

International Proceeding Community Services

Magic Savings Adventure: Children's Financial Literacy Through Gamification and Experiential Learning

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ABSTRACT

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Financial literacy is an essential life skill that should be introduced from an early age to foster responsible financial behavior in the future. To enhance children's understanding of basic financial management, the Community Service Team of Perbanas Institute implemented the “Magic Savings Adventure” program on May 21, 2026, involving 40 participants consisting of 20 children aged 4–7 years and 20 children aged 8–12 years.

The program was designed using experiential learning and gamification approaches through engaging outdoor activities. Participants were invited to enter the imaginative world of the “Magic Savings Kingdom” as Smart Coin Guardians, where they completed a series of educational missions, including Happy Coin Hunt, Smart Choice Challenge (Needs vs. Wants), and the Magic Mini Market. Through these interactive activities, children learned to recognize the value of money, distinguish between needs and wants, understand the importance of saving, and make simple financial decisions.

The implementation results demonstrated high levels of enthusiasm and active participation among the children. The program successfully improved participants’ basic financial literacy by providing a fun, practical, and age-appropriate learning experience. These findings suggest that experiential learning combined with gamification can serve as an effective approach to financial literacy education and has the potential to be replicated in various child-centered community programs.

I. INTRODUCTION

Financial literacy has become an essential life skill in the modern era, particularly amid the rapid growth of digital technology and increasingly accessible financial services. Children today are frequently exposed to various forms of financial transactions, ranging from cash payments to digital payment systems encountered in their daily lives. Such exposure creates opportunities for early financial learning; however, without proper guidance, children may develop consumption-oriented behaviors and limited understanding of responsible money management. Consequently, financial literacy education should be introduced from an early age to help children develop sound financial habits and decision-making skills that can support their future financial well-being.

The importance of financial literacy education for children has been highlighted by numerous international studies. According to the OECD (2024), financial literacy encompasses the knowledge, skills, attitudes, and behaviors necessary for making informed financial decisions and achieving individual financial well-being. Findings from the OECD Programme for International Student Assessment (PISA) 2022 revealed that a considerable proportion of students still demonstrate limited financial literacy competencies, particularly in understanding basic financial concepts, managing expenditures, and making responsible financial decisions. Students with higher levels of financial literacy were found to be more capable of planning expenditures, evaluating financial alternatives, and adopting positive saving behaviors. These findings emphasize the need to strengthen financial education from an early age to prepare younger generations for increasingly complex economic environments.

Recent studies have demonstrated the effectiveness of financial literacy interventions among children. Mancone et al., (2024) reported that financial education programs designed for children and adolescents positively influence financial knowledge, attitudes, and behavioral intentions, particularly when learning activities actively involve participants in practical experiences. Similarly, Cannistrà et al., (2024) found that game-based financial education significantly improved students' understanding of financial concepts and enhanced their motivation to engage in learning activities. These findings suggest that interactive and participatory approaches can contribute substantially to improving children's financial literacy outcomes.

In addition to financial education content, the learning approach plays a crucial role in determining educational effectiveness. Experiential Learning Theory emphasizes that meaningful learning occurs through direct experience, reflection, conceptualization, and active experimentation (Kolb & Kolb, 2012). For children, experiential learning provides opportunities to transform abstract concepts into concrete experiences that are easier to understand and remember. Through hands-on activities and real-life simulations, children can actively construct knowledge and develop practical skills related to financial decision-making.

Furthermore, gamification has emerged as an innovative educational strategy capable of enhancing learner engagement and motivation. By integrating game elements such as missions, challenges, rewards, storytelling, and competition into educational activities, gamification creates enjoyable learning experiences while maintaining educational objectives. Recent evidence reported by Andreatti & Morselli (2026) indicates that game-based learning environments can improve children's comprehension, participation, and retention of financial literacy concepts. Therefore, combining experiential learning with gamification offers promising opportunities for developing age-appropriate financial literacy education programs.

Despite growing recognition of the importance of financial literacy education, many existing programs continue to rely on conventional instructional methods that emphasize information delivery rather than active participation. Moreover, community-based financial literacy programs specifically designed for children aged 4–12 years and integrating both experiential learning and gamification remain relatively

limited. Consequently, there is a need for innovative educational initiatives capable of introducing financial concepts through engaging, interactive, and developmentally appropriate learning experiences. Based on these considerations, the Community Service Team of Perbanas Institute organized the “Magic Savings Adventure: Children's Financial Literacy through Gamification and Experiential Learning” program. The program was designed to introduce fundamental financial literacy concepts, including money recognition, distinguishing between needs and wants, saving habits, and simple financial decision-making through interactive games, simulations, and experiential activities.

