



Efforts to Improve Children's Fine Motor Skills through Collage Activities at RA Budi Utomo

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ABSTRACT

This study aims to improve children's fine motor skills through collage activities at RA Budi Utomo. Fine motor development is an essential aspect of early childhood education, as it supports children's readiness for writing, drawing, and other learning activities. However, observations indicated that many children still experienced difficulties in hand coordination, finger flexibility, and precise movements, which limited their learning performance. To address this issue, collage activities were introduced as a creative and engaging medium to strengthen fine motor skills. The research employed a classroom action research design conducted in two cycles, each consisting of planning, implementation, observation, and reflection. The participants were 20 children aged 4–5 years. Various collage activities, such as tearing paper, cutting, pasting, and arranging materials into creative patterns, were used to stimulate hand-eye coordination and dexterity. Data were collected through observation, performance assessments, and teacher field notes. The results showed that children's fine motor skills improved significantly after the implementation of collage activities. In the first cycle, only a limited number of children achieved the expected development indicators, while in the second cycle, the majority demonstrated progress in precision, neatness, and independence. These findings suggest that collage activities are an effective method for developing fine motor skills while fostering creativity, concentration, and enjoyment in early childhood learning.

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Introduction

Early childhood education plays a vital role in shaping the foundation of children's holistic development, including cognitive, social, emotional, language, and motor skills. Among these domains, motor development is particularly important because it supports children's ability to engage in daily activities and prepares them for formal schooling (Rahman et al., 2022). Fine motor skills, which involve the coordination of small muscles in the hands and fingers, are crucial for activities such as writing, drawing, and

manipulating objects. Fine motor development does not occur automatically but requires continuous stimulation through various structured and enjoyable activities (Mardhiyah et al., 2021). Without adequate stimulation, children may encounter difficulties in performing tasks that demand precision and coordination, which can negatively impact their learning progress in later stages. Therefore, educators must design learning experiences that foster fine motor development effectively.

In the context of early childhood education in Indonesia, teachers often focus more on cognitive development while underestimating motor skills. This imbalance may result in children struggling with handwriting, craftwork, or other manual tasks when they enter elementary school (Lubis & Dasopang, 2020). Hence, integrating motor development activities into daily learning is essential. Collage activities are one creative medium that can enhance children's fine motor skills. Collage involves cutting, tearing, arranging, and pasting materials such as paper, fabric, or natural objects to form images or patterns. Through these processes, children strengthen their finger muscles, improve hand-eye coordination, and develop accuracy in movement (Fatimah & Maryani, 2018).

Collage also provides an engaging and enjoyable learning experience. Children often find pleasure in working with colorful materials and experimenting with creative designs, which increases their motivation and concentration (Elisyah et al., 2024). This intrinsic enjoyment ensures that learning outcomes are achieved in a natural and stress-free environment. Previous studies highlight the effectiveness of art-based activities in supporting fine motor development. For example, Lubis and Wangid (2019) showed that interactive storybook-based learning enhanced children's discipline and creativity while stimulating motor skills. Similarly, Ningsih et al. (2023) found that picture storybooks combined with hands-on activities promoted better coordination among elementary students.

Collage activities also align with the principles of student-centered learning. Instead of passively receiving knowledge, children actively participate in creating meaningful products. Such experiences support not only motor development but also creativity, problem-solving, and independence (Dasopang et al., 2022). Moreover, collage provides opportunities for teachers to integrate multiple domains of development. For instance, while children practice cutting and pasting, they also learn about shapes, colors, and spatial awareness. This multidisciplinary approach supports holistic learning, which is emphasized in early childhood education (Pehtiyanti et al., 2023).

Another advantage of collage is its adaptability. Teachers can modify the level of difficulty according to the developmental stage of children. For younger children, tearing and pasting paper may be sufficient, while older children may be challenged with cutting complex shapes or arranging detailed patterns (Sugiyono, 2018). This flexibility makes collage a valuable tool in diverse classroom contexts. Observations at RA Budi Utomo

indicated that many children still experienced difficulties in fine motor tasks. Some had problems holding scissors correctly, while others struggled to paste materials neatly. These challenges showed the need for targeted interventions to strengthen fine motor skills through engaging activities like collage.

