

COMMUNITY SERVICE PROGRAM TO IMPROVE EARLY CHILDHOOD AND SCHOOL-AGE LITERACY USING THE MULTISENSORY METHOD

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ABSTRACT

Indonesia still faces literacy challenges among elementary and junior high school students, especially in urban areas like Jakarta. This issue stems from insufficient early literacy stimulation, minimal family involvement, and low motivation to learn. To address these challenges, the community service team supports the Gempica (Smart Reading Movement) program in Menteng Dalam Village, South Jakarta. The initiative introduces two innovative, multisensory learning strategies at RPTRA Flamboyan. The first method uses pictures and storytelling to help children recognize letters and stimulate their imagination. The second method applies an educational dice game, “*Aku Cinta Indonesia*,” to train quick thinking and broaden knowledge through interactive teamwork. Thirty children aged 6–10 participated, with active support from families and community partners, deepening collaboration. The results show improvements in reading interest, letter recognition, reading fluency, and self-confidence. Children gained social skills and found joy in learning, while parents expressed satisfaction and desire for continued activities.

Keywords: Literacy, Multisensory, Educational Games, Community Collaboration.

1. INTRODUCTION

Literacy remains a fundamental pillar of children’s education, serving as a gateway to knowledge, critical thinking, and effective communication within society (Wahidah et al., 2025). Children who have early literacy skills are better prepared to face the challenges of the next education levels and adapt better in social life (Daulay et al., 2023). In Indonesia, the urgency of strengthening early literacy is evident from both national and international assessments. The Programme for International Student Assessment (PISA) 2018 ranked Indonesia 62nd out of 70 countries for reading, and results from the National Assessment further illustrate below-average literacy competency among students (OECD, 2018). In urban areas such as Jakarta, the situation is equally concerning: recent data shows that the Reading Interest Level (TGM) in 2024 reached only a moderate 72.19, with children typically reading just 3–4 books per year and spending minimal time daily on reading activities, with fewer achieving minimum proficiency (Hendrik et al., 2025). These figures highlight that despite the availability of formal education, gaps in literacy persist and demand urgent attention (Fig1).

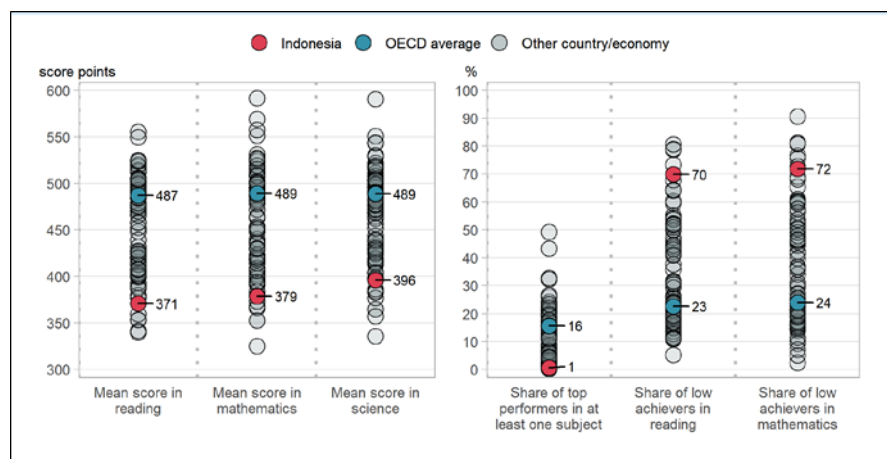


Figure 1. Snapshot of performance in reading, mathematics and science
Source: McComas (2018)

The complication stems not only from systemic issues but also from factors within the family and community. Many children struggle with basic reading because early literacy stimulation is lacking at home, parental involvement is minimal, and motivation to read is low. Traditional, memorization-heavy teaching methods fail to spark engagement, often causing boredom and lowering learning effectiveness. In highly urbanized settings, the situation is amplified as parents face work pressure and cannot provide adequate support for their children's literacy development. Studies have shown that multisensory and interactive approaches, such as storytelling, games, and tactile media, are more effective in engaging children and supporting memory retention, making reading a joyful and lasting experience (Ruhaena, 2015; Herawati et al., 2025).

