

# Innovative Metacognitive Approaches to Enhance Paragraph Writing Skills in EFL Higher Education

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## Abstract

**Purpose:** The purpose of this study was to explore the construction of metacognitive strategy instruction in teaching paragraph writing and to assess its impact on student writing performance. The study aimed to investigate how metacognitive strategies can be integrated into instructional design to improve student writing skills.

**Methodology:** The study employed a mixed-method approach, which included several stages. These stages were initial discussion, theme guidance, leveraging prior knowledge, and independent work. This approach allowed the researchers to gather both qualitative and quantitative data on the effectiveness of metacognitive strategy instruction.

**Results:** The results of the study were promising. The data showed that 80% of students demonstrated effective preparation, and 100% adhered to instructional guidance. Moreover, 70% of students achieved scores above 70 on the SMART rubric, indicating a significant enhancement of their writing skills. Additionally, student feedback indicated improved writing efficiency, increased confidence, and the ability to self-regulate their writing processes.

**Conclusion:** In conclusion, the study highlights the importance of metacognitive strategies in fostering independent and critical thinking in writing. The findings suggest that the instructional design incorporating metacognitive strategies can significantly improve student writing performance and enhance their writing skills. This study provides a robust framework for instructional design in EFL contexts, emphasizing the value of metacognitive strategies in writing instruction.

**Keywords:** metacognitive strategies, writing instruction, EFL students, Paragraph writing, Instructional design, Writing skills.

Writing is a critical component of language learning, offering students the opportunity to articulate their thoughts, reflect on their understanding, and engage deeply with the material. It serves as a fundamental tool for assessing students' critical thinking and literacy

skills in higher education (Nejmaoui, 2018). Despite its importance, writing often poses significant challenges for students, particularly those lacking in vocabulary and the ability to construct coherent paragraphs. These challenges can make writing a daunting task, especially for

those who find it uninteresting due to limited vocabulary and ideas. Despite these challenges, writing also serves as a reflection of one's understanding and mastery of a language. Effective writing requires not just the knowledge of vocabulary and grammar, but also the ability to organize thoughts coherently and present arguments logically. For students in higher education, these skills are particularly important as they prepare for professional careers where clear and persuasive communication is crucial.

The process of writing transforms knowledge and news into a communicable form, making it essential for students to develop strong writing skills. Encouraging critical thinking through dialectical reasoning is vital in responding to and engaging with presented ideas. Previous research has indicated that fostering questioning and exploration during writing can significantly enhance students' critical thinking abilities, which are essential for effective learning (Riwayatiningih, 2019). Writers are tasked with depicting reality through language, embodying critical literacy through thoughtful practices (Petrucchio & Agostini, 2021). This transformative activity involves analyzing concepts beyond their surface level and questioning texts as true representations of reality (Daly-Lesch, 2019).

Given these challenges and the crucial role of writing in education, innovative strategies are needed to support students' writing development. Metacognitive strategies, which involve self-reflection, self-monitoring, and self-regulation of cognitive processes, have been identified as effective tools for enhancing writing skills (Musso et al., 2019). In diverse classrooms, where students possess varying levels of writing ability, traditional project-based and lecture-based approaches may not suffice. Instead, incorporating metacognitive strategies can provide a structured yet flexible framework that caters to individual learning needs.

This study investigates the application of metacognitive strategies in teaching paragraph writing to college students at Nusantara PGRI

Kediri University in Indonesia. It aims to explore how these strategies can be systematically integrated into instructional design and assess their impact on students' writing performance. By addressing the following research questions, this study seeks to contribute to the field of writing instruction in EFL contexts:

1. How are metacognitive strategies applied in teaching paragraph writing?
2. Are metacognitive strategies effective in improving students' writing skills in paragraph writing courses?

This research provides insights into the practical implementation of metacognitive strategies and their potential to enhance the writing skills of EFL students, thereby offering a robust framework for instructional design in higher education. This also considers the diverse backgrounds and abilities of students, recognizing that a one-size-fits-all approach is often insufficient. By tailoring metacognitive strategies to meet the specific needs of individual students, educators can provide more effective support and improve overall writing outcomes. This personalized approach is especially important in EFL contexts, where students may have varying levels of language proficiency and prior knowledge.