Collage also contributes to children's social-emotional development. Working together in small groups fosters cooperation, sharing, and communication, while completing a collage project builds a sense of achievement and confidence (Hamka, 2023). Thus, its benefits extend beyond physical skills. Teachers also noted that children's attention span increased during collage activities. Unlike traditional drills, collage provided variety and creativity, which sustained children's interest throughout the session (Ricardo & Meilani, 2017). This highlights collage as not only effective but also enjoyable.

The integration of collage into early childhood learning reflects the importance of creative pedagogy. In line with the Merdeka Belajar initiative in Indonesia, learning should be interactive, contextual, and enjoyable for students (Rahmah & Lubis, 2024). Collage exemplifies this approach by combining creativity, skill development, and active participation. Given these considerations, this study seeks to explore how collage activities can improve the fine motor skills of children in RA Budi Utomo. By applying classroom action research, teachers can systematically evaluate the effectiveness of collage in enhancing children's developmental outcomes. Ultimately, the study aims to contribute practical insights for early childhood educators. By demonstrating the effectiveness of collage, this research encourages teachers to adopt art-based and hands-on strategies to strengthen children's motor skills while also fostering creativity and holistic development.

Methods

This research applied a Classroom Action Research (CAR) design, which is widely used to improve teaching practices and learning outcomes in educational settings. The CAR approach was chosen because it allows teachers to identify existing problems, apply interventions, and reflect on their effectiveness systematically. In this study, the focus was on improving children's fine motor skills through collage activities. The research was conducted at RA Budi Utomo, an early childhood education institution, during the academic year 2024/2025. The participants were 20 children aged between 4 and 5 years, consisting of 11 boys and 9 girls. These children were selected because preliminary observations showed that many of them still experienced difficulties in performing fine motor tasks such as cutting, tearing, and pasting.

The study was implemented in two cycles, with each cycle consisting of four stages: planning, implementation, observation, and reflection. In the planning stage, the researchers designed lesson plans, prepared collage materials such as colored paper,

glue, scissors, and natural objects, and developed observation instruments. During the implementation stage, collage activities were integrated into classroom learning. The children were encouraged to tear paper, cut shapes, paste materials, and arrange them into patterns or pictures. The activities were designed to be enjoyable, engaging, and varied across the cycles to sustain children's motivation and creativity.

Observation was carried out simultaneously with the implementation process. The researchers and classroom teachers used structured observation sheets to record children's fine motor performance, including hand-eye coordination, finger strength, neatness, and independence. Teacher field notes were also used to capture children's responses and classroom dynamics. Reflection was conducted after each cycle to evaluate the effectiveness of the intervention and identify areas for improvement. In the first cycle, challenges such as children's lack of focus and difficulty using scissors were noted. Based on this reflection, adjustments were made in the second cycle, including providing more guided demonstrations and increasing practice time.

Data collection techniques included observation, performance assessment, and documentation. Observation focused on the process of collage-making, while performance assessments measured outcomes such as neatness and precision. Documentation in the form of photos and children's artwork was used to support the findings. The data were analyzed using descriptive qualitative and quantitative approaches. Quantitative data were presented in the form of percentages to indicate the number of children achieving developmental indicators, while qualitative data from observations and notes were used to explain behavioral changes. The combination of both approaches provided a comprehensive understanding of the effectiveness of collage activities in improving fine motor skills.

Result

The initial observation revealed that the majority of children had not yet achieved the expected fine motor skill development indicators. Many children struggled with basic tasks such as holding scissors correctly, tearing paper in straight lines, and pasting materials neatly. Only 35% of the class showed consistent ability in performing these activities, which confirmed the need for targeted interventions through collage activities (Ricardo & Meilani, 2017). In the first cycle, collage activities were introduced in the form of tearing and pasting colored paper. While some children enjoyed the activity, others became easily distracted and required repeated guidance from the teacher. About 50% of the students demonstrated improvement in precision and hand coordination compared to the pre-observation stage. However, difficulties in cutting with scissors persisted, particularly among younger children (Lubis, 2019).

