

Metacognitive strategies in teaching essay writing: Repeated measures in the creative writing classroom

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Abstract - Metacognitive strategies are language learning strategies used to improve self-monitoring and self-regulation skills. Using a purposive sampling technique, 79 students in a creative writing class were selected to participate. Data collection was carried out repeatedly, and the data were analyzed using repeated measurement tests. During essay writing learning, students were guided to develop metacognitive skills, starting from planning, monitoring, and evaluating writing. The results of the study showed that metacognitive strategies influenced the development of metacognitive skills. Students were accustomed to writing in the stages of planning writing, monitoring the strategies used, and evaluating the writing results. When completing their writing, they were guided to use a reflection journal as a self-reflection tool. Measurements were carried out five times. In the first week, students began to be introduced to metacognitive strategies with a focus on awareness of the thinking process, especially in planning the content of the writing; in the second week, students showed significant improvement when they were able to organize ideas more coherently and relevantly to the topic; In week 3, students demonstrated maturity in developing arguments, enriching descriptions, and improving paragraph cohesion and coherence, resulting in a significant increase in their creative essay writing scores. However, in weeks 4 and 5, students' abilities slowed down, with no statistically significant differences. This stagnation was caused by the learning plateau and ceiling effect, the short duration of treatment, inaccurate assessment instruments, and student motivation and boredom. Nevertheless, metacognitive strategies are recommended for use in essay writing learning.

Keywords: Creative Writing, Essay Writing, Metacognitive Strategies

1. Introduction

Creative writing has become part of learning programs from elementary school to university level. Students are taught to write in various types of genres and writing styles, starting from fiction and non-fiction. Creative writing is important because it functions as a tool for expressing emotions, developing creativity and imagination, and a means of perfecting writing skills (Mardiningrum et al., 2024). Creative writing is also a valuable experience for students in developing language skills (Harshini, 2020). Additionally, creative writing has even become a tool in science learning. Students are asked to observe an object and report it in the form of creative writing (Osborn et al., 2023). Considering the benefits of creative writing, students need to improve their writing skills from time to time. To enhance creative writing skills, students need to read a variety of literature, write consistently, dare to experiment with various writing styles, pay attention to correct writing instructions, and accept constructive criticism from others (Fitria, 2024).

In learning creative writing, various ways and methods have been used and proven successful in fostering students' creativity in writing. These various methods, namely: carrying out learning through giving multitasks to students so that they are able to develop creative writing competencies (Mohammed, 2019); implementing short story-based learning so as to improve creative writing skills (El-Mahdy et al., 2019); using Creative Writing Instruction Program based on Speaking Activities (CWIPSA) model in learning and proven to foster creative writing attitudes and achievements (Bayat, 2016); using Wattpad as a means of developing creative writing (Zubaidi et al., 2023); using poetry to be transformed into other creative writing (Aryusmar & Putria, 2014); and using nature as a means of learning creative writing (Vedia & Emzir, 2017). Even though there have been many ways to develop creative writing skills, novice writers still experience difficulties in writing, for example, difficulties in developing stories (Marlina & Narius, 2020). In implementing writing learning, teachers need to pay attention to the assignments and media used and students need to pay attention to how to analyze and produce writing by paying attention to writing rules.

In creative writing, students need to have independence and freedom in developing their ideas and imagination. One learning strategy that can shape student's independence in learning is metacognitive strategies. Metacognitive strategies are used so that students have metacognitive skills (Ramadhanti & Yanda, 2021). Teaching students to have metacognitive knowledge and skills is the same as teaching them to have self-agency. This sense of agency needs to be possessed by students so that they can continue to develop greater agency, improve metacognition, and ultimately be able to transfer the knowledge they have across contexts (Taczak & Roberston, 2020). Ultimately, students will have self-regulation, namely the ability to assess the extent to which a learners are aware of their strengths and weaknesses as well as the strategies they use to learn (Quigley et al., 2018).

Metacognitive strategies have been widely chosen as a means to facilitate learning. For example, in listening lessons, teachers can find out the level of student's understanding because each learning step is carried out systematically and encourages student's critical thinking skills (Salasiah et al., 2018). By implementing metacognitive strategies in the classroom, teachers have changed the way they frame learning intentions and criteria for learning success. By asking students questions and guiding learning with a metacognitive strategies, teachers have helped students monitor their learning (Smith & Ferguson, 2020a). In its application, metacognitive strategies can also be integrated with the use of reflective e-portfolios to help develop student's reflection skills (Turky, 2018). Metacognitive strategies are used by students if they understand and have metacognitive knowledge and skills. Metacognitive knowledge includes knowledge about self, tasks, and strategies (Flavell, 1979; Pintrich, 2017).

