
Generating Interest in Literacy Through Project-Based Learning in Pancoran: An Action Service Initiative

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Article History:

Received: August 15th, 2025

Revised: August 25th, 2025

Accepted: November 26th, 2025

Keywords: *Literacy, project-based learning, action research*

Abstract: *Literacy is a critical issue to tackle in Indonesia. Hence, to alleviate it, Kampung Literasi Pancoran has been developed to help residents of the Pancoran ward, helping elementary students and adults alike to improve their literacy skills in multiple aspects by garnering their interest through project-based learning. English literacy is offered to elementary students using multiple mediums, while financial literacy is taught to adults. This study implements an action research cycle, where constant improvements were made throughout the 9 week period. Findings show that more students participated and had positive sentiments to the lessons prepared, while more attention needed to be brought to ensure full community support and social progress for all stakeholders.*

Introduction

Literacy is a constant issue in Indonesia. The 2018 Programme for International Student Assessment (PISA) results underscored the severity of the issue, placing Indonesia's reading performance in the bottom ten of the 79 participating countries, with an average score significantly below the OECD average (East Asia and Pacific Regional Brief - Programme for International Student Assessment (PISA) 2018, 2020). The issue stems from various problems that occur during lessons and situations that cannot be controlled, such as the learning loss caused by the COVID-19 pandemic (Hata et al., 2024). Another issue is the lack of reading interest. In a study comparing literacy policies in Singapore, Malaysia, and Indonesia, a UNESCO report from 2014 was cited, indicating that Indonesia's reading interest index was

0.001% (Rusydiyah et al., 2022). Hence, there is a need to not only bring literacy as a meaningful topic for students to learn, but also for everyone in this country to realize its importance.

The definition of literacy itself has evolved, creating the need for modern students to be more aware of the various understandings to empower them in an ever-changing world. While its main understanding is one's ability to read and write, it has grown to more complex meanings over time. For example, functional literacy is described as a tool for people to accomplish daily tasks in their lives (Jacobson, 2023). UNESCO (2009, p. 13) described literacy as "the ability to identify, understand, interpret, create, communicate and compute using printed and written materials associated with varying contexts." These definitions indicate that reading and writing, while an integral part of literacy, is no longer the only focus that must be honed on. Other strands of literacy have emerged in the modern era, such as critical literacy, financial literacy, information literacy, digital literacy, and artificial intelligence (AI) literacy. As these new forms of literacy emerge, a global urgency to evolve from traditional literacy pedagogy develops, referred to as multiliteracies — the ability to incorporate many forms of understanding beyond reading and writing (Kustini, 2023).

A method that has been developed to combat literacy issues is gamification and project-based learning. In gamification, students work unconsciously alone or together to achieve predetermined objectives, creating a fun learning environment in classrooms. Project-based learning (PBL) requires students to identify a problem and develop the necessary skills to address it to learn (Sefton et al., 2020). Furthermore, project-based learning enables students to perceive classroom activities as relevant since it develops students through their interests and allows them to immediately apply the learning materials to activities. PBL can be used to teach multiliteracies because the emphasis on application-based methods also exists in literacy fields. According to Kustini (2023), "the goal of multiliteracies theory is for students to apply skills, knowledge, information, and behaviors they have gained through the three dimensions of multiliteracies instruction to their real-world experiences (p. 635)." As a result, PBL teaches students through problems by utilizing their interests, resulting in real-world-based application, a foundation of multiliteracies.

While literacy skills are necessary to learn and acquire for everyone, elementary students have more potential to improve when learning when compared to adults, with language learning as the topic. This phenomenon is caused by their brains, which are still under development; hence, they can absorb and retain more knowledge (Palmer & Jernigan, 2023). However, when a child has limited socioeconomic capital, their brain development is deprived (Likhari et al., 2022). This issue may be circumvented through efforts to teach them as a community service. Furthermore, for target accomplishments, the English language has been

chosen, as it has become a lingua franca; hence, students who have English proficiency may have more access to online knowledge, may have opportunities to study abroad, and may get higher-paying jobs in the future (Adipat et al., 2021; Akhter, 2022; Gultom & Oktaviani, 2022). Hence, as children have more potential to grow, we chose them as our main target audience to ensure that this sustainable development has long-lasting impact

However, adults also require more literacy knowledge, particularly in financial literacy. With the ongoing phenomena in the country, such as Buy Now, Pay Later (BNPL) schemes, a lack of savings, and missed economic opportunities, the average Indonesian adults suffer from a lack of financial planning despite the reported year-on-year national economic growth (Jhonson et al., 2023; Parameswari & Ginny, 2022). Hence, this topic needs to be addressed within the community service program to assist adults in financial growth.