Accordingly, this community service activity seeks to address the following question: How can experiential learning and gamification improve children's understanding of basic financial literacy concepts? Therefore, the objective of this program is to enhance financial literacy among children aged 4–12 years by providing meaningful learning experiences that encourage positive financial attitudes and behaviors through experiential learning and gamification-based activities.

II. METHODS

This community service program employed a participatory educational approach integrating Experiential Learning and Gamification to improve financial literacy among children. The activity was conducted on 21 May 2026 and involved 40 participants, consisting of 20 children aged 4–7 years and 20 children aged 8–12 years. The program was designed to provide direct learning experiences that enable participants to understand basic financial concepts through interactive activities, simulations, and educational games.

The implementation of the program followed four stages: preparation, implementation, evaluation, and reporting. During the preparation stage, the community service team conducted coordination meetings, identified participants' learning needs, developed educational materials, and designed gamified learning activities appropriate for children's developmental characteristics. Learning media and supporting materials were also prepared, including play coins, needs-and-wants cards, transaction simulation tools, worksheets, and educational game equipment. In addition, a storytelling scenario entitled “Magic Savings Kingdom” was developed as the central narrative framework for all learning activities.

During the implementation stage, participants engaged in a series of experiential learning activities designed around financial literacy concepts. The program began with an introduction and ice-breaking session, followed by storytelling that introduced participants to their role as Smart Coin Guardians. Participants were then divided into four groups according to age and rotated through three educational activity stations. The first activity, Happy Coin Hunt, introduced the concept that money is obtained through effort and cooperation. The second activity, Smart Choice Challenge, encouraged participants to classify various items as needs or wants. The third activity, Magic Mini Market, provided opportunities for children to participate in simulated purchasing activities, prioritize spending, and practice simple financial decision-making. Gamification elements such as missions, challenges, point systems, rewards, and symbolic coins were incorporated throughout the activities to increase engagement and motivation.

Data was collected through direct observation and reflective evaluation. Observations were conducted by facilitators during all learning activities using structured observation sheets focusing on participants' ability to recognize the functions of money, distinguish between needs and wants, understand the importance of saving, and make simple financial decisions. At the end of the program, participants were invited to participate in a reflection session to express their learning experiences and demonstrate their understanding of the financial literacy concepts introduced during the activities.

The data collected were analyzed using descriptive qualitative analysis. Observation results and participant reflections were summarized and categorized according to the learning objectives of the program. The analysis focused on identifying changes in participants’ understanding, participation levels, and responses to the experiential learning and gamification activities. The findings were then interpreted to evaluate the effectiveness of the program in enhancing children’s basic financial literacy and to formulate recommendations for future community-based financial education initiatives.

III. RESULTS AND DISCUSSION

3.1 Results

The Magic Savings Adventure program was successfully implemented on 21 May 2026 and involved 40 children aged 4–12 years. All registered participants attended the activity until completion, resulting in a participation rate of 100%. The program was conducted through a series of experiential learning and gamification activities, including *Happy Coin Hunt*, *Smart Choice Challenge (Needs vs. Wants)*, and *Magic Mini Market*. Throughout the activities, participants actively engaged in group discussions, educational games, and financial decision-making simulations.

The observation results indicate positive learning outcomes in relation to the targeted financial literacy competencies. Facilitators assessed participants’ ability to recognize the function of money, distinguish between needs and wants, understand the importance of saving, and make simple financial decisions during the activities. The achievement percentages were calculated based on the number of participants who successfully demonstrated each competency during the observation activities. Out of 40 participants, 38 children (95.0%) successfully recognized the function of money, 35 children (87.5%) distinguished needs from wants, 36 children (90.0%) understood the importance of saving, and 34 children (85.0%) demonstrated simple purchasing decision-making skills.

Table 1. Financial Literacy Competencies Demonstrated by Participants

No	Financial Literacy Indicator	Number of Participants	Percentage (%)
1	Recognizing the function of money	38	95.0
2	Distinguishing needs from wants	35	87.5
3	Understanding the importance of saving	36	90.0
4	Making simple purchasing decisions	34	85.0

Source: Observation results during program implementation (2026).

As presented in Table 1, the highest percentage was recorded for the indicator Recognizing the Function of Money (95.0%), followed by Understanding the Importance of Saving (90.0%). Furthermore, 87.5% of participants successfully distinguished between needs and wants, while 85.0% demonstrated the ability to make simple purchasing decisions during the simulation activities. Overall, the observed percentages ranged from 85.0% to 95.0% across the four assessed financial literacy competencies.