Based on these things, this research needs to be carried out to determine the effect of applying metacognitive strategies in learning to write creative essays. Metacognitive strategies are important in creative writing because they help students recognize, plan, monitor, and evaluate their writing process, allowing them to express their creative ideas in a more focused and coherent manner. With these strategies, students are not only able to overcome obstacles such as writer's block but also reflect on their word choice, flow, and writing style to improve the quality of their work. Furthermore, metacognitive strategies encourage independent learning, creativity, and self-evaluation, resulting in more original, engaging, and meaningful writing.

Essay writing is assessed by how capable students are of presenting their ideas and ideas by paying attention to the structure and linguistic rules of the essay namely introduction, content, and conclusion. In essay writing, metacognitive strategies play a crucial role because they help writers plan the content and structure of their essay, monitor the logical flow of their arguments, and evaluate the clarity and accuracy of their language. With metacognitive awareness, writers can ensure that their essay's thesis is

consistent, arguments are supported by relevant evidence, and paragraphs are structured coherently and sequentially. Furthermore, these strategies enable writers to be more reflective about their writing's weaknesses, critically revise their writing, and ultimately produce a more systematic, convincing, and high-quality essay.

However, research on the extent to which students are aware of plan, monitor, and evaluate their writing process, allowing them to express creative ideas in a more focused and coherent manner, has never been conducted. Repeated measurements are used to demonstrate the development of student's essay writing skills over time. Therefore, this study aims to describe the influence of metacognitive strategies on student's essay writing skills in a creative writing class. This study is to prove the research hypothesis, namely: H0: There is no significant average difference in student's essay writing ability using metacognitive strategies during the measurement time interval; and H1: There is a significant average difference in student's essay writing ability using metacognitive strategies during the measurement time interval.

2. Method

This research was quantitative research using quasi-experimental methods. This research aims to determine the influence of metacognitive strategies in learning to write creative essays after repeated measurements. The experimental design used is the equivalent time sample design. The equivalent time sample design is a research design that is carried out repeatedly on one group by paying attention to the distance between treatments and test administration (Yusuf, 2007). In this study, the distance given was a week. The sample in this research was 79 students who took the Creative Writing class. The research sample was treated by applying metacognitive strategies in learning to write creative essays.

The instruments used in this research consisted of three, namely: a Lecture Unit for learning to write creative essays; a creative essay writing performance test instrument; and a reflective journal to monitor writing progress. The questions asked in the reflective journal are: (1) Describe your process of finding writing ideas from the environment around you! (2) Explain how familiar you are with the themes and topics you write about. (3) Explain why you chose that topic for your writing? (4) Explain how you got the idea for your writing? (5) What strategies did you use to gather information about the idea before writing it down? (6) How long will it take you and how much information will you need to complete your writing? (7) How familiar are you with the topic you are writing about? (8) What difficulties did you encounter while completing your writing? (9) What efforts did you make to overcome your difficulties and weaknesses while writing on this topic? (10) What interesting things did you feel while collecting information and writing about the topic? (11) How can you determine that your writing is worthy of being called creative writing? (12) Give a summary of your creative process in writing starting from planning your writing, developing ideas into creative writing, and evaluating your writing! ((Mana et al., 2023; Ramadhanti, 2024). Reflective journals were used to collect qualitative data about student's essay writing progress notes.

The data collection procedure was carried out by providing treatment to the sample group by carrying out creative essay writing lessons using metacognitive strategies. Implementation of metacognitive strategies is carried out in the following steps, namely: planning what is learned (planning), monitoring what is learned (monitoring), and assessing what is learned (evaluation) (Oxford, 1990; Quigley et al., 2018). More specifically, learning activities are carried out using the steps in Table 1 below.

