

# Enhancing Fifth-Grade Students' Creativity in Visual Arts Learning Through Concrete Media: A Classroom Action Research Study

Arum Ariyanti<sup>1</sup>, Andi Imrah Dewi<sup>2</sup>, Kadek Hariana<sup>3</sup>, Zulfuraini<sup>4</sup>, Kasmawati<sup>5</sup>  
<sup>1,2,3,4,5</sup>Tadulako University, Palu, Sulawesi Tengah, Indonesia

---

## Article Info

### Article history:

Received 2026-04-07

Revised 2026-04-18

Accepted 2026-04-28

---

### Keywords:

Creativity

Concrete Media

Visual Arts

Rhythm Principle

Elementary Education

---

## ABSTRACT

This study was motivated by the low level of students' creativity in visual arts learning, particularly in understanding the principle of rhythm, which is still abstract and difficult for elementary school students to apply. The purpose of this study was to enhance fifth-grade students' creativity through concrete media in visual arts instruction, focusing on rhythm. This research employed a Classroom Action Research (CAR) approach conducted in two cycles, involving 22 fifth-grade students at SDN Biro, Palu City. Data were collected through observation and documentation, and analysed using descriptive quantitative techniques expressed in percentages. The results showed that students' creativity improved from Cycle I to Cycle II, with the mastery percentage increasing from 68.18% in Cycle I to 86.36% In Cycle II. This improvement was reflected in students' ability to develop ideas, create variations In form, demonstrate originality, and complete their drawings carefully. The findings indicate that the use of concrete media helps students understand the principle of rhythm through direct experiences of observing, trying, and organising visual patterns, encouraging active engagement and the gradual development of creativity. Therefore, concrete media is effective in elementary visual arts learning for enhancing students' creativity in understanding the principle of rhythm.

*This is an open-access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.*



---

## Corresponding Author:

Arum Ariyanti

Faculty of Teacher Training and Education, Elementary School Teacher Education, Tadulako University

Email: [arumariyanti458@gmail.com](mailto:arumariyanti458@gmail.com)

---

## 1. INTRODUCTION

In the 21st century, Indonesia needs human resources who not only master knowledge but also think creatively, innovatively, and adaptively in responding to increasingly complex global challenges. Rapid changes across various sectors require individuals to be flexible thinkers and capable of generating relevant solutions to the problems they face. Therefore, education should not only focus on transferring knowledge

but also on developing students' creativity and higher-order thinking skills from an early age [1]. At the elementary school level, learning should provide students with opportunities to try, explore ideas, and freely express their thoughts through meaningful activities [2]. Creativity serves as an essential foundation for students to deal with future challenges, and thus it needs to be nurtured through active, contextual learning experiences that directly involve students in the learning process [25].

In this context, visual arts education plays an important role as it is closely related to the development of students' creativity and visual expression. It does not merely serve as a medium for producing artwork but also as a space for training students' aesthetic sensitivity, imagination, and creative thinking in transforming ideas into visual forms. Through visual arts learning, students are not only taught to draw but also encouraged to express ideas, explore imagination, and organise visual elements into meaningful creations [3]. One of the essential topics in visual arts is the principle of rhythm, which refers to the repetition of visual elements that create a sense of order and movement in an artwork [4]. Understanding this principle is crucial for helping students produce structured, harmonious, and aesthetically valuable work. However, for elementary school students, the concept of rhythm can still feel abstract when explained only verbally, without concrete, practical learning experiences to support it.

This condition can be observed in classroom practices. Students still struggle to understand and apply the principle of rhythm in drawing. Based on observations, many students tend to create drawings without clear patterns, exhibit limited variation, and rely heavily on the teacher's examples. This indicates that the learning process has not fully provided students with direct experiences that help them understand the concepts being taught [5]. In addition, the lack of variation in teaching methods makes students less actively involved and more likely to follow instructions [6]. Conventional teaching practices tend to position students as passive recipients of information [11], resulting in a less engaging learning experience that does not effectively encourage active participation [10]. As a result, students' creative thinking and ability to develop ideas are not optimally nurtured in visual arts learning [25].