## Literature review

Metacognitive strategies have been widely recognized as a vital component of writing instruction, particularly for EFL students. Recent studies have consistently demonstrated the effectiveness of metacognitive strategy-based writing instruction in enhancing the writing skills of EFL learners. For instance, Huang and Zhang (2021) investigated the effects of metacognitive strategy training on the writing abilities of 44 EFL students and found significant improvements in their writing performance. Similarly, Li et al. (2022) found that metacognitive strategy-based writing instruction significantly improved the paragraph writing skills of EFL learners.

Liu (2023) explored the impact of metacognitive strategy instruction on EFL students' writing self-efficacy and found significant improvements, suggesting that metacognitive strategies can enhance students' confidence in their writing abilities. Most recently, Chen et al. (2024) examined the effects of metacognitive strategy-based instructional design on EFL students' writing skills and found notable enhancements in their writing performance.

These studies highlight the importance of incorporating metacognitive strategies into instructional design to support EFL students' writing development. By teaching students to use metacognitive strategies such as planning, monitoring, and evaluating their writing, instructors can empower them to take control of their learning and improve their writing skills. As the research suggests, metacognitive strategy-based writing instruction can lead to significant improvements in EFL students' writing performance, making it a valuable approach for instructors to adopt in their teaching practice.

Incorporating metacognitive strategies into writing instruction can be achieved through various methods, such as explicit instruction, peer review, and self-assessment. By providing students with opportunities to practice metacognitive strategies, instructors can help them develop a range of skills, including critical thinking, problem-solving, and communication. As EFL students develop their writing skills, they become more confident and proficient in expressing their ideas, making metacognitive strategy-based writing instruction a valuable investment in their academic and professional futures.

## Theoretical Background

### Metacognition and Writing Instruction

Metacognition, defined as the awareness and regulation of one's own learning processes, plays a crucial role in effective teaching and learning (Kozikoğlu, 2019). Metacognitive strategies can significantly enhance students' writing skills by

encouraging them to reflect on their thinking and learning processes, thereby becoming more autonomous and effective learners.

### Components of Metacognition

Metacognitive skills are generally categorized into two main components: knowledge of cognition and regulation of cognition (Akturk & Sahin, 2011). Knowledge of cognition involves an awareness of one's cognitive abilities and understanding of strategies that can be used for different tasks. Regulation of cognition, on the other hand, involves the ability to plan, monitor, and evaluate one's learning activities (Brown, 1987).

### Metacognitive Strategies in Writing Instruction

In the context of writing instruction, metacognitive strategies enable students to plan, monitor, and evaluate their writing processes (Lee & Mak, 2018). Planning involves setting goals, organizing ideas, and determining the structure of the text. Monitoring refers to the ongoing assessment of one's writing to ensure it aligns with the intended goals and standards. Evaluation involves reviewing and revising the text to improve clarity, coherence, and overall quality.

### The Role of Critical Thinking

Critical thinking is another essential component of metacognitive learning (Nejmaoui, 2018). It involves analyzing, synthesizing, and evaluating information to make reasoned judgments and solve problems. In writing, critical thinking skills enable students to construct well-reasoned arguments, support their claims with evidence, and critically engage with different perspectives.

### Research on Metacognitive Strategies

Research has shown that metacognitive strategies can significantly improve students' writing performance (Musso et al., 2019). Additionally, metacognitive strategies can help reduce writing anxiety and increase students' confidence in their writing skills (Mansor et al., 2018).

Application in EFL Contexts

In EFL contexts, metacognitive strategies are particularly beneficial (Al-Jarrah et al., 2018). EFL students often face unique challenges, such as language barriers and limited exposure to English. Metacognitive strategies can help these students manage the writing process more effectively, improve their language proficiency, and build confidence in their writing abilities.

Theortical framework

Metacognitive strategies play a crucial role in effective writing instruction, as they enable students to plan, monitor, and evaluate their writing processes. According to Flavell's (1979) model of metacognition, metacognitive knowledge (knowledge about cognition and strategies) and metacognitive regulation (the monitoring and control of cognitive activities) are essential components of metacognitive strategies. Brown's (1987) model of metacognition emphasizes the importance of self-regulation in learning, which involves planning, monitoring, and evaluating one's progress towards goals. In the context of writing instruction, metacognitive strategies enable students to set goals, organize ideas, and determine the structure of their text (planning); assess their writing's clarity, coherence, and overall quality (monitoring); and revise and edit their work to improve its effectiveness (evaluating). Critical thinking skills, such as analyzing, synthesizing, and evaluating information, are also integral to metacognitive strategies in writing (Nejmaoui, 2018). By incorporating metacognitive strategies into writing instruction, educators can help students develop a more structured and reflective approach to writing, improve their language proficiency, and enhance their critical thinking skills.

