

Metacognition in ELT writing: Teacher's facilitation and students' strategies

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ABSTRACT

Metacognition is central in understanding learning processes in the classroom, especially in the context of EFL writing. This study explores how an English teacher facilitated the mastery of metacognition strategies used by students in English writing classes, metacognitive strategies used by the students, and the impact of metacognitive strategies on students' writing. The subjects were 17 eleventh grade students enrolled in the social program and their English teacher (one teacher) at a private school in Surabaya. The data were collected from students' writing works, observation, and interviews. The data were coded and analyzed further by using thematic analysis. The findings reveal that the teacher played a role in fostering the mastery of metacognition skills in an English writing class by providing students with background knowledge, monitoring their progress, and encouraging an awareness of future tasks. With these types of facilitation, students could enhance their metacognitive strategies, such as using personal styles, planning, and self-evaluation. The findings show the importance of metacognition to promote students' awareness, self-regulation, and reflection. The findings imply that writing pedagogy should also involve in developing metacognition by means of effective teachers' facilitation.

Keywords: *ELT; Metacognition; EFL writing; Indonesia; Teacher's facilitation*

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1. Introduction

In recent years, the concept of metacognition has gained attention within educational research (Åsta Haukås, Bjørke, & Dypedahl, 2018; Dypedahl, 2018; Haukås, 2018; Knospe, 2018; Zhang & Qin, 2018). Metacognition allows educators to gain insight into students' thought processes and accordingly, teachers can adjust and facilitate learning in the classroom better. Teachers can improve learning outcomes by monitoring, evaluating, and adjusting their instructional approaches based on individual students, objectives, and contexts (Cer, 2019; Knospe, 2018; Stephen & Singh, 2010). Furthermore, there is a correlation between metacognitive awareness in writing classes and students' overall writing proficiency, more than that of other language skills (Chong, 2021). Writing represents the application of cognition. To develop successful writers, students must effectively regulate their learning process. However, Hacker (2009) highlights a potential issue when self-regulation strategies or writing approaches become innate that they operate subconsciously.

Metacognition enables teachers to gain awareness about and control over how they think and teach, and to monitor, evaluate, and regulate their teaching activities in accordance with specific students, goals, contexts, thus exerting great impacts on their teaching (Xiao, 2007). Therefore, writing is essentially cognition being applied onto practice. In order for students to be successful writers, they must be able to regulate their learning. Some researchers, however, still argue whether or not automatic (but potentially conscious if necessary) use of a writing or self-regulation strategy constitutes an occurrence of metacognition.

A wide range of research on metacognition and writing has been conducted, from understanding learners' metacognition to identifying various types of metacognitions that facilitate students' learning. For example, Carrington and Mu (2007) conducted an investigation of three Chinese students in their writing class to see the strategies that they used. It was found that those students used social/affective, metacognitive, and cognitive strategies in their learning. Based on the findings, it was suggested that teachers assist L2 writers to identify strategies they have acquired and help them employ the strategies in writing processes (Carrington & Mu, 2007). Another example, Ruan (2004) investigated the development of metacognition in Chinese-English first graders in a writing class where students did a dictation story activity throughout the year and how being bilingual affected their achievement in writing activities. In this study, it was found that these students improved in their procedural metacognition. In the end they acquired the ability to compose texts independently. From various studies on metacognition, the knowledge gap is related to how to facilitate the development of metacognition in students' mind so that they can be independent writers and successful language learners.

While it has been widely accepted that metacognition strategies are important in language learning (Haukås, Bjørke, & Dypedahl, 2018; Tobias & Everson, 2009), the facilitation to enhance the awareness and the use of the strategies among students are

rarely discussed. This study was aimed at exploring teachers' facilitation that enables students with diverse academic backgrounds enhance their awareness in applying metacognitive strategies in a writing class. Therefore, the objective of this study is twofold; first, it aims at understanding what facilitation teachers did in writing class and second, it also investigated the metacognition strategies the students used in their writing class.

By observing a teacher's facilitating of metacognitive strategies in the classroom, this study seeks to identify strategies that students do apply in their writing process. Additionally, the research explored how students' metacognitive knowledge and strategy impact their writing outcomes across different ability levels. Therefore, the main question of this study was centered on “how did the teacher facilitate the mastery of metacognition skills in English writing class?” In addition, the types of metacognitive strategies and its impacts on students' writing were also investigated for a more comprehensive understanding about the facilitation of metacognition mastery in the classroom.