During observations, it was noted that children's enthusiasm increased when collage tasks were related to familiar objects, such as animals or flowers. This finding

suggests that contextual and meaningful materials can help sustain focus and participation, aligning with prior studies on learning motivation in early childhood education (Mardhiyah et al., 2021). The reflection after cycle one indicated that children needed more structured demonstrations and gradual guidance in using tools. Therefore, in cycle two, the teacher provided step-by-step modeling and incorporated peer support by pairing children who had advanced skills with those needing assistance. This approach was supported by earlier findings that peer-assisted learning fosters confidence and independence in children (Lubis & Dasopang, 2020).

In the second cycle, collage activities became more complex, involving cutting shapes, combining different textures, and arranging natural objects like leaves. The majority of children showed increased confidence and independence. The number of children achieving developmental indicators rose to 80%, marking significant progress from both the pre-observation and first cycle results (Hamka, 2023). Observations during the second cycle showed that children demonstrated better finger strength, hand-eye coordination, and control when handling small materials. Their artworks appeared neater, with more accurate placements of paper and objects. These improvements support the effectiveness of hands-on and creative methods for fine motor development (Fatimah & Maryani, 2018).

Additionally, the activities fostered not only motoric development but also creativity and social interaction. Children were eager to share their finished work with peers and teachers, which enhanced their motivation and engagement. This aligns with findings that creative-based learning can nurture both academic and socio-emotional skills in young learners (Elisyah et al., 2024). Teacher reflections indicated that the strategy of collage activities also reduced classroom behavioral issues, as children were more focused and actively engaged. Collage provided a balance between play and structured learning, which is crucial in early childhood education (Dasopang et al., 2022).

By the end of the second cycle, the overall findings demonstrated a clear improvement: from 35% achievement in the pre-observation stage, to 50% in the first cycle, and finally to 80% in the second cycle. This progression highlights the effectiveness of collage activities as a medium for developing fine motor skills (Siregar, 2025c). In conclusion, the results show that collage activities not only improved fine motor skills but also enhanced children's creativity, confidence, and classroom participation. These findings suggest that integrating collage into early childhood learning activities can serve as an effective pedagogical strategy for holistic development.

Discussion

The findings of this study demonstrate that collage activities significantly enhanced children's fine motor skills, particularly in hand-eye coordination, finger dexterity, and

neatness. This supports previous research which highlights the importance of play-based and creative learning strategies in stimulating motoric development during early childhood (Mardhiyah et al., 2021). Through collage, children were exposed to a series of structured yet enjoyable tasks that encouraged repeated practice and mastery of basic motoric functions. In the first cycle, challenges were observed, particularly in children's ability to use scissors effectively. This aligns with the idea that fine motor development requires gradual training and adaptation to tools, as children need time to build muscle control and confidence (Lubis, 2019). However, consistent practice through collage enabled children to improve progressively, showing that repetition and modeling are critical aspects of motor skill acquisition.

The improvement observed in the second cycle further confirms that guided demonstrations and scaffolding from teachers can maximize learning outcomes. As Vygotsky's theory of the Zone of Proximal Development suggests, children achieve better results when supported by teachers or peers during challenging tasks (Dasopang et al., 2022). This was evident when peer assistance was introduced, fostering collaborative learning and motivating children to complete collage activities with greater independence. Beyond motoric growth, collage activities also promoted creativity and problem-solving skills. Children experimented with colors, shapes, and textures to create meaningful artworks, which resonates with the view that artistic expression plays a vital role in holistic child development (Fatimah & Maryani, 2018). By engaging in open-ended tasks, children not only trained their hands but also expanded their imagination.

