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Community Services Article

Rumah Belajar Ceria: Tutoring in Mathematics and English for Elementary School Students in Tenrigangkae Village

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ABSTRACT

The *Rumah Belajar Ceria* program was implemented as part of the community service component of the KKN-PPL program of Universitas Negeri Makassar in Tenrigangkae Village, aiming to enhance elementary school students' motivation and understanding of Mathematics and English. This initiative was driven by limited learning facilities and a lack of academic support outside school hours, causing children to spend more time playing without academic guidance. The program was conducted informally in three phases: planning, implementation, and evaluation. The learning strategy emphasized interactive, contextual, and game-based approaches. The results showed increased motivation, participation, and confidence among students, along with significant improvement in understanding basic concepts. In addition, the program received positive support from parents and the community, strengthening social bonds between students, parents, and university students. These findings highlight that informal game-based learning models can serve as an alternative solution to improve both educational quality and community empowerment in rural areas.

1. INTRODUCTION

Education is a crucial aspect of human resource development, especially for elementary school children who are at a critical stage of cognitive growth. As stated in [1], education plays a vital role in creating a sustainable future, as it enables individuals to understand global issues, develop critical thinking, collaborate, and innovate in problem-solving. Similarly, Hayati [2] emphasized that elementary education aims to instill critical and imaginative thinking skills, nurture moral values, and strengthen faith as life guidance.

However, children in rural areas still face challenges such as limited learning resources and a lack of guidance outside formal schooling. This is consistent with findings in [3], which indicate that geographical distance, socioeconomic status, and low parental involvement significantly affect children's educational development. Field observations revealed that many children struggle to understand lessons, particularly in mathematics and English. These difficulties are compounded by parents' limited time or ability to assist with learning at home. As a result, children spend more time playing with peers or gadgets, making their out-of-school learning less optimal. This is consistent with various studies indicating that excessive use of gadgets can reduce learning interest, disrupt concentration, and negatively affect children's academic achievement [4][5][6].

In response, the Universitas Negeri Makassar KKN-PPL team designed *Rumah Belajar Ceria* program to provide informal tutoring in Mathematics and English through engaging, flexible, and interactive methods. The program had five main objectives: (1) improving children's basic mathematical and English skills, (2) fostering motivation and interest in learning beyond school hours, (3) creating a relaxed and interactive learning environment, (4) ensuring equal learning opportunities for children in three hamlets, and (5) developing students' competence in designing and conducting informal learning within the community. This article systematically outlines the program implementation and its impact on children's learning progress in Tenrigangkae Village.

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2. METHODS

The program was conducted informally from July to August 2025, with sessions lasting 1.5–2 hours each, held in Padaelo, Bugis, and Bombongi hamlets of Tenrigangkae Village. The number of participants varied, starting with 5–10 children in the initial sessions and increasing to 7–15 by the end.

The implementation of the program consisted of three main stages, namely planning, implementation, and evaluation. In the first stage (planning), the team scheduled the activities, selected learning materials that suited the children's needs, and prepared the necessary teaching media. During the second stage (implementation), the learning process involved delivering concepts through simple exercises, educational games, and interactive discussions. Finally, in the last stage (evaluation), the participants were assessed based on their active participation, enthusiasm during educational games, application of knowledge in activities, and responses in reflection sessions.

To enhance the learning process, several teaching strategies were applied. The interactive approach was implemented through educational games to foster children's engagement. The contextual strategy aimed to connect the learning content with everyday life, while the collaborative approach encouraged teamwork through small group activities.

The sequence of program implementation is summarized in the following table.

Table 1. Implementation of *Rumah Belajar Ceria* Program

Session	Subject	Main Activity	Notes
1	Mathematics (Addition & Subtraction)	Buying–selling game with picture cards of objects and prices	Trains accuracy, teamwork, and application of basic arithmetic
2	English (Introduction)	Self-introduction practice + simple concentration game	Encourages speaking English in front of peers
3	Mathematics (Multiplication)	Tiered practice + concentration game	Adjusted for mixed levels (Elementary–Junior High)
4	English (Family Theme)	Vocabulary practice + group games	Encourages active use of simple vocabulary
5	Evaluation	Educational competitions (Math & English)	Assesses understanding while boosting motivation

3. RESULTS AND DISCUSSION

The program received positive responses from both children and the community. Significant improvements were observed in students' active participation from session to session, such as answering questions, engaging in educational games, and confidently speaking in front of peers. The game-based approach effectively reduced anxiety about difficult subjects, particularly Mathematics and English, supporting previous research that game-based learning increases motivation and conceptual understanding [7][8].

In mathematics sessions, for example, the use of price cards in a simulated buying–selling activity engaged children in discussions and calculations. This activity not only improved numeracy skills but also fostered collaboration and confidence. As illustrated in Figure 1, children in Bugis Hamlet actively participated and enjoyed the learning process, confirming that game-based approaches stimulate both cognitive and affective engagement.

Figure 1. Game-based mathematics learning atmosphere in Bugis Hamlet

In addition to Mathematics, positive developments were also observed in English learning. As the program progressed, the children's confidence gradually increased. In English sessions, simple activities such as self-introductions, which were initially performed with hesitation, slowly became more fluent after receiving guidance. The children began to confidently state their names, hobbies, and even introduce family members in simple English. A relaxed and interactive learning atmosphere was a crucial factor in encouraging their confidence to communicate in a foreign language.

As shown in Figure 2, documentation from Padaelo Hamlet illustrates children's active involvement in practicing new vocabulary. This visualization reinforces the field findings that informal learning approaches not only enhance linguistic abilities but also build children's communicative confidence.

Figure 2. Children in Padaelo Hamlet actively participating in English learning

These results align with previous studies indicating that informal tutoring contributes to improved motivation, comprehension, and active participation in the learning process [9].

Furthermore, increased participation was also evident when more challenging material, such as multiplication, was introduced. Although initially perceived as difficult, exercises tailored to their abilities kept the children enthusiastic in solving problems. This enthusiasm became even more apparent during the final evaluation, which was designed as a competition. The children competed while simultaneously collaborating, applying the knowledge they had learned, and demonstrating joy in learning. This could be observed in the atmosphere of Bombongi Hamlet (Figure 3), where the children enthusiastically engaged in mathematics practice.

Figure 3. Enthusiasm of Bombongi Hamlet children during mathematics practice

Overall, this activity demonstrates that non-formal learning with a game-based approach can foster positive responses, including increased self-confidence, motivation, and academic understanding. This is in line with the findings of Oktaviani & Utami [10], who emphasized that learning assistance outside of school can significantly enhance children's motivation, interest, and comprehension. In addition, the activity also generates social impacts, such as the development of study habits, collaboration skills, and parental support. Thus, the non-formal mentoring program *"Rumah Belajar Ceria"* not only improves children's understanding but also strengthens family and community involvement in supporting children's learning in rural areas.

4. CONCLUSION

The community service program *Rumah Belajar Ceria* provided positive impacts. The game-based learning approach proved effective in increasing children's motivation, confidence, and understanding, particularly in Mathematics and English.

These findings affirm that such informal tutoring models have strong potential for broader development. As a follow-up, similar programs could expand participant coverage, diversify materials, or be adapted to the specific needs of each region. The outcomes of this program may also serve as a reference for developing creative and enjoyable community-based learning models, offering alternative solutions to the limited tutoring opportunities available for children in rural areas.

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