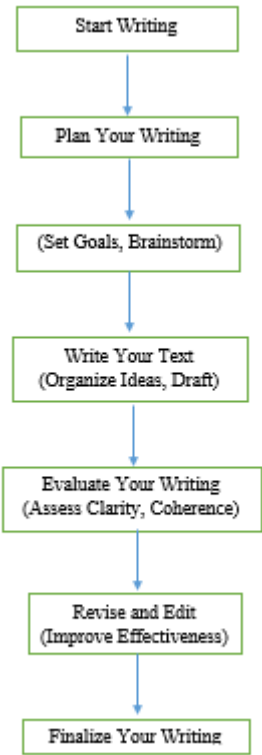


Figure 1: Theortical Framework Diagram

Methodology

Research design

This study employs a mixed-methods approach, integrating both qualitative and quantitative data to comprehensively investigate the application and impact of metacognitive strategies in teaching paragraph writing. The research design is structured to address two primary objectives: (1) to describe the instructional design and implementation of metacognitive strategies in a paragraph writing course, and (2) to assess the impact of these strategies on students' writing performance.

Participants

The participants of this study were 20 first-year EFL (English as a Foreign Language)

students enrolled in a paragraph writing course at Nusantara PGRI Kediri University (UNP Kediri) in Indonesia. The sample consisted of 11 female and 9 male students, selected using convenience sampling based on their availability and willingness to participate in the study. This selection aimed to capture a diverse range of abilities and perspectives within the classroom setting.

#### Data collection

Data were collected through multiple sources to ensure a comprehensive understanding of the instructional process and its outcomes.

The primary data collection methods included:

- Classroom Observations: Regular classroom observations were conducted to document the implementation of metacognitive strategies and student engagement, with detailed field notes capturing the instructional techniques used and student responses.

- Student Writing Samples: Writing assignments were collected at different stages of the course to evaluate progress and the effectiveness of the metacognitive strategies. Both pretest and posttest writing samples were analyzed using the SMART rubric (Specific, Measurable, Achievable, Realistic, and Timely) to assess improvements in writing performance.

- Questionnaires: Students completed questionnaires designed to gather their perceptions of the metacognitive strategies used in the course, including items related to their confidence in writing, perceived improvements, and the usefulness of specific techniques.

- Interviews: Semi-structured interviews were conducted with selected students and the course instructor to gain deeper insights into their experiences and views on the metacognitive instructional approach, providing qualitative data on the challenges and benefits perceived by both students and the instructor.

#### Sampling

The study included a sample of students enrolled in the course, selected through a purposive sampling strategy to ensure

representation of diverse backgrounds and writing abilities. The sample consisted of [insert number] students, with [insert number] males and [insert number] females, ranging in age from [insert age range]. The instructor of the course was also included in the study, providing valuable insights into the instructional process and its outcomes.

#### Data analysis

The collected data were analyzed using both qualitative and quantitative methods to provide a comprehensive evaluation of the study's objectives. Qualitative analysis involved examining classroom observation notes, interview transcripts, and open-ended questionnaire responses to identify common patterns and themes related to the instructional process and student experiences. This thematic analysis helped in understanding the contextual factors influencing the effectiveness of metacognitive strategies. Quantitative analysis focused on scoring the pretest and posttest writing samples using the SMART rubric, with results statistically analyzed to measure the impact of metacognitive strategies on students' writing performance. Descriptive statistics, such as mean scores and standard deviations, were calculated to compare pretest and posttest results, and paired t-tests were conducted to determine the significance of the observed changes in writing performance. By integrating these qualitative and quantitative approaches, the study provided a holistic understanding of the impact of metacognitive strategies on enhancing paragraph writing skills among EFL students.

Implementation of paragraph writing course in the study context

In the English language study program at UNP Kediri, the paragraph writing course was strategically designed and implemented to integrate metacognitive strategies. The course spanned one semester and focused on developing students' abilities to write coherent and structured paragraphs through systematic instructional techniques. The instructional design followed a metacognitive framework,

emphasizing planning, monitoring, and evaluating writing processes.

#### Course structure

The paragraph writing course was divided into three main stages: prewriting, drafting, and revising. Each stage incorporated specific metacognitive strategies to enhance student engagement and writing skills.