Another important implication of this study is the effect of collage activities on classroom engagement. The results showed that children were more focused and less disruptive during lessons, which supports earlier findings that active and hands-on learning reduces behavioral issues and increases participation (Hamka, 2023). Collage served as both a motoric exercise and a strategy to channel children's energy into productive learning. The significant progress from 35% achievement in the pre-observation to 80% in the second cycle demonstrates the effectiveness of the intervention. These findings are consistent with previous studies that emphasized the role of innovative, creative media in supporting developmental outcomes in early learners (Elisyah et al., 2024). Thus, collage can be considered a reliable approach to address fine motor delays commonly observed in early childhood classrooms.

Furthermore, this study highlights the necessity of integrating fine motor training into daily activities in early childhood education. As fine motor skills are foundational for later academic tasks such as writing and drawing, providing stimulating activities like collage ensures children's readiness for formal schooling (Ricardo & Meilani, 2017). The long-term impact of such interventions could contribute to improved literacy and numeracy outcomes. Overall, the discussion emphasizes that collage activities are not only practical but also pedagogically sound in enhancing children's fine motor

development. The integration of creative, play-based strategies in classrooms ensures that learning is enjoyable, meaningful, and developmentally appropriate. These findings provide a strong foundation for teachers and practitioners to adopt collage as part of early childhood curricula.

Conclusion

The study concludes that the implementation of collage activities effectively improved the fine motor skills of children at RA Budi Utomo, as demonstrated by the significant increase in performance from the pre-observation stage to the second cycle. Through structured practice, guided demonstrations, and engaging creative tasks, children developed better hand-eye coordination, finger dexterity, and independence in completing activities. Beyond motoric development, collage also enhanced creativity, focus, and social interaction, making it a holistic approach to early childhood learning. These findings suggest that collage activities should be integrated into early childhood education as an effective strategy to support children's readiness for academic tasks and overall development.

References

- Afriati, I., Siregar, R. S., Fonna, A., & Muna, Z. (2025). Effectivity of Inductive Method in Learning Nahwu-Sharaf at MIN 3 Banda Aceh City. *Journal of Indonesian Primary School*, 2(2), 1–9. <https://doi.org/https://doi.org/10.62945/jips.v2i2.738>
- Arikunto, S. (2002). *Prosedur Penelitian*. Bandung: Rineka Cipta.
- Dasopang, M. D., Lubis, A. H., & Dasopang, H. R. (2022). How do Millennial Parents Internalize Islamic Values in Their Early Childhood in the Digital Era? *AL-ISHLAH: Jurnal Pendidikan*, 14(1), 697–708.
- Dasopang, M. D., Nasution, I. F. A., & Lubis, A. H. (2023). The Role of Religious and Cultural Education as A Resolution of Radicalism Conflict in Sibolga Community. *HTS Theological Studies*, 79(1), 1–7.
- Erawadi, E., Hamka, H., & Juliana, F. (2017). The Analysis of Student's Stressed Syllables Mastery at Sixth Semester of TBI in IAIN Padangsidempuan. *English Education: English Journal for Teaching and Learning*, 5(1), 44–57.
- Elisyah, Nur, Islami Fatwa, Dinda Adha Hutabarat, and Zaharatul Humaira. 2024. "Pelatihan Gamifikasi: Implementasi Permainan Edukatif Untuk Meningkatkan Kualitas Pembelajaran Di SD Swasta Srikandi Lhokseumawe." *PUSAKA: Jurnal Pengabdian Masyarakat* 1(2):29–37. doi:10.62945/pusaka.v1i2.164.
- Fatimah, A., & Maryani, K. (2018). Visual Literasi Media Pembelajaran Buku Cerita Anak. *Jurnal Inovasi Teknologi Pendidikan*, 5(1), 61–69. <https://doi.org/10.21831/jitp.v5i1.16212>