2. Literature review

Metacognition, or thinking about thinking, refers to an individual's knowledge of their cognitive processes—the results of continuous reflection of one's own thoughts and experiences (Flavell, 1979; Haukås, 2018; Tobias & Everson, 2009). In the context of education, metacognitive knowledge refers to individuals' conscious understanding of what they know and have acquired during their learning journey, including transient knowledge. In this way, learners' metacognition covers the awareness and regulation of cognition involved in the process of learning in which learners demonstrate their ability to use learned skills and monitor their learning progress. It was introduced by Flavell (1979) who noticed children lacked awareness of their own cognition and learning monitoring. Young students often struggle to be conscious of their learning methods beyond the content itself. Metacognition involves being aware of and controlling one's cognition (Baker & Beall, 2009; Baker & Cerro, 2000; Gourgey, 2002). Thus, it enables students to actively understand what they are learning, as knowing the material is not the sole focus of learning.

This section overview current studies on metacognition in ELT, their pedagogical implications—how teachers facilitate the development of metacognitive knowledge and skills on their students.

2.1. Metacognition in ELT writing

When Flavell (1979) discussed the model of cognitive monitoring, he observed that children did not monitor their thinking process. From this starting point, he proposed the model of metacognition that involves metacognitive knowledge, metacognitive experiences, goals (tasks), and strategies. Central to his model is the concept of metacognitive knowledge—world knowledge related to diverse “cognitive

tasks, goals, actions, and experiences” (p. 906). Another important concept in the model is metacognitive experiences—momentary cognitive experiences when one realizes a mental process related to learning. These experiences can influence cognitive goals and strategies.

Since then, the model of cognitive monitoring has become the foundation of the study of metacognition including those in ELT (Dypedahl, 2018; Haukås, 2018; Vandergrift & Goh, 2012). Different from other types of learning, the field of ELT has developed in conjunction with the development of linguistics and psychology. Therefore, the study of language learning and teaching developed from structural linguists’ perspectives, cognitivists’ ones, and socio-constructivists’ views on language and language learning. A strong influence from the field of psychology has also shaped the practices of ELT, such as drilling and habit formation, which are the legacy of behaviorists or the current communicative language teaching (CLT), which is influenced by socio-constructivism in psychology (Oxford, Lavine, & Crookall, 1989; Sugiharto, 2018). Informed by different perspectives in linguistics and psychology, the metacognition in ELT has become a hot topic in recent years.

Current studies on metacognition in ELT cover the four language skills, listening, speaking, reading and writing as well as incorporating the mastery of grammar and vocabulary in those skills. In the area of listening for example, the studies focus on metacognition and listening strategies (Cross, 2015; Goh, 2018; Vandergrift & Goh, 2012). Similarly on speaking, metacognitive strategies have played important roles for second language learners (Sabnani & Goh, 2021; Sun, 2022). Abundant research on metacognition in relation to reading and writing has been published in the last two decades, focusing on metacognitive strategies and self-regulation (Farahian & Avarzamani, 2018; Harris, Graham, Brindle, & Sandmel, 2009; Knospe, 2018; Lee & Mak, 2018; Ramadhanti & Yanda, 2021; Teng, 2020).

The importance of metacognition in EFL writing can be subsumed in that writing involves complex cognitive processes to express thoughts and feelings in conventional orthographic symbols as well as the process of problem solving (Cer, 2019). In order to enhance writing skills, one should be aware of the processes and develop self-regulation to achieve writing goals. Thus, metacognition cannot be separated from writing processes as it involves self-planning, self-monitoring, and self-regulating—which are parts of metacognitive strategies. In the contexts of EFL writing, learners should master the target language as well as the writing genre and the discourse structure.

Focusing on writing, Chong (2020) noted the importance of metacognition by looking at different strategies and different perceptions among three groups of students of different proficiency: high, average, and low proficiency in English. High and average proficiency groups indicated their positive perceptions on writing. In addition, the two groups also indicated more effective metacognitive strategies and high self-awareness about their own writing and writing processes so that they could accomplish

writing tasks effectively. They had more positive self-awareness and confidence in writing and they realized the importance of planning, writing, evaluating, and self-navigating to solve writing problems in language, contents, and organization.