To address these issues, a learning approach that connects abstract concepts with students' real experiences is needed. One effective alternative is the use of concrete media in the learning process. Concrete media allows students to interact directly with real objects, making abstract concepts easier to understand and apply in learning activities [7]. This type of media provides students with opportunities to see, touch, and experiment directly, making the learning experience more meaningful than purely theoretical [8]. The use of concrete media also increases student engagement, as they are actively involved in each stage of the learning process [9]. Furthermore, direct learning experiences encourage students to be more confident in exploring ideas, experimenting with different possibilities, and producing more varied and creative works in line with their abilities [12].

Several previous studies have explored the use of concrete media in visual arts learning, including plasticine, which has been shown to enhance student creativity and engagement [24]. The use of plasticine allows students to experiment directly in forming objects, thereby increasing their interest and participation in learning. However, plasticine

---

activities tend to focus more on creating three-dimensional objects and therefore do not directly train students in understanding two-dimensional visual patterns, such as the principle of rhythm in drawing. Moreover, these studies have not specifically examined how concrete media can be used to develop students' creativity in understanding rhythm in a more focused way. This indicates a research gap, particularly in studies that specifically investigate the use of concrete media to improve fifth-grade students' creativity in learning the principle of rhythm in visual arts education.

Based on preliminary observations conducted in a fifth-grade class at SDN Biro, Palu City, students' creativity in drawing was still relatively low. This can be seen from their work, which often lacks clear patterns, shows limited variation, and relies heavily on teacher-provided examples. In addition, students tend to lack confidence in developing their own ideas and often imitate existing examples without making meaningful modifications. Learning activities that are still dominated by conventional methods also make students less active and limit their opportunities to explore ideas freely. These conditions highlight the need to improve the learning process so that students can become more actively involved and develop their creativity more effectively through meaningful, contextual learning experiences.

Based on these problems and the identified research gap, this study aims to improve fifth-grade students' creativity through the use of concrete media in visual arts instruction, particularly in the topic of rhythm. This study is expected to provide a clearer understanding of how concrete media can be effectively implemented to help students grasp the concept of rhythm while also enhancing their creativity through active, interactive, and meaningful learning processes. In addition, the findings of this study are expected to serve as a reference for teachers in selecting a wider range of, more varied, innovative, and student-centred learning strategies. Thus, visual arts learning is not only focused on the final product but also on the overall development of students' creativity. This study contributes by showing how concrete media can be effectively applied in elementary visual arts instruction to improve students' creativity in learning the principle of rhythm.

## **2. METHOD**

This study employed a Classroom Action Research (CAR) approach conducted in several cycles. CAR is an effort to improve the learning process through systematic, repeated actions [13]. The research design followed the model proposed by Kemmis and McTaggart, which consists of four stages: planning, action, observation, and reflection [14]. The data used in this study were quantitative in nature and analysed descriptively, meaning that numerical data were further explained narratively to describe the improvements that occurred [15]. The study was conducted in two cycles, with each cycle consisting of two meetings. It took place in a fifth-grade class at SDN Biro, Palu City, Central Sulawesi, during the first semester of the 2025/2026 academic year. The participants were 22 students, comprising 10 boys and 12 girls. The selection of fifth-grade students was based on their developmental stage, as they are generally able to think

---

concretely and begin to develop creativity, making them suitable for visual arts learning using concrete media.

The research was conducted in two cycles, each comprising the stages of planning, action, observation, and reflection [14]. In the planning stage, the researcher prepared teaching modules and learning resources, organised students into groups, and developed assessment instruments. In the action stage, the learning process used concrete media in activities focused on drawing rhythm principles. Students worked collaboratively in groups, completed worksheets, and produced drawings using materials such as drawing paper, pencils, crayons, and canvas. The learning activities emphasised the repetition of visual elements, such as lines, shapes, and colours. Students were also encouraged to apply simple techniques, including repetition, gradation, and contrast. The use of these concrete media was intended to help students better understand the material through direct experience, thereby encouraging their active participation in the learning process.