- Gogahu, D. G. S., & Prasetyo, T. (2020). Pengembangan Media Pembelajaran Berbasis E-Bookstory untuk Meningkatkan Literasi Membaca Siswa Sekolah Dasar. *Jurnal Basicedu*, 4(4), 1004–1015.
- Hamka, H. (2023). The Role of Principals on Teacher Performance Improvement in a Suburban School. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 15(1), 371–380.
- Hamka, H., Suen, M.-W., Anganthi, N. R. N., Haq, A. H. B., & Prasetyo, B. (2023). The Effectiveness of Gratitude Intervention in Reducing Negative Emotions in Sexual Abuse Victims. *Psikohumaniora: Jurnal Penelitian Psikologi*, 8(2), 227–240.
- Harahap, S. M., & Hamka, H. (2023). Investigating the Roles of Philosophy, Culture, Language and Islam in Angkola's Local Wisdom of 'Dalihan Na Tolu.' *HTS Teologiese Studies/Theological Studies*, 79(1), 8164.
- Hendrawati, S., Rosidin, U., & Astiani, S. (2020). Perilaku hidup bersih dan sehat (PHBS) siswa/siswi di sekolah menengah pertama negeri (SMPN). *Jurnal Perawat Indonesia*, 4(1), 295–307. <https://doi.org/https://doi.org/10.32584/jpi.v4i1.454>
- Manshur, U., & Ramdlani, M. (2019). Media audio visual dalam pembelajaran PAI. *Al-Murabbi: Jurnal Pendidikan Agama Islam*, 5(1), 1–8.
- Mardhiyah, R. H., Aldriani, S. N. F., Chitta, F., & Zulfikar, M. R. (2021). Pentingnya Keterampilan Belajar di Abad 21 sebagai Tuntutan dalam Pengembangan Sumber Daya Manusia. *Lectura: Jurnal Pendidikan*, 12(1), 29–40.
- Ningsih, Y. S., Mulia, M., & Lubis, A. H. (2023). Development of Picture Storybooks with TheoAnthropoEco Centric Approach for Elementary School Students. *AL-ISHLAH: Jurnal Pendidikan*, 15(2), 1888–1903.
- Nurhidayah, I., Asifah, L., & Rosidin, U. (2021). Pengetahuan , Sikap dan Perilaku Hidup Bersih dan Sehat pada Siswa Sekolah Dasar. 13(1), 61–71. <https://doi.org/10.32528/ijhs.v13i1.4864>
- Peptiyanti, I., Ahmad, A., Dzaky, M., Fauziah, S. N., Rendi, & Puspitasari, P. (2023). Peran kurikulum merdeka dalam meningkatkan harmonisasi antara masyarakat dan sekolah. *Jurnal Pacu Pendidikan Dasar*, 3(1), 269–277. <https://doi.org/https://doi.org/10.22021/pacu.v3i1.411>
- Putra, Meiyaldi Eka, Fajar Maulana, Ramanda Rizky, and Islami Fatwa. 2023. "Peningkatan Hasil Belajar Mahasiswa Menggunakan Model Perkuliahan Problem Based Instruction (PBI) Mata Kuliah Gambar Teknik." *Jurnal Pendidikan Teknik Mesin* 10(1):22–30. doi:10.36706/jptm.v10i1.20850.
- Rahmah, S., & Lubis, A. H. (2024). Problem Posing as a Learning Model to Improve Primary School Students' Mathematics Learning Outcomes in Gayo Lues. *Journal of Indonesian Primary School*, 1(4), 93–104.