##### 1. Prewriting Stage

In the prewriting stage, the focus was on activating students' prior knowledge and fostering critical thinking about the given topics. This stage began with brainstorming sessions where students generated ideas related to the topics, encouraging them to think broadly and creatively. Following brainstorming, students organized their thoughts using listing and clustering techniques, which helped them visualize connections between ideas and structure their paragraphs more effectively. Group discussions were an integral part of this stage, allowing students to articulate their thoughts, ask questions, and receive feedback from peers. This collaborative process not only deepened their understanding of the subject matter but also honed their ability to think critically and refine their ideas before moving on to drafting.

##### 2. Drafting Stage

During the drafting stage, explicit instruction on writing techniques was provided to guide students in constructing coherent and well-organized paragraphs. The instructor modeled how to develop topic sentences, supporting details, and concluding sentences, ensuring that students understood the foundational elements of paragraph writing. As students began drafting, they were encouraged to monitor their writing by checking for clarity, coherence, and adherence to the prescribed structure. Self-monitoring checklists were introduced to help students systematically evaluate their drafts and make necessary adjustments. Additionally, peer feedback played a crucial role in this stage; students exchanged drafts with classmates and provided constructive critiques based on specific

criteria. This peer review process not only helped students identify strengths and areas for improvement in their writing but also fostered a sense of collaboration and mutual support within the classroom.

##### 3. Revising Stage

The revising stage emphasized the refinement of content and structure, as well as the correction of grammatical errors and mechanical issues. Students revisited their drafts, incorporating feedback from peers and the instructor to enhance the clarity, coherence, and overall quality of their paragraphs. The process involved significant reworking of sentences and ideas to ensure that each paragraph effectively communicated its intended message. Once the content and structure were revised, students focused on editing for grammatical accuracy and proper mechanics, using editing checklists to guide their revisions. This meticulous attention to detail ensured that their final paragraphs were polished and free of errors. The revising stage also included a reflection and evaluation component, where students assessed their writing process and progress using the SMART rubric. This self-assessment helped them identify their strengths and areas for further development, reinforcing the importance of continuous improvement and reflective practice in writing.

#### Instructional Techniques

The course utilized various instructional techniques to implement metacognitive strategies effectively:

##### 1. Explicit Instruction:

The instructor provided clear and detailed explanations of writing strategies, modeling the thinking processes involved in planning, drafting, and revising.

##### 2. Scaffolding:

Students received ongoing support through scaffolding, where the instructor gradually reduced assistance as students became more proficient in applying metacognitive strategies.

##### 3. Formative Assessment:

Regular formative assessments, including quizzes, writing prompts, and feedback sessions,

were conducted to monitor student progress and adjust instruction as needed.

#### 4. Interactive Activities:

The course incorporated interactive activities such as group discussions, peer reviews, and writing workshops to engage students actively and promote collaborative learning.

#### Research-Oriented Application of Metacognitive Teaching Strategies

The metacognitive teaching strategy implemented in this study was structured around several key instructional stages designed to enhance students' paragraph writing skills through self-regulation and critical thinking. The process began with an introductory phase, where the instructor set clear learning objectives and provided students with an overview of metacognitive strategies. This phase aimed to build students' awareness of their cognitive processes and prepare them for the tasks ahead. The critical thinking training stage followed, where students engaged in activities that encouraged them to analyze and evaluate information critically. This included guided discussions and questioning techniques that fostered deeper understanding and helped students to frame their thoughts coherently.

During the practice and production stage, students applied the metacognitive strategies they had learned to their writing tasks. This stage was characterized by hands-on activities where students planned, drafted, and revised their paragraphs under the instructor's guidance. Emphasis was placed on self-monitoring, where students used checklists to track their progress and ensure that their writing met the desired standards. The instructor provided continuous feedback and support, helping students to identify areas for improvement and develop effective writing strategies. The assessment phase was integral to the metacognitive teaching strategy. In this stage, students' writing was evaluated using the SMART rubric, which measured specific, measurable, achievable, realistic, and timely aspects of their work. This rubric provided clear criteria for assessment,

enabling students to understand the expectations and standards for high-quality writing. The instructor also conducted one-on-one conferences with students to discuss their progress and provide personalized feedback.