Table 1. Implementation of Creative Essay Writing Learning
Using Metacognitive Strategies

No	Stage	Learning Activities
1	Planning	<ol style="list-style-type: none"> At this stage, the teacher asks students to find out previous knowledge about writing and things to pay attention to when writing. The teacher asks students to make a writing outline The teacher asks students to prepare writing materials to be developed into writing. The teacher provides models to students so that students can pay attention to the models given by the teacher.

2 Monitoring	<ol style="list-style-type: none"> 1. Students develop ideas according to the model provided by the teacher by monitoring writing progress by answering questions in a reflective journal. 2. Students monitor that the writing they produce is by the framework of ideas and assessment criteria provided by the teacher. 3. Students monitor the correctness of the writing they produce using the assessment rubric provided by the teacher together with their peers.
3 Evaluation	<ol style="list-style-type: none"> 1. Students re-examine the writing they have produced according to the results of peer and teacher assessments. 2. Students complete the writing independently. 3. Students reflect to find out what they have learned, how to complete the assignment, and how effective the strategies used were when completing the assignment.

Furthermore, data analysis was carried out using a repeated measures test to determine the significance of learning using metacognitive strategies in learning creative writing which is carried out repeatedly. Student essays are written using the following rubric.

Table 2. Essay Writing Assessment Rubric

Score	Criteria Description
4	The essay demonstrates a deep and relevant understanding of the topic, logical and convincing arguments, a clear structure (introduction, body, conclusion), coherent paragraphs, standard language with effective sentences, and almost error-free spelling and grammar.
3	The essay is quite clear and relevant to the topic, the argument is logical although not completely strong, the structure is quite coherent, there is cohesion between paragraphs, the language is generally standard with some minor errors, and the spelling and grammar are still acceptable.
2	The essay lacks focus, limited relevance to the topic, weak arguments, and lack of evidence, unbalanced structure, less cohesive paragraphs, many distracting language and spelling errors, but still understandable.
1	The essay has an unclear direction of discussion, is not relevant to the topic, arguments are absent or illogical, the structure is chaotic without cohesion, the language is not standard, and there are many spelling and grammar errors so it is difficult to understand.

The test stages carried out were: inputting research data into the SPSS program, carrying out a data normality test, and carrying out a repeated measures ANOVA test. This research hypothesizes that there is a difference in the average writing ability of students in the interval group measuring creative writing learning outcomes.

3. Results and Discussion

Metacognitive strategies are assumed to be variables that influence creative writing learning outcomes. Measurements were carried out five times taking into account the distance between treatment and test administration. The significance of the difference in the average results of measuring student's writing learning outcomes can be seen based on the test results in Table 3 below.

Table 3. Tests of Within-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
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Time_Week	Sphericity Assumed	2,699.281	4	674.820	15.947	0.000
	Greenhouse-Geisser	2,699.281	3.524	765.945	15.947	0.000
	Huynh-Feldt	2,699.281	3.711	727.306	15.947	0.000
	Lower-bound	2,699.281	1.000	2,699.281	15.947	0.000
Error (Time_Week)	Sphericity Assumed	13,202.719	312	42.316		
	Greenhouse-Geisser	13,202.719	274.881	48.031		
	Huynh-Feldt	13,202.719	289.485	45.608		
	Lower-bound	13,202.719	78.000	169.266		

The average difference in student's writing ability can be seen by paying attention to the Greenhouse-Geisser value in the Test of Within-Subject Effect Table. In this table, the Greenhouse-Geisser significance value is 0.000. This value is less than 0.05. If the Greenhouse-Geisser significance value is greater than 0.05 then there is no difference in the average ability of students over the five intervals for measuring learning outcomes. On the other hand, if the Greenhouse-Geisser significance value is less than 0.05 then there is a difference in the average ability of students during the five intervals for measuring learning outcomes. Thus, it can be concluded that during creative writing learning using metacognitive strategies, there are differences in the average student's writing abilities. This difference is influenced by the learning strategy used. By using metacognitive strategies, students are able to plan the content and structure of their essays, monitor the logical flow of their arguments, and evaluate the clarity and accuracy of their language. Furthermore, the average increase in student writing learning outcomes is stated in Table 4 below.