2.2. Facilitating metacognition in writing class

Writing classes are useful to develop skills to express thoughts and opinions, sharpening critical thinking, and enhancing creativity—the very manifestation of applied metacognition (Hacker, Keener, & Kircher, 2009). Grabe and Kaplan (2014) noted that writing “involves training, instruction, practice experience, and purpose” (p. 6). In training and instruction, teachers have important roles to help the students practice and have positive experiences in writing as well as to make them aware of writing purposes and about the whole writing process.

While research of metacognition and EFL writing has informed the importance of cognitive strategies, self-regulation, and self-awareness in writing, the ways teachers should facilitate the effective application in the classroom is somewhat short (Duffy, 2005; River & Whitehead, 2018). From the literature review related to metacognition and writing, Cer (2019) identified that teachers need to introduce metacognitive knowledge and skills to the students so that they can improve their writing. The impact of metacognition on writing has been documented in that it can enhance positive attitude toward writing, the ability to focus on the writing process (planning, organizing, drafting, revising, and evaluating), and skills to solve problems in writing. In this way, teachers' facilitation in writing class can systematically address the metacognitive areas relevant to the students' progress in writing. Therefore, the teacher facilitation to enhance metacognition in students covers at least two areas, metacognitive knowledge and metacognitive skills (Zhao & Liao, 2021).

Wenden (1991, 1998) suggested that metacognition allowed teachers to design tasks that lead students to be aware of their own learning processes. It could empower teachers to be aware of and control their teaching methods—aligning them with students' needs and goals (Dypedahl, 2018; Knospe, 2018; River & Whitehead, 2018; Vandergrift & Goh, 2012; Xiao, 2007). From the conceptions of putting the metacognition into actions in the classroom, facilitating the enhancement of metacognitive knowledge and skills in students should involve teachers' preparation, teaching methods and techniques and assessment. In the preparation phase, writing teachers could outline the goal, instructions, and scenarios of learning experiences in the process of writing clearly. In the classroom, the teacher could help the students to analyze their role and task requirements, using task analysis to determine the purpose and demands. During the assessment, teacher's feedback should encourage the students to reflect on the writing process and the result (Fadli, Irawan, & Haerazi, 2022; Lam, 2015). In this way, writing teachers not only teach and coach the students to write but they also actively encourage the students to think about their own thinking and learning; so that it enhances the metacognitive awareness of the students.

Facilitating the development of metacognition in students assumes that teachers realize metacognition components relevant to writing. Aiming at developing a useful taxonomy, Gorzelsky, Driscoll, Paszek, Jones, and Hayes (2016) identified the sub components of the known metacognition in writing: (1) person knowledge that includes knowledge of a oneself as a writer, knowledge of genre, rhetoric, writing conventions, and writing strategies; (2) task knowledge, which is knowledge of affordances and constraints related to a writing task at hand; (3) strategy knowledge related to the awareness of a wide range of strategies and approaches to writing; (4) planning knowledge and skills related to problem identification in writing and how to solve them; (5) monitoring knowledge and skills related to evaluating one's performance in writing; (6) control knowledge and skills related to the awareness of choices and the decisions to use the available choices to solve problems; (7) evaluation knowledge and skills related to the awareness about the quality of the completed writing project; (8) constructive metacognition that allow ones to reflect on the whole process of writing. Realizing all the metacognitive components in writing, teachers could facilitate the students to develop their own metacognition and self-regulations as writers (Knospe, 2018; Lee & Mak, 2018).

3. Method

Exploring facilitations to enhance students' metacognition, understanding the strategies used by the students and its impact on their writing, this study involved one English class consisting of 17 students and a teacher as participants in the site of one writing class at a private high school in East Java. This school was selected because it had specific English writing classes for their students. With one site of research, this study was a case study involving observation and interviews with the participants as well as examining various documents related to the writing class and students' writing products. To answer questions related to teacher facilitation and the use of metacognitive strategies by the students, classroom observations were conducted twice. These classroom observations were meant to see how the teacher facilitated the students in writing class and how the students used metacognitive strategies in completing writing tasks. An observation checklist and field notes were used to record what happened in the classroom in relation to metacognitive facilitation and the use of metacognitive strategies when the students were working on writing tasks. As part of the observation, documents were collected as writing artifacts. They were lesson plans, lesson materials and writing products completed by the students in the two sessions of observation. They were journal entries and narrative essays. These documents are primarily used to understand the impact of metacognitive strategies on students' writing.