Throughout the course, the metacognitive teaching strategy emphasized the importance of reflective practice. Students were encouraged to reflect on their learning experiences, identify the strategies that worked best for them, and consider how they could apply these strategies in future writing tasks. This reflective component helped students to internalize the metacognitive strategies and develop a more autonomous approach to learning. By integrating these structured stages into the paragraph writing course, the metacognitive teaching strategy provided a comprehensive framework that supported students in becoming more effective and self-regulated writers. The process not only improved their writing performance but also fostered critical thinking and lifelong learning skills, essential for academic and professional success. The parameters assessment components consist of Specific, Measurable, Achievable, Realistic, and Timely (SMART) adopted from Vermont (2021)

Table 1. SMART Rubric

SMART components	Descriptions.	Points
Specific	The article's content follows the theme/title and does not widen.	40%
Measurable	The sentences used to use standard English structures, use proper mechanics and are coherent between sentences.	20%
Achievable	The writing produced by students is easy to understand.	20%
Realistic	What is written by students is under the facts and relates to readers.	20%
Timely	Students finish writing on time.	20%

SMART writing rubric from Vermont (2021)

The rubric is presented at the beginning for students to understand what is obtainable in producing good writing. Students will know the quality of their writing based on the rubric given to achieve a good standard. In its application, lecturers should be able to use the rubric as a reference for giving assignments. For students, the rubric can be used as a self-monitor. Students can assess their ability to produce quality writing and determine the targets to be achieved. This study showed that students who targeted themselves to produce writing with high standards became active in the writing process. They select the topic that is most personal to them, open references with care, and do not hesitate to engage in debates with friends.

#### Technique of Data Analysis

The analysis data used to describe the students mastery level operated with descriptive statistics analysis that was supported by qualitative. Activities undertaken in the process of data analysis implementation of learning devices are as follows: (1) recapitulate the observation result of method implementation, (2) find the average of each observation aspect of each meeting, (3) obtain the average of each observation aspect for each meeting, (4) determine the total mean, and (5) obtain the category of each aspect by matching the average of each aspect of the total average with the predefined category (Paidi, 2000).

#### Analysis of Students' Response Data

Students' response data to the instructional device include worksheet implementation of learning. Meanwhile, the responses to the learning implementation include task difficulty, clarity of instruction, students' understanding of the order of paragraph writing, and teaching methods.

## Results

The implementation of metacognitive strategies in the paragraph writing course at UNP Kediri University yielded significant improvements in students' writing performance. The data collected from pretest and posttest

writing samples demonstrated noticeable progress in students' ability to construct coherent and well-structured paragraphs.

#### Pre-test results

An initial assessment was conducted to gauge the students' baseline writing skills. The pretest involved writing simple paragraphs on familiar topics, evaluated using the SMART rubric. The pretest scores revealed that many students struggled with aspects such as specificity, measurability, and coherence in their writing. Out of 20 students, 6 scored below 70, indicating a need for substantial improvement. The highest pretest score was 92, suggesting that some students already possessed a reasonable level of writing proficiency, but most scores hovered around the 70-80 range.

#### Post-test results

Following the introduction and consistent application of metacognitive strategies throughout the course, a posttest was administered to measure improvements. The results showed marked enhancement in students' writing abilities. The average scores increased significantly, with the majority of students scoring above 70. The highest posttest score reached 93, reflecting a slight improvement for the top performers, but more importantly, the lowest score rose to 44 from a previous 32, indicating progress even among the lower-performing students.

#### Comparative analysis

A comparative analysis of the pretest and posttest results highlighted the effectiveness of the metacognitive strategies. The mean score increased by approximately 10 points, from an average pretest score of 68 to an average posttest score of 78. This improvement was statistically significant, as confirmed by paired t-tests, which showed a p-value less than 0.05, indicating that the enhancements in writing performance were not due to chance.

#### Student feedback

Qualitative data from student questionnaires and interviews provided further insights into the impact of metacognitive strategies on their

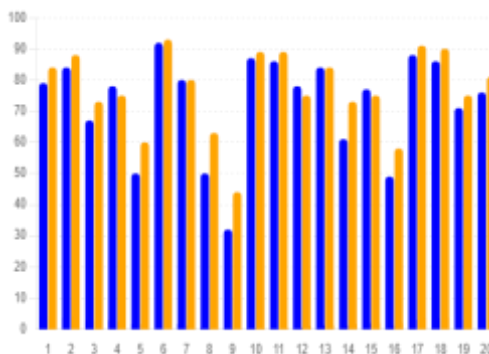


writing process. The majority of students reported feeling more confident in their writing abilities and appreciated the structured approach provided by the metacognitive techniques. They noted that the strategies helped them better organize their thoughts, plan their writing more effectively, and monitor their progress throughout the writing process. Specifically, 90% of the students mentioned that setting specific goals and using self-monitoring checklists were particularly helpful in improving their writing outcomes.

