

EDUCATION

Enhancing Grade 3 Pupils' Composition Writing and Behavior through the Use of Manipulative Objects

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Abstract

This action research examined the effectiveness of manipulatives in improving the composition-writing performance and classroom behavior of Grade 3 pupils at one of the public elementary schools in Misamis Occidental during the School Year 2025–2026. Guided by the need to address pupils' difficulties with writing and classroom engagement, the study employed a classroom-based action research design using a single-group pretest-posttest approach. The respondents were selected using purposive sampling, involving pupils who were officially enrolled in Grade 3 and met the inclusion criteria. Data were gathered through a researcher-developed composition writing test, a behavioral observation checklist, and lesson plans integrating manipulatives, and were analyzed using descriptive statistics and a paired t-test. Findings revealed that pupils initially demonstrated low performance in composition writing and satisfactory classroom behavior before the intervention. After the integration of manipulatives, both composition writing skills and classroom behavior significantly improved, with better idea generation, organization, vocabulary use, grammar accuracy, engagement, and participation in writing tasks. The study concludes that manipulative objects are effective instructional tools in enhancing both the writing performance and classroom behavior of Grade 3 pupils. It recommends that teachers consistently integrate manipulative-based strategies in writing instruction. At the same time, school administrators support their implementation through training, resources, and sustained instructional support to strengthen learners' writing development and engagement.

Keywords: behavior; composition writing; manipulative objects

1 Introduction

1.1 Context and rationale

Effective composition writing in the elementary grades is closely intertwined with pupils' classroom behavior, engagement, and self-regulation. Writing requires sustained attention, cognitive control, and the ability to manage complex academic tasks, making positive classroom behavior a critical foundation for successful written composition (Graham et al., 2022). When pupils demonstrate appropriate on-task behavior, self-management, and emotional regulation, they are better positioned to plan, organize, and express ideas clearly in written form. Conversely, challenging classroom behaviors can disrupt instructional flow and significantly hinder pupils' writing development and academic participation (Smith et al., 2022).

Despite its importance, many elementary pupils continue to experience significant difficulties in writing. Writing is widely regarded as a demanding and complex task, especially for pupils and those in English as a Foreign Language (EFL) or multilingual contexts (Koç et al., 2022). Many learners struggle to choose the suitable academic words, organizing ideas, and writing well-organized paragraphs (Aldabbus, 2022). Moreover, pupils' persistent difficulties in composition writing are

often accompanied by low engagement, weak self-regulation, and off-task classroom behaviors that hinder their ability to plan, organize, and complete written tasks effectively. A wide range of instructional approaches has been implemented to enhance students' writing skills (Ngilangil and Tuisa Jr., 2025).

Methodical intervention can assist in tackling the challenges that primary learners face with writing. Explicit and systematic literacy interventions, particularly those delivered individually or in small groups and incorporating multiple components, can improve pupils' reading and writing-related skills (Al Otaiba et al., 2023). Additionally, curriculum standards such as the Common Core State Standards emphasize the development of opinion, informational, and narrative writing skills for all learners, including multilingual students (Lewis, 2024). Pupil's writing difficulties may arise from a range of cognitive, linguistic, and affective factors, and multifaceted instruction use to enhance pupil's composition writing (Patty, 2024). Within this framework, using manipulative objects can act as a concrete and organized instructional intervention, offering students visual and hands-on cues that help them develop and arrange their ideas before they write.

Although these approaches have yielded promising results, persistent writing difficulties remain evident in many elementary classrooms, particularly in under-resourced and multilingual settings. In such contexts, pupils often exhibit low writing engagement, writing anxiety, and weak structural organization, while teachers face challenges related to classroom management and instructional complexity (Ngilangil and Tuisa Jr., 2025). Challenging classroom behaviors and limited student self-regulation further interfere with effective writing instruction, highlighting the need for integrated strategies that support both academic and behavioral outcomes (Zoder-Martell et al., 2023).

Pairing effective teaching methods with a supportive learning environment can greatly support the growth of pupils' composition writing skills and enhance their behavior in the classroom. Research suggests that methodical, scaffolded, and process-oriented writing instruction promotes writing fluency, academic self-efficacy, and sustained improvement in writing performance (Akhmedova, 2025). Moreover, studies on classroom engagement highlight the benefits of using physical manipulatives and hands-on activities to increase student motivation, confidence, and conceptual understanding across subject areas (Angco and Angco, 2024). Although manipulatives are traditionally associated with mathematics instruction, emerging evidence suggests their potential value in enhancing engagement and learning processes more broadly (Laski et al., 2023).

Despite extensive research on writing instruction and growing evidence supporting the use of manipulatives and structured classroom management systems, there remains a notable practical knowledge gap in the existing literature. While previous studies emphasize the theoretical value of manipulative objects, limited action research translates these concepts into concrete classroom practices, particularly in elementary writing instruction. The use of manipulatives as tools for managing behavior and enhancing composition writing among young learners remains underexplored. Most prior studies focus on general learning outcomes rather than specific writing skills and behavioral improvements. Additionally, much of the existing research focuses on higher education, with minimal attention to classroom-based applications for elementary pupils (Miles, 2017).

This study aims to address this research gap by examining how manipulative objects affect Grade 3 pupils' composition-writing performance and classroom behavior. Specifically, it seeks to determine whether the use of manipulatives can improve pupils' ability to generate ideas, organize sentences, and remain focused during writing activities, and the extent to which these tools enhance overall classroom management. The findings are expected to contribute to improved instructional practices

by reducing time spent addressing misbehavior and increasing engagement in meaningful writing tasks. Aligned with Sustainable Development Goal 4 on quality education, this action research aims to provide educators, school administrators, and policymakers with practical, research-based strategies to improve pupils' composition writing and behavior through the purposeful use of manipulatives.