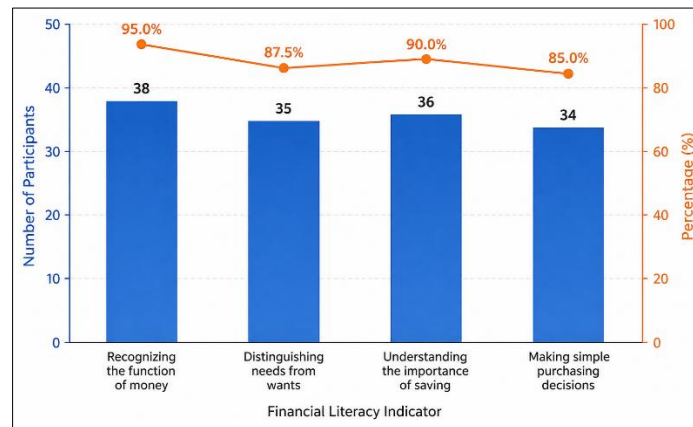


Figure 1. Participants' Financial Literacy Competencies

Figure 1 provides a visual representation of participants' achievement across the four financial literacy indicators. The graph shows that the highest achievement was recorded for recognizing the function of money (95.0%), followed by understanding the importance of saving (90.0%). The indicators related to distinguishing needs from wants and making simple purchasing decisions achieved 87.5% and 85.0%, respectively. The results demonstrate relatively consistent achievement across all indicators.



Figure 2. Experiential Learning and Gamification Activities during the Magic Savings Adventure Program

Figure 2 illustrates participants' engagement during the experiential learning and gamification activities. The photographs show children actively participating in educational games, group discussions, and financial decision-making simulations throughout the program. Participants collaborated within groups, completed assigned missions, and interacted with facilitators during the learning process.

Overall, the observation results indicate that participants demonstrated achievement across all targeted financial literacy competencies. All assessment indicators achieved percentages above 80%, with scores ranging from 85.0% to 95.0%.

To ensure the validity of the findings, observations were conducted using structured observation sheets aligned with the learning objectives of the program. The observation indicators focused on participants' ability to recognize the function of money, distinguish between needs and wants, understand saving behavior, and make simple financial decisions. Prior to implementation, facilitators received briefing sessions regarding the observation criteria to ensure a common understanding of the assessment indicators. Reliability was enhanced through observations conducted by multiple facilitators assigned to different participant groups. Observation results were subsequently reviewed and compared during the evaluation session to ensure consistency across assessors.

The results presented above provide evidence of participants' engagement and achievement across the assessed financial literacy competencies. The implications of these findings are discussed in the following section.

3.2 Discussion

The findings indicate that the integration of experiential learning and gamification provided a supportive environment for introducing financial literacy concepts to children. The high achievement rates across all assessed indicators suggest that participants were able to understand and demonstrate fundamental financial literacy competencies through direct participation in educational activities and simulations.

These findings are consistent with Experiential Learning Theory, which emphasizes that meaningful learning occurs through concrete experience, reflection, conceptualization, and active experimentation. Through activities such as *Happy Coin Hunt* and *Magic Mini Market*, children were not only exposed to financial concepts but also experienced situations that required them to apply their knowledge in practical contexts. This approach enabled participants to connect abstract financial concepts with real-life experiences, making learning more meaningful and easier to understand.

The results also support previous studies highlighting the effectiveness of interactive financial education. Mancone et al. (2024) reported that financial literacy programs involving active participation and practical learning experiences contribute positively to children's financial knowledge and behavioral intentions. Similarly, Cannistrà et al. (2024) found that game-based financial education enhances learners' motivation and improves their understanding of financial concepts. The positive outcomes observed in the present program reinforce the argument that combining experiential learning with gamification can improve engagement and facilitate financial literacy learning among children.

Unlike many conventional financial literacy programs that rely primarily on classroom-based instruction, the present program integrated experiential learning and gamification within a community-based setting involving children aged 4–12 years. This combination enabled participants to experience financial concepts directly through interactive challenges, educational games, and financial simulations, thereby increasing engagement and supporting practical understanding. The findings demonstrate that learning experiences designed around play, storytelling, and active participation can effectively introduce financial literacy concepts to young learners.

One notable finding is the high percentage of participants who successfully recognized the function of money and understood the importance of saving. These competencies represent fundamental aspects of

financial literacy and serve as important foundations for future financial behavior. Although the percentage for making simple purchasing decisions was slightly lower than the other indicators, the achievement rate remained high, suggesting that most participants were capable of applying financial reasoning when making purchasing choices within the simulation activities.

