Implementation of the Mind Mapping Model to Improve Students' Writing Creativity in Indonesian Language Learning at SMP Negeri 1 Panga

Munawarah[1], SMP Negeri 1 Panga, Indonesia
Irma Yalis[2], SMP Negeri 1 Panga, Indonesia

ABSTRACT

This study explores the effectiveness of the Mind Mapping learning model in enhancing the creativity of ninth-grade students in writing Indonesian language essays at SMP Negeri 1 Panga. Writing is a critical skill that reflects students' ability to organize ideas, express opinions, and communicate effectively. However, many students face difficulties in generating ideas, structuring essays, and developing originality, which hinders their writing creativity. The research employed a Classroom Action Research (CAR) design, conducted over two cycles consisting of planning, acting, observing, and reflecting stages. Participants included 32 ninth-grade students aged 14–15 years. Data were collected through essay assessments, observation of student engagement, and documentation of classroom activities. Quantitative data were analyzed using descriptive statistics, while qualitative data provided insights into students' creativity, idea generation, and writing processes. Findings indicate significant improvement in students' writing creativity after implementing the Mind Mapping model. The percentage of students meeting the creativity criteria increased from 40% in the preliminary assessment to 87% in the second cycle. Observations revealed enhanced idea organization, originality, and engagement in writing tasks. The study concludes that the Mind Mapping model is an effective instructional strategy for fostering writing creativity in Indonesian language classes, supporting students' cognitive, organizational, and creative development.

Corresponding Author:

Munawarah
SMP Negeri 1 Panga, Indonesia
munawarahmm768@gmail.com

Introduction

Writing is a fundamental skill in education, serving as a medium for students to express ideas, opinions, and critical thinking (Graham & Perin, 2007). In secondary education, effective writing requires not only mastery of language conventions but also creativity in organizing and presenting ideas. Despite its importance, many students experience challenges in essay writing, including difficulty generating ideas, organizing thoughts,

and producing original content (Torrance, 2010). These challenges often result in low creativity scores and reduced motivation in language classes.

Creativity in writing involves generating unique ideas, making connections between concepts, and expressing thoughts in a coherent and engaging manner (Runco & Acar, 2012). Enhancing writing creativity is therefore essential for fostering critical thinking and independent learning among adolescents. The Mind Mapping model offers a structured approach to organizing ideas visually, which can enhance cognitive processing and stimulate creativity (Buzan, 2018). Mind maps allow students to identify main topics, subtopics, and relationships, making abstract concepts more concrete and manageable.

Research has shown that Mind Mapping improves not only idea generation but also memory retention and comprehension, supporting both the creative and cognitive aspects of learning (Novak & Cañas, 2008). These benefits are particularly relevant for essay writing, where idea organization is critical. Classroom Action Research (CAR) is an appropriate methodology for implementing Mind Mapping in real classrooms. CAR involves iterative cycles of planning, acting, observing, and reflecting, allowing teachers to adjust instructional strategies based on students' progress and needs (Kemmis, McTaggart, & Nixon, 2014).

Preliminary observations at SMP Negeri 1 Panga indicated that ninth-grade students struggled to develop coherent and creative essays. Most students produced texts with limited originality, repetitive ideas, and poor organization, highlighting the need for innovative instructional strategies. The Mind Mapping model aligns with constructivist principles, emphasizing active engagement, knowledge construction, and meaningful learning experiences (Jonassen, 2000). By visually representing ideas, students actively organize information and establish connections between concepts.

Implementing Mind Mapping can also enhance motivation and engagement in writing activities. Visual representation and interactive brainstorming make the writing process more enjoyable and less intimidating, encouraging students to experiment with new ideas and expression styles (Al-Jarf, 2009). Teachers play a crucial role in guiding students through the Mind Mapping process. Providing scaffolding, modeling, and feedback helps students utilize the tool effectively and fosters independent thinking and creativity (Gagne, 2013).

Assessing writing creativity requires evaluating originality, idea richness, coherence, and language use (Amabile, 1996). Using clear rubrics allows for systematic measurement of students' progress and provides actionable insights for improving instructional methods. Previous studies indicate that integrating Mind Mapping into writing instruction significantly improves students' creativity, essay structure, and overall

writing quality (Farrand, Hussain, & Hennessy, 2002). These findings suggest that Mind Mapping is a practical and evidence-based approach for language classrooms.

The iterative nature of CAR enables teachers to refine Mind Mapping activities based on observed difficulties, such as inadequate idea generation or organizational challenges. Adjustments in subsequent cycles enhance the effectiveness of the intervention (Burns, 2010). Mind Mapping not only improves cognitive and creative aspects of writing but also promotes collaboration and peer learning. Group brainstorming and discussion using Mind Maps foster exchange of ideas, feedback, and mutual inspiration among students (Buzan, 2018). In conclusion, the Mind Mapping model provides a structured, engaging, and evidence-based approach to enhancing writing creativity. Implementing this model in ninth-grade Indonesian language classes has the potential to significantly improve students' idea generation, organization, and expression, addressing observed deficiencies in traditional writing instruction.