1.2 Intervention

Concrete objects can be useful in different classroom settings because they give pupils the chance to actively participate and interact with the learning materials and with their classmates. Unlike traditional teaching methods that mainly depend on teacher explanations, the use of manipulatives allows pupils to take a more active role in the learning process (Siller and Ahmad, 2024). Through seeing, touching, arranging, and manipulating the materials, pupils can better understand ideas and connect them to what they are learning. In this action research, manipulative objects are used as a strategy to support Grade 3 pupils' composition writing and classroom behavior. These materials include picture cards, word and phrase strips, sentence strips, story sequence cards, graphic symbols, and simple writing organizers. The use of manipulatives enables pupils to visualize ideas, organize thoughts, and construct coherent sentences, thereby supporting the writing process and sustaining attention during composition activities (Byrne et al., 2023).

During the implementation phase of the action research, manipulative objects are systematically integrated into composition writing lessons. At the beginning of each lesson, pupils are introduced to the manipulatives to activate prior knowledge and generate ideas for writing. Pupils use picture cards and story-sequence materials to plan their compositions, arrange word and sentence strips to form complete, meaningful sentences, and organize events logically before writing them on paper. The teacher facilitates the activity by guiding pupils in manipulating the materials, modeling correct sentence structure, and reinforcing expected classroom behavior. Research indicates that hands-on learning materials support pupils' engagement, conceptual organization, and sustained attention during academic tasks (Gilligan-Lee et al., 2023). Throughout the writing process, pupils are encouraged to work individually or in small groups using the manipulatives, which helps maintain focus, improve collaboration, and reduce disruptive behavior. Such structured and interactive instructional approaches have been shown to enhance student engagement and promote positive classroom behavior when effectively guided by the teacher (Smith et al., 2022).

1.3 Statement of the problem

This action research aimed to enhance Grade 3 pupils' composition writing and behavior by using manipulatives in one of the elementary schools in Misamis Occidental during SY 2025-2026. Specifically, this study answered the following questions:

1. What is the level of pupils' composition writing before the implementation of manipulative objects?
2. What is the level of pupils' composition writing after the implementation of manipulative objects?
3. What is the level of pupils' behavior before the implementation of manipulative objects with the use of a checklist observation?
4. What is the level of pupils' behavior after the implementation of manipulative objects with the use of a checklist observation?

5. Is there a significant difference in pupils' composition writing before and after the implementation of manipulative objects?
6. Is there a significant difference in pupils' behavior before and after the implementation of manipulative objects with the use of a checklist observation?

1.4 Null hypotheses

H₀1: There is no significant difference in the level of composition writing of Grade 3 pupils before and after the implementation of the manipulative objects.

H₀2: There is no significant difference in the level of behavior of Grade 3 pupils before and after the implementation of manipulative objects.

2 Methods

2.1 Research design

This study employed a classroom-based action research approach using a single pretest-posttest design to evaluate a strategy by measuring Grade 3 pupils' composition writing and behavior before and after its implementation. The design was deemed appropriate in this study because it allows researchers to assess Grade 3 pupils' composition writing and behavior using manipulatives. Before the manipulative objects, a researcher-made pretest assessing descriptive writing abilities was administered to the participant group. Following the intervention, a post-test, identical to the pretest, was administered. The impact of manipulative objects on learners' descriptive writing was determined by comparing pre- and post-test scores using appropriate statistical analyses.

2.2 Research setting

This study was conducted in one of the public elementary schools situated in Ozamiz City, Misamis Occidental, Philippines. This study was conducted during the academic year 2025-2026. The school employed a departmentalized instructional approach, facilitating specialized instruction across various subject areas. This school offers Special Science Classes, one Special Needs Education (SNED) class, and heterogeneous classes. The target group for this study is Grade 3-Hawk, a section consisting of 41 pupils.

2.3 Respondents of the study

This study includes 31 Grade 3 Pupils. The respondents were chosen through purposive sampling on the following criteria: (1) currently enrolled in Grade 3, Academic year 2025-2026 in one of the Public Elementary School (2) willing to provide informed consent. The exclusion criteria include pupils who are not enrolled in Grade 3 Hawk and those who do not provide consent to participate in the study.

2.4 Research instruments

The study used the following questionnaires as data-gathering instruments:

Grade 3 pupils' composition writing (Appendix A). This researcher-designed test, consisting of a 7-item essay test with the use of a scoring rubric, evaluated Grade 3 pupils' composition writing before and after the implementation of manipulative objects. To ensure validity, experts in education reviewed the questionnaire and refined it for clarity, relevance, and accuracy. To check reliability,

Cronbach's alpha was used to measure internal consistency. The items were relevant to this study since they emphasize the level of pupils' behavior and their composition writing.

Table 1. Scoring scale of the composition writing test.

Score range	Interpretation
19–20	Outstanding
18	Very satisfactory
16–17	Satisfactory
15	Fairly satisfactory
14–1	Did not meet expectations

Grade 3 pupils' behavior (Appendix B). This researcher developed a checklist and evaluated Grade 3 pupils' behavior before and after the implementation of manipulatives. The checklist contains short, age-appropriate indicators that the teacher rates during each 45-minute lesson, progressing from concrete manipulatives to pictorial representations and, finally, to abstract symbols. To ensure validity, education experts reviewed the questionnaire, refining it for clarity, relevance, and accuracy. To check reliability, Cronbach's alpha was used to measure internal consistency. The items were relevant to this study since they emphasize the level of pupils' behavior and their composition writing.

