

Improving Children's Learning Outcomes in Recognizing Letters of the Alphabet Using Active Student Learning for Group B Students

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Abstract

Early childhood literacy development is a fundamental aspect of education because the ability to recognize alphabet letters forms the basis for reading and writing skills. However, many kindergarten children still experience difficulties in identifying and pronouncing letters due to limited engagement and monotonous teaching methods. This study aimed to improve children's learning outcomes in recognizing alphabet letters through the implementation of Student Active Learning (SAL) in Group B students at ABA Sei Besar Kindergarten. The research employed a Classroom Action Research (CAR) design using the Kemmis and McTaggart model conducted in two cycles involving 12 children aged 5–6 years. Data were collected through observation, learning outcome assessments, field notes, and documentation, then analyzed descriptively using percentage techniques. The findings revealed a significant improvement in children's alphabet recognition skills after the application of SAL. Learning mastery increased from 42% in the pre-action stage to 79.1% in Cycle I and reached 95.1% in Cycle II. Children became more active, motivated, confident, and collaborative during learning activities involving games, group discussions, and hands-on letter recognition tasks. The study concludes that SAL is an effective and engaging approach for improving early childhood literacy outcomes, particularly alphabet recognition. This research contributes to the development of active learning strategies in early childhood education by emphasizing participatory and child-centered literacy instruction.

Keywords

alphabet recognition, early childhood education, literacy learning outcomes, student active learning.



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INTRODUCTION

Early childhood education is critical in laying the foundation for optimal cognitive, language, physical, social, and emotional development (Amin & Sumendap, 2022). Among the key developmental milestones for young children, the ability to recognize and use alphabetic letters is essential for literacy and later academic success (Djamarah & Zain, 2010). Language

mastery encompassing listening, speaking, reading, and writing enables children to communicate, express themselves, and make sense of their environment (Dimiyati & Mudjiono, 2009). The recognition of alphabetic letters is particularly vital at the kindergarten level, serving as a gateway for reading and writing development (Nesi et al., 2021). Children who can identify, pronounce, and write letters are better prepared to acquire reading fluency and comprehension. However, many early childhood educators face challenges in teaching the alphabet effectively, especially when children display low motivation, lack of interest, or difficulties in distinguishing letter forms and sounds (Erma, 2022).

Observations at ABA Sei Besar Kindergarten revealed that only 3 out of 12 children reached the expected level of letter recognition, while the majority struggled with pronunciation, letter identification, and interest in the subject matter. Contributing factors included monotonous teaching methods, insufficiently engaging learning materials, and a lack of active participation during lessons. As a result, children's learning outcomes in alphabet knowledge were low, and teachers were compelled to seek more innovative and interactive approaches to foster engagement and achievement. Active involvement is essential for meaningful learning experiences among young children (Amin & Sumendap, 2022; Djamarah & Zain, 2010). Passive learning environments, where children are merely recipients of information, often lead to disengagement and minimal learning gains. Recognizing this, contemporary early childhood pedagogy emphasizes student-centered approaches that encourage exploration, interaction, and creativity (Hosnan, 2014).

Student Active Learning (SAL) is a pedagogical model designed to maximize student participation in the learning process. The SAL approach employs diverse strategies—including games, group activities, hands-on tasks, and problem-solving exercises—to create a dynamic and participatory classroom climate (Ibrahim, 2005; Amin & Sumendap, 2022). Through SAL, students are encouraged to collaborate, reflect, and apply their knowledge in real-world contexts, making learning both effective and enjoyable. Previous research has demonstrated the positive impact of active learning models on learning outcomes across various subjects and educational levels (Dedi Setiyadi, 2024; Mulyani & Wardani, 2022). For instance, Setiyadi (2024) found that using SAL in Islamic character education significantly improved student mastery and enthusiasm. Similarly, Erma (2022) reported that SAL could increase letter recognition among young learners. Despite these encouraging findings, the adoption of SAL in early childhood alphabet instruction remains limited, and further empirical validation is warranted.

