writing than did the third-year students in the context of Iran. The study confirmed that assessing students' attitudes towards the employment of SRL strategies in writing is beneficial for academic writing courses. However, it is not true that English students in every context used SRL strategies in learning writing skills. One study conducted by Fentaye [35] revealed that a majority of students did not apply metacognitive strategies or have short and long-term plans to achieve their set goal (expected grade), or share their problems of writing with their peers.

It can be said that many students, in a certain context, still may not pay attention to the use of SRL strategies in their English writing courses. EFL students should know that successful writers often use self-regulation strategies to best suit their purposes throughout the writing process [7], and that the development of writing competence depends on high levels of self-regulation [36]. In addition, Zimmerman and Risemberg [37] emphasized that becoming an adept writer requires more than vocabulary and grammar knowledge; it depends on students' levels of personal regulation because writing activities are usually self-planned, self-initiated, and self-sustained, and researchers have proved that good writers are more actively, and more meta-cognitively involved in the writing process; they spend more time planning and revising their text and are more active in monitoring their writing [38]. It can be concluded that to be successful in English writing courses, it is impossible for students not to use SRL strategies.

## **2.2. Research methodology**

### **2.2.1. Research design**

The study used a mixed-methods research design to investigate the use of SRL strategies among English-majored students at tertiary level. To understand the research problems clearly and deeply, the study concurrently employed a combination of collecting both quantitative and qualitative data via the use of the questionnaire and structured interview respectively. The two databases were mixed by merging the results during the analysis and interpretation of the data.

### **2.2.2. Participants**

This study was conducted at Ho Chi Minh City University of Technology in Vietnam. The participants of the study were 154 English-majored students who were in their second academic year and came from four classes. 105 of them are female (68.2%), and 49 of them are male (31.8%). Their ages range from 19-20 (78.6%), 21-24 (17.5%), and 25-over (3.9%). Although they all were in the second academic year, their perceived English proficiency varied, ranging from pre-intermediate (22.0%), intermediate (60.4%) to upper-intermediate (17.6%) levels. They studied 6 credit hours of writing skills a week with Vietnamese EFL teachers.

### **2.2.3. Instruments**

As found in literature, researchers have employed several typical instruments of measuring students' SRL such as self-reported questionnaires, structured interviews, teacher judgments, think aloud, error detection tasks, trace methodologies or observations of performance [22, 39]. Nonetheless, the current study only employed two most frequently-used instruments, i.e. self-report questionnaire and structured interviews. The questionnaire was adapted from Teng and Zhang [40]. It consists of two parts. The first part includes 6 items used to explore demographic

information of the participants. The second part includes 9 categories with 40 items used to explore the students' perceptions of the use of SRL strategies in their writing courses including Cognition: Text Processing (6 items) & Course Memory (3 items), Metacognition: Idea Planning (3 items) & Goal-Oriented Monitoring and Evaluating (6 items), Social Behavior: Peer Learning (3 items) & Feedback Handling (4 items), Motivation: Interest Enhancement (4 items), Motivational Self-Talk (8 items) and Emotional Control (3 items). The questionnaire used five-point Likert scale measuring "frequency" ranging from 1-Never, 2-Rarely, 3-Sometimes, 4-usually to 5-Always.

The current study employed Teng and Zhang's questionnaire [40] because this writing SRL inventory was not designed for general learning contexts, but specific ones so data can be treated as reliable for providing insights into specific writing issues. Moreover, this questionnaire was developed in the Chinese context; however, so far almost no empirical studies employing this questionnaire in the Vietnamese context have been found, so it needs to be applied in other EFL contexts like Vietnam to test its validity and reliability.

To obtain triangulation of data for the study, the structured interview was used for collecting qualitative data. It consists of 10 specific questions directly focusing on addressing the two research questions.