The observation stage was conducted throughout the learning process to monitor student activities as supporting data and to assess their creativity. Creativity was assessed using observation sheets to identify any improvement in students' creative abilities. A Likert scale ranging from 1 to 4 was used, where 1 indicated very low, 2 low, 3 good, and 4 very good [15]. The assessment of creativity was based on students' ability to develop ideas, create variations in form, produce unique work, and demonstrate carefulness in completing their drawings. While the main focus was on creativity, student activity was also observed to support the interpretation of their engagement during the lesson. Observations were conducted by two observers, namely the researcher and the classroom teacher. The researcher carried out observations during the learning process, after which the classroom teacher reviewed the results. To ensure consistency in scoring, both observers used the same instrument and cross-checked their results.

Data were collected through observation and documentation techniques. Observation was used to examine teacher and student activities and to assess students' creativity, while documentation served as supporting data in the form of instructional materials and students' artworks. The instruments used in this study included teacher activity observation sheets, student activity assessment sheets, and creativity assessment sheets. The data were analysed using descriptive quantitative techniques, with percentages calculated and narratively explained to describe the observed improvements [15]. The score was calculated using the following formula [16]:

$$\text{Score} = \frac{\text{Obtained Score}}{\text{Maximum Score}} \times 100 \quad 1)$$

Explanation:

Score = Learning outcome score

Obtained Score = The score achieved by each student

Maximum Score = The highest possible score that can be achieved

In addition, the mastery learning percentage was calculated by dividing the number of students who met the mastery criteria by the total number of students. The criteria for the success of the action were determined as follows [14]:

1. At least 75% of students met the school's Minimum Mastery Criteria (KKTP). This 75% threshold was based on the standard mastery level applied in the visual arts subject at the school.
2. There was a significant improvement in students' creativity between Cycle I and Cycle II.
3. There were positive changes in students' activeness and creativity during the learning process.
4. Students' creativity scores reached at least the "Good" category.

The quantitative, in nature and analysed descriptively assessment categories used in this study were as follows [15]:

Table 1. Assesment Categories

Very Good (A)	$90 < A \leq 100$
Good (B)	$75 < B \leq 90$
Fair (C)	$65 < C \leq 75$
Low (D)	$\leq 65$

This study was conducted with the school's permission, and all student data were used solely for research purposes while maintaining confidentiality.

### 3. RESULTS AND DISCUSSION

This section presents the results of the classroom action research conducted in two cycles through the implementation of concrete media in visual arts learning. Each cycle consisted of the stages of planning, action, observation, and reflection, carried out systematically to identify changes during the learning process. The results presented include teacher activities in managing the learning process, student activities during the learning process, and the level of students' creativity in producing artworks. The data obtained were analysed to determine improvements from Cycle I to Cycle II and were systematically presented in tables to facilitate readers in understanding of the comparison of results and the development in each cycle.

#### 3.1. Results

The observation of teacher activity was conducted by the fifth-grade homeroom teacher using a prepared observation sheet. The observation was carried out throughout the learning process, from the beginning to the end of the lesson in Cycle I. The observed aspects included all teacher activities in managing the learning process, particularly the implementation in concrete media in visual arts learning.

Table 2. Observation Results of Teacher Activity in Cycle I

No	Aspect	Value
1	Number of students	22
2	Total score obtained	68
3	Maximum score	76
4	Percentage	89,47%
5	Category	Good

The teacher's activity in cycle I achieved a 89.47% score, which falls into the good category. This indicates that the learning process was implemented quite effectively. However, several aspects still need improvement, such as delivering apperception, explaining learning objectives, providing evaluation, and guiding students during presentations. In addition, the implementation of concrete media was not yet optimal and needs improvement in the next cycle.