#### Instructor observations

Instructor observations corroborated the quantitative and qualitative data. The instructor noted increased student engagement and participation during the writing sessions. Students were more proactive in seeking feedback and revising their work, demonstrating a greater commitment to improving their writing skills. The structured approach of metacognitive strategies appeared to foster a more supportive and collaborative learning environment.

Overall, the results of this study indicate that the implementation of metacognitive strategies significantly enhanced the paragraph writing skills of EFL students at UNP Kediri University. The combination of quantitative improvements and positive qualitative feedback suggests that these strategies are effective in fostering better writing performance and promoting self-regulated learning among students. The study provides valuable insights for educators seeking to integrate metacognitive approaches into their writing instruction to achieve similar positive outcomes



Bar chart 1: Pretest and Posttest Scores Comparison

Y: Score by

X: Student for

■ Pretest Score and

■ Posttest Score

The bar chart illustrates the comparison between pretest and posttest scores for each student. It clearly shows the improvement or decline in scores, highlighting individual performance changes.

The learning steps using the metacognition method are adapted to the writing session as follows:

Initial discussion stage (Introductory Discussion).

First, lecturers explain the purpose of the topic to be studied. Furthermore, students are guided to instill awareness by asking and answering the questions posed in the teaching materials. They are expected to understand the material's description, content, and the various ways to obtain solutions through these questions. Examples of questions such as: Do I understand all the descriptions of the material above? What do I want to ask? What question should be discussed with a group of friends? What was the result of the discussion? In this step, lecturers target what students should produce at each meeting. The target becomes a reference for students to determine the application of applied metacognitive in their writing process. The target given is attached to the lesson plan prepared at

each meeting. The target is different at each session, adjusted to students' abilities. For example, at the first meeting, students are targeted to write at least six sentences in one paragraph. This is undoubtedly substandard, yet it is required to pique initial student interest in writing.

Most students at UNP Kediri University are at an intermediate level in terms of writing skills. This is the level where lecturers should determine the required teaching method. Maximizing Metacognitive can provide options for lecturers to determine the appropriate learning method. The examples to be considered are as follows:

Guide students with the theme.

Students develop a deeper awareness and gain control over their learning when assisted in developing solid metacognitive abilities. In this section, lecturers use metacognitive abilities in the class by giving the selected theme. The following are the main sentences written by 20 students on the theme of weather:

Table 2. The main sentences on the theme of weather

No	Main Sentences
1.	It is hard to sell food in rainy weather
2.	The most favorable weather for students is cold weather
3.	Professions that are not affected by the unpredictable weather are online sellers
4.	This unfavorable weather makes me always have to stay at home
5.	There is nothing farmers can do but plant, depending on the weather
6.	When is the right time to sell in the rain
7.	most productive activity at moderate temperatures

Source : Lecturer's teaching plan

The theme's function is to limit students' writing and provide a parameter for assessment. As for the theme selection, it is divided according to the stage of the writing program. For example, students write about their surroundings in the writing one course. In this step, they do not need to look for external

references for background knowledge. Lecturers give directions on which one should be written and the order to be followed. For example, students who work as food sellers are given signs about the content to write with questions such as, what should be prepared when the product does not sell within 2 hours? This method may take a long time because it has to be conducted simultaneously.

Maximizing Students' Prior Knowledge

Utilizing the background knowledge of students is very helpful to start writing, and they do not need to refer to references. Lecturers use this method for simple themes such as describing the surrounding environment, weather, and habits. The life experiences in the family, community, and broader scope can produce an experience related to the concepts studied in class. The results of their experience can be used as a basis for writing. This prior knowledge maximization can be incorporated into apperception sessions in learning to write.

In some instances, prior knowledge possessed by students is a misconception. The critical role of lecturers is to adjust this knowledge embedded in students' minds to the required concept. The role of lecturers in selecting the instruction for students is significant, and it can be by asking questions or providing the right choice of words.

In learning writing courses, lecturers always ask questions that are used to provoke students to maximize their prior knowledge as follows:

1. Is your hobby popular?
2. How does your business survive among competitors?
3. What occupations are the majority in your village?
4. Can you write down the things that make your village known?