Interviews were conducted to nine participants selected randomly from the 17 students involved in this study. The random selection was done by picking up nine students' names from all the 17 students randomly using assigned numbers. Therefore,

the nine selected students represented the class in terms of different English competency and skill levels. Each interview session was held for 30-90 minutes following a semi-structured interview protocol. The questions that guided the researcher in the interview were related to metacognitive skills observed during the teaching-learning processes in the classroom.

The observation checklist, field notes and documents were analyzed to identify the teacher's metacognitive strategies in the classroom. The analysis in some degree followed Grabe and Kaplan (2014) who emphasized teachers' role in modeling metacognitive skills through thinking aloud. Therefore, the classroom observations were aimed at identifying observable metacognition in the classroom and the facilitation the teacher provided to her students. The field notes tried to capture the overall learning processes, including how often the teacher introduced metacognitive skills, how she provided feedback on using strategies, and how the students used metacognitive strategies in completing writing tasks. The collected documents (students' writing, journal prompt responses, final narrative essays, teaching materials, and lesson plans) were analyzed to corroborate the observations. The researcher analyzed these documents to understand participants' metacognitive strategies and their possible impacts on writing.

The results of the recorded interviews were transcribed and coded in terms of thematic analysis which involved theme identification, classification and interpretation. The emerging themes were interpreted to answer the question related to teacher facilitation and the metacognitive strategies used by the students as well as the impact of the strategies to their essays.

4. Findings and discussion

The following findings are organized based on the three research questions: (1) the question related to teacher's facilitation to enhance the use of metacognition strategies, (2) the question related to the strategies used by the students, and (3) the impact of metacognition on students' writing.

4.1. Facilitation of metacognition in writing class

Three main themes were identified that showed how the teacher facilitated the mastery of metacognition skills in English writing class. Based on interviews conducted with both the teacher and students, it was observed that the teacher promoted the development of metacognitive skills by using various strategies in the English writing class. First, one of the teacher's approaches involved equipping students with the necessary background knowledge required for effective writing. In particular, the teacher provided guidance on crafting a meaningful essay, offering valuable insights such as tips for creating meaningful content, specific writing features to consider, and techniques to cultivate a writing habit through journaling. These aspects proved to be

crucial in enabling students to produce writing pieces that were meaningful and purposeful.

Additionally, the teacher focused on imparting knowledge about essay structure. This involved teaching students the essential elements of a well-structured essay, explaining the sequential steps necessary in the writing process, and facilitating whole-class brainstorming sessions to stimulate critical thinking. By providing this foundational understanding of essay structure, the teacher aided students in organizing their thoughts and initiating the writing process more effectively. The teacher also provided knowledge on the proper structure of a narrative essay outline. The overall emerging themes related to teacher's facilitation to enhance metacognitive awareness can be seen in Table 1. It shows how the teacher supported the students in enhancing the mastery of metacognitive awareness and skills.

Table 1

Teacher's support in enhancing the mastery of metacognitive skills.

No	Major themes	Sub themes	Observed activities
1	Providing background knowledge for writing	providing knowledge on meaningful essay	<ul style="list-style-type: none"> ● giving tips for meaningful essay ● informing writing features ● asking the students to write journal entries
		providing knowledge on essay structure	<ul style="list-style-type: none"> ● informing essay structure ● explaining steps to writing process ● brainstorming ideas as a class ● sharing outlines of narrative essay
2	Monitoring student's progress in writing	monitoring for revision	<ul style="list-style-type: none"> ● correcting students' mistakes ● monitoring mistakes ● giving feedback and providing consultation with the students for essay revision ● asking students questions to evoke their thinking ● inviting students to ask questions
		monitoring progress of essay writing	<ul style="list-style-type: none"> ● checking students' essays ● observing writing process
3	Encouraging awareness of what's ahead	providing writing timeline	<ul style="list-style-type: none"> ● giving preview of what's ahead ● helping with writing objectives

From Table 1, it is apparent that the teacher played a crucial role in fostering the development of metacognitive strategies by actively monitoring and promoting revision during the students' essay-writing process. This involved various support by the teacher

to facilitate effective revision. To begin with, the teacher diligently corrected students' mistakes, ensuring that they were aware of their errors and providing guidance on how to address them. The teacher actively monitored students' writing to identify potential mistakes, helping students become more mindful of their areas for improvement. Additionally, the teacher welcomed student consultations, creating an open and collaborative environment that encouraged revision discussions. Here, two examples of the students' thoughts and responses on the teacher's feedback.