Table 4. Pairwise Comparisons

(I) Time_Week	(J) Time_Week	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Lower Bound
1	2	-2.810*	.913	.029	-5.448	-.172
	3	-5.215*	1.084	.000	-8.348	-2.083
	4	-5.722*	.976	.000	-8.540	-2.903
	5	-7.557*	.974	.000	-10.370	-4.744
2	1	2.810*	.913	.029	.172	5.448
	3	-2.405	1.191	.469	-5.846	1.036
	4	-2.911	1.052	.070	-5.950	.127
	5	-4.747*	1.131	.001	-8.015	-1.479
3	1	5.215*	1.084	.000	2.083	8.348
	2	2.405	1.191	.469	-1.036	5.846
	4	-.506	1.150	1.000	-3.828	2.816
	5	-2.342	.995	.211	-5.216	.533
4	1	5.722*	.976	.000	2.903	8.540
	2	2.911	1.052	.070	-.127	5.950
	3	.506	1.150	1.000	-2.816	3.828
	5	-1.835	.829	.298	-4.231	.560
5	1	7.557*	.974	.000	4.744	10.370
	2	4.747*	1.131	.001	1.479	8.015
	3	2.342	.995	.211	-.533	5.216
	4	1.835	.829	.298	-.560	4.231

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

The output table above provides information about the average increase in essay writing ability for five measurements. Number 1 shows the measurement time of student's initial essay writing ability;

Number 2 shows the measurement time of student's essay writing ability in Week 1; Number 3 shows the measurement time of student's essay writing ability in Week 2; Number 4 shows the measurement time of student's essay writing ability in Week 3; and Number 5 shows the measurement time of student's essay writing ability in Week 4 after using metacognitive strategies.

The explanation of the output table is as follows. *First*, Number 1 (student's initial essay writing skills) compared to Number 2 (essay writing skills in Week 1) showed a significant difference in student's writing skills after using metacognitive strategies with a sign value of $0.029 < 0.05$; *Second*, Number 1 (student's initial essay writing skills) compared to Number 3 (essay writing skills in Week 2) showed a significant difference in student's writing skills after using metacognitive strategies with a sign value of $0.000 < 0.05$; *Third*, Number 2 (essay writing ability Week 1) compared to Number 3 (essay writing ability Week 2) there is no significant difference in student's writing ability after using metacognitive strategies with a sign value of $0.469 < 0.05$; *Fourth*, Number 3 (essay writing ability Week 2) compared to Number 4 (essay writing ability Week 3) there is no significant difference in student's writing ability after using metacognitive strategies with a sign value of $1.000 < 0.05$; and *Fifth*, Number 4 (essay writing ability Week 3) compared to Number 5 (essay writing ability Week 4) there is no significant difference in student's writing ability after using metacognitive strategies with a sign value of $0.298 < 0.05$.

These results indicate that the improvement in essay writing ability using metacognitive strategies was only significant in the first three weeks, while there was no significant difference in the fourth and fifth weeks. This condition can be explained by the phenomenon of a learning plateau, a situation where the development of learning abilities slows down or stagnates after reaching a certain point. According to DeKeyser (2007), In the early stages of learning complex skills like writing, progress is typically rapid as students become familiar with effective strategies. However, progress slows afterward as students take longer to internalize the skill. Furthermore, stagnation is also related to the ceiling effect, a condition where students reach the maximum achievement limit according to the learning instrument or context provided (Bond & Fox, 2015). In this case, after three sessions of practice, most students understood how to plan, monitor, and evaluate their writing using metacognitive strategies, so subsequent improvements were relatively small and not statistically significant. This suggests that essay writing skills require further development with a variety of interventions or long-term practice.

The relatively short duration of treatment was also another factor influencing the results. Five weeks of learning were insufficient to develop essay writing skills sustainably, as writing is a productive skill that requires intensive and repeated practice over an extended period (Hyland, 2019). Therefore, although metacognitive strategies are effective for improving writing skills, sustainable improvement requires a longer learning program with a variety of activities, feedback, and more complex writing challenges. In addition to technical factors, student's motivational and psychological aspects also need to be considered. In the first few weeks, student motivation is usually high due to the new experience and the challenge of writing with different strategies. However, over time, boredom can set in, reducing the quality of the learning process (Zimmerman, 2002). Thus, the stagnation of results in the fourth and fifth weeks does not mean that metacognitive strategies are ineffective, but rather indicates that further innovation, extension of time, and verification of instruments are needed so that the development of student's essay writing abilities remains significant. The stagnation in student's essay writing learning outcomes in weeks 4 and 5 is visualized in the following flowchart.