Methods

This study employed a Classroom Action Research (CAR) design, a well-established approach for improving teaching and learning practices through iterative cycles of planning, acting, observing, and reflecting (Kemmis, McTaggart, & Nixon, 2014). CAR is particularly suitable for implementing innovative instructional strategies such as the Mind Mapping model. Participants consisted of 32 ninth-grade students aged 14–15 years at SMP Negeri 1 Panga. This class was selected purposively due to preliminary observations indicating low writing creativity, difficulties in generating ideas, and poor essay organization. Both male and female students were included to represent the typical classroom demographic.

The intervention applied the Mind Mapping model, which involves visually organizing ideas into hierarchical and connected structures. Students were guided to identify main topics, subtopics, and supporting details, enabling clearer organization of essay content and facilitating idea generation (Buzan, 2018). The study was conducted over two CAR cycles, each including planning, acting, observing, and reflecting stages. In the planning stage, teachers prepared lesson plans, Mind Mapping templates, and assessment rubrics. During the acting stage, students created Mind Maps and developed essays based on them. Observations focused on engagement, idea generation, and essay organization. Reflection enabled teachers to adjust strategies to address observed challenges (Burns, 2010).

Data collection employed multiple instruments to ensure triangulation. Essay assessments measured creativity, coherence, and originality. Observation sheets recorded classroom participation, interaction, and engagement. Documentation included student Mind Maps and written essays, providing evidence of idea development and organization. This mixed-method approach allowed comprehensive

analysis of both quantitative and qualitative outcomes (Creswell & Plano Clark, 2017). Essay assessments were scored using a standardized rubric assessing originality, idea richness, logical organization, and language accuracy (Amabile, 1996). This ensured consistent evaluation of student writing creativity across all cycles.

Triangulation of data enhanced trustworthiness. Quantitative scores were analyzed descriptively, calculating averages, mastery percentages, and improvement rates. Qualitative data were analyzed thematically, identifying patterns in students' creative processes, engagement, and idea generation (Miles, Huberman, & Saldaña, 2014). The success criteria for the intervention were: (1) at least 80% of students demonstrating creativity scores meeting or exceeding the rubric standards, and (2) observable improvement in idea generation, essay organization, and engagement during writing tasks (Graham & Perin, 2007).

Ethical considerations were strictly observed. School authorities, teachers, and parents provided informed consent. Students participated voluntarily, and anonymity was maintained. All activities adhered to ethical standards for educational research, ensuring a safe and supportive learning environment (BERA, 2018). In summary, this methodology combined CAR with the Mind Mapping model and mixed-methods data collection to systematically enhance writing creativity. Iterative cycles and multiple data sources provided both practical classroom insights and empirical evidence for the effectiveness of Mind Mapping in fostering creative essay writing.

Result

Initial assessment of ninth-grade students at SMP Negeri 1 Panga revealed that only 40% of students met the creativity criteria in their Indonesian language essays. Common issues included limited idea generation, poor essay organization, and lack of originality in content (Runco & Acar, 2012). During the first CAR cycle, students were introduced to the Mind Mapping model. Observations indicated increased engagement, with students actively brainstorming ideas and connecting concepts visually. After the first cycle, the percentage of students achieving creativity criteria rose to 65%, demonstrating initial improvement in idea generation and essay structure (Buzan, 2018).

Quantitative analysis showed that average essay scores increased from 62.5 in the pre-test to 74.3 after Cycle I. Students exhibited better coherence in essays and improved use of supporting details. Mind Maps helped them organize main ideas, subtopics, and examples systematically (Novak & Cañas, 2008). In Cycle II, scaffolding strategies were refined based on observations. Teachers encouraged students to elaborate on ideas, add creative elements, and revise drafts based on peer feedback. This resulted in further improvements, with 87% of students meeting the creativity criteria in post-test assessments.

Documentation of student work revealed richer content, originality in expressions, and enhanced logical flow of essays. Students demonstrated the ability to connect ideas in innovative ways, reflecting higher-order thinking and creative problem-solving skills in writing (Amabile, 1996). Observation data also indicated heightened motivation and confidence. Students who were initially reluctant to write became active participants, showing enthusiasm in brainstorming sessions and eagerness to present their Mind Maps and essay drafts (Graham & Perin, 2007).

Comparative analysis of pre- and post-intervention assessments revealed gains across multiple dimensions of writing creativity, including originality, organization, coherence, and elaboration of ideas. These results confirm the effectiveness of Mind Mapping as a pedagogical strategy to enhance creative writing in language classrooms (Torrance, 2010). Overall, the findings demonstrate that the Mind Mapping model significantly improves both cognitive and affective aspects of writing. Students not only developed better essay organization and idea generation but also displayed increased engagement, confidence, and motivation, highlighting the comprehensive impact of the intervention.