There were a few words that the teacher said I needed to erase or fix. I couldn't ask friends how to fix my story because each person's story is personal. (Student 1)

Sometimes I didn't notice that there were some grammar mistakes that the teacher found. He left a comment and I just fixed everything up. (Student 3)

Furthermore, the teacher engaged in meaningful conversations with the students to stimulate their thinking and foster a questioning mindset throughout the writing process. The teacher promoted metacognitive awareness and growth by prompting students to reflect on their writing choices and encouraging critical analysis. Moreover, the teacher closely monitored the progress of the essays by offering assistance in checking and reviewing the students' work. This included providing one-on-one help to address individual challenges and observing the writing process within the classroom context. Overall, these monitoring and revision-focused strategies facilitated by the teacher effectively supported students in their metacognitive development, enabling them to engage in thoughtful and purposeful revision to enhance the quality of their written work. The following quotations are from the observation notes:

The teacher asks the students what they know about a narrative essay and its parts. (Class Observation 1)

While students write their journals, the teacher walks around the classroom, asking them what they're writing about and often reminding them how to elaborate their writing. (Class Observation 1)

Finally, the teacher used a practical approach to facilitate the mastery of metacognitive strategies by providing a structured writing timeline. This involved previewing the upcoming writing tasks and establishing clear student objectives. Students gained a sense of the overall writing process and were able to mentally prepare for the upcoming tasks. Additionally, the teacher established objectives that served as guiding points for the students, enabling them to focus on the key aspects of their writing and understand the expectations given by the teacher.

Informing students of objectives behind the writing process is the core in completing writing tasks. Hence, they know their responsibility and skill

that they need to sharpen in order to finish the essay. Having peer review assisted students to be aware of their writing result for they wrote the essay not only for the task, but also for readers. (The Teacher)

This was confirmed by one of the students when interviewed.

Usually, the teacher gives us a summary and explanation of what we're going to learn in the next few weeks. And then he gave us some tests. He gave us, like, mini games to do the opening start of the subject. And then after that, he gave us assignments to test our knowledge about it after he explained it to us. (Student 2)

By transparently presenting these objectives, the teacher promoted metacognitive awareness and provided students with a roadmap for their writing development. These were the ways the teacher facilitated the mastery of metacognitive skills in the writing class based on class observations, student interviews, and teacher interviews.

4.2. Metacognitive strategies in writing class

During the interviews with students, a wide range of metacognitive strategies employed in their writing class emerged as summarized in Table 2. The first strategy observed was utilizing personal writing styles through implementing personal writing style or individualized writing approaches.

Table 2

Metacognitive strategies utilized by students.

No	Major themes	Sub theme	Observed activities
1	Using personal writing style	Implementing personal writing strategies	<ul style="list-style-type: none"> ● Practicing conveying ideas without worry ● Showing aware of writing style ● Doing something different than what was taught by teacher ● Writing in personal style ● Having mental visualization
2	Planning the writing	Processing the topic	<ul style="list-style-type: none"> ● Showing awareness of topic ● Choosing motivating essay topic ● Choosing essay about life lessons from the past
		Organizing thoughts	<ul style="list-style-type: none"> ● Writing down their thinking ● Using mind maps ● Writing notes to recall ● Using native language to avoid confusion
		Creating a guide for the	<ul style="list-style-type: none"> ● Using outline as a guide