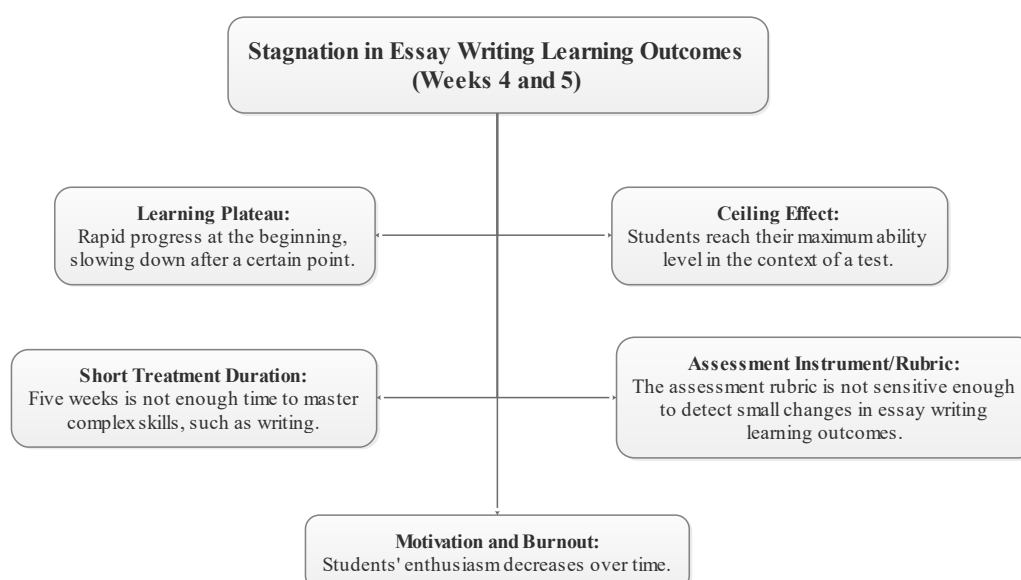


Figure 1. Flowchart of Causes of Stagnation in Essay Writing Learning Outcomes Using Metacognitive Strategies

Overall, learning objectives are achieved and students also have independence in learning. Metacognitive strategies according to the concept aim to ensure that students have metacognitive skills and become independent learners. One aspect of independent learning is reflection skills (Belenkova, 2021). Students can also reflect on their writing skills through reflective journals. With reflection skills, students can realize their own learning goals, set tasks, select and use certain strategies, and choose the most appropriate strategy. Apart from having reflection skills, students have metacognitive skills that enable them to overcome various problems in learning. These metacognitive and self-reflection skills are the basis of self-education and guarantee successful learning (Wang, n.d.).

The development of metacognitive and reflective skills needs to be carried out continuously to shape students into independent learners. To develop reflection skills, teachers need to integrate learning with an environment that supports students in reflective practice (Antonio, 2020). Students become better and wiser in determining tasks and choosing the right strategy for completing tasks. They also need to be trained to continually plan, monitor, and evaluate their learning activities to support problem-solving efforts (Clark et al., 2022). Students also have control over their learning (Millis, 2016) because metacognitive strategies help students to determine learning goals and monitor their progress in achieving these goals (Smith & Ferguson, 2020b). In this case, metacognitive reflection increases the power of learning (Miller et al., 2021). Metacognitive reflection also brings about a change in perspective and can support valuable reconceptualization for lifelong learning (Merkebu et al., 2024). Students generally tend to use learning approaches that can be applied throughout their lives. Factors that limit the success of a metacognitive approach are the individual's capacity and motivation to reflect (Phelps et al., 2001).

Reflection skills can be measured using self-reports and reflective journals (Ramadhanti & Yanda, 2023). Students who are used to writing reflective journals can develop their writing skills and become independent learners (Ramadhanti et al., 2020). This is what is done during learning to write creative essays. Students monitor the writing process using a reflective journal. Writing a reflective journal is one approach to record self-evaluation and improve independent learning. Things that can be recorded in a reflective journal, namely: reflection on initial learning objectives, monitoring of involvement in learning, monitoring of conceptual understanding, monitoring of progress in achieving learning objectives, self-evaluation of what has been learned, what is still not understood, and what needs to be improved, and feelings after participating in learning including emotional attitudes and self-motivation (Beach et al., 2020).