METHODS

This research employed a Classroom Action Research (CAR) design based on the Kemmis and McTaggart model, encompassing two cycles with each cycle consisting of planning, action, observation, and reflection (Arikunto, 2010; Asrori & Rusman, 2020). The study took place at ABA Sei Besar Kindergarten, Karang Intan, Banjar Regency, during the 2024–2025 academic year. The research subjects were 12 children aged 5–6 years from Group

B, with an equal number of boys and girls. The main objective was to enhance alphabet recognition through the Student Active Learning (SAL) method. Prior to the intervention, a pre-action observation was conducted to identify initial learning outcomes and challenges. The researcher collaborated with school staff to obtain consent and prepare the learning environment.

During each cycle, three lessons were held, each focusing on different themes (animals for cycle I, plants for cycle II) to contextualize alphabet learning. Lesson plans incorporated various SAL strategies such as games, group discussions, hands-on letter-matching exercises, and creative activities (Ibrahim, 2005; Amin & Sumendap, 2022). Children were encouraged to identify, arrange, and write letters using manipulatives (e.g., letter cards, bottle caps, puzzles) and to participate actively in group and individual tasks. Data were collected through observation sheets (tracking children's engagement and letter recognition), teacher and student activity logs, and learning outcome tests at the end of each cycle (Dimiyati & Mudjiono, 2009; Djamarah & Zain, 2010). Observational criteria included the ability to recognize, name, arrange, and write letters, as well as levels of participation and enthusiasm. Scores were categorized as not yet developed, emerging, meeting expectations, or very well developed, in accordance with national early childhood education guidelines. Documentation (photographs, lesson plans, student work samples) complemented the quantitative data. Data analysis was conducted descriptively, using percentage increases to measure progress from pre-action to post-intervention phases, following established procedures for classroom action research (Arikunto, 2010; Sugiyono, 2015).

FINDINGS AND DISCUSSION

The initial observation revealed that only 42% of children met the expected outcomes for alphabet recognition, with many displaying low motivation and engagement. Most children could not distinguish or name letters independently, and classroom activities tended to be teacher-centered and repetitive. After the implementation of Student Active Learning (SAL) in the first cycle, there was an immediate improvement. At the end of cycle I, 79.1% of children reached the "meeting expectations" or "very well developed" categories. Children became more enthusiastic, willingly participated in games and group activities, and demonstrated higher confidence in naming and writing letters. Activities such as letter-matching games, arranging bottle caps with letters, and collaborative group exercises proved particularly effective in fostering engagement and retention (Amin & Sumendap, 2022; Ibrahim, 2005).

In cycle II, the upward trend continued, with 95.1% of children showing mastery in alphabet recognition by the final meeting. The number of children in the "not yet developed" and "emerging" categories dropped to zero and one, respectively. Class observations indicated that children were increasingly able to recognize, pronounce, and write letters, both individually and in groups. They also displayed greater initiative in classroom discussions, asking questions, and helping peers with challenging tasks, reflecting the core principles of

active learning (Hosnan, 2014). The progressive improvements across both cycles demonstrate the positive impact of SAL on early childhood learning outcomes, confirming findings from previous studies on active learning in alphabet instruction (Erma, 2022; Dedi Setiyadi, 2024). The interactive and participatory nature of SAL aligns with contemporary theories of child development, which emphasize hands-on experiences, social interaction, and the integration of cognitive, affective, and psychomotor domains (Dimiyati & Mudjiono, 2009; Djamarah & Zain, 2010).