Grade 3 Pupils' behavior was measured using a 5-point Likert scale, with 5 representing excellent and 1 representing poor performance and minimal engagement.

Table 2. Scale of the behavior checklist.

Responses	Continuum	Interpretation
5	4.20–5.0	Excellent
4	3.40–4.19	Very good
3	2.60–3.39	Good
2	1.80–2.59	Poor
1	1.0–1.79	Very poor

Lesson Plan (Appendix C). In this study, Manipulative Objects were integrated into the Grade 3 English Lesson Plan, covering literary and expository texts. Each 45-minute session begins with a short review, followed by teacher-led instruction using concrete manipulatives and guided practice. To ensure validity, education experts reviewed the plan for clarity, relevance, and alignment with Grade 3 competencies.

2.5 Data collection

Pre-Implementation Phase. Prior to data collection, ethical clearance was obtained from the relevant authorities, including the college dean, the DepEd superintendent, the school principal, the program head, and the resource teacher. Following approvals, the study's purpose and ethical protocols were communicated to participants. Existing college data were documented, recorded, and analyzed using Microsoft Excel and Minitab software. Concurrently, lesson plans incorporating

manipulatives for collaborative development were implemented. Pre- and post-test questionnaires were developed to assess Grade 3 pupils' composition writing and behavior. Face-to-face instruction and progress monitoring were prioritized during the implementation phase of the intervention.

Implementation Phase. This study employed a pretest/post-test design to evaluate the effectiveness of manipulatives in enhancing Grade 3 pupils' composition writing and behavior. Data collection included pre- and post-test assessments among Grade 3 pupils. Observations and documentation of pupil engagement were conducted throughout the intervention. A quantitative analysis of pre- and post-test scores was performed to determine the impact of the intervention.

Post-Implementation Phase. Post-intervention data were used to assess the efficacy of manipulatives in enhancing Grade 3 pupils' composition writing behavior. Descriptive statistics (mean and standard deviation) summarized the pre- and post-intervention performance. A t-test was used to assess the statistical significance of any observed differences. Thematic analysis of the interview data provided qualitative insights into the participants' experiences. The findings will be compiled into a research report, disseminated to stakeholders (teachers, administrators, policymakers), and potentially presented at a seminar/workshop. The research process itself was critically reflected upon, identifying strengths, limitations, and future research directions for technology-mediated writing instruction.

2.6 Ethical consideration

The ethical standards in conducting the study were upheld by adhering to the Data Privacy Act of 2012 (Republic Act No. 10173). Approval was sought from the Misamis University Research Ethics Committee (MUREC) to ensure compliance with institutional and ethical research standards. Due to the small number of participants, a consent form was given to the parents or guardians of the 41 Grade 3 Hawk pupils. In contrast, the pupils gave their assent form, signifying voluntary participation. Both parents and pupils were informed about the purpose of the study. All personal data was strictly confidential; participants were given the freedom to provide their personal information. The right to withdraw was explicitly stated in the consent form; therefore, participants could withdraw from participating at any time. To ensure data safety, all information gathered was stored in password-protected computer files and secure physical storage. The data were then presented with unique identifiers rather than names to ensure anonymity. All electronic data was encrypted, and access was restricted to authorized personnel. After the study was complete, the data were stored securely for a specified period before being permanently erased to prevent unauthorized use.

2.7 Data analysis

The study used the following tools in analyzing the data gathered with the use of Jamovi Software:

- *The Mean and Standard Deviation* were used to determine the levels of Grade 3 pupils' composition writing and behavior before and after the use of manipulatives.
- *The Paired-T Test* was used to examine the significant difference in Grade 3 pupils' composition writing and behavior.

2.8 Dissemination plan

This study was shared with school administrators, cooperating teachers, and Grade 3 pupils and parents through reports, discussions, and simple summaries, ensuring that they understood the benefits of manipulatives. Consent and assent procedures were highlighted when sharing results with

pupils and parents to emphasize ethical research practices. The findings were presented through poster presentations and to other educators through seminars, presentations, and publications to support improved teaching strategies.

2.9 Utilization plan

The results of the study will be used in various areas to improve teaching and learning practices. In the classroom, manipulatives will be used in every activity to enhance students' composition writing and behavior. This intervention will also be shared with cooperating teachers during mentoring sessions to support their professional development. Additionally, the findings will guide lesson planning, school improvement decisions, and future research aimed at strengthening pupil engagement and learning retention.

2.10 Cost estimate

The estimated budget for conducting this study is broken down below, drawn from the proponent's personal funds. The proponent has a personal laptop and printer.

Table 3. Estimated budget of the study.

Materials	Amount
1 ream short bond paper	Php 175.00
1 set 664 ink	Php 1,000.00
2 sliding folders	Php 15.00 x 2 (Php 30.00)
Tokens (ballpen)	Php 1,000.00
Snacks	Php 1,500.00
Total	Php 3,705.00

3 Results and discussion

3.1 Level of Grade 3 pupils' composition writing before the implementation of manipulative objects

Table 4 presents the pupils' composition writing performance before the implementation of manipulative objects. The overall result revealed that the pupils demonstrated a very low level of composition writing skills, as reflected in the total mean score of ($M = 1.70$, $SD = 0.23$). This finding indicates that the Grade 3 pupils encountered significant difficulties in expressing ideas, organizing thoughts, and applying appropriate grammar and vocabulary in written compositions. Pupils may have had limited exposure to meaningful and engaging writing activities that could enhance their confidence and competence in composition writing. It emphasized that elementary learners require interactive and collaborative writing experiences to improve their ability to construct and communicate ideas effectively (Bouwer and Van der Veen, 2024). This suggests that the pupils' very low performance may stem from the absence of stimulating instructional approaches and concrete learning experiences that could strengthen their writing development. Meaningful writing activities and learner-centered interventions significantly improve pupils' writing proficiency, especially among beginning writers in elementary education (Skar et al., 2024).