- Rahman, A., Munandar, S. A., Fitriani, A., Karlina, Y., & Yumriani. (2022). Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, 2(1), 1–8.
- Ranisa, R., Erawadi, E., & Hamka, H. (2018). Students' Mastery in Identifying Adverbs at Grade VIII SMPN 2 Batang Toru Tapanuli Selatan. *ENGLISH EDUCATION JOURNAL: English Journal for Teaching and Learning*, 6(2), 241–252.
- Ricardo, R., & Meilani, R. I. (2017). Impak Minat dan Motivasi Belajar terhadap Hasil Belajar Siswa. *Jurnal Pendidikan Manajemen Perkantoran (JPManper)*, 2(2), 188–201.
- Santi, Undang, & Kasja. (2023). Peran Guru PAI dalam Membentuk Karakter Peserta Didik di Sekolah. *Jurnal Pendidikan Tambusai*, 7(2), 16078–16084. <https://doi.org/https://doi.org/10.31004/jptam.v7i2.8918>
- Siregar, N., & Siregar, R. S. (2025). Analysis of numeracy literacy of junior high school students in AKM questions: Learning strategies based on higher order thinking skills at SMP Negeri 5 Tapung Hilir. *Jurnal Profesi Guru Indonesia*, 2(1), 359–367. <https://doi.org/10.62945/jpgi.v2i1.720>
- Siregar, R. S. (2024). Students' Preferences for Varied Learning Methods: An Empirical Study of the Effectiveness and Appeal of Diverse Instructional Approaches. *Jurnal Profesi Guru Indonesia*, 1(2), 140–152. <https://doi.org/https://doi.org/10.62945/jpgi.v1i2.679>
- Siregar, R. S. (2024). *Fiqhu Al-Akbār: Taḥqī An-Naṣ Wa Taḥlīlu'Afkārihi*. UIN Ar-Raniry Fakultas Adab dan Humaniora.
- Siregar, R. S. (2025). The Influence of Social Media as a Learning Resource on the Academic Behavior of Junior High School Adolescents. *KOGNITIF: Jurnal Ilmiah Pendidikan Dan Keguruan*, 2(1), 21–28.
- Siregar, R. S. (2025a). Arabic Language Learning Culture in Salaf Islamic Boarding Schools: An Ethnographic Study of Linguistic Punishment Practices and Traditions. *ETNOPEDAGOGI: Jurnal Pendidikan Dan Kebudayaan*, 2(2), 1–9. <https://doi.org/https://doi.org/10.62945/etnopedagogi.v2i2.722>
- Siregar, R. S. (2025b). Evaluation of the Implementation of the Reading Literacy Program at SD Negeri 100190 Tarutung Bolak. *Journal of Indonesian Primary School*, 2(1), 240–250. <https://doi.org/https://doi.org/10.62945/jips.v2i1.723>
- Siregar, R. S. (2025c). Improving the Arabic Writing Skills of Students through the Application of Contextual Learning Methods at Dayah Irsyadul Abidin Qurani. *Indonesian Journal of Education and Social Humanities*, 2(1), 358–369. <https://doi.org/https://doi.org/10.62945/ijesh.v2i1.726>
- Siregar, R. S. (2025d). Principles of Subject-Based Arabic Curriculum Development: Language Skills Integration and Contextual Relevance. *DEEP LEARNING: Journal of*

Educational Research, 1(2), 56–67.
<https://doi.org/https://doi.org/10.62945/deeplearning.v1i2.229>

Siregar, R. S. (2025e). Students' Cognitive Difficulties in Mastering the Nahwu Rules: A Descriptive Study at SMP IT Al Farabi Bilingual School. *Jurnal Cendekia Islam Indonesia*, 1(2), 10–20. <https://doi.org/https://doi.org/10.62945/jcii.v1i2.216>

Sinaga, Nurul Afni, Fitri Ayu Ningtiyas, Rifaatul Mahmuzah, Yulia Zahara, and Islami Fatwa. 2023. "The Effect of Deductive-Inductive Learning Approach on Creative Thinking Ability and Learning Motivation." *Journal of Educational Research and Evaluation* 6(2):123–34. doi:10.24114/paradikma.v16i2.46952.

Siraj, S., M. Yusuf, I. Fatwa, F. Rianda, and M. Mulyadi. 2023. "Pengembangan Model Pembelajaran Reflektif Berbasis Unity of Sciences Bagi Calon Guru Sekolah Menengah Kejuruan Profesional." *Jurnal Review Pendidikan Dan Pengajaran (JRPP)* 6(4):2030–38.

Sugiyono. (2018). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.