To solve literacy issues in our society, this community service program is meant to help those who are within the closest proximity receive help in their literacy level. Since the university is based in Pancoran, this project took place within the area. This initiative is designed to be as adaptive as possible to the needs of the community. Hence, the objectives of the service program are as follows:

1. Developing interest in literacy in elementary students and adults by various media and project-based learning.
2. Understanding the children's interest in particular subjects of literacy.
3. Adapting teaching strategies and activities based on observations and community feedback, either from students, parents, policymakers, or the broader community.

Method

During the community service program, an action research cycle is used to deliver the most accurate learning activities according to the needs and wants of the community. Action research is described as a way for teachers to understand the needs of their students better by utilizing various teaching methods and their own ingenuity to create a lesson objective that matches the students' needs and brings meaningful learning (Ivankova et al., 2023). Instead of a grounded activity with controlled variables, the flexibility and adaptability of teachers can be tested, with various learning theories experimented upon. The experiences of the teachers during these teaching sessions become data for research, analyzing and synthesizing them into new information and knowledge. Action research is done in a cycle with four steps, namely planning, acting, observing, and reflecting (Lewin, 1946).

The planning phase involves the dedication of conceptualizing the inquiry and designing a critically informed process. The purpose of this phase is to analyze the questions

regarding the practice to come up with a plan for action. Identifying the idea is the analytical process where the researcher identifies the thematic reasoning that must be addressed. The second phase is called the action phase, where the plan is put into motion. The planned changes will be executed during the action research, which is the primary activity of this phase. One essential detail that must be prioritized is flexibility, where the researchers learn the dynamics of change. Due to this, the plan beforehand must be adaptable enough to strengthen the core. Then comes the observation phase, the methodological engine of action research. The central purpose of this phase is to collect the required data and evidence systematically based on the effects of the action. This can come from multiple sources—in this case, class activities, student engagement, and reflection. While observation involves documenting the actions and the effects, it is not limited to analyzing the final outcomes. Lastly, the reflecting phase requires critical analysis and reflection of the entire process of the research. This allows for more improvement for the next cycle, allowing the researchers to learn what went according to plan and what went in contrast to the initial plan. This phase encourages learning and improving one's practical abilities.

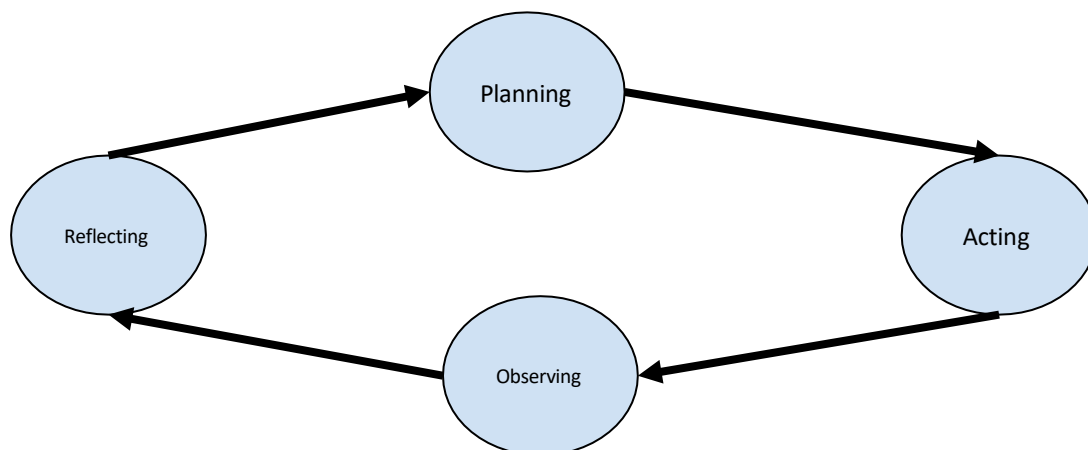


Figure 1. Cycle of action research

The program is conducted from June to August 2025. In this program, the cycle starts with planning before the starting date, where the team drafted the possible learning objectives and goals that can be achieved along with the target audience, which is determined to be upper elementary students (grades 3-6). The initial target was 30 students a day, but it eventually led to 130 children a day. Since admission continues to open every week, there are different students coming in at different points in time. This draft was then sent to the Pancoran Ward office to receive approval from the ward head and a negotiation to use their auditorium as a location for the students to learn. We met with the ward head and the head of human resources