Student activity was observed throughout the learning process using a prepared observation sheet. The purpose of this observation was to identify the level of student involvement during learning activities, particularly in the use of concrete media to illustrate rhythm principles. Student activity was monitored at each stage of the lesson, including participation, activeness, and involvement in group work.

Table 3. Student Creativity Assessment Results in Cycle I

Indicator	Result
Mean Score	73.56
Number of Students	22
Students Achieving Mastery	14
Percentage of Mastery	63.63%

Table 4. Distribution of Student Creativity Categories in Cycle I

Category	Number of Students
Very Good	6
Good	8
Fair	1
Low	7
Total	22

The average student activity score in cycle I was 73.56, with 22 students; 14 achieved the mastery criteria, resulting in a mastery percentage of 63.63%. The distribution of activity levels was mostly in the Good category (8 students) and the Very Good category (6 students). However, there were still 7 students in the Low category and 1 student in the Fair category. These results indicate that student activity in cycle I had not yet reached an optimal level, and improvements were needed in the next cycle to ensure more consistent, active student participation.

Student creativity was assessed throughout the learning process using a structured assessment sheet. This assessment aimed to evaluate students' ability to develop ideas and produce drawings using concrete media in learn the principle of rhythm. The aspects

observed included idea development, variation of forms, originality of the artwork, and accuracy in completing the task.

Table 5. Student Creativity Assessment Results in Cycle I

Indicator	Result
Mean Score	71.30
Number of Students	22
Students Achieving Mastery	16
Percentage of Mastery	68.18%

Table 6. Distribution of Student Creativity Categories in Cycle I

Category	Number of Students
Very Good	0
Good	6
Fair	11
Low	5
Total	22

The average creativity score in cycle I was 71.30, with 22 students; 16 met the mastery criteria, resulting in a 68.18% mastery rate. Most students were in the Fair category (11 students), followed by the Good category (6 students), while 5 students were still in the Low category. No students reached the Very Good category at this stage. These results suggest that students' creativity in cycle I had not yet developed optimally, indicating the need for improvements in the next cycle to enhance their creative abilities further.

In Cycle II, observations of teacher activity were conducted to identify improvements in instruction quality following the revisions made in Cycle I. The observation was conducted by the fifth-grade homeroom teacher using a structured observation sheet that covered the entire learning process from the beginning to the end of the lesson. This observation aimed to evaluate the appropriateness of the instructional process and the effectiveness of the teacher in implementing concrete media in visual arts learning. The results of the teacher activity observation in Cycle II are presented in Table 7.

Table 7. Observation Results of Teacher Activity in Cycle II

No	Aspect	Value
1	Number of students	22
2	Total score obtained	73
3	Maximum score	76
4	Percentage	96,05%
5	Category	Very Good

The results indicate that teacher activity in Cycle II improved significantly, reaching 96.05%, which falls into the very good category. However, several aspects still require improvement, including the clarity of the learning objectives (some students were still confused), the need for more explicit explanations of the material, and classroom

management during the conclusion stage. Overall, teacher activity in Cycle II demonstrated better performance compared to Cycle I.

In Cycle II, student activity was observed to identify changes in student involvement after improvements were made in the learning process. The same observation sheet was used to ensure consistent comparison with results from the previous cycle.

Table 8. Student Activity Results in Cycle II

Indicator	Result
Mean Score	79.84
Number of Students	22
Students Achieving Mastery	18
Percentage of Mastery	81.81%

Table 9. Distribution of Student Activity Categories in Cycle II

Category	Number of Students
Very Good	2
Good	15
Fair	3
Low	3
Total	22

The average student activity score in Cycle II was 79.84, with 22 students; 18 achieved the mastery criteria, resulting in a 81.81% mastery rate. This shows a clear improvement over Cycle I, which reached only 63.63%, indicating an increase of 18.18%. In addition, the number of students achieving mastery increased from 14 students in Cycle I to 18 students in Cycle II. The distribution of activity levels was dominated by the Good category (15 students) and the Very Good category (2 students), while the number of students in the Low category decreased from 7 in Cycle I to 3 in Cycle II, and the Fair category accounted for 3 students. These changes reflect a noticeable improvement compared to the previous cycle. Overall, the results in Cycle II indicate that student activity improved significantly after the refinement of the learning process.