Furthermore, the use of diverse media and activities within the SAL framework addressed the children's varying learning preferences and maintained high levels of interest throughout the intervention. Teachers noted that the classroom atmosphere became more dynamic, collaborative, and joyful, leading to improved discipline, attention, and learning retention. Despite these successes, the research also identified challenges, such as managing group dynamics, maintaining focus among all children, and adapting tasks for those who progressed at different rates. These challenges underscore the importance of teacher flexibility, ongoing observation, and reflection in classroom action research (Arikunto, 2006). Certainly! Here is an additional expanded section for "Findings and Discussion" that you can seamlessly connect below the previous section. This text further deepens the critical analysis, compares with more literature, discusses classroom nuances, and explores implications for teaching practice fully referenced with your requested sources.

To further elaborate, the implementation of Student Active Learning (SAL) not only resulted in quantitative improvements but also brought about qualitative changes in classroom dynamics and student attitudes. Throughout the cycles, teachers observed a marked shift from passive reception to active exploration. Children who initially hesitated to participate gradually became more confident in expressing their ideas, asking questions, and even leading group exercises, exemplifying the core tenet of SAL—active involvement (Amin & Sumendap, 2022; Hosnan, 2014). The use of varied SAL strategies—such as letter matching, arranging physical objects, and peer discussions—catered to diverse learning styles among students. Visual, kinesthetic, and auditory learners all found entry points for engagement. For instance, some children excelled when using tactile materials like bottle caps and letter puzzles, while others thrived in verbal group games or storytelling activities. This confirms the assertion by Ibrahim (2005) and Djamarah & Zain (2010) that differentiated instruction within active learning frameworks is essential to reach every learner effectively.

In addition, the collaborative group setting fostered social and emotional skills. Children learned to listen, negotiate, and support peers—a benefit that extends beyond cognitive outcomes and supports holistic child development (Dimiyati & Mudjiono, 2009; Hayati Rozana & Wulan). Teachers reported that, as students became more comfortable with SAL routines, classroom management improved, and disruptive behavior decreased. The collaborative atmosphere contributed to a positive emotional climate, in line with the findings of Dedi Setiyadi (2024), who noted increased student motivation and classroom unity under active learning models. Comparing these results to prior studies, the findings reinforce the

conclusions of Mulyani & Wardani (2022) and Erma (2022), which emphasized that SAL is an effective method for content mastery and attitudinal gains in both cognitive and affective domains. The observed increase in mastery—from 42% to over 95%—exceeds the gains reported in some previous studies, possibly due to the tailored, context-specific application of SAL strategies and the commitment of both teachers and students throughout the research process.

Another notable aspect was the role of formative assessment. Continuous observation and immediate feedback allowed teachers to adjust instruction in real-time, address misconceptions, and celebrate small successes. This iterative feedback loop is a hallmark of SAL and is strongly recommended for early childhood classrooms (Djamarah & Zain, 2010; Arikunto, 2010). However, the findings also highlight remaining challenges. Some students required more time and individualized attention to fully master letter recognition, especially those with limited prior exposure to print or those who were less confident at the outset. This suggests that while SAL is broadly effective, ongoing differentiation and flexible pacing remain important for inclusive early childhood practice (Amin & Sumendap, 2022; Dimiyati & Mudjiono, 2009). The study's implications are also relevant for teacher professional development. Implementing SAL requires specific skills in facilitation, formative assessment, and classroom management. Ensuring that teachers have opportunities for ongoing training and reflective practice will be essential for sustaining and scaling the benefits observed in this research (Asrori & Rusman, 2020; Hosnan, 2014).

The findings of this study demonstrate that the implementation of Student Active Learning (SAL) significantly improved children's learning outcomes in recognizing alphabet letters at ABA Sei Besar Kindergarten. The improvement was not merely reflected in quantitative achievement scores, but also in qualitative changes in classroom participation, motivation, and social interaction among children. The percentage of mastery increased progressively from 42% in the pre-action stage to 79.1% in Cycle I and finally reached 95.1% in Cycle II. This indicates that SAL successfully transformed the learning process from passive reception into active engagement, allowing children to construct knowledge through direct experience, interaction, and exploration. The findings strengthen constructivist learning theory, which argues that children learn more effectively when they are actively involved in meaningful activities rather than functioning merely as recipients of information. In early childhood education, active participation is particularly important because children at this developmental stage rely heavily on sensory experiences, social interaction, and concrete learning media to build understanding (Hosnan, 2014; Amin & Sumendap, 2022).