and development to communicate our needs and wants among each stakeholder, learning about the current situation within the population. The acting phase consists of our lessons, which were done every Friday and Saturday during the period. There are also several activities that were done in collaboration with other people within the area, such as movie nights, where children of all ages within a particular district are gathered to watch short films about a preordained topic to learn. During the teaching and learning activities, our team made observations regarding the classroom situation. Furthermore, every class is livestreamed to YouTube and kept as an archive for other students to have the opportunity to visualize what class we have while also giving the team full documentation to observe. This is done to emphasize the democratic partnership and collaboration we have as action research (Somekh, 2006). The work includes highlighting how students behave and how their interest in literacy changes over time. It also involves understanding the differences in their behavior when we decide to alter a part of the classroom. These observations are discussed within meetings that are held every week, either right after each class or an online meeting the next day. Finally, within our evaluation, meetings are held with other stakeholders, either formally or informally, to further understand the parents and community leaders and how we can assist them in developing their children. This includes extra sessions that are initially out of the first plan submitted to the ward, with two events known as “Movie Night” planned and executed without any correlation to the ward. This data is then placed into our plans, indicating how we can move to the next step. The cycle repeats from week 1 to week 8, where the program culminates in a presentation of what the students have done in class. An extra week was held as a celebration of the students’ participation in our class, where they exercised and played games outdoors with all teachers and volunteers.

The initial plans drafted for what activities students will do are listed in *Table 1*.

Table. 1 Initial Plan

Week	Activity	Description
1	Introduction	Playing an introductory game with the students, knowing and understanding their English skill level.
2	Pictionary	Students learn nouns and use them to play a game of Pictionary
2	Charades	Students learn action verbs and use them to play charades as a class

3	Adult financial literacy	Citizens of Pancoran and parents of children in the English literacy class learn about basic financial knowledge. Using the knowledge gained, they will know how to manage their monthly income.
3	Arts and crafts: Play-Doh	Students learn about the names of animals, the body parts, and adjectives used to describe them. Using these descriptions, they will create an animal of their choosing using Play-Doh.
4	Arts and crafts: drawing	Students learn about the names of shapes and colors. Afterwards, a teacher asks them to use some shapes and turn them into a drawing of their liking.
5	Arts and crafts: bracelets	Students learn about vocabulary and learn to make bracelets. Using this opportunity, they will increase their creativity.
5	Arts and crafts: comic strips	Students learn to make comics based on their favorite fable.
6	Children's picture books	Students will be divided into teams to read aloud a certain book and participate in interactive activities.
6	Morning exercise: traffic lights	Students learn about traffic sign vocabulary while participating in a morning walk or exercise around the Pancoran area
7	Adult financial literacy	Citizens of Pancoran and parents of children in the English literacy class learn about basic financial knowledge. Using the knowledge gained, they will know how to manage their monthly income.

7	Hangman, arrange words, word clapping	Students expand their English vocabulary through games such as hangman, arrange words, and word clapping.
8	Song dissect	Students learn the vocabulary and meaning of a chosen song.
8	Cooking	Students prepare a meal under supervision.
9	Movie time	Students watch a movie in English to expand their vocabulary and learn a moral lesson.
9	Arts and crafts: Scrapbooking	Students recall what they have learned throughout the English literacy classes and make an art out of it.
10	Special English workshop	A guest speaker delivers an interactive English workshop using a book.

The initial plan for this program was created without a thorough needs analysis regarding the students' needs for literacy; therefore, the initial plan was created more generally to accommodate any changes that needed to be made once the students' proficiency level was clearer. When comparing the initial plan with the executed plan, many of the planned activities were carried out in the classes, though some were completely revised with new activities once the students' proficiency level was clearer. The cycle of action research was applied during this process, as after each lesson was carried out, the results and occurrences identified during the lesson were reflected upon and utilized to make changes appropriate to the next lesson's planning. The changes based on the reflections can be seen in the table below, where the actual execution of the plan caused several changes to be made.