No	Major themes	Sub theme	Observed activities
		writing process	<ul style="list-style-type: none"> ● Using points to guide the writing ● Following the structure of an essay ● Planning for the task
3	Monitoring progress	Find struggling areas	<ul style="list-style-type: none"> ● Aware of weakness ● Realize struggling areas in writing ● Have more practice in struggling areas
		Ways to analyze progress	<ul style="list-style-type: none"> ● Comparing to friend's progress ● Counting number of sentences ● Consistently checking essay length ● Monitoring progress ● Checking progress ● Making sure clear points were written ● Rereading ● Getting opinions from friends
		Thinking process	<ul style="list-style-type: none"> ● Recalling prior knowledge
4	Evaluating before submission	Seeking teacher's feedback	<ul style="list-style-type: none"> ● Seeking feedback from teacher ● Seeking clarification
		Proofreading and revising	<ul style="list-style-type: none"> ● Evaluating task ● Evaluating to adjust
		Checking using online tools	<ul style="list-style-type: none"> ● Utilizing online tools for clarification ● Utilizing online tools

Students engaged in this strategy by practicing expressing their ideas without unnecessary concerns. Moreover, they demonstrated an awareness of their unique writing style, which influenced the way in which they approached writing tasks. Furthermore, they personalized the assigned tasks beyond the instructions provided by the teacher, opting to write in their own distinctive style. Additionally, students exhibited a thinking process involving mental visualization, where they envisioned and conceptualized their output of their essay instead of writing it down. These strategies were reflected in what students said during the interview.

But for me, like, I kind of ignored those. It just went straight for it. Like freestyling. Like, freestyling is my technique when writing. Like, I literally almost never make an outline unless the story is long. (Student 1)

Yeah, it was kind of intensive. I think. It's good to like what you say. Practice the concept of just typing whatever is in your mind and to convey your idea without and usually what they say is "don't worry about grammatical mistakes. (Student 2)

For instructions, I usually just at first, I write it in my own way and then I read the instruction and then I edit it out after I write all of my essays. So, I do it first without any instructions, and then I edit it according to the instructions. (Student 4)

Sometimes I just roll with it in my mind what topic I take. I use it and then visualize it in my mind. (Student 5)

Another metacognitive strategy employed by the students was strategic planning in their writing process. They demonstrated this by first engaging in a comprehensive processing of the topics given to them. This involved being aware of the given topic, selecting an essay topic that personally motivated them and choosing a topic based on past personal experiences and lessons learned. The students also exhibited effective organization of their thoughts by documenting their thinking in various ways, such as writing down ideas, utilizing mind maps, jotting down notes for future reference, and using their native language to articulate their thoughts coherently and avoid confusion. They also created a roadmap or a guide for their writing process. Following the teacher's guidance, they developed an outline that was valuable in directing their writing process. They also utilized key points from their outline to guide their writing and adhered to the structure of the essay taught by the teacher. This intentional approach to planning enabled the students to navigate the writing process more effectively and produce cohesive and well-structured essays.

No, I just use the outline. Sometimes I use mind maps. But for the collaboration essays, I need to collect eight lessons. So, I need to make a mind map. Okay, so for writing an essay, you think it's the best? An outline is really the best way. To plan for you, because after reading the mind map, I needed to read the outline. (Student 6)

I used Indonesian language in my outline so I do not get confused. Since this is a new type of essay, I need to write a lot of notes so I know what each part means. (Student 7)

The students monitored their progress, indicating metacognitive awareness. This involved identifying areas in which they faced difficulties and acknowledging their weaknesses. By recognizing these challenging aspects of writing, students could address them effectively by practicing on their weak points. They also exhibited an approach to monitoring their progress throughout the writing process. They used various techniques to analyze their progress as they composed their essays. For instance, students compared their progress to that of their peers, tracked the number of sentences they had written, consistently checked the length of their essays, and continuously monitored their overall progress. They also ensured the clarity of their points by rereading their

essays and seeking feedback from friends to gain a different perspective. Furthermore, students displayed a thoughtful thinking process by recalling their prior knowledge and experiences to support their writing task. This use of prior knowledge enhanced the quality of student's written work.

So, I did make it even though I did it halfheartedly, I always don't remember what my outline is. I guess it kind of stuck subconsciously in my head because when I write I can see a bit of like I just recall a bit and it's kind of similar to my outline. (Student 1)

I struggle with vocabulary. I sometimes can read it, but when I have to say it I can't. I need to have more practice in creating sentences and making better sentences. (Student 8)

Usually when I am given a reading text, I can understand it. But I have difficulty when I have to write myself. I lack in vocabulary and vocabulary is *something I need to improve and in grammar too*. (Student 9)

Another metacognitive strategy among the students in their writing class was students evaluating their work before submission. They sought feedback from their teacher to ensure a clear understanding of the assignment requirements. Additionally, students engaged in thorough proofreading and revision processes to refine their essays. In order to evaluate their work effectively, the metacognitive strategy students used was assessing the given task, and making necessary adjustments to align their writing with the essay requirements. They then proceeded to reread their work, engaging in proofreading to identify and revise any errors or inconsistencies. Furthermore, students looked at their initial outline, ensuring that their final piece of writing-maintained coherence and adhered to the structure they planned at the beginning. The following examples were students' responses when they were asked about evaluating their works before submitting.