The success of SAL in this research occurred because the learning activities were designed to match the developmental characteristics of early childhood learners. Children in kindergarten generally possess short attention spans and require enjoyable, varied, and physically engaging learning experiences. The use of games, letter cards, puzzles, bottle caps, collaborative discussions, and thematic activities stimulated multiple sensory modalities simultaneously, enabling children to recognize letters through visual, auditory, and

kinesthetic channels. This finding aligns with the theory proposed by Dimiyati and Mudjiono (2009), who emphasized that meaningful learning emerges when students are actively involved cognitively, emotionally, and physically in the learning process. Through SAL, children were not only memorizing letters mechanically but were also associating letters with enjoyable experiences, peer collaboration, and contextual themes. Such conditions likely enhanced memory retention and conceptual understanding because children processed information in a meaningful rather than rote manner.

The improvement in alphabet recognition also reflects the importance of motivation in early childhood literacy acquisition. Before the intervention, classroom activities were predominantly teacher-centered, resulting in boredom and limited participation. After SAL was implemented, children became more enthusiastic and confident in engaging with alphabet-learning tasks. This confirms the argument of Djamarah and Zain (2010) that active learning strategies increase intrinsic motivation because learners experience autonomy, interaction, and success during classroom activities. Motivation became a key explanatory factor behind the dramatic improvement observed in Cycle II. Children who initially hesitated to participate gradually gained confidence because the SAL environment minimized fear of failure and encouraged peer support. This phenomenon is consistent with socio-constructivist perspectives, particularly Vygotsky's view that learning develops through social interaction and collaborative engagement. Peer interaction during group activities likely created scaffolding opportunities where children learned not only from teachers but also from classmates.

The findings are also consistent with several previous studies that reported positive effects of active learning approaches on literacy development. Erma (2022) found that SAL effectively improved children's ability to recognize uppercase letters in kindergarten settings, while Dedi Setiyadi (2024) reported increased learning outcomes and student enthusiasm through SAL implementation in Islamic education. Similar to those studies, the present research confirms that active participation, collaborative learning, and varied instructional media significantly enhance student engagement and achievement. However, the current study produced a higher level of mastery improvement, reaching 95.1%, which exceeds the gains reported in some previous studies. One possible explanation for this difference is the contextual adaptation of SAL strategies to the specific needs of kindergarten learners. The researcher incorporated thematic learning, manipulative materials, and repeated practice opportunities that were closely connected to children's daily experiences. This suggests that the effectiveness of SAL may depend not only on the method itself but also on how flexibly and contextually teachers implement it within classroom environments.

From a theoretical perspective, the findings reinforce active learning theory, which posits that knowledge acquisition becomes more effective when learners engage directly in constructing meaning through interaction and experience (Ibrahim, 2005). The results also support experiential learning theory, particularly the idea that children learn best through "learning by doing." The manipulative activities used in this study enabled children to interact

concretely with abstract symbols such as alphabet letters. Early childhood learners often struggle with abstract concepts when instruction relies heavily on verbal explanation alone. By incorporating hands-on and collaborative activities, SAL bridged the gap between abstract literacy concepts and children's concrete cognitive abilities. This explains why children showed substantial progress in letter identification, pronunciation, and writing accuracy across both cycles.

Despite the positive outcomes, the study also revealed several challenges that are important to discuss critically. Some children required more individualized guidance and progressed more slowly than others, indicating that differences in readiness, prior exposure to literacy, and learning pace remained influential factors. This finding suggests that SAL is not automatically effective for every child unless teachers continuously adapt activities and provide differentiated support. The need for teacher flexibility confirms the argument of Asrori and Rusman (2020) that classroom action research requires reflective teaching practices and ongoing instructional adjustments. In addition, managing active classrooms demanded considerable teacher preparation, classroom management skills, and creativity in designing learning media. Without adequate teacher competence, SAL implementation could potentially become chaotic or less focused. Therefore, the effectiveness of SAL is strongly dependent on teacher readiness, professional competence, and the availability of supportive learning resources.