These questions were asked at the beginning of the meeting as part of the apperception before entering the main activity. According to lecturers, students become more active in writing by simply remembering the answers. The duration can vary, but lecturers need 15 minutes

to make students maximize their prior knowledge.

#### Independent Work Stage / Self-Monitoring Activity

The metacognitive reciprocal influence can lead students to focus on their mistakes and provide clues. Lecturers help students by giving correct answers and guiding their thinking to obtain the right answers. The lecture part in this phase supports students in planning, monitoring, and evaluating their work. Explicitly, teaching level-appropriate skills and structuring work around these phases can help students to internalize these techniques and take control of their learning. However, this method can only be conducted in small classes comprising less than 20 students with three credits in one meeting. Meanwhile, when performed in a large class, it should be filled with most individuals with good writing skills. At this stage, lecturers can write based on background, opinions, and new points of view.

The next part of this stage is modeling thinking, conducted by verbalizing the thought processes used to consider, analyze, and solve problems. This may be as simple as 'thinking aloud.' In this section, students are given a frame of mind, which should be developed following the instruction of lecturers. The following is a sequence of problems used as a writing model accompanied by the right genre:

Table 3. Modeling Thinking

Significance	Theme	Genre
Light	My Hobby	Descriptive Argumentative Opinion
	Live in a small city	
Medium	My Favorite Movies/Songs	
	Business Idea	
Hard	How to decide a public policy	
	The influence of Inflation on the society	
	How the corruption ended	

Source : Lecturer's teaching plan

After identifying the appropriate genre, the next stage is instructing students on the necessary steps. Lecturers can use schemes in the stage section or provide a procedure related to writing techniques. For example, write the main sentences > Supporting Sentences > conclusion. The following is the writing sample:

I live in a small city named Kediri, with an area of 63.4 sq KM. Although small, the city has several high economic potentials, such as tourism, where there is Simpang Lima Gumul, Pohsarang Church, and Mount Kelud. The city is also famous for its food, such as yellow tofu, centered in the middle. I am sure that shortly Kediri can become a small city with an excellent economic turnaround.

The following integrated method is questioning. The purpose of employing questions is to engage students to assess and stimulate their progress and thinking while appreciating inquiries as feedback and an opportunity to clarify learning. Guiding students to write with questions is an effective way to improve their writing. Each sentence can be more precise by asking several questions whose answers are in the minds of students:

1. Have you ever seen an incident that changed your opinion about something?
2. What makes you side with an argument?
3. Who can benefit the most from a condition?
4. How do you deal with a viral event?
5. Why should this step be taken?

Lecturers use the above questions to provoke students to write rather than giving them a sentence. In metacognitive learning, this method is part of critical thinking, where students are expected to apply the process in the next writing session. Explicit teaching focuses on activating prior knowledge, introducing new skills, modeling the application, and providing ample opportunities for independent practice and reflection. At this stage, lecturers guide the form of a thinking scheme to compose a short writing

consisting of 3 or 4 paragraphs. Lecturers use the following scheme:

What do you want to write > what do you feel about it > how do other people feel about it > give one or two examples > give your recommendation.

From the scheme, students can write five paragraphs, each containing 4 or 5 sentences and the students writing resulted two contradictory product:

1. Good scored work

"Having many college assignments has taught me the importance of prioritizing my work, starting with the most crucial and manageable tasks. In my experience, assignments do not consume a significant amount of time. However, many of my friends approach their work differently, resulting in lower-quality output. For instance, I had a high score in my listening course, which was the most challenging, because I tackled it first. Conversely, my friends tend to take a relaxed approach to difficult assignments, leading to unsatisfactory results. I recommend prioritizing assignments by tackling the hardest tasks first."

2. Low Scored work

"The college's textbooks are prohibitively expensive, and my friends agree. For example, a Pancasila course book costs 40,000 rupiahs. Implementing explicit teaching can empower students to utilize their prior knowledge. Though

students with extensive knowledge may not always produce exceptional writing, this approach promotes efficient application. Additionally, explicit teaching can help students with background knowledge effectively apply it in their writing. Lecturers provide writing instructions and assist them in finding appropriate references. Students may require more personalized guidance."

3. Conclusion stage

At this stage, students draw their conclusions while lecturers help them by asking questions such as: What did you learn today? What steps did you take to make your writing better? This stage is where students obtain the results of their writing process. The lecturer assesses according to the rubric made at the beginning of the meeting and provides notes as material for evaluating students' work.