Beyond financial literacy outcomes, the program also promoted the development of broader life skills. During the activities, participants were encouraged to communicate, collaborate, negotiate, and make decisions within their groups. These experiences contributed to the development of social interaction skills, teamwork, and problem-solving abilities, which are essential competencies for children in the twenty-first century.

The implementation of the Magic Savings Adventure program demonstrates that experiential learning and gamification can serve as effective approaches for community-based financial literacy education. The program offers an innovative learning model that is engaging, age-appropriate, and easily adaptable for implementation in schools, community centers, and other educational settings. Therefore, this initiative contributes not only to the improvement of children's financial literacy but also to the broader effort of promoting financial awareness and responsible financial behavior from an early age.

Despite the positive outcomes, the findings should be interpreted with caution because the evaluation relied primarily on observational assessments and involved a relatively small number of participants. Future community service programs may incorporate pre-test and post-test measurements, larger participant groups, and longitudinal evaluations to provide more robust evidence regarding the effectiveness of experiential learning and gamification in improving children's financial literacy and financial behavior over time.

IV. CONCLUSION

This community service program demonstrates that the integration of experiential learning and gamification can effectively enhance children's understanding of basic financial literacy concepts. Observation results showed achievement rates ranging from 85.0% to 95.0% across all assessed indicators, including recognizing the function of money, distinguishing between needs and wants, understanding the importance of saving, and making simple purchasing decisions. These findings indicate that interactive learning experiences can support children in understanding and applying fundamental financial concepts in an engaging and meaningful manner.

In response to the research question, the results confirm that experiential learning and gamification contribute positively to children's financial literacy by encouraging active participation, practical application of knowledge, and meaningful engagement throughout the learning process. In addition to improving financial literacy, the program also supported the development of communication, collaboration, and decision-making skills, highlighting the broader educational benefits of community-based learning activities.

The Magic Savings Adventure program provides an innovative and replicable model for financial literacy education among children. The findings suggest that community-based financial literacy programs can complement formal education by introducing financial concepts through enjoyable and age-appropriate learning experiences. Future programs may expand the scope of learning materials by incorporating topics such as personal budgeting, entrepreneurship, allowance management, and age-appropriate digital financial literacy. Furthermore, greater involvement of parents, teachers, and community organizations is recommended to strengthen the sustainability of financial literacy practices beyond the duration of the program. Future studies may also employ pre-test and post-test designs or

longitudinal evaluations to provide stronger evidence regarding the long-term impact of experiential and gamified financial literacy interventions on children’s financial knowledge, attitudes, and behaviors.

THANK-YOU NOTE

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The authors further acknowledge the support of Perbanas Institute, the participating lecturers, student volunteers, and all stakeholders whose contributions, commitment, and collaboration were essential to the successful implementation of this community service initiative.

LIST OF PARTICIPANTS

Table 2. List of Participants and Attendance

Number	Name	Attendance Checklist
1	Arga Saputra	√
2	Arvan Al Hafizh	√
3	M. Al Fahri	√
4	M. Hafiz Fauzansyah	√
5	Athar arrafif	√
6	Alfareza Hidayatullah	√
7	M. Rifqi Firdaus	√
8	Ahmad Rofif A.	√
9	Tika Khoirunnisa	√
10	Rizkia Kamila P.	√
11	Siti Nur Jhazijah	√
12	Aska Abizar	√
13	Aysah Aqila A.	√
14	Alifah Mulyani	√
15	Alazzam Khalif. P.A	√
16	M. Hafiz Fauzansyah	√
17	Deni Marsel.	√
18	Meli Rahmadani	√
19	M. Sidik	√
20	M. Anwar R	√
21	Ezha Nurahman	√
22	M. Agung j.	√
23	M. Fajar Nudin	√
24	Misya Agustin	√
25	Yuyun Yunengsih	√
26	Haikal alfin	√
27	Kiki Lestari	√
28	Maesaroh	√
29	Rahma Aulia	√

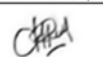
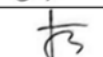
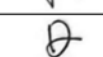
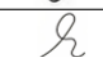
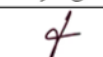
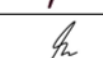
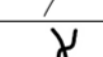
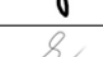
Number	Name	Attendance Checklist
30	Siti Nurjanah	√
31	Yulianti Pratama	√
32	Aisyah Syifa A	√
33	Annisyahilla Putri	√
34	M. Abizar	√
35	Rifai Anshor	√
36	Siti Nuraisah	√
37	Auliya putri	√
38	Azifa Zahida Setiawan	√
39	Vebbyansyah putri	√
40	Hana Khoirunnisa	√