Scientifically, the study contributes important implications for early childhood literacy education. First, it provides empirical evidence that active learning approaches are highly effective in improving alphabet recognition during the foundational literacy stage. Second, it demonstrates that literacy learning in early childhood should prioritize participatory, play-based, and contextualized activities rather than relying solely on conventional teacher-centered instruction. Third, the findings highlight the importance of integrating cognitive and socio-emotional dimensions in literacy instruction, as meaningful interaction and emotional engagement significantly influence learning outcomes. These implications are relevant not only for kindergarten teachers but also for curriculum developers and policymakers seeking to improve early childhood literacy achievement through child-centered pedagogical approaches.

CONCLUSIONS

The application of Student Active Learning (SAL) at ABA Sei Besar Kindergarten resulted in a substantial increase in children's alphabet recognition skills. The proportion of students reaching mastery rose from 42% before intervention to 95.1% after two cycles of SAL-based instruction. The findings affirm that SAL provides an effective, interactive, and enjoyable framework for early childhood literacy development. The study recommends wider adoption of SAL in early childhood education, along with continued teacher training in active learning methods and the development of diverse instructional resources.

REFERENCES

- Abdullah, N., Sahidun, N., Listiawati, L., Lukman, S., Sangu, I., Kofia, S., & Ridwan, F. (2025). Development of animated letter media to improve alphabet recognition ability in early childhood. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(2). <https://doi.org/10.23969/jp.v10i2.35599> (Jurnal Universitas Pasundan)
- Amin dan Linda Yurike Susan Sumendap, 2022 164 *Model Pembelajaran Kontemporer*, Yogyakarta, Pusat Penerbitan LPPM.
- Aprilia, A. E., & Tasuah, N. (2025). Implementation of letter-assembling learning media to introduce the alphabet to children at kindergarten level. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 7(2). <https://doi.org/10.35473/ijec.v7i2.4128> (Jurnal Universitas Ngudi Waluyo)
- Arikunto, S. 2006 *Prosedur Penelitian: Suatu Pendekatan Praktik*. Edisi Revisi VI. Jakarta: PT. Rineka Cipta.
- Arikunto, Suharsimi. 2010 *Prosedur Penelitian suatu Pendekatan Praktik*. Jakarta: PT Rineka Cipta.
- Asrori dan Rusman, *Classroom Action Research Pengembangan Kompetensi Guru*, Purwokerto, CV. Pena Persada, 2020,
- Cabell, S. Q., Tortorelli, L. S., & Gerde, H. K. (2013). How do I write...? Scaffolding preschoolers' early writing skills. *The Reading Teacher*, 66(8), 650–659. <https://doi.org/10.1002/TRTR.1179>
- Cahyani, N. A., & Rocmah, L. I. (2021). Improving the ability to recognize letters through interactive video media "Mari Mengetahui Huruf" in kindergarten children. *Academia Open*, 4. <https://doi.org/10.21070/acopen.4.2021.2575> (Academia Open)
- Dedi Setiyadi. 2024. *Penerapan Metode Student Active Learning Dalam Meningkatkan Hasil Belajar Siswa Pada Materi Akhlak Terhadap Orang Tua Mata Pelajaran Pendidikan Agama Islam Dan Budi Pekerti*.
- Dimiyati dan Mudjiono. 2009. *Belajar dan Pembelajaran*. Jakarta: Rineka Cipta.
- Djamarah, Syaiful Bahri dan Aswan Zain. 2010. *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta. Hal 205.
- Erma, 2022. *Upaya Meningkatkan Hasil Belajar Materi Mengetahui Huruf Besar melalui Metode Student Active Learning (SAL) pada Anak Kelompok A1.1 Di TK Negeri Pembina Ujung Bulu Kabupaten Bulukumba*. Jurnal pada Universitas Negeri Malang: Tidak Diterbitkan.
- Fieana, N. A., Fidrayani, F., & Hayati, M. (2024). Improving the ability to recognize letters through smart box media in kindergarten students. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 6(1), 62–72. <https://doi.org/10.35473/ijec.v6i1.2802> (Jurnal Universitas Ngudi Waluyo)
- Hayati Rozana, Wulan, *Pengembangan Kognitif Anak Usia Dini (Teori dan praktik)*.
- Hosnan, M. 2014. *Pendekatan Saitifikdan Kontekstual Dalam Pembelajaran Abad 21*. Bogor: Ghalia Indonesia.
- Ibrahim, M. 2005. *Pembelajaran Kooperatif*. UNESA: University Press.
- Justice, L. M., Pence, K., Bowles, R. P., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which 4-year-old children learn the alphabet letters.