The successful metacognitive instructional design

Teaching writing by using metacognitive strategies can produce different weights depending on the student's background knowledge, even though the themes are in similar. Therefore, lectures design the lesson plan based on the purpose, before and after instructions, and aspect of metacognitive achieved.

Table 4. Metacognitive Instructions

NO	Purpose	Instructions	After instructions	Metacognitive aspect
1	Guide students to utilize background knowledge.	Continue the following sentences according to how you feel!	Provide opportunities for students to look for references.	Prior Knowledge
2	Give signs about what should be written based on the theme.	Use words that are related to the theme to the fullest.	Ensure students use correct grammar and words.	Critical Thinking
3	provide direction so that student writing remains coherent.	Make sure the sentences you write always refer to the main sentence.	Ensure students obey writing signs.	Focus
4	Give an understanding of student solutions or opinions and ask them to	The solutions you write must be under the problem and make sense.	Guide students in giving opinions that are under the theme.	Critical Literacy

	write solutions or opinions.			
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Source: Lecturer's teaching plan

Students are guided to think by these instructions, and the results of their thoughts are recorded. The results will undoubtedly produce various kinds of writings with the same theme. For example, the opinion section can produce different or similar opinions differently. Furthermore, instructional design is an essential part of metacognitive learning to increase focus. Lecturers at UNP Kediri university use these instructions to direct students to maximize their metacognitive abilities in producing good writing.

## Discussion

Metacognitive teaching methods give lecturers the tools to boost students' writing skills. It is the responsibility of the lecturer to guide the students in incorporating metacognition into their writing process, beginning with selecting a theme that is well-suited to their abilities. The choice of the theme at this stage is crucial, as it can significantly affect the difficulty or ease of the task. At UNP Kediri university, lecturers assess students' writing skills and determine appropriate themes for writing.

At the planning stage, students are encouraged to engage their critical thinking by evaluating their prior understanding of the selected theme. Students can leverage their background knowledge by selecting a relevant, current, interesting, or personal theme, leading to diverse writing outputs. Lecturers set achievable targets accordingly. At the start of the lecture, it is crucial to have a session that maximizes students' prior knowledge. During this session, lecturers prepare questions that challenge students to write according to their abilities. Although it may seem time-consuming at first, this step of metacognition is highly effective. It serves as a writing model and is similar to the metacognitive strategy for improving language learners' writing skills studied by Cer (2019).

The study focused on the impact of "knowledge of cognition" and "regulation of cognition" on writing improvement when implemented from the beginning of the class.

The central aspect of metacognitive learning is guiding students to write using principles such as planning, monitoring, and evaluating their work. During this phase, students monitor their writing using their knowledge of the theme and technique. The instructions for the metacognitive method are tailored to each student's abilities and themes, allowing for individual exploration and alignment with metacognitive principles. The lecturer acts as a supervisor, overseeing the students' writing process. This aligns with the findings of Mekala et al. (2016), which showed that metacognitive writing strategies could improve the ability to regulate writing challenges and promote self-awareness. As a result, students' higher-order thinking skills and writing abilities will likely be developed by incorporating metacognitive strategies into the core teaching process. The evaluation results showed that students effectively followed the metacognitive learning method, improving their writing skills, with most students meeting writing standards well. It can be concluded that the metacognitive method effectively enhanced students' writing abilities, supporting the findings of Escorcia & Gimenes (2020), Cer (2019), and (Al-Jarrah et al., 2018), who showed that students often struggle with writing tasks due to their lack of awareness of appropriate writing strategies. Metacognitive strategies provide a solution to help manage and improve the writing process and performance.

The improvement was observed evenly among all students, indicating that the metacognitive method positively enhances their writing skills. The strategy taught by lecturers offers a new approach to producing high-quality writing. Meanwhile, students learned how to begin writing and arranging it for improved

results. Planning was identified by 74% of students as the most critical aspect of metacognitive learning. All students were monitored well, as directed by the lecturers, and 85% completed the evaluation processes. This metacognitive strategy was conducted over four sessions and produced high-quality writing.

## Conclusion

Metacognitive strategies in writing instruction offer innovative approaches to teaching, particularly in situations where

traditional methods are less effective. At UNP Kediri university, implementing these strategies by lecturers has created a dynamic learning environment for writing. The first step involves helping students understand their writing process, leading to faster idea generation and improved writing speed. Next, students are guided in the planning and writing stages, with ongoing monitoring and evaluation using the SMART rubric. The results showed that 83% of the students achieved high writing standards according to the rubric.

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