Among the four constructs, Ideas and Content obtained the highest mean score ($M = 1.95$, $SD = 0.30$), interpreted as Low. This was followed by Organization, with a mean score of $M = 1.80$ ($SD = 0.23$), also interpreted as Low. Meanwhile, Vocabulary had a mean score of $M = 1.59$ ($SD = 0.19$), interpreted as Very Low. Lastly, Grammar and Mechanics recorded the lowest mean score ($M = 1.46$, $SD = 0.20$), likewise interpreted as Very Low. These findings indicate that prior to the intervention, the Grade 3 pupils experienced considerable difficulties in developing composition-writing skills, particularly in the technical aspects of writing, such as grammar, mechanics, and vocabulary. Among the four fundamental English language skills—reading, speaking, listening, and writing—writing can be particularly challenging for learners. Anistasya (2022) emphasized that difficulties in vocabulary can affect learners' ability to express their ideas effectively in written English, as limited vocabulary may make it difficult for them to construct sentences and communicate their thoughts clearly. Vocabulary limitations and weak sentence-construction skills are common barriers for elementary pupils, especially when writing instruction lacks explicit scaffolding (Limpo and Alves, 2022).

Although pupils showed a slightly better ability to generate ideas and organize their thoughts, they still struggled to express these ideas effectively through appropriate vocabulary and correct grammatical structures. The low performance in Ideas and Content and Organization may indicate that the pupils possessed limited prior experiences and insufficient exposure to guided writing activities. Furthermore, the very low ratings in Vocabulary, Grammar, and Mechanics imply that the pupils had inadequate mastery of the language conventions necessary for meaningful written communication. This condition may be attributed to limited opportunities for interactive and engaging learning experiences that could stimulate pupils' creativity, language development, and confidence in writing. Meaningful and interactive writing interventions significantly improve pupils' ability to organize and express ideas effectively in written form (Bouwer and Van der Veen, 2024). Integration of engaging instructional materials and interactive learning approaches enhances elementary pupils' writing performance, creativity, and vocabulary development (Graham et al., 2023).

Pupils demonstrated very low writing proficiency before the implementation of manipulative objects. Teachers may consider integrating more hands-on, interactive instructional strategies to concretize abstract ideas and motivate pupils to write. The use of manipulative objects may help pupils generate ideas, enrich vocabulary, and improve sentence construction through meaningful experiences. Manipulative and interactive learning materials positively influence learners' engagement and skill development by providing concrete experiences that support understanding and expression. School administrators may also provide training and instructional resources that support innovative writing interventions in the classroom. Moreover, parents may be encouraged to expose children to storytelling, picture description, and language-rich activities at home to strengthen their writing foundation. To address the identified gaps, teachers may implement activities such as object description exercises, guided storytelling using realia, vocabulary games, sentence-building activities, and collaborative writing tasks to enhance pupils' grammar, mechanics, organization, and overall composition writing skills.

Table 4. Level of Grade 3 pupils' composition writing before the implementation of manipulative objects.

Construct	M	SD	Remarks
Ideas and content	1.95	0.30	Low
Organization	1.80	0.23	Low
Grammar and mechanics	1.46	0.20	Very low

Construct	M	SD	Remarks
Vocabulary	1.59	0.19	Very low
Overall	1.70	0.23	Very low

Scale: 4.20–5.00 = very high; 3.40–4.19 = high; 2.60–3.39 = good; 1.80–2.59 = low; 1.00–1.79 = very low.

3.2 Level of Grade 3 pupils' composition writing after the implementation of manipulative objects

Table 5 presents the pupils' composition writing performance after the implementation of manipulative objects in terms of Ideas and Content, Organization, Grammar and Mechanics, and Vocabulary. Overall, the results indicate a very high level of performance, with a mean score of $M = 4.30$ ($SD = 0.22$). This suggests that integrating manipulative objects as an instructional strategy positively enhanced pupils' writing performance across all domains. Pupils were able to effectively express ideas, organize their thoughts, and apply language conventions with a high degree of proficiency after exposure to concrete, interactive learning materials.

Hands-on and multimodal instructional strategies improve young learners' writing development by making abstract language processes more concrete and engaging. For instance, using picture cards, word strips, sentence strips, story sequence cards, and graphic organizers can help pupils develop ideas, arrange their thoughts, create meaningful sentences, and communicate their ideas more confidently. Emphasized that explicit and interactive writing instruction significantly enhances elementary learners' writing quality, particularly in organization and idea development (Graham et al., 2022). Strategy-based writing interventions can improve students' ability to generate and organize ideas effectively, particularly during the early grade levels. Elementary teachers with specific strategies to support developing multilingual writers and can be integrated into traditional literacy activities or content-area instruction (Lewis, 2024).