Amid these challenges, key questions arise: What strategies can effectively enhance literacy among urban children? How can learning methods stimulate interest, strengthen family involvement, and bring sustainable positive change to communities struggling with low literacy?

This community service program at RPTRA Flamboyan, Menteng Dalam, South Jakarta addresses these questions by introducing an innovative solution—multisensory, game-based literacy interventions targeting children aged 6–10. The program combines letter and word recognition using pictures and storytelling with the “*Aku Cinta Indonesia*” educational dice game, fostering quick thinking, teamwork, and knowledge growth through playful and interactive learning. Children are grouped by skill level for differentiated instruction, ensuring that activities match their developmental needs. Family and community partners actively participate, making literacy a shared, sustainable pursuit beyond the classroom. This initiative offers a replicable model for collaborative campus–community partnerships, advancing literacy and building an enduring culture of reading among urban children.

2. METHOD

The implementation of the community service program to enhance children's literacy began with a comprehensive preparation phase focused on establishing a foundation for meaningful learning outcomes. First, the project team conducted a detailed assessment to identify and map the target participants, considering various factors such as age, initial reading ability, family background, and existing literacy challenges within the partner location. This mapping process was essential to ensure that the intervention would be tailored to the real needs and conditions of the community, thereby maximizing potential impact.

Following the assessment, a socialization stage was held to introduce the program to broader stakeholders. This involved engaging local residents, parents, educators, community leaders, and RPTRA managers in dialogue about the objectives, strategies, and anticipated benefits of the literacy activities. By fostering collective awareness and support, the program could generate positive motivation and active participation both from families and community partners.

The core implementation phase comprised a variety of interactive and multisensory instructional activities, delivered across a series of structured sessions. These activities included dedicated one-on-one tutoring, group shared reading sessions, storytelling workshops, and the distribution of custom-designed literacy worksheets. Educational games—particularly the “*Aku Cinta Indonesia*” dice game—were employed as enrichment to stimulate children's thinking, encourage teamwork, and create an enjoyable learning environment. To further increase program effectiveness, all participants were systematically grouped based on their present level of literacy competence, enabling facilitators to deliver differentiated and personalized learning experiences. The instructional strategies were carefully sequenced to emphasize letter recognition and phonics for early readers, gradual reading practice for more advanced learners, text comprehension exercises adapted to age and ability, and integration of local environmental knowledge to make learning relevant for older children.

Throughout the implementation, facilitators played an active role in observing and adaptively monitoring each session. Regular observation enabled facilitators to respond promptly to individual needs, maintain high engagement, and make adjustments to teaching approaches in order to optimize learning progress for every participant. Special attention was given to fostering a supportive and joyful learning atmosphere, leveraging multisensory materials such as sandpaper letters, picture books, interactive media, game boards, question cards, and various written assignments. These materials were selected for their potential to stimulate children's senses of sight, touch, and hearing, reinforcing their memory, imagination, and confidence in reading.

The program's commitment to meaningful evaluation was evident in its multi-layered assessment approach. Qualitative outcomes were measured through in-depth interviews with parents, RPTRA managers, community leaders, and village officials, yielding valuable insights into the program's practical impacts. Facilitators implemented a systematic progress tracking mechanism that documented changes in participants' literacy skills, motivation, and

engagement throughout the sessions. By integrating both formal and informal feedback, the program ensured ongoing refinement to sustain its positive effects and address any emerging challenges.

Ultimately, the initiative was carried out entirely at RPTRA Flamboyan in Menteng Dalam, South Jakarta, chosen for its child-friendly facilities and accessibility to the local community. Resources provided for the sessions included sandpaper letters for tactile learning, illustrated children's books for read-aloud activities, customized dice game boards, question and challenge cards for group play, and a diverse array of worksheets and written assignments. Each instructional session lasted three hours and was held twice, giving children ample time for immersive and engaging experiences. The combination of well-structured activities, responsive facilitation, and sustained parental involvement proved decisive in creating a nurturing and sustainable literacy environment.



Figure 2. Equipment required for the activity
Source: Personal documentation

3. RESULTS AND DISCUSSION

The literacy program was initiated following thorough stakeholder engagement and early research to map the specific conditions of children at RPTRA Flamboyan, Menteng Dalam. This collaboration ensured the interventions addressed actual literacy gaps and developmental needs in the local population. Thirty children, including one with special needs, participated in the activities, and support from parents and community members added value to the program. The participants were distributed by age (twelve aged 6–7 years, eighteen aged 8–10 years) and gender (sixteen boys, fourteen girls), allowing for age-appropriate grouping and differentiated instruction.