I asked for, like, his opinion, whether there was, like, any feedback or anything. Like, when you first submitted the outline. And for my case, he didn't have any comments or anything. It was okay and you could carry on. (Student 2)

I read it again. Okay. And I also asked for the teacher's opinion first. Can you have, like, a brief read of my essay before I submit it? (Student 9)

Lastly, students utilized online tools to aid in the evaluation process. They made good use of these tools to check their writing for grammar, spelling, and other potential areas of improvement. Additionally, online resources serve as a valuable source of clarification for any uncertainties they may have. Overall, this evaluative approach used by the students contributed to the enhancement of their written work prior to submission.

I would fix it by looking at google translate, and I would put the sentences I'm unsure of into google translate. I also struggle with vocabulary and writing essays. (Student 6)

I personally write on my notes app not in google docs. There were a few things I did not understand. When I finally understood what I wanted to write, I put it in google docs. (Student 8)

4.3. *Observed impacts on students' writing*

Related to the third research question related to the impact of metacognition, there were three common themes emerged from the data: (1) improvement in writing product, (2) improvement in grammar and punctuation, and (3) the awareness of future room for improvement (see Table 3). Firstly, they noted significant improvements in the quality of their writing. Specifically, their vocabulary skills showed advancement, resulting in improved spelling and overall enriched word choices. Moreover, their written content demonstrated enhancement, and they gained an increased sense of confidence in their writing abilities.

One key aspect of their content improvement was attributed to the effective use of outlines. Students realized that utilizing an outline helped them structure their essays more effectively—resulting in noticeable progress from task to task. This progress was evident in their essays that met the requirements of systematic and well-structured essays. Overall, students expressed satisfaction with their writing, recognizing the growth they achieved by applying metacognitive strategies. Another significant aspect of how metacognitive strategies enhanced their writing was the improvement in grammar, spelling, and punctuation. Students became more aware of and were more cautious in their grammar and punctuation.

I have improved a lot. I used to spell words incorrectly. (Student 6)

It [the feedback] is helpful and I didn't need to translate it into Indonesian anymore because my vocabulary increased as well. (Student 7)

Lastly, students demonstrated an increased awareness of areas they could improve their future writing. Specifically, they recognized the need for improvement in the content aspects of their work. For instance, they acknowledged the need to enhance their writing by incorporating more pathos, creating a stronger emotional connection with their readers. Furthermore, students identified opportunities for improvement by refining their storytelling techniques, such as condensing their narratives and ensuring a more comprehensive storyline. Additionally, students acknowledged the importance of addressing areas for improvement in grammar. They recognized the need to enhance their grammatical skills further to achieve greater accuracy and precision in their writing. By reflecting on their writing experiences through a metacognitive lens,

students gained valuable insights into their strengths and weaknesses. This awareness of their room for improvement encouraged them for future writing tasks.

Because six paragraphs are too long, but then I felt like I didn't know. I didn't know I didn't know how to end it. (Student 2)

So, I can see there's an improvement because in Junior High we studied vocabulary and we didn't focus on writing, so I didn't really care about grammar that much back then. But since we started to have writing classes and we learn more about writing, from that point, I can see that I'm starting to get very careful when I learn, like, the grammar and punctuations. (Student 3)

I need to add more to the ending, there are some sentences that need addition, the story is incomplete. The organization 9 because I think it's enough. (Student 9)

Table 3
Effects of metacognitive strategies on students' writing.