In Cycle II, student creativity was assessed to examine the development of students' abilities after improvements were made in the learning process. The same assessment instrument was used to ensure that the results could be directly compared with those from the previous cycle. The assessment focused on students' ability to develop ideas, create variations in form, demonstrate originality in their work, and show accuracy in completing their drawings.

Table 10. Student Creativity Assessment Results in Cycle II

Indicator	Result
Mean Score	82.48
Number of Students	22
Students Achieving Mastery	19
Percentage of Mastery	86.36%

Table 11. Distribution of Student Creativity Categories in Cycle II

Category	Number of Students
Very Good	1
Good	18
Fair	1
Low	3
Total	22

The average creativity score in Cycle II was 82.48, with 22 students; 19 achieved the mastery criteria, resulting in a 86.36% mastery rate. This indicates a clear improvement over Cycle I, which reached only 68.18%, an increase of 18.18%. In addition, the number of students achieving mastery increased from 16 students in Cycle I to 19 students in Cycle II. The distribution of creativity levels was dominated by the Good category (18 students) and the Very Good category (1 student). In contrast, the number of students in the Low category decreased from 5 in Cycle I to 3 in Cycle II, and the Fair category dropped significantly from 11 to 1. These changes reflect a noticeable difference compared to the previous cycle. Overall, the results in Cycle II indicate that students' creativity improved more effectively after refining the learning process.

### 3.2. Discussion

The findings of this study indicate that the use of concrete media in visual arts learning can gradually improve the creativity of fifth-grade students from Cycle I to Cycle II. In the initial stage, students still faced difficulties in developing ideas independently, tended to imitate their peers, and were not yet familiar with using concrete media in drawing activities. This condition suggests that students' creativity had not developed optimally, as they were still in the process of adapting to the learning approach. However, after improvements were implemented in Cycle II, students began to show more noticeable progress, including creating their own patterns, using a wider variety of shapes, and applying colour combinations through gradient and opposition techniques more appropriately. Therefore, the improvement in students' creativity did not occur instantly but developed gradually through a learning process that allowed students to try, revise, and refine their ideas over time.

Furthermore, the improvement in creativity is closely related to the role of concrete media, which helps transform abstract concepts into more tangible and understandable forms. In learning the principle of rhythm, students received not only verbal explanations but also direct involvement in observing, experimenting, and manipulating visual objects. Through this kind of sensory engagement, students found it easier to understand pattern repetition, form variation, and colour combinations because they experienced them firsthand. The process of manipulating real objects enabled students to internalise the concept of rhythm through visual and kinesthetic experiences, making the learning process more meaningful than merely memorising concepts. This finding is consistent with Shoimah and Syafi'aturrosyidah [17], who state that concrete media help students build understanding through real experiences. In this study, this process was clearly reflected in direct drawing activities, where students not only understood the concept but also applied it in their own artworks. In addition, Verawati et al. [18] emphasise that the use of concrete

media can increase students' interest in learning, as evidenced by the increased student engagement during the learning process in this study.

From the perspective of the learning process, improvements in creativity were also influenced by students' active involvement in learning activities. In Cycle I, some students remained passive and were not yet accustomed to working collaboratively in groups, which limited the ideas they generated. However, in Cycle II, students became more engaged in discussions, more confident in expressing their ideas, and more responsible in completing their tasks. This change occurred because students had become more familiar with the use of concrete media and with the group-work structure used in the classroom. In addition, the instructions provided in Cycle II were clearer and more structured, which helped reduce students' confusion when completing tasks. As a result, students felt more comfortable participating actively in the learning process. This active involvement not only increased participation but also fostered the emergence of creative ideas through student interaction and collaboration. In other words, group discussions and collaborative work became a space for students to exchange ideas and develop them further. This is in line with Aisyah and Hadiyanti [19], who state that activity-based learning promotes direct student engagement. Furthermore, Fariza and Kusuma [20] also explain that active participation contributes to the development of students' thinking skills and overall engagement in learning.