#### **2.2.4. Data collection and analysis**

The data for the study was collected in the first semester of academic year 2020-2021 when the students had finished 3 English writing courses. 160 copies of questionnaire were administered in-person to students. They were instructed and required to complete the questionnaire outside class hours; nonetheless, after three days, 154 copies were returned. For the interview, 15 students were invited. Each interview lasted around 30 minutes. All interviews were recorded for later analysis. Regarding data analysis procedures, for analyzing quantitative data collected from the questionnaire, descriptive statistics were employed through the use of SPSS version 22. Mean scores and standard deviation were calculated. Based on calculated interval coefficient for four intervals in five points ( $5-1=4$ ), intervals with the range of 0.80 (4/5) were arranged. The following criteria in the Likert type scale were used to interpret the data: Never (1.00 -1.80); Rarely (1.81-2.60); Sometimes (2.61-3.40); Usually (3.41- 4.20); Always (4.21-5.00). For qualitative data collected from interviews, "content analysis" was employed. The responses gathered from the interviews were categorized into the themes to support the quantitative data. The students were coded as S1 to S15.

In terms of reliability and validity of the study, the questionnaire was adapted from [40]. Some adjustments to the final questionnaire were made. Cronbach's Alpha indexes of the 9 categories of strategies indicate a rather high level of reliability, including 06 text processing strategies = .791, 03 course memory strategies = .701, 03 idea planning strategies = .735, 06 goal-oriented monitoring and evaluating = .790, 03 peer-learning strategies = .759, 04 feedback handling strategies = .848, 04 interest enhancement strategies = .798, 08 motivational self-talk = .867, and 03 emotional control strategies = .787.

### **2.3. Results and discussion**

#### **2.3.1. Results**

##### ***2.3.1.1 Self-regulated learning strategies used by English-majored students in their writing courses***

To address research question 1, both quantitative and qualitative data were collected. For quantitative data, descriptive statistics were performed. The mean scores of 9 categories of writing SRL strategies are displayed in the following table, and more specifically, the mean scores of all 40 strategies and qualitative data are displayed in the subsequent sections.

**Table 1. Descriptive statistics of 9 categories of writing SRL strategies**

No	Categories of strategies	No of items	M	St. D
1	Text Processing	06	3.64	.397
2	Course Memory	03	3.30	.182
3	Idea Planning	03	3.77	.418
4	Goal Oriented Monitoring and Evaluating	06	3.18	.122
5	Peer-Learning	03	3.24	.354
6	Feedback Handling	04	4.17	.229
7	Interest Enhancement	04	3.76	.247
8	Motivational Self Talk	08	3.72	.271
9	Emotional Control	03	3.66	.119

As it can be seen in Table 1, the frequency of using SRL strategies in the English writing courses is rather high, which may imply that most of the second-year English majored students usually used SRL strategies in learning writing skills. Among the 9 categories of SRL strategies, the category of feedback handling was the most frequently employed by the students with  $M=4.17$  and  $St. D = .229$ . The three least employed categories are course memory, goal-oriented monitoring and evaluation, and peer-planning with  $M = 3.30, 3.18 \& 3.24$  and  $St. D = .182, .122, \& .354$  respectively. Especially, three categories of motivational SRL writing strategies, namely interest enhancement, motivational self-talk and emotional control with  $M= 3.76, 3.72, 3.66 \& St. D = .247, .271 \& .119$  respectively were more frequently utilized than the other three categories of cognition, metacognition and social behavior. More specifically, both quantitative and qualitative data reflecting the frequency of using all the SRL writing strategies are presented in the following sections.

### **Cognitive SRL writing strategies**

Regarding **Text Processing**, the data show that among 6 TP strategies, only one strategy “using some literary devices” was sometimes used by the students with  $M=2.92$  and  $St. D= .964$ ; meanwhile, the other 5 strategies, including checking grammar mistakes, spelling and punctuation, the structure for logical coherence, the cohesiveness or connection among sentences, and the topic and the content were most often used with  $M= 3.79, 3.87, 3.50, 3.73 \& 4.06$  and  $St. D= .995, .805, .985, .701 \& .912$  respectively.

The data gathered from the interviews are also consistent with the quantitative data displayed above. Accordingly, 13 (86%) out of 15 students interviewed said that they checked spelling, grammar, structure, punctuation, vocabulary, cohesiveness and especially the content when they were writing or finished writing. For example, “*I check the errors after finish at least twice to make sure everything in my essay is good enough to get good scores (S2); I check grammar, vocabulary, and ideas if they are relevant with the topic or not and correct them (S4); after writing I check for grammar errors, spelling errors and edit if needed (S10)*”.