Learning to write creative essays uses metacognitive strategies designed so that students have reflection skills. Students are given questions in the form of a reflective journal during assignment completion so that they can continually reflect on themselves from planning to completing assignments. Self-reflection in this case aims to investigate student's learning strategies and to increase their control over learning. Things that students reflect on include their understanding of concepts, the quality of

progress in completing assignments, learning problems faced, and further self-development (Simarmata & Sulistyaningrum, n.d.). The use of a reflection model in the form of reflective journal writing during learning has been proven to improve learning (McAlpine et al., 1999). Writing a reflective journal also helps improve student's thinking abilities. Students can improve their learning by becoming aware of their thinking as they read, write, and solve problems in learning. Teachers can increase this awareness by informing students about effective problem-solving strategies (Fathima & Saravanakumar, 2012). During the application of metacognitive strategies, students improve the strategies used because they evaluate through reflective journals. Self-evaluation is the most important indicator of independent learning (Shamdas, 2023). Students also show real involvement in learning so that learning creative writing feels beneficial for student development. Student involvement in learning influences academic achievement (Jaya & Sucipto, 2023). Apart from that, learning is also carried out systematically and based on discovery when thinking about things to write about. In this case, discovery-based learning improves student's critical thinking skills (Sabur et al., 2023).

Metacognitive strategies influence learning. Students need to develop their metacognitive skills continuously. Metacognitive knowledge and skills develop with age. However, to build metacognitive knowledge and skills, students need support and explicit instructions from teachers and parents (Beach et al., 2020). Efforts that teachers can make to encourage student's metacognition, namely: using explicit language to describe metacognition and self-regulation, asking investigative and discovery questions, providing specific examples, modeling metacognitive behavior and highlighting exemplary behavior, and encouraging students to transfer and relate their learning to other topics and experiences. Parenting efforts that can be implemented by parents to encourage student's metacognition, namely: encouraging the use of metacognitive language to describe learning experiences, creating a challenging and independent learning environment, generating student's self-confidence, people taking responsibility for learning, providing responses and certain emotional reactions to learning, and approaching learning failures with more support and less control. Apart from that, to help student's thinking processes, things that teachers can do are: providing academic-oriented feedback, giving praise for their thoughts and ideas in making decisions, and providing direct guidance, especially about things that students need to do. students in certain situations, applying problem-solving and inquiry, teaching students to ask themselves questions about the problem or task they are working on, and emphasizing higher-order thinking skills in the classroom (Fathima & Saravanakumar, 2012).

4. Conclusion

The application of metacognitive strategies in essay writing learning shows clear stages of progress. In the first stage (Week 1), students begin to recognize metacognitive strategies with a focus on awareness of thought processes, especially in planning the content of writing. In the second stage (Week 2), students show significant improvement when they are able to organize ideas more coherently and relevantly to the topic. In the third stage (Week 3), students demonstrate maturity in developing arguments, enriching descriptions, and improving paragraph cohesion and coherence, resulting in a significant increase in essay writing ability scores. However, in the fourth stage (Week 4), students show slowing development of abilities, and in the fifth stage (Week 5), stagnation occurs as indicated by the absence of statistically significant differences. This stagnation occurs due to the phenomena of the learning plateau and the ceiling effect. This condition causes students to achieve skill stability according to the treatment given. In addition, the relatively short duration of treatment, assessment instruments/rubrics that are less sensitive to small changes, and decreased motivation also contribute to the stagnation. Thus, this study concludes that metacognitive strategies are effective in improving essay writing skills at the early to intermediate stages, but to achieve sustainable development, long-term treatment, variations in learning strategies, and more adaptive evaluation instruments are needed so that students can overcome the plateau point in creative essay writing skills. Furthermore, the implementation of learning and writing assessments need to be designed in such a way that students can gain more meaningful experiences while studying. Students who use metacognitive strategies indirectly are also taught to write systematically, starting from planning ideas, realizing ideas in their minds into meaningful writing, and evaluating and revising the results of their writing. During the writing assessment, students are also guided by an assessment rubric so that they can assess their own writing. In fact, his colleagues can also provide input on his writing. Metacognitive strategies are recommended in learning creative writing because apart from forming independence in learning, students will also get used to thinking

about whatever they are going to do and can reflect on every action they take. Students can think about the most effective strategies to use in learning according to their learning needs.

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