The overall very high mean score ($M = 4.30$, $SD = 0.22$) further indicates that pupils demonstrated consistent improvement across all writing components after the intervention. This improvement may be attributed to the use of manipulative objects, which likely provided learners with tangible representations of ideas, thereby reducing cognitive load and supporting better organization of thoughts. Among the observed outcomes, Vocabulary Development appeared to be the strongest area, suggesting that manipulatives helped enrich pupils' exposure to and use of words. Meanwhile, although all components were rated very highly, the slightly lower relative performance in Ideas and Content suggests that higher-order thinking skills, such as elaboration and depth of ideas, may still require further instructional support.

Teachers may continue to integrate manipulatives in composition writing instruction as an effective strategy to enhance pupils' writing performance. However, to further strengthen Ideas and Content development, educators are encouraged to incorporate complementary strategies such as guided writing activities, story mapping, collaborative writing tasks, and questioning techniques that promote critical thinking. School leaders may also consider providing professional development programs focused on multimodal and strategy-based writing instruction to ensure sustained improvement in pupils' writing proficiency.

Table 5. Level of Grade 3 pupils' composition writing after the implementation of manipulative objects.

Construct	M	SD	Remarks
Ideas and content	4.10	0.24	High

Construct	M	SD	Remarks
Organization	4.37	0.20	Very high
Grammar and mechanics	4.19	0.19	High
Vocabulary	4.55	0.24	Very high
Overall	4.30	0.22	Very high

Scale: 4.20–5.00 = very high; 3.40–4.19 = high; 2.60–3.39 = good; 1.80–2.59 = low; 1.00–1.79 = very low.

3.3 Level of Grade 3 pupils' behavior before the implementation of manipulative objects

Table 6 presents the pupils' behavior before the implementation of manipulatives in composition writing across cognitive, behavioral, affective, and writing constructs. The overall finding reveals a fairly satisfactory level of behavior, as shown in the overall mean ($M = 2.12$, $SD = 0.43$), indicating that Grade 3 pupils demonstrated limited readiness and engagement in writing tasks prior to the intervention. In terms of specific constructs, cognitive behavior obtained the highest mean ($M = 2.33$, $SD = 0.31$), followed by behavioral ($M = 2.17$, $SD = 0.40$) and affective ($M = 2.08$, $SD = 0.47$) domains, while writing performance obtained the lowest mean ($M = 1.92$, $SD = 0.52$). These results suggest that although pupils had some basic understanding of writing concepts, this did not translate into strong writing output and engagement.

Writing is a complex skill requiring sustained instructional support and practice. As noted in earlier studies, elementary learners often struggle with organizing ideas, selecting appropriate vocabulary, and structuring written outputs, which contributes to weak writing performance (Anistasya, 2022). Similarly, learners' difficulty in writing may be attributed to insufficient exposure to structured writing practice and a lack of motivation, which limit their ability to develop fluency and coherence in composition (Koç et al., 2022). This supports the low writing mean observed in the present study. Moreover, although cognitive understanding appears slightly higher, research suggests that knowledge alone is insufficient unless supported by guided practice and scaffolded instruction that help learners translate ideas into written form (Akhmedova, 2025). Furthermore, behavioral and affective results suggest limited engagement and motivation, which is consistent with studies highlighting that classroom management, student engagement, and emotional readiness significantly influence academic performance (Smith et al., 2022).

The results also reinforce the importance of hands-on and interactive instructional strategies in early literacy development. Studies have shown that manipulative-based instruction greatly improves learners' engagement compared to traditional methods (Siller and Ahmad, 2024). Physical manipulatives, in particular, have been found to enhance conceptual understanding and active participation in learning tasks, especially among young learners (Byrne et al., 2023). Additionally, effective writing instruction requires structured, scaffolded, and process-oriented approaches that gradually build learners' writing competence (Ngilangil and Tuisa Jr., 2025). These findings collectively suggest that the observed low-to-fair writing performance in the present study may be addressed through more interactive, guided, and developmentally appropriate instructional strategies.

Grade 3 teachers and school administrators should strengthen the integration of manipulative-based writing activities to enhance pupils' engagement and performance. Teachers may design writing tasks that incorporate physical objects, visual aids, and guided storytelling to help learners generate and organize ideas more effectively. School heads may support ongoing teacher training in innovative writing strategies, such as Self-Regulated Strategy Development and inquiry-based writing instruc-

tion, to improve both cognitive and behavioral engagement. Additionally, intervention programs focusing on vocabulary enrichment, sentence construction, and guided writing practice should be implemented to address identified gaps in writing performance. These strategies are expected to enhance pupils' motivation, participation, and overall writing competence in composition writing.

Table 6. Level of Grade 3 pupils' behavior before the implementation of manipulative objects.

Construct	M	SD	Remarks
Cognitive	2.33	0.31	Fairly satisfactory
Behavioral	2.17	0.40	Fairly satisfactory
Affective	2.08	0.47	Fairly satisfactory
Writing	1.92	0.52	Fairly satisfactory
Overall	2.12	0.43	Fairly satisfactory

Scale: 4.20–5.00 = outstanding; 3.40–4.19 = very satisfactory; 2.60–3.39 = satisfactory; 1.80–2.59 = fairly satisfactory; 1.00–1.79 = did not meet the expectation.

3.4 Level of Grade 3 pupils' behavior after the implementation of manipulative objects

Table 7 presents the pupils' behavior after the implementation of manipulative objects in enhancing Grade 3 composition writing in terms of cognitive, behavioral, affective, and writing constructs. Overall, the findings reveal a very high level of pupil behavior, with a mean score of $M = 4.33$ ($SD = 0.41$), interpreted as Outstanding. This indicates that the use of manipulatives positively influenced learners' classroom behavior during writing activities, particularly attention, participation, and task engagement. Manipulatives influence learning outcomes depending on how they are integrated into instruction. Manipulative objects contributed to creating a more interactive and structured learning environment that supports positive learner behavior (Laski et al., 2023).