Regarding **Course Memory**, it was found that the use of three memory strategies is at an average level. The results revealed that most of the students usually wrote useful words and expressions taught in writing courses to help them remember them with  $M = 3.50 \& St. D = .804$ . This cognitive strategy was used more often than the other two strategies, i.e., speaking out useful words and expressions taught in writing courses, or reading class notes and the course material over and over again to help remember them with  $M = 3.26 \& 3.14$  and  $St. D = .702 \& .813$  respectively.

The qualitative data gathered from interviews also revealed that many students used these strategies. For instance, *“Before going to class, I spend an hour or more reading all the theory and completing the exercises as much as I can (S7); or in class, I pay attention to the teacher’s lecture. That’s time I can learn again and have a deep understanding of that area and remember more words and expressions (S11).”*

### **Metacognitive SRL writing strategies**

In terms of **Idea Planning**, it was discovered that at the pre-writing stage, the students used the internet to search for related information and thought about the core elements of a good essay to plan with  $M = 4.16$  &  $3.83$  and  $St. D = .939$  &  $.934$  respectively more than they read related articles with  $M = 3.33$  &  $St. D = .827$ .

Through interviews, different students expressed different opinions about what they did before they wrote essays. Some reported that they used the Internet for searching information more than other strategies. Others said that they read other essays, articles or newspapers, or they watched videos on YouTube. Especially, some of them said that they brainstormed ideas, made a draft and thought critically before they wrote. For example, *“Before I write, I arrange the ideas so as to know which one should go first (S1); I make a skeleton outline for the essay at first (S2); I list out as many ideas as possible. I love to make an outline (S4); I read comments on YouTube and some academic articles from foreign websites (S12); and so on.* To sum up the data collected from the interviews are consistent with those collected from the questionnaire, and the use of these strategies is at a rather high level.

With respect to **Goal-Oriented Monitoring and Evaluating**, it was found that this category of meta-cognitive SRL strategies was employed in English writing courses. The mean scores range from 3.09 to 3.26, showing that when learning writing, students sometimes set up goals to direct learning, checked progress, evaluated knowledge and skills, monitored learning process, followed plan, and set up goal to improve writing with  $M = 3.26, 3.12, 3.10, 3.09, 3.25,$  &  $3.08$  and  $St. D = .982, .804, .962, .973, .802,$  &  $.802$  respectively.

Qualitative data showed that not all goal-oriented monitoring and evaluating strategies were used by one student, but different students employed different strategies in learning writing. Hereafter are some excerpts: *“At the beginning of the course, the teacher always asks us to set goals. I will follow them to manage my results. These things help me self-monitor and self-evaluate my writing process (S7). I follow the following steps in my writing: find the materials about the topic you are writing, identify kind of writing, brainstorming ideas, find how to link ideas, write down all ideas to papers, make a draft, and complete writing (S5).”*

### **Social behavioral SRL writing strategies**

One more category of writing SRL strategies that students employed in writing is **Peer-Learning**. Among these three social behavioral strategies, the frequency of discussing with peers to have more ideas to write with  $M = 3.45$  &  $St. D = .726$  was comparatively higher than the other two strategies. English majored students usually worked collaboratively with their classmates. They discussed, brainstormed ideas with  $M = 3.16$  &  $St. D = .930$  related to the topic before they wrote. However, they chose “working with peers to complete a writing task” less frequently with  $M = 3.11$  &  $St. D = .836$  respectively.

The above-presented quantitative data was supported by students’ expressions in the interviews. 9 out of 15 students reported that they worked with their classmates at the prewriting stage to brainstorm and discuss ideas. Below are some excerpts extracted from the interviews: *“We often work in pairs of groups to discuss what the main idea in writing is, and then we brainstorm all ideas by exploring the writing prompt, generating thoughts, and organizing ideas (S5); I seek help from my friends who are good at writing skill. She shares ideas with me, shows me what I should do if I don’t understand the topic and the way how to write (S8).”*

One more category of social behavioral SRL strategies is **Feedback Handling**. It was discovered that this category was more frequently utilized by the students than the category of peer learning strategies. Compared with the other categories, the frequency of using the four feedback handling strategies was the highest of all with the mean scores ranging from 3.90 to 4.41. Obviously, most English-majored students were usually ready for receiving and had a tendency of using peer and teacher feedback for improving writing with M= 4.09, 4.31, 3.90 & 4.41 and St. D = .993, .974, .609 & .797 respectively. The findings also revealed that the students preferred teacher feedback to peer feedback.