In addition, the use of concrete media offered students broader opportunities to explore their creativity. Students did not simply follow examples; they began to develop their own ideas through observation, experimentation, and the combination of visual elements such as lines, shapes, and colours. This exploratory process allowed students to think more flexibly and produce more varied artworks. At the same time, these direct experiences helped build students' confidence in expressing their ideas. This finding is consistent with Sagitarini et al. [21], which states that hands-on learning experiences can stimulate the emergence of creative ideas through exploration. Thus, students' creativity developed as they were actively involved in a learning process that encouraged experimentation and independent idea generation.

Nevertheless, not all students showed optimal progress. A few students were still less focused, lacked confidence, or tended to rely on their peers during group activities. This condition indicates that instructional media do not solely influence creativity development but are also affected by students' internal factors. In this context, concrete media serve as facilitators, while the success of learning is also determined by students' readiness and individual characteristics. This is in line with Achmad et al. [22], who state that students' creativity and activeness significantly influence learning outcomes. Therefore, teachers need to provide more intensive guidance and support for students who still experience difficulties.

Compared with previous studies, this research's findings show both similarities and differences that strengthen its contribution. The study by Misykah and Panggabean [23] focuses on improving students' learning outcomes through a quantitative approach, emphasising general cognitive factors. Meanwhile, Tisna et al. [24] also apply a quantitative approach, focusing on conceptual understanding through plasticine media, but

---

do not specifically address student creativity. In contrast, Rosalina and Sanoto [25] have examined the improvement of creativity through classroom action research, although this remains limited to printmaking techniques. Unlike those studies, the present research not only focuses on creativity but also examines how it develops progressively through learning cycles in the context of visual arts, particularly in learning the principle of rhythm using concrete media. Therefore, this study provides a more specific contribution by explaining how students' creativity develops through processes of observation, manipulation, exploration, and collaboration in the classroom.

However, this study also has several limitations. It was conducted in a single class within one school, with a relatively small number of participants, so the findings primarily reflect that specific context. In addition, the relatively short study duration limits the ability to observe the long-term development of students' creativity. The assessment of creativity also relied on observation sheets, although efforts were made to ensure consistency through collaborative evaluation. Therefore, the findings of this classroom action research should be understood as context-specific, and their application to other contexts should be carefully carried out, taking into account different conditions.

Overall, the use of concrete media in visual arts learning provides students with more meaningful learning experiences. Through direct involvement, exploration, and interaction during the learning process, students become more active, more confident, and better able to develop creative ideas. Therefore, concrete media can be considered an effective instructional strategy for enhancing students' creativity, particularly in visual arts instruction at the elementary school level.

#### **4. CONCLUSION**

This study shows that the use of concrete media in visual arts learning in Grade V of SDN Biro Kota Palu can improve students' creativity in understanding the principle of rhythm. This improvement is reflected in the increase in students' creativity mastery, which rose from 68.18% in Cycle I to 86.36% in Cycle II. These findings suggest that learning activities that involve direct experience through concrete media help students more easily understand the concept of rhythm while also supporting the development of their creative thinking skills.

From an instructional perspective, these results indicate that concrete media can be considered an alternative teaching strategy in visual arts education, particularly in helping students grasp abstract visual concepts. The use of this media makes the learning process more active and interactive, while also giving students more space to explore their ideas freely in creating artworks. However, this study has limitations, as it was conducted in only one class with a relatively small number of students and over only two learning cycles. Therefore, the findings remain contextual and cannot be generalised broadly.