Table 1. Participants by Age and Gender

Age Group	Number	Gender	Number
6-7 tahun	12	Laki-laki	16
8-10 tahun	18	Perempuan	14

Source: primer data, 2025

At the beginning of implementation, facilitators introduced the “Flamingo” picture book, selected for its vibrant illustrations and simple, accessible text suitable for young readers. This approach aimed to nurture both literacy and numeracy, as research shows that visual and textual integration boosts children’s engagement and retention (Subianto et al., 2023). After group sessions, illustrated worksheets were sent home for completion with parental assistance, deepening the link between school activities and home support. This strategy emphasized the central role of families in sustaining children's literacy progress.

Multisensory media, including textured letter cards and interactive visual aids—were key in helping children, especially younger participants, recognize and remember letter shapes. The use of Montessori-inspired sandpaper letters leveraged children’s tactile and visual senses, stimulating memory and making abstract symbols more concrete (Pattiwael et al., 2024). Facilitators reinforced these learning experiences by encouraging children to identify real-world objects beginning with target letters, bridging classroom instruction with contextual, meaningful practice.

The storytelling method fostered phonetic awareness, vocabulary enrichment, and emotional connection during read-aloud activities with the “*Flamingo*” book. These sessions supported the development of imagination and positive attitudes toward reading, while home-based worksheets extended learning into daily family routines. Such follow-up activities promoted long-term collaboration between educators and parents, crucial for embedding literacy habits beyond the classroom.



Figure 3. Implementation of letter recognition and read-aloud learning
Source: Personal documentation

Older children were actively engaged through the “Aku Cinta Indonesia” dice game, a group-based educational activity that integrated movement, competition, and teamwork. As children advanced along the game board, reading and responding to group challenge cards, they practiced comprehension and critical thinking while building social and communication skills. Rewards for winning teams fostered motivation and a spirit of sportsmanship. Evidence from Darubekti et al. (2021) supports the motivational impact of educational games in increasing student participation and reinforcing character development in literacy learning.



Figure 4. Implementation of the interactive dice game “*Aku Cinta Indonesia*”
Source: Personal documentation

Throughout the program, parental involvement remained central. Sessions closed with reflection and input from parents, who reported increased reading interest and fluency in their children, as well as requests for program continuation. This feedback validated the community-based model, where continuous family support and collaborative evaluation strengthen effectiveness and sustainability.

Evaluation combined systematic observation with in-depth interviews. Facilitators documented notable improvements: children gained confidence in recognizing letters, read single and double syllables more fluidly, and responded more quickly to questions and tasks. Parents highlighted positive changes in motivation and expressed satisfaction with the outcomes. The collective evidence demonstrated the program's ability to create an inclusive, engaging, and cooperative literacy environment, confirming the value of multisensory, interactive, and family-centered interventions for urban communities facing persistent literacy challenges.

4. CONCLUSION

The community service program designed to improve early childhood and school-age literacy at RPTRA Flamboyan, Menteng Dalam, demonstrated meaningful and multifaceted results. By utilizing a multisensory approach and integrating interactive games, the program successfully fostered not only children's reading ability but also their motivation and enjoyment of learning. Activities such as letter recognition with tactile media, group storytelling, and the “*Aku Cinta Indonesia*” dice game helped participants recognize letters, develop fluency, expand their knowledge, and collaborate with peers in a supportive environment.

Crucially, the involvement of parents and local community members amplified the program's positive effects, fostering sustained engagement and turning literacy learning into a shared responsibility. This collaborative atmosphere enabled the development of self-confidence and respect among children, while also strengthening family bonds and social cohesion within the community. Evaluation through observation and interviews revealed high levels of satisfaction from both parents and facilitators, with many expressing a desire for continued activities.

Overall, the initiative underscores that literacy improvement is most effective when it leverages creative, multisensory methods and relies on active partnership between educational institutions, families, and community leaders. The program stands as a practical model for replicable and sustainable literacy interventions in urban environments, inspiring further campus and community collaborations to build a robust reading culture and better educational outcomes for young learners.

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