The data gathered from interviews are also in line with quantitative data. 13 out of 15 students reported that they wanted their teacher and classmates to help point out mistakes in their essays. Some excerpts are presented as follows: *“I get help from the teacher or from students who have good grades in writing tests for showing me what errors I make in my essays. After that I will correct it. It means I can learn from mistakes (S5). I send my writing exercises to the teacher and friends to ask for comments (S6). I ask my teacher to point out my mistakes and explain why I get that score so that I can avoid repeating them in the future (S14). I often ask classmates who are better than me in writing to give feedback (S15).”*

It can be concluded that English-majored students preferred using feedback handling strategies to peer-learning strategies. They might perceive that peer and teacher feedback could help them make a better writing text.

#### **Motivational SRL writing strategies**

When it comes to the category of **Interest Enhancement**, 4 major strategies are mentioned. As observed, they were usually utilized by the students. When learning writing, students usually looked for ways to bring more fun, chose interesting topics, and connected writing tasks with real-life with M = 3.42, 3.79 & 3.86 and St. D = .706, .703 & .901 respectively. The most frequently used strategy was “connecting writing tasks with personal interest” with M= 4.00 & St. D = .963.

Qualitative data are also consistent with quantitative data, which showed that most of the students employed interest enhancement strategies in learning English writing skills. They had several ways to enhance their writing learning. Some of them tried to create fun in learning, or others selected suitable and interesting topics to practice writing. Some of their opinions can be described as follows: *“Honestly, sometimes, I encourage myself that if I don’t write, I will forget all grammar I learn (S14); practicing my essay is the motivating way to learn writing English. I read my previous writing and think of making it better. I re-write it if I can and check whether it is better. I love to see my achievement (S6); I do something like finding a quiet place to write and selecting suitable and interesting topics, writing something that’s been on my mind recently, and doing something fun and get emotional (S5)”*.

As far as **Motivational Self-Talk** is concerned. Descriptive statistics show that 7 out of 8 strategies of this category were usually employed by the English-majored students, except “competing with other students and challenge me to do better than them in writing courses” with M= 3.14 & St. D = .814, showing that the students less frequently used this strategy. Especially many students told themselves that they should keep studying to improve their writing competence and to become good at writing with M = 3.99 & 3.94 and St. D = .918 & .600 respectively. These strategies were more often used than the rest strategies concerning grades and outperformance with M= 3.79 & 3.67 and St. D = .608 & .706 respectively.

With reference to the data collected from the interviews, it was found that 11 out of 15 students always encouraged themselves to learn writing skills although they encountered challenges or sometimes felt discouraged. Several students’ opinions are described as follows: *“I encourage myself to keep on thinking and writing by recalling the goals I set in the beginning. This helps a lot because I recall the reason why I have to study writing or take the writing courses*



(S2). *Whenever I feel discouraged, I try to sort out certain excellent writings as a motivation to push me up. I ask myself when I could do such a good academic task, so I get the energy to finish my work (S9). Or I tell myself that I am the sailor of my boat. I have to overcome the problems because it is going to be the consequence for my future life (S15)*”.

In concern with **Emotional Control**, one of the three categories of motivational SRL writing strategies, it was found that the students usually utilized emotional control strategies in their learning. They tried not to worry when taking a writing test or answering questions in writing courses, or keep on writing, or find ways to regulate mood when they want to give up writing with  $M = 3.56, 3.80 \& 3.64$  and  $St. D = .717, .608 \& .721$  respectively.

The data collected from the interviews showed that different students chose different ways to control emotion when learning writing skills. They all tried not to give up learning despite challenges. Several students reported, *“I tell myself to finish the writing. I tell myself not to give up because it will lead to bad results like a bad score (S4); when I feel tired, I stop for a while to listen to some music, watch a movie, take a walk or just stop it and try to finish it a few hours later (S3); or I will read English comic books, funny stories in English to reduce the stress. It reminds me that I am not too bad and I am doing well (S8)”*.

It can be concluded that the English majored students tended to employ motivational SRL strategies quite often to control as well as enhance their learning in their English writing courses.