- Early Childhood Research Quarterly*, 21(3), 374–389.
<https://doi.org/10.1016/j.ecresq.2006.07.010>
- Kemendiknas, 2010. *Pusat Kurikulum Balitbang Kemendiknas*
- Lonigan, C. J., Schatschneider, C., & Westberg, L. (2008). Identification of children's skills and abilities linked to later outcomes in reading, writing, and spelling. *Developing Early Literacy: Report of the National Early Literacy Panel*, 55–106.
<https://doi.org/10.1598/RT.61.1.5>
- Mazidah, N., & Putro, K. Z. (2023). Alphabet letter recognition through speech development in early childhood. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 5(1).
<https://doi.org/10.35473/ijec.v5i1.1953> (Jurnal Universitas Ngudi Waluyo)
- Neumann, M. M. (2018). Using environmental print to enhance emergent literacy and print motivation. *Reading and Writing*, 31(4), 771–793. <https://doi.org/10.1007/s11145-017-9800-6>
- Noviana, N., Zuhrotul, B. H., & Zakaria, M. (2025). The effectiveness of alphabet block games on language development in early childhood letter recognition. *Ainara Journal (Jurnal Penelitian dan PKM Bidang Ilmu Pendidikan)*, 6(3), 348–356.
<https://doi.org/10.54371/ainj.v6i3.976> (Ainara Press Journal)
- Piasta, S. B., Logan, J. A. R., Farley, K. S., Justice, L. M., & Petscher, Y. (2018). Preschoolers' alphabet learning: Letter name and sound instruction, cognitive processes, and English proficiency. *Early Childhood Research Quarterly*, 44, 257–274.
<https://doi.org/10.1016/j.ecresq.2018.04.011> (ScienceDirect)
- Pical, H., & Rocmah, L. I. (2025). Flashcard media and early childhood letter recognition achievement. *Academia Open*, 10(1). <https://doi.org/10.21070/acopen.10.2025.12423> (Academia Open)
- Primasari, W., Zahro, I., & Suwargono, T. (2025). Improving pre-reading skills in children aged 4–5 years using card game media. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(4).
<https://doi.org/10.23969/jp.v10i04.31221> (Journal Universitas Pasundan)
- Risianti, V. W., & Sari, W. (2024). The effect of Smart Fun Alphabet media on the ability to recognize letters for early childhood. *International Journal Education and Computer Studies (IJ ECS)*, 4(2). <https://doi.org/10.35870/ijecs.v4i2.3051> (Lembaga KITA Journal)
- Yanti, L. R., Kurnia, R., & Nurlita, N. (2024). Development of Android-based alphabet box games to improve letter recognition ability in early childhood. *PAUD Lectura: Jurnal Pendidikan Anak Usia Dini*, 7(2). <https://doi.org/10.31849/paud-lectura.v7i2.17067> (Journal of Universitas Lancang Kuning)