Table. 2 Execution

Week	Activity	Description
1	Introduction	Playing an introductory game with the students, knowing and understanding their English skill level.
2	Pictionary	Students learn nouns and use them to play a

game of Pictionary		
2	Charades	Students learn action verbs and use them to play charades as a class
3	Adult Financial Literacy	Citizens of Pancoran and parents of children in the English literacy class learn about basic financial knowledge. Using the knowledge gained, they will know how to manage their monthly income.
3	Arts and crafts: Play-Doh	Students learn about the names of animals, the body parts, and adjectives used to describe them. Using these descriptions, they will create an animal of their choosing using Play-Doh.
4	Arts and crafts: drawing	Students learn about the names of shapes and colors. Afterwards, a teacher asks them to use some shapes and turn them into a drawing of their liking.
5	Children's picture book	Students read a book together. Then, they split into groups to create different endings for the stories in the books they've read.
5	Children's picture book: comic	Students recalled the storybooks they had read. Then, they created their own endings, differing from the ones in the books. They expressed these endings through their own six-panel comics.
6	Children's picture book: roleplay	Students recalled the storybooks they had read. They were then divided into groups and discussed their preferred endings. These endings were then presented to their mentors in the form of roleplays.
6	Children's picture book:	Students use their knowledge of the story from

	treasure hunt	previous storybooks to participate in a Treasure Hunt game.
6	Movie night 1	Students watch movies and learn important moral lessons while participating in games and quizzes.
7	AI: movie time	Students watched a short film about the misuse of AI and learned an important moral message from the film.
7	AI: generating images	Students learn about the imperfections of AI in creating images and the misuse of AI.
7	Adult financial literacy	Citizens of Pancoran and parents of children in the English literacy class learn about basic financial knowledge. Using the knowledge gained, they will know how to manage their monthly income.
8	Art exhibition preparation	Students used their creativity to prepare an art exhibition containing the lessons and activities they did during the Pancoran Literacy Village classes.
8	Art exhibition	Students participated in an art exhibition containing lessons and activities they did during their Literacy Village classes.
8	Adult financial literacy	Citizens of Pancoran and parents of children in the English literacy class learn about basic financial knowledge. Using the knowledge gained, they will know how to manage their monthly income.
9	Children financial literacy	Students learn about how to manage money by participating in roleplay games as shopkeepers and customers

9	Field day	Students participated in outdoor activities such as gymnastics, morning walks, and chopstick games. They then received certificates marking the completion of the Pancoran Literacy Village class.
9	Adult financial literacy	Citizens of Pancoran and parents of children in the English literacy class learn about basic financial knowledge. Using the knowledge gained, they will know how to manage their monthly income.
9	Movie night 2	Students watch movies about bullying and learn the impact of it while participating in games and quizzes.

No traditional summative assessments were taken by the students at the end of the period, as this program has an informal setting and operates to motivate students to pursue deeper literacy learning with various mediums. Instead, various formative assessments were done during class periods, including playing games with the vocabulary learned, drawing using shapes and colors previously explained in the classroom, and using several words learned to describe flawed AI pictures. Formative assessment has been shown to improve student motivation when learning, which is the objective of our program (Ismail et al., 2022). Furthermore, a portfolio display was made to showcase the children's projects and activities during classroom period, promoting how project-based learning with a portfolio as a final activity can improve student understanding between learning and assessment (Rizal et al., 2021). As such, this option is chosen as it aligns with our service objectives.

Result

The expected result of the community service program is the improvement of student literacy in the topics covered by the teachers, namely English and financial literacy.

For the English literacy program, the objectives are to ensure that students have the vocabulary capacity to use English and express the language in a creative manner through the mediums provided in the classes. From this program, the expected social change is that students realize that learning a new language is not frightening, but rather a fun experience. After the program, they are expected to be more confident in conveying themselves, whether through art or by communicative means.

In the financial literacy program, the objectives are to enable adults to be more aware of their spending and introduce them to concepts regarding spending and saving. Furthermore, they are expected to know the dangers of BNPL schemes and evaluate their risks against their current financial situation, making wise decisions that enable them to improve their quality of life. From the program, the adults should be more vigilant about the various controversies regarding BNPL and change their methods of saving money using strategies discussed in the sessions.

The issue of solving literacy leads to the creation of Kampung Literasi Pancoran, an eight-week program that allows upper elementary students to learn about different aspects of literacy. It focuses more on English literacy, but uses various materials to deliver the lessons, such as physical games, computer games, art materials, and short animations and films. The objective of all the activities is to introduce the students to a plethora of ways to learn English, giving them the confidence to use the language in different contexts.