### **2.3.1.2. Top five most common and least common SRL writing strategies used by students**

#### **Most commonly used SRL strategies**

The data revealed that the most commonly used SRL strategies by English-majored students belonged to “improving English writing based on teacher feedback” and followed by “being open to teacher feedback” with  $M = 4.41 \& 4.31$  and  $St. D = .797 \& .974$  respectively. Those two social-behavioral SRL strategies were used the most frequently of all 40 strategies, and more frequently than the other three strategies showing that English-majored students usually used the Internet to search for related information to help plan, being ready to receive peer feedback, and checked whether the topic and the content had been clearly expressed with  $M = 4.16, 4.09 \& 4.06$  and  $St. D = .939, .993 \& .912$  respectively.

#### **Least-commonly-used SRL strategies**

The data showed that among the 5 least commonly used strategies, one is a cognitive SRL strategy; the next three others are metacognitive SRL strategies, and the last one is social behavioral strategy. The findings revealed that very few students used literary devices to make essays more interesting with  $M = 2.93$  and  $St. D = .964$ . The other four strategies were sometimes used by the students, including “setting up a learning goal to improve my writing”, “monitoring learning process”, “evaluating mastery of the knowledge and skills” and “working with peers to complete a writing task” with  $M = 3.08, 3.10, 3.10 \& 3.10$  and  $St. D = .977, .973, .973 \& .936$  respectively.

It can be concluded that the English-majored students had a tendency of employing motivational SRL strategies most frequently in their writing courses. Coming next are social behavioral strategies; the cognitive, metacognitive strategies were only sometimes used by the students; and they were also the least frequently used strategies.

### **2.3.2. Discussion**

Students who are self-regulated use a combination of strategies associated with one or more of the four dimensions of SRL strategies (four core paradigms of SRL), namely, cognition, metacognition, social behavior and motivation regulation [41] through three self-regulation phases, namely forethought phase, performance phase and self-reflection phase [25]. The current study has indicated some significant findings that are consistent with the above researchers’

perspectives. It was found that more or less, all the 40 SRL writing strategies were utilized by the English-majored students in their writing courses at tertiary level. As reported in the above sections, the students demonstrated a moderate to a rather high level of SRL use. These findings are in line with those discovered by several researchers in other contexts like [34, 40]. It can be inferred that the participants might perceive the crucial role of self-regulation in students' writing proficiency [42], and so they paid attention to the demands of writing tasks and deploy strategies to meet task demands [25].

More specifically, regarding the cognitive dimension consisting of two categories of SRL writing strategies, namely text processing with six items reflecting students' use of linguistic, rhetorical, and discourse knowledge to generate a written text and course memory with three items referred to students' actively remembering writing knowledge taught in the writing course. The findings of the study showed that the students tended to use text processing strategies more often than course memory strategies. One of the possible explanations for this is that the students might think that linguistic factors were important for creating a well written text and checking mistakes could foster and enhance their writing outcomes and exam grades. This finding of the study is consistent with that of Ong and Zhang [43], showing that cognitive processes have an essential role in fostering students' writing performance.

In terms of the metacognitive dimension including two categories, namely idea planning with three items referred to specific idea-generating behavior before writing, and goal-oriented monitoring and evaluating with six items including such strategies as setting up goals to direct writing activities, it was explored that the students usually employed these metacognitive strategies in their writing courses. This may be explained by the fact that during the 3 writing courses, the participants in this study were instructed substantially on how to carry out a writing task or follow the process of writing an essay. They were able to set goals and find ways to achieve their goals. It can be said that they could discover several effective writing methods such as monitoring their learning process, searching for information for the writing topic, using several strategies for memorizing new words or structures, and evaluating their achievements. With a rather high frequency of using SRL strategies, it can be affirmed that they were active and responsible for their writing learning; they set goals for themselves, monitored, regulated, and controlled their cognition, motivation and behavior, and finally completed, and evaluated writing tasks to determine what they had learned. As a result, they were able to increase their independence and English competence [44].

With respect to social behavioral dimension, two categories of strategies are demonstrated, namely peer learning with three items reflecting the procurement of help from peers in the learning environment. It is also a social interaction, and feedback handling with four items reflecting students' attitude toward teacher and peer feedback. The findings of the study revealed that students usually discussed with their classmates to have more ideas for writing at the pre-writing stage, but they did not work with them through the process of writing. They also preferred receiving feedback from the teacher to classmates. It can be affirmed that the English-majored students knew how to seek help from classmates and the teacher when they had difficulty in learning or achieving goals; they were able to identify preferences for types of feedback, teacher feedback to peer feedback. This finding is in line with Vasu, et al.'s study [45] showing that feedback is an effective instructional practice and teacher feedback helps students become more self-regulated. Feedback handling yields a significant, positive effect on students' writing scores; and feedback aids individuals' monitoring and self-evaluation in the SRL process, contributing to positive academic outcomes [40]. The findings may reflect how students utilized social-behavioral factors to promote their self-regulatory capability.