Among the behavioral-related indicators embedded in the constructs, cognitive obtained the highest mean score ($M = 4.35$, $SD = 0.32$), followed closely by writing ($M = 4.34$, $SD = 0.50$), behavioral ($M = 4.33$, $SD = 0.41$), and affective ($M = 4.29$, $SD = 0.39$). The strong cognitive and behavioral ratings suggest that pupils became more attentive, more engaged, and more participatory in writing tasks when manipulatives were used. Structured classroom interventions and self-management strategies improve learners' on-task behavior and reduce disruptive tendencies (Smith et al., 2022). It is emphasized that effective classroom management systems enhance student engagement and behavioral regulation by keeping learners focused and actively involved in academic tasks (Zoder-Martell et al., 2023).

The improvement in pupils' behavior may also be attributed to the engaging and hands-on nature of manipulatives, which reduce boredom and increase active participation during writing tasks. Manipulatives enhance learner engagement, motivation, and classroom participation by creating dynamic and interactive learning environments (Angco and Angco, 2024), spatial and hands-on learning activities significantly improve children's engagement and learning behavior (Gilligan-Lee et al., 2023). Manipulatives serve not only as cognitive tools but also as behavioral supports that encourage positive classroom conduct, sustained attention, and active involvement in learning tasks.

Teachers may continue to integrate manipulatives as a behavior-supportive instructional strategy in composition writing lessons. School administrators may support this by providing training on classroom management strategies that incorporate hands-on learning tools to sustain positive pupil

behavior. Teachers are also encouraged to design structured writing activities that use manipulatives, along with clear behavioral expectations and guided instruction, to further strengthen on-task behavior. Additionally, implementing reflective routines and collaborative writing tasks may further enhance engagement and reduce off-task behavior, ensuring that pupils remain actively involved and motivated throughout the writing process.

Table 7. Level of Grade 3 pupils' behavior after the implementation of manipulative objects.

Construct	M	SD	Remarks
Cognitive	4.35	0.32	Outstanding
Behavioral	4.33	0.41	Outstanding
Affective	4.29	0.39	Outstanding
Writing	4.34	0.50	Outstanding
Overall	4.33	0.41	Outstanding

Scale: 4.20–5.00 = outstanding; 3.40–4.19 = very satisfactory; 2.60–3.39 = satisfactory; 1.80–2.59 = fairly satisfactory; 1.00–1.79 = did not meet the expectation.

3.5 Difference in Grade 3 pupils' composition writing before and after the implementation of manipulative objects

Table 8 presents the significant difference in pupils' composition writing performance before and after the implementation of manipulative objects in terms of Ideas and Content, Organization, Grammar and Mechanics, and Vocabulary. The results show statistically significant improvements across all writing components, as indicated by p-values of 0.001 ($p < 0.05$), leading to the rejection of the null hypothesis. This suggests that the use of manipulative objects had a strong and consistent positive effect on pupils' writing performance across all domains.

Significant improvements were observed in Ideas and Content, with pretest ($M = 1.95$, $SD = 0.30$) and post-test ($M = 4.10$, $SD = 0.24$), ($t = 36.0$, $p = 0.001$). This indicates that pupils became more capable of generating relevant ideas and developing meaningful content after the intervention. Structured and intentional writing instruction, including scaffolded learning and feedback, is essential for developing students' ability to construct meaningful written outputs (Graham et al., 2022). Furthermore, foundational writing skills require early instructional strategies that promote idea development and critical thinking (Yokubjonova, 2024).

For Organization, a significant improvement was also found from pretest ($M = 1.80$, $SD = 0.23$) to post-test ($M = 4.37$, $SD = 0.20$), ($t = 36.0$, $p = 0.001$). This indicates that pupils improved in structuring and sequencing their ideas logically. Systematic instructional approaches and scaffolded learning significantly enhance students' essay organization skills (Akhmedova, 2025). Elementary learners, including multilingual students, require structured strategies to effectively organize ideas across different writing genres (Lewis, 2024). Thus, writing instruction strengthens academic writing development and supports early research literacy (Ngilangil and Tuisa Jr., 2025).

In terms of Grammar and Mechanics, a significant difference was observed between the pretest ($M = 1.46$, $SD = 0.20$) and the post-test ($M = 4.19$, $SD = 0.19$) ($t = 36.0$, $p = 0.001$). This suggests that pupils demonstrated improved accuracy in grammar, punctuation, and writing conventions after the intervention. Poor vocabulary is the major difficulties in elementary when it comes to expressing ideas (Anistasya, 2022). Learners in the early stages of writing often struggle with language accuracy due

to limited opportunities for practice and vocabulary constraints (Koç et al., 2022). The improvement also aligns with the idea that consistent practice and guided instruction are essential in improving writing accuracy (Graham et al., 2022).

For vocabulary, a significant improvement was also recorded from pretest ($M = 1.59$, $SD = 0.19$) to post-test ($M = 4.55$, $SD = 0.24$), ($t = 36.0$, $p = 0.001$). This indicates that pupils enhanced their word choice and lexical range in writing tasks after using manipulative objects. Learners often have difficulty selecting appropriate words when composing texts (Koç et al., 2022). Moreover, effective writing instruction helps learners develop vocabulary needed for different text types and academic purposes (Lewis, 2024).