For future research, it is recommended that studies be conducted with larger samples, longer implementation periods, and comparisons between concrete media and other instructional media. In addition, further research may explore more detailed indicators of creativity to deepen the understanding of students' creative development.

---

Overall, this study indicates that the use of concrete media can enhance students' creativity in visual arts learning within the specific classroom context. However, further studies with a broader scope are needed to examine the consistency and transferability of these findings in different learning environments.

## ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Dr Andi Imrah Dewi, S.Pd., M.Sn., as my first supervisor, and to Kadek Hariana, S.Pd., M.Pd., as my second supervisor, for their guidance, valuable input, and continuous support throughout this research. I would also like to thank Dr. Zulfuraini, S.Pd., M.Pd., as the examiner and Kasmawati, M.Pd., as the secretary, for their constructive suggestions and feedback. My appreciation is also extended to the principal of SDN Biro, all teachers of SDN Biro, and especially the fifth-grade students of SDN Biro for their cooperation and participation in the data collection process. Lastly, I would like to thank my family and friends for their prayers, encouragement, and unwavering support in completing this research.

## REFERENCES

- [1] M. P. Sari, R. Mardhiah, and M. Damayanti, "Efforts to improve elementary students' creativity: A systematic literature review and bibliometric analysis," *Dwijia Cendekia: Jurnal Riset Pedagogik*, vol. 8, no. 3, pp. 401–420, 2024, doi: 10.20961/jdc.v8i3.86831.
- [2] S. Nurmala, R. Triwoelandari, and M. Fahri, "Development of articulate storyline 3 media in STEM-based science learning to enhance elementary students' creativity," *Jurnal Basicedu*, vol. 5, no. 6, pp. 5024–5034, 2021, doi: 10.31004/basicedu.v5i6.1546.
- [3] R. A. Prayogi and R. T. Rakhman, "Early childhood visual arts learning (Mona Brookes learning method)," *Eduarts: Jurnal Pendidikan Seni*, vol. 13, no. 3, pp. 68–74, 2024, doi: <https://doi.org/10.15294/eduarts.v13i3.3257>
- [4] Rohayu, D. A. Putra, and K. D. A. Afiani, "Analysis of the use of instructional media in improving students' creative thinking skills," *Inventa: Jurnal Pendidikan Guru Sekolah Dasar*, vol. 5, no. 1, 2021, doi: <https://doi.org/10.36456/inventa.5.1.a2623>
- [5] S. Susanti et al., "The negative impact of monotonous teaching methods on students' learning motivation," *Pedagogik: Jurnal Pendidikan dan Riset*, vol. 2, no. 2, pp. 86–93, 2024, doi: <https://doi.org/10.65311/pedagogik.v2i2.529>
- [6] H. N. Rahman, "Improving rhythm reading skills in music learning through the Takadimi-Orff method," B.S. thesis, Univ. Negeri Yogyakarta, Yogyakarta, Indonesia, 2015.
- [7] D. E. Setyawati, "The implementation of concrete media to improve conceptual understanding in learning processes," *Sekar: Indonesian Journal of Community Engagement*, vol. 1, no. 1, pp. 8–14, 2024, doi: <https://doi.org/10.31004/jptam.v8i2.14848>
- [8] A. D. Putranti, S. Wannabuliandari, and Santoso, "Application of creative problem solving learning model assisted by concrete media to improve creative thinking skills," *Jurnal Ilmiah Mitra Swara Ganesha*, vol. 8, no. 1, 2021.
- [9] N. M. Nurdiana, D. W. Saputra, and M. Hayun, "Improving students' creativity through non-standard measurement using concrete media in elementary school," in *Seminar Nasional FIP UMJ*, 2024, doi: <https://jurnal.umj.ac.id/index.php/SEMNASFIP/index>
- [10] R. A. Rahmani and M. Abduh, "The effectiveness of interactive PowerPoint media on motivation and cognitive learning outcomes during the pandemic," *Jurnal Basicedu*, vol. 6, no. 2, pp. 2456–2465, 2022, doi: 10.31004/basicedu.v6i2.2378.
- [11] A. Peranginangin, H. Barus, and R. Gulo, "Differences in student learning outcomes between elaboration and conventional learning models," *Jurnal Penelitian Fisikawan*, vol. 3, no. 1, 2020.