Finally, concerning the motivational regulation dimension, including three categories of writing strategies, namely motivational self-talk, interest enhancement, and emotional control reflecting self-encouragement in knowledge mastery, tendency to make learning more enjoyable and efforts to reduce distraction when completing a writing task or learning to write, it was found in the study that all of these strategies were usually used by the students, which means that students may know it is necessary to encourage themselves to learn writing. They need to have positive emotions about the learning situation and become more committed to the task, thus contributing to better writing outcomes [40]. The findings may also imply that many English-majored students might have positive feelings about themselves and their abilities to learn writing, be able to understand the importance of writing and their strengths and weaknesses in this skill, evaluate their current levels of motivation in learning writing, choose suitable strategies for improving motivation, and set goals for improving writing skills. The findings of the study are consistent with Andrade and Evans's perspectives [41], showing that successful students can motivate themselves even when they do not feel like completing a task. They take responsibility for their learning, and practice self-regulated learning strategies, and use strategies to regulate mood and avoid distraction from writing or control discouraging feelings about writing. They could know when to stop and where to sit to write, and if they try to get engaged and active in the process of learning, they will be able to build up internal motivation and boost self-regulation [46].

### **3. Conclusion and implications**

The findings of this study shed light on the SRL strategies for learning English writing skills among Vietnamese EFL students at tertiary level. The findings of the study showed that English-majored students utilized SRL strategies in their English writing courses with a rather high frequency. Among 9 categories of SRL writing strategies of 4 dimensions of self-regulation investigated in this study, the highest frequently utilized category was “feedback handling strategies”, followed by the category of “idea planning strategies”, “interest enhancement strategies” and “motivational self-talk strategies”; the least frequently used categories of strategies were “goal-oriented monitoring and evaluating” belonging to metacognitive regulation and “peer-learning” belonging to social-behavioral regulation. Students become more self-regulated when teachers engage them in complex and open-ended tasks, offer choices, allow them to control the level of challenge, and provide opportunities for self-and peer-evaluation [41]. The current study has significant pedagogical and research implications. Both English teachers and students can benefit from the findings of this study. If students are made aware of the importance of SRL strategies, they will put more effort into using different strategies in learning writing skills, and they will be able to achieve more in their learning; and if teachers know clearly about students' attitudes towards the use of SRL writing strategies, they will find ways to enhance their students' academic performance. Teachers can help students develop self-regulated learning via the discussion with students about different types of learning strategies, how and when to use these strategies in their writing courses, especially, self-reflective and self-evaluative activities should be designed for them to practice and predict their success in learning writing. Teachers should train students how to use writing strategies and show them which strategies are beneficial and discuss the benefits of each strategy, and particularly should provide opportunities for students to use it efficiently in practice. The study was conducted with second-year English-majored students at one university. To gain more insights into the use and benefits of SRL writing strategies, future studies could involve English-majored students of different years and from more universities in the Vietnamese or other contexts.