Table 3. Community Service Team Attendance List

ATTENDANCE LIST
COMMUNITY SERVICE PROGRAM – PERBANAS INSTITUTE
LIGARMUKTI VILLAGE, KLAPANUNGGAL DISTRICT, BOGOR REGENCY
Thursday, 21 May 2026

Group: Magic Savings Adventure Team

Title: “Magic Savings Adventure: Children's Financial Literacy Through Gamification And Experiential Learning”

No	Nama Lengkap	Dosen/Mahasiswa	NIDN/NIM	Prodi	Paraf
1	Turah Slamet, S.Pd., S.M., M.M	Dosen	0310028004	S1 Manajemen	
2	Dr. Ir. Markonah ASAI, M.M	Dosen	0315106303	S1 Manajemen	
3	Fangky A. Sorongan, ST., MM., CAP	Dosen	0314027903	D3 Akuntansi	
4	Desmar Panji S.	Mahasiswa	2512000021	S1 Manajemen	
5	Muhammad Farhan	Mahasiswa	2512000062	S1 Manajemen	
6	Deandra Rayhan S.	Mahasiswa	2512000008	S1 Manajemen	
7	M. Rizki Alfariz	Mahasiswa	2512000005	S1 Manajemen	
8	Putri Bunga L.	Mahasiswa	2502000029	D3 Keuangan Perbankan	
9	Rahma Aprianingsih	Mahasiswa	2502000023	D3 Keuangan Perbankan	

REFERENCES

- Andreatti, G., & Morselli, D. (2026). Cooperative or Game-Based Learning? Fostering Financial Literacy for Sustainable Citizenship Through Two Contrasting Implementations in Primary Education. *Sustainability*, 18(3), 1545. <https://doi.org/10.3390/su18031545>
- Cannistrà, M., De Beckker, K., Agasisti, T., Amagir, A., Pöder, K., Vartiak, L., & De Witte, K. (2024). The impact of an online game-based financial education course: Multi-country experimental evidence. *Journal of Comparative Economics*, 52(4), 825–847. <https://doi.org/10.1016/j.jce.2024.08.001>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining gamification. In A. Lugmayr, H. Franssila, C. Safran, & I. Hammouda (Eds.), *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments* (pp. 9–15). ACM. <https://doi.org/10.1145/2181037.2181040>
- Kolb, A. Y., & Kolb, D. A. (2012). Experiential Learning Theory. In *Encyclopedia of the Sciences of Learning* (pp. 1215–1219). Springer US. https://doi.org/10.1007/978-1-4419-1428-6_227
- Mancone, S., Tosti, B., Corrado, S., Spica, G., Zanon, A., & Diotaiuti, P. (2024). Youth, money, and behavior: the impact of financial literacy programs. *Frontiers in Education*, 9. <https://doi.org/10.3389/educ.2024.1397060>
- Lusardi, A. (2019). Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), 1–8. <https://doi.org/10.1186/s41937-019-0027-5>
- OECD. (2024). *Financial education*. <https://www.oecd.org/en/topics/sub-issues/financial-education.html>
- Organisation for Economic Co-operation and Development (OECD). (2024). *PISA 2022 results (Volume IV): Financial literacy*. OECD Publishing. https://www.oecd.org/en/publications/pisa-2022-results-volume-iv_5a849c2a-en.html
- Otoritas Jasa Keuangan. (2025). *Survei Nasional Literasi dan Inklusi Keuangan Tahun 2025*. Otoritas Jasa Keuangan. <https://ojk.go.id/id/Fungsi-Utama/Perilaku-Pelaku-USaha-Jasa-Kuangan/SNLIK/Pages/SNLIK-2025.aspx>
- Prensky, M. (2001). *Digital game-based learning*. McGraw-Hill. https://www.researchgate.net/publication/30874037_Digital_Game-Based_Learning
- Whitebread, D., & Bingham, S. (2013). Habit formation and learning in young children. *Money Advice Service Research Report*, University of Cambridge. <https://altorwealth.com/wp-content/uploads/2024/04/the-money-advice-service-habit-formation-and-learning-in-young-children-may2013.pdf>
- Yahaya, R., Zainol, Z., Osman, J., Abidin, Z., & Ismail, R. (2019). The effect of financial knowledge and financial attitudes on financial behavior among university students. *International Journal of Academic Research in Business and Social Sciences*, 9(8), 22–32. <https://doi.org/10.6007/IJARBS/v9-i8/6205>