Table. 3 Action Research Cycle

Week	Theme	Observation and/or feedback	Reflection	Planning and action
1	Communication	Not a lot of students came; parents were intimidated by Google Forms, and some district leaders did not share the program.	Teachers need to open the class to everyone, tell people about the program personally.	Remove the necessity for registration and encourage direct attendance. Also, personally hand out flyers to the community.
2	Overcrowding	Students were not focused, loud uncondusive environments, and teaching assistants were overwhelmed	A division of the classroom is needed	Two scheduled classes on Saturday
3	Communication	Though invited, not many parents attended the first	The class was done on a weekday at 10	Financial literacy classes were moved to Saturdays to

		financial literacy class.	AM, often when parents were at work and unavailable.	adjust to parents' schedules after reconfirming.
5	Collaboration	Request to create a movie night with RT11 Pancoran	There is a need for new resources and lesson design that caters to multiple grades according to a chosen theme.	Using multiple short movies and group discussions as a learning tool. Furthermore, a projector is purchased to allow a large audience viewing.
5	Objective	The Community Association suggested lessons rooted in functionality, such as competition, debate, or public speaking.	Students need experiences based on real-world opportunities for future success.	Class goals were shifted to overarching themes aimed at developing students' competitive skills.
6	Distraction	Some boys who gathered together were disruptive and noisy during class, disturbing other students.	They keep getting distracted by their friends, and end up not paying attention to the class.	Have one of the teachers on standby near them to remind them every time they start to get noisy.
7	Volunteers	The number of volunteers decreased as time went on, forcing the main teachers	Volunteers were preoccupied with other tasks.	In the beginning, teachers divided the work among less people available. Over time, more

to handle more
work throughout
the middle to the
end of the program.

volunteers were
invited and accepted
to help.

While the initial plan allows teachers to improve the student literacy rate for both children and adults alike in their respective topics, there were some changes necessitated by several factors within the community. The first challenge was a lack of community participation. During the first session, twelve elementary students came to the meeting. Communication was the first problem encountered during the program. Although the initial plan was to allow students who had registered in Google Forms to join the class, several parents cited that there is a technology gap in some parents, discouraging them from enrolling their children in the classes. Hence, to improve this situation, we decided to open the class for everyone in Pancoran, no matter what. Instead of a Google Form to fill in, students can come to class and register at the front desk. Furthermore, some district leaders have not been cooperating with our program, failing to deliver the announcement to their respective communities. Therefore, to alleviate the issue, we started printing out flyers and handing them out once a week to the people of Pancoran. We prioritize several key locations, such as stationery shops, as they are frequently visited by students and parents. Furthermore, we also opened a WhatsApp group with the parents to ensure that the communications regarding our activities are handled directly from us, with parents spreading the invite by word-of-mouth. This solution was successful in increasing overall community participation, with up to 65 students attending the usual Saturday classes and up to 77 children joining the Movie Night activity.

During the Saturday of the second week, we had a charades game as the activity, where students would learn about action verbs and play a game around it based on their movements, with all other students guessing their actions. However, a problem emerged when a total of 46 students came to the class within a single session. With the lesson being designed for a maximum of 30 students, some of the students were unable to perform as expected, as they could not participate in group discussions as anticipated. Furthermore, as the room was indoors, the students' loud noises as they answered their friends' gestures created echoes, further disrupting any lessons. Consequently, this issue prompted us to divide the classroom into two separate sessions on Saturday, when more students participate, to decrease the load of each classroom and maintain a conducive learning atmosphere. This decision helped the teachers and volunteers to assist the children in achieving the learning objectives of the day.

During the third week of the program, a financial literacy workshop was held to cater

towards parents or adults in the community who were interested in furthering their knowledge regarding savings. Due to the circumstances of the workshop being held on a weekday at 10 AM, only three participants from the Pancoran community were able to join, while there were five university students who also joined. A parent from the community then stated that parents, specifically mothers of the students who joined the English Literacy classes, would have more availability if the workshops were done on a Saturday at 9 to 10 AM. After further discussion with the Head of Community Welfare of the Pancoran ward, it was revealed that many of the adults in the Pancoran community tend not to participate in workshops or events such as this one. Using this information, the rest of the classes in Financial Literacy were taught every Saturday at 9 to 10 AM to appeal more to mothers who would be available.

In the second week of activities, a parent approached the team and discussed the viability of collaborating to create a movie night for a particular area of Pancoran, covering RT1, RT4, and RT11. Two weeks later, we met with the head of RT11, who developed the initial idea with several other community leaders in the area. During the meeting, information was exchanged regarding the readiness of the Pancoran team and some items that are needed to design the event, with a lack of a projector being highlighted as a crucial issue. During initial negotiations and needs analysis, the Pancoran team mentioned a desire to have short films with themes surrounding morals and caring for the environment. Furthermore, they predicted that around 30-40 children, mainly elementary students, would participate in the movie night, and we designed a group discussion around the