No	Major themes	Sub themes	Observed products in writing
1	Improvement in writing product	Improvement in vocabulary	Improvement in spelling Increased vocabulary use
		Improvement and confidence in content	Improvement in writing Improved essay because of outline Essay fulfilled the requirements Confidence in final essay Overall satisfactory writing
2	Improvement in grammar and punctuation	Improvement in grammar and punctuation	Careful with grammar and punctuation
3	Awareness of future room for improvement	Room for improvement in content	Needs improvement in pathos Needs improvement in condensing story Realizing areas for improvement Needs improvement to complete story
		Room for improvement in grammar	Finds room for improvement in grammar

5. Discussion

The study delves into how the teacher facilitates the mastery of metacognition skills in an English writing class. The research findings reveal that the teacher plays a pivotal role by offering background knowledge on the writing process, monitoring students' progress, and encouraging forward-thinking awareness. This finding supports Ruan's (2013) report that metacognitive awareness was strongly enhanced when the teacher provided explicit instruction and strategies to improve writing skills. The

teacher's proactive approach aimed to empower students with the necessary skills for effective writing. While collaborative writing wasn't observed in this study, the integration of metacognitive strategies and collaborative approaches, as highlighted by Molenaar, Slegers, and van Boxtel (2014) can be highly advantageous for learners in enhancing their writing abilities.

The findings related to the use of various metacognitive strategies such as planning, progress monitoring, and evaluation are aligned with Ramadhanti and Yanda (2021). By using the metacognitive strategies, students personalized the writing process, leading to enhancement of metacognitive awareness and ownership of their writing. The use of metacognitive strategies by the students could demonstrate planning, memory retrieval, and revision strategies, proving effective for improving writing skills. These findings are in line with the metacognitive mindscapes as suggested by Chong (2020).

As suggested by Ramadhanti and Yanda (2021), metacognitive strategies could bring about a positive impact on students' thinking as well as the way they see writing as they become more reflective. As seen in the findings of the current study, students shared that they saw improvements in their writing output, grammar, punctuation, and a better understanding of how to enhance future work. These positive outcomes illustrate the effectiveness of metacognitive strategies in improving writing performance. In short, metacognitive strategies enhance overall students' performance in writing as they become better in planning, recalling, and making revision.

The findings of this current study have significant implications for schools aiming to foster students' independence in EFL writing classes. Metacognitive strategies are highly supportive of student reflective thinking and it can be applied to other subjects. Firstly, teachers should possess subject knowledge and employ student-centered teaching methods, fostering an environment where students can develop their approaches to classroom tasks. Secondly, educators should promote critical thinking in assignments, recognizing that students may already possess the necessary skills but need to cultivate a thinking habit leading to better metacognition. Lastly, teachers should use assessments to understand students' abilities, existing knowledge and skills that can be leveraged in future lessons. These ideas can boost student independence not only in English but potentially in other subjects as well, benefiting students who may struggle to realize their capabilities and improve their learning. Typically, students focus on what they're learning in class rather than how they're learning it. In summary, by equipping teachers with effective strategies, encouraging student autonomy, and conducting assessments, schools can enhance independence in English classes and potentially extend these benefits to other subjects.

6. Conclusion

In this research, it was found that the teacher in this study facilitated the mastery of metacognitive strategies by providing background knowledge prior to working on the task, assisted in monitoring students' progress by giving meaningful feedback, and

encouraged students' awareness of what is ahead. Facilitated by the teacher, the students used metacognitive strategies in the writing processes. They used their personal writing style, showing their knowledge of self, planning their writing, and evaluating before submission. Finally, the use of metacognitive strategies in writing processes gave a positive impact on the products of students' writing. The impacts were evident by seeing improvements in the essay organization, in grammar and punctuation, and in the self-reflection, they did on how they could improve in future assignments.

The major limitation of the study was that it focuses on writing classes while metacognitive facilitation can be conducted by teachers in various subjects. While the study primarily focused on an English writing class and demonstrated students' metacognitive awareness, it is vital to investigate the use of these strategies in other subjects and their impact on students' academic success. As suggested in previous studies (Cer, 2019; Chong, 2020; Daradoumis & Arguedas, 2020; Huang & Zhang, 2022; Ramadhanti & Yanda, 2021) metacognitive knowledge as learners' explicit understanding of their own knowledge, encompasses both accumulated information and temporary knowledge during the learning process. Similarly, cognitive regulation involves how learners apply acquired skills and monitor their learning progress. Thus, the findings of this study imply the need to examine students' metacognitive knowledge and regulation across various subject areas at school.

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