Overall, all four constructs showed significant differences ($p < 0.05$), indicating that no non-significant results were found in this study. This means that Ideas and Content, Organization, Grammar and Mechanics, and Vocabulary all improved significantly after the implementation of manipulatives. The consistency of these results suggests that manipulatives provide a holistic instructional benefit in improving multiple dimensions of writing performance. In addition, physical manipulatives support meaningful and engaging learning experiences, reinforcing their effectiveness in foundational education (Byrne et al., 2023). Manipulatives promote deeper understanding and engagement, which contribute to improved academic performance (Angco and Angco, 2024).

The findings imply that manipulative objects are a highly effective instructional strategy in improving pupils' composition writing across all key components. Teachers are encouraged to consistently integrate manipulatives into writing instruction, particularly in lessons involving idea generation, organization, grammar development, and vocabulary enrichment. School administrators may support this by providing training programs on manipulative-based pedagogy and process-oriented writing instruction (Ngilangil and Tuisa Jr., 2025). Additionally, teachers may design enriched writing activities such as story sequencing, word-building games, and guided composition tasks using manipulatives to sustain learner engagement and skill development. Continuous monitoring, feedback, and reinforcement strategies should also be implemented to ensure long-term improvement in pupils' writing proficiency.

Table 8. Difference in Grade 3 pupils' composition writing before and after the implementation of manipulative objects (paired t-test).

Construct	M	SD	t	p	Decision
Pretest (ideas and content)	1.95	0.30	36.0	0.001	Reject H_0
Post-test (ideas and content)	4.10	0.24			
Pretest (organization)	1.80	0.23	36.0	0.001	Reject H_0
Post-test (organization)	4.37	0.20			
Pretest (grammar and mechanics)	1.46	0.20	36.0	0.001	Reject H_0
Post-test (grammar and mechanics)	4.19	0.19			
Pretest (vocabulary)	1.59	0.19	36.0	0.001	Reject H_0
Post-test (vocabulary)	4.55	0.24			

Note: H_0 : There is no significant difference between the pupils' level of composition writing before and after the implementation of manipulative objects. $p < 0.05$ = significant.

3.6 Difference in Grade 3 pupils' behavior before and after the implementation of manipulative objects

Table 9 presents the significant differences in pupils' behavior before and after the implementation of manipulative objects across cognitive, behavioral, affective, and writing constructs. The results show that all constructs yielded statistically significant differences ($p < 0.05$), leading to the rejection of the null hypothesis. This indicates that the implementation of manipulative objects had a strong and consistent positive effect on pupils' behavior across all domains.

Significant improvements were observed in the cognitive construct, with pretest ($M = 2.33$, $SD = 0.32$) and post-test ($M = 4.35$, $SD = 0.33$), ($t = 36.0$, $p = 0.001$). This suggests that pupils demonstrated improved mental engagement, comprehension, and idea processing during writing tasks after the intervention. Similarly, highlighted that structured and scaffolded instruction improves learners' cognitive abilities to organize and express ideas in writing. (Graham et al., 2022) .further supported this by emphasizing that early writing instruction strengthens critical thinking and cognitive development in young learners (Yokubjonova, 2024)

For the behavioral construct, a significant difference was also found between pretest ($M = 2.17$, $SD = 0.40$) and post-test ($M = 4.33$, $SD = 0.42$), ($t = 36.0$, $p = 0.001$). This indicates improved pupil engagement, participation, and on-task behavior during writing activities. This finding is supported by Smith et al. (2022), who explained that structured classroom interventions and self-management strategies significantly improve student behavior and reduce off-task activities. Likewise, it emphasized that effective classroom management systems enhance student engagement and academic focus (Zoder-Martell et al., 2023).

In terms of affective behavior, a significant improvement was observed from pretest ($M = 2.08$, $SD = 0.48$) to post-test ($M = 4.29$, $SD = 0.39$), ($t = 36.0$, $p = 0.001$). This indicates that pupils developed more positive emotions toward writing, including increased confidence, enjoyment, and reduced anxiety. This supports Koç et al. (2022), who found that writing is often associated with anxiety and low motivation, but can be improved through engaging instructional strategies.

For the writing construct, a significant difference was also found between pretest ($M = 1.92$, $SD = 0.52$) and post-test ($M = 4.34$, $SD = 0.50$), ($t = 36.0$, $p = 0.001$). This indicates substantial improvement in pupils' writing performance and output quality after the intervention. Studies emphasized that scaffolded instruction and intentional writing practice significantly improve students' essay-writing skills (Akhmedova, 2025), Additionally, elementary learners benefit from targeted instructional strategies that support genre-based writing development (Lewis, 2024)

In this study, there were no non-significant findings across all constructs since all p-values were reported as 0.001 ($p < 0.05$). This indicates that all measured aspects of pupils' behavior and writing showed statistically significant improvement after the implementation of manipulative objects. The consistency of these results suggests that manipulatives have a comprehensive, holistic effect on learners' behavioral and academic development. Moreover, manipulatives enhance engagement, motivation, and learning outcomes of the learners (Angco and Angco, 2024).

The findings imply that manipulative objects are an effective instructional tool in improving pupils' behavior and engagement in composition writing. Teachers are encouraged to integrate manipulatives into writing instruction to enhance cognitive engagement, promote positive classroom behavior, strengthen affective responses, and improve writing performance. School administrators may support this by providing professional development programs focused on manipulative-based and

interactive teaching strategies. Furthermore, teachers may design structured writing activities such as story sequencing, idea mapping, and vocabulary-building tasks using manipulatives to sustain engagement and motivation. Continuous monitoring, feedback, and reinforcement strategies should also be implemented to ensure the sustained improvement of pupils' behavior and writing performance.