- [12] D. R. Putri, N. Shofyana, and W. Wijayanto, "Implementation of visual arts learning through coloring activities to introduce color types to elementary students," *Buletin Edukasi Indonesia*, vol. 5, no. 1, pp. 33–43, 2026, doi: 10.56741/IISTR.bei.001959.
- [13] M. Huda, *Classroom Action Research: Theory and Practice*. Yogyakarta, Indonesia: Pustaka Pelajar, 2015.
- [14] S. Arikunto, S. Suhardjono, and Supardi, *Classroom Action Research*. Jakarta, Indonesia: PT Bumi Aksara, 2008.
- [15] Sugiyono, *Quantitative, Qualitative, and R&D Research Methods*. Bandung, Indonesia: Alfabeta, 2013.
- [16] M. A. Blolon, Y. Y. Dhiki, and K. D. P. Meke, "The effectiveness of matrix board learning media in improving students' understanding," *Jurnal Kajian Teori dan Praktik Pendidikan*, vol. 6, no. 3, 2025, doi: <https://ejournals.com/ojs/index.php/jktp>
- [17] R. N. Shoimah and M. Syafi'aturrosyidah, "The use of concrete learning media to improve learning activities and understanding of fraction concepts," *MIDA: Jurnal Pendidikan Dasar Islam*, vol. 4, no. 2, pp. 1–18, 2021, doi: 10.52166/mida.v3i1.1836
- [18] Verawati, S. Rahmadani, and T. P. Sari, "The use of concrete objects in mathematics learning in elementary schools," *Journal of Teacher Education Al-Abawaini*, vol. 1, no. 1, pp. 41–51, 2025.
- [19] R. Aisyah and P. O. Hadiyanti, "Implementation of project-based learning in science learning in elementary schools," *Cetta: Jurnal Ilmu Pendidikan*, vol. 8, no. 4, 2025, doi: <https://jayapanguspress.penerbit.org/index.php/cetta>
- [20] N. A. Fariza and I. H. Kusuma, "Implementation of project-based learning models to improve elementary students' creativity," *Jurnal Penelitian Tindakan Kelas Indonesia*, vol. 1, no. 3, pp. 1–10, 2024, doi: 10.47134/ptk.v1i3.453
- [21] N. M. D. Sagitarini, I. K. Ardana, and I. G. A. A. S. Asri, "Experiential learning model assisted by concrete media influences science knowledge competence," *Jurnal Ilmiah Pendidikan dan Pembelajaran*, vol. 4, no. 2, 2020, doi: <https://doi.org/10.23887/jipp.v4i2.26432>
- [22] A. H. Achmad, M. Dinar, and Bernard, "The influence of learning activeness, independence, and creativity on students' mathematics achievement," *Issues in Mathematics Education*, vol. 4, no. 1, pp. 11–17, 2020, doi: <https://doi.org/10.35580/imed15287>
- [23] Z. Misykah and D. S. Panggabean, "The effect of concrete media on students' learning outcomes in mathematics," vol. 6, no. 4, pp. 419–429, 2022, doi: <https://doi.org/10.24114/jgk.v6i4.37093>
- [24] A. P. Tisna, M. Muhaimin, and E. Zumrotun, "The effectiveness of plasticine media in improving students' understanding of art concepts," *Jurnal Ilmiah Pendidikan Citra Bakti*, 2022, doi: 10.38048/jipcb.v12i2.5292
- [25] M. Rosalina and H. Sanoto, "Improving students' creativity through project-based learning in visual arts learning," *Didaktik: Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, vol. 9, no. 5, 2023, doi: <https://doi.org/10.38048/jipcb.v12i2.5292>
-