## REFERENCES

- [1] Meyer, B., Haywood, N., Sachdev, D., & Faraday, S., 2008. Independent learning: Literature review. Research report DCSF-RR051. <https://www.associationforpsychologyteachers.com>
- [2] Le Thi Thu Dan, 2016. The effects of self-regulated learning strategy on non-English majors' oral communication performance at Bach Viet College. HCMC Open University TESOL Conference Proceedings 2016.
- [3] Tran Quoc Thao & Duong My Tham, 2012. The attitudes towards English language learning and use of self-regulated learning strategies among college non-English majors. *International Journal of Scientific and Research Publications*, Vo.3, No.7, pp. 333-340.
- [4] Tran Quoc Thao & Nguyen Chau Hoang Long, 2020. The use of self-regulated language learning strategies among Vietnamese English-majored freshmen: A case study. *VNU Journal of Science: Education Research*, Vol. 36, No. 1, pp.50-63.
- [5] Ngo Cong Lem, 2019. Self-regulated learning and its relation to Vietnamese EFL learners' L2 listening achievement. *VNU Journal of Foreign Studies*, Vol. 35, No.4, pp. 60-75.
- [6] Zimmerman, B. J., 1986. Becoming a self-regulated learner: Which are the key processes? *Contemporary Educational Psychology*, Vol.11, pp.307–313.
- [7] Zimmerman, B. J., 2000. Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). San Diego, CA: Academic Press.
- [8] Zimmerman, B. J., 2002. Becoming a self-regulated learner: An overview. *Theory into Practice*, Vol.41, pp.64-70.
- [9] Garcia, T., 1995. The role of motivational strategies in self-regulated learning. *New Directions for Teaching and Learning*, Vol. 63, pp. 29-42. Jossey-Bass Publishers.
- [10] Winne, P. H., & Perry, N. E., 2000. Measuring self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 531–566). San Diego, CA: Academic Press
- [11] Pintrich, P. R., Wolters, C. A., & Baxter, G. P., 2000. Assessing metacognition and self-regulated learning. In G. Schraw, & J. C. Impara (Eds.), *Issues in the measurement of metacognition* (pp. 43–97). Lincoln, NE: Buro Institute of Mental Measurements
- [12] Dörnyei, Z., 2005. Language learning strategies and student self-regulation. In Z. Dörnyei (Ed.), *The psychology of the language learner: Individual differences in second language acquisition* (pp. 162–196). Mahwah, NJ: Lawrence Erlbaum.
- [13] Pajares, F., 2008. Motivational role of self-efficacy beliefs in self-regulated learning. In D. Schunk & B. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research, and applications* (pp. 111-139). New York, NY: Routledge.
- [14] Dembo, M.H., Junge, L.G., & Lynch, R., 2006. Becoming a self-regulated learner: Implications for web-based education. In H.F. O'Neil & R.S. Perez (Eds.), *Web-based learning: Theory, research, and practice* (pp. 185–202). New York: Erlbaum.
- [15] Schraw, G., Crippen K. J., & Hartley K., 2006. Promoting self-regulation in science education: Metacognition as part of a broader perspective on learning. *Research in Science Education*, Vol. 36, pp. 111-139.
- [16] Boekaerts, M., & Corno, L., 2005. Self-regulation in the classroom: A perspective on assessment and intervention. *Applied Psychology*, Vol. 54, No. 2, pp. 199–231.
- [17] Zimmerman, B. J., & Campillo, M., 2003. Motivating self-regulated problem solvers. In J. E. Davidson & R. J. Sternberg (Eds.), *The nature of problem solving* (pp. 233-262). New York: Cambridge University Press.