Table 9. Difference in Grade 3 pupils' behavior before and after the implementation of manipulative objects (paired t-test).

Construct	M	SD	t	p	Decision
Pretest (cognitive)	2.33	0.32	36.0	0.001	Reject H_0
Post-test (cognitive)	4.35	0.33			
Pretest (behavioral)	2.17	0.40	36.0	0.001	Reject H_0
Post-test (behavioral)	4.33	0.42			
Pretest (affective)	2.08	0.48	36.0	0.001	Reject H_0
Post-test (affective)	4.29	0.39			
Pretest (writing)	1.92	0.52	36.0	0.001	Reject H_0
Post-test (writing)	4.34	0.50			

Note: H_0 : There is no significant difference between the pupils' level of behavior before and after the implementation of manipulative objects. $p < 0.05$ = significant.

4 Summary, findings, conclusions and recommendations

4.1 Summary

This action research explored the effectiveness of manipulatives in enhancing composition writing and classroom behavior among 41 Grade 3 pupils at a public elementary school in Misamis Occidental during School Year 2025–2026. Guided by hands-on and scaffolded learning approaches, the study employed a single-group pretest-posttest action research design using researcher-developed tests, observation checklists, and lesson plans. The mean, standard deviation, and paired t-test were calculated using Jamovi software for data analysis. The findings revealed that before the intervention, pupils demonstrated very low performance in composition writing and fairly satisfactory classroom behavior. After the implementation of manipulatives such as picture cards, sentence strips, and story sequence cards, pupils' writing performance improved significantly to a very high level. In contrast, classroom behavior improved to an outstanding level. Significant differences were found in all writing and behavioral constructs, indicating that manipulative objects positively influenced pupils' engagement, participation, and organization of ideas, vocabulary, grammar, and writing performance. Manipulative objects are effective instructional tools in improving pupils' composition writing and classroom behavior. It is recommended that teachers continuously integrate manipulative-based activities and interactive writing strategies to strengthen learner engagement, motivation, and writing proficiency in elementary classrooms.

4.2 Findings

This study yielded the following findings:

1. The level of Grade 3 pupils' composition writing before the implementation of manipulative objects was found to be very low, indicating that the pupils experienced difficulties in ideas and content, organization, grammar and mechanics, and vocabulary.
2. The level of Grade 3 pupils' composition writing after the implementation of manipulative objects was found to be very high, showing that the pupils significantly improved their writing performance after the intervention.
3. The level of Grade 3 pupils' behavior before the implementation of manipulative objects was found to be fairly satisfactory, indicating limited engagement, participation, and motivation during writing activities.
4. The level of Grade 3 pupils' behavior after the implementation of manipulative objects was found to be outstanding, indicating improved cognitive, behavioral, affective, and writing-related engagement among the pupils.
5. There was a significant difference in the pupils' composition writing before and after the implementation of manipulative objects, which indicated that the intervention significantly improved the pupils' writing performance.
6. There was a significant difference in the pupils' behavior before and after the implementation of manipulative objects, which indicated that the intervention significantly enhanced the pupils' classroom behavior and engagement during writing activities.

4.3 Conclusions

Based on the findings of the study, the following are the conclusions:

1. Grade 3 pupils exhibited a very low level of composition writing performance before the implementation of manipulative objects, indicating limited skills in ideas and content, organization, grammar and mechanics, and vocabulary.
2. Grade 3 pupils achieved a very high level of composition writing performance after the implementation of manipulative objects, showing marked improvement across all writing components.
3. Grade 3 pupils demonstrated a fairly satisfactory level of behavior before the implementation of manipulative objects, indicating low engagement, limited participation, and weak classroom involvement during writing activities.
4. Grade 3 pupils demonstrated an outstanding level of behavior after the implementation of manipulative objects, reflecting improved cognitive engagement, positive affect, active participation, and better writing-related behavior.
5. There is a significant difference in the pupils' composition writing performance before and after the implementation of manipulative objects, indicating that the intervention effectively enhances pupils' writing skills.
6. There is a significant difference in the pupils' behavior before and after the implementation of manipulative objects, indicating that the intervention effectively improves pupils' classroom engagement and behavior during writing tasks.

4.4 Recommendations

Based on the findings and conclusions of the study, it is recommended that:

1. Future researchers may conduct further studies on the use of manipulative objects in other grade levels and subject areas. They may employ a larger sample size and different school settings to enhance the generalizability of results.
2. Elementary teachers may consistently integrate manipulative objects in composition writing lessons and carefully plan lessons by embedding these materials during pre-writing, drafting, and organizing stages to help pupils generate and structure ideas more effectively.
3. School administrators may support the implementation of manipulative-based instruction by providing training, seminars, and instructional materials. They may also encourage teachers to adopt innovative and learner-centered strategies by including them in school-based learning action cell (SLAC) sessions.
4. Curriculum planners and education policymakers may consider incorporating manipulative-based and interactive writing strategies. This can be done by providing clear instructional frameworks and resource support for teachers.
5. Parents and guardians may support children's writing development at home by engaging them in simple writing activities. This can help reinforce vocabulary development and idea generation outside the classroom.
6. Future classroom practice may continuously refine the use of manipulative objects by combining them with other strategies to further strengthen pupils' writing proficiency and behavior.

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