Further analysis of student essays revealed improvements in idea elaboration. Many students moved beyond listing facts and instead developed supporting details, examples, and explanations for their main ideas. This indicates enhanced cognitive engagement and deeper processing of content (Runco & Acar, 2012). Students also demonstrated increased originality in their writing. Essays contained more unique perspectives, creative expressions, and imaginative storylines. Mind Mapping encouraged them to explore alternative ideas and make connections between concepts that were previously overlooked (Amabile, 1996).

The Mind Mapping process helped students with logical essay organization. Previously, many students' essays lacked clear structure, but post-intervention essays displayed coherent introductions, well-developed body paragraphs, and concise conclusions. This structure facilitated clarity of communication and improved readability (Novak & Cañas, 2008). Observation data revealed significant improvements in student participation. Students who were initially passive during writing activities became active contributors in class discussions, peer reviews, and Mind Map presentations. Increased engagement fostered a collaborative learning environment, enhancing overall learning outcomes (Graham & Perin, 2007).

Quantitative assessment of essay quality showed an overall increase in average scores from 62.5 (pre-test) to 85.1 (post-test after Cycle II). The percentage of students achieving mastery in creativity rose from 40% to 87%, demonstrating substantial effectiveness of the Mind Mapping model in improving writing skills (Torrance, 2010). Documentation of Mind Maps showed that students increasingly utilized hierarchical

organization and visual cues such as colors, symbols, and arrows. This visual representation supported memory retention, idea development, and cognitive flexibility in essay writing (Buzan, 2018).

The intervention also positively influenced affective aspects of learning. Students expressed greater confidence in their writing abilities, were more willing to take risks in exploring ideas, and exhibited persistence in revising and improving their work. This highlights the model's role in fostering intrinsic motivation (Amabile, 1996). Finally, longitudinal observation indicated that the skills gained from Mind Mapping were transferable. Students reported using Mind Mapping strategies in other subjects, such as history and science, to organize information and enhance creativity, suggesting the broader applicability of the method beyond language learning (Novak & Cañas, 2008).

Discussion

The results demonstrate that the Mind Mapping model significantly improved students' writing creativity. Initial challenges, such as limited idea generation and poor essay organization, were addressed effectively through structured visual mapping of ideas. This finding aligns with previous research showing that Mind Mapping enhances creative thinking and cognitive organization (Buzan, 2018). The hierarchical structure of Mind Maps helped students systematically organize main ideas, subtopics, and supporting details. This approach not only improved essay coherence but also facilitated deeper cognitive processing, enabling students to connect concepts and expand their ideas (Novak & Cañas, 2008).

Enhanced originality in student essays indicates that Mind Mapping fosters divergent thinking. By visually exploring multiple possibilities and relationships, students generated unique perspectives and expressions, which supports Amabile's (1996) theory that structured creative tools stimulate innovative thought. Observations revealed increased engagement and collaboration during writing activities. Students actively participated in peer discussions, shared ideas, and provided feedback. Collaborative Mind Mapping sessions promoted social learning and reinforced understanding, consistent with findings by Graham & Perin (2007) on collaborative writing strategies.

The iterative CAR cycles allowed teachers to refine instruction based on observed difficulties. Adjustments such as scaffolding prompts and guidance for idea elaboration helped students progress from partial understanding to mastery, supporting Burns' (2010) view that reflective cycles enhance teaching effectiveness. Motivation and confidence improved alongside cognitive skills. Students expressed willingness to experiment with ideas and revise drafts, reflecting intrinsic motivation and self-efficacy. This affective growth is crucial for sustaining engagement in complex writing tasks (Torrance, 2010).

Documentation of Mind Maps showed that students increasingly used visual cues, colors, and symbols to organize and elaborate ideas. This strategy enhanced memory retention, conceptual clarity, and creative connections, demonstrating the dual cognitive and creative benefits of Mind Mapping (Novak & Cañas, 2008). Overall, the study confirms that Mind Mapping is an effective instructional strategy for improving writing creativity in secondary education. It supports idea generation, organizational clarity, originality, engagement, and motivation, highlighting its value as a holistic pedagogical tool for enhancing student learning outcomes (Runco & Acar, 2012).

Conclusion

The implementation of the Mind Mapping model significantly enhanced ninth-grade students' creativity in writing Indonesian language essays. Students demonstrated improved idea generation, originality, coherence, and essay organization, with mastery increasing from 40% in the pre-test to 87% after two CAR cycles. Beyond cognitive gains, the intervention fostered greater motivation, engagement, collaboration, and confidence, indicating both affective and cognitive development. These findings confirm that Mind Mapping is an effective instructional strategy for promoting holistic growth in writing skills, providing students with practical tools to organize ideas creatively and communicate them effectively.

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