- [18] Boekaerts, M., 1996. Self-regulated learning at the junction of cognition and motivation. *Eur. Psychol.* Vol. 2, pp. 100–112. doi: 10.1027/1016-9040.1.2.100.
- [19] Winne, P. H., & Hadwin, A. F., 1998. Studying as self-regulated engagement in learning. In D. Hacker, J. Dunlosky, & A. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 277-304). Hillsdale, NJ: Lawrence Erlbaum.
- [20] Pintrich, P. R., 2000. The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 452–502). San Diego, CA: Academic Press.
- [21] Zimmerman, B. J., 1989. A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, Vol. 81, pp. 329–339.
- [22] Zimmerman, B. J., & Martinez-Pons, M., 1986. Development of a structured interview for assessing student use of self-regulated learning. *American Educational Research Journal*, Vol. 23, No. 4, pp. 614–628.
- [23] Zimmerman, B. J., 1990. Self-regulated learning and academic achievement: *An Overview*, *Educational Psychologist*, Vol. 25, No.1, pp.3-17. DOI: 10.1207/s15326985ep2501.
- [24] Winne, P.H., 2011. A cognitive and metacognitive analysis of self-regulated learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 15–32). New York: Routledge.
- [25] Oxford, R. L., 2013. *Teaching and researching language learning strategies* (2<sup>nd</sup> ed.). Harlow, UK: Pearson.
- [26] Pintrich, P. R., Smith, D. A., Garcia, T., & McKeachie, W. J., 1991. *A manual for the use of the motivated strategies for learning questionnaire (MSLQ)*. Ann Arbor, MI: The University of Michigan Press.
- [27] Harris, B. R, Lindner, R. W. & Piña, A. A., 2011. Strategies to promote self-regulated learning in online environments. In G. Dettori & D. Persico (EDs). *Fostering self-regulated learning through ICT* (pp. 123-143). New York: Information Science Reference.
- [28] Pintrich, P. R., & McKeachie, W. J., 2000. A framework for conceptualizing student motivation and self-regulated learning in the college classroom. In P. R. Pintrich, & P. Ruohotie, *Conative constructs and self-regulated learning*. Hämeenlinna, Finland: Research Centre for Vocational Education.
- [29] Zimmerman, B. J. & Risemberg, R., 1997. Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, Vo. 22, No.1, pp. 73-101.
- [30] Zimmerman, B. J., & Bandura, A., 1994. Impact of self-regulatory influences on writing course attainment. *Educational Research Journal*, Vol. 31, No.4, pp. 845-862.
- [31] Gordon, C., 1990. Changes in readers' and writers' metacognitive knowledge: Some observations. *Reading Research and Instruction*, Vo. 30, pp. 1-14.
- [32] Nakata, Y., 2010. Toward a framework for self-regulated. *Language Learning TESL Canada Journal*, Vo. 27, No. 2, pp.1-10.
- [33] Hue, N. M., 2008. Self-regulated strategy development as a means to foster learner autonomy in a writing course. *VNU Journal of Science, Foreign Languages*, Vo. 24, pp. 246-253.
- [34] Abadikhah, S., Aliyan, Z. & Talebi. S.H., 2018. EFL students' attitudes towards self-regulated learning strategies in academic writing. *Issues in Educational Research*, Vo. 28, No.1, pp. 1-17.

- [35] Fentaye, M. A., 2017. EFL learners' use of self-regulated learning strategies and impediments they face when learning writing skills: A self-hand feeding approach. *International Journal of Science and Research (IJSR)*, Vol. 6, No.1, pp. 1600-1607.
- [36] Graham, S. & Harris, K. R., 2000. The Role of Self-Regulation and Transcription Skills in Writing and Writing Development. *Educational Psychologist*, Vol. 35, No.1, pp. 3-12.
- [37] Zimmerman, B. J., & Risemberg, R., 1997. Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, Vol. 22, No.1, pp.73-101.
- [38] Graham, S. & Harris, K.R., 1989. A componential analysis of cognitive strategy instruction: Effects on learning disabled students' composition and self-efficacy. *Journal of Educational Psychology*, Vol. 81, pp. 353-361.
- [39] Winne, P. H. & Perry, N. E., 1999. Measuring self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.). *Handbook of self-regulation* (pp.351-368). New York: Academic Press.
- [40] Teng, L. S. & Zhang, L. J., 2016. A questionnaire-based validation of multidimensional models of self-regulated learning strategies. *The Modern Language Journal*, Vo.100, pp.1-28. DOI: 10.1111/modl.12339.
- [41] Andrade, M. S. & Evans, N. W., 2013. Principles and practices for response in second language writing: Developing self-regulated learners. New York: Routledge.
- [42] Sun, T. & Wang, C., 2020. College students' writing self-efficacy and writing self-regulated learning strategies in learning English as a foreign language. *System*, Vol. 90. doi.org/10.1016/j.system.2020.102221.
- [43] Ong, J., & Zhang, L. J., 2013. Effects of the manipulation of cognitive processes on EFL writers' text quality. *TESOL Quarterly*, Vol.47, No. xx, pp.375-398.
- [44] Ramdass, D., & Zimmerman, B., 2011. Developing self-regulated skills: The important role of homework. *Journal of Advanced Academics*, Vol. 22, No.2, 194-218.
- [45] Vasu, K. A., Fung, Y. M., Nimehchisalem, V. & Rashid, S. M., 2020. Self-regulated learning development in undergraduate ESL writing classrooms: Teacher feedback versus self-assessment. *RELC Journal*, pp.1-15. ps://doi.org/10.1177/0033688220957782.
- [46] Cao Thi Hong Phuong & Le Thi Minh Nguyet, 2018. Using project work to foster learner autonomy at a pedagogical university, Vietnam: A case study. *HNUE Journal of Science*, Vol. 63, No. 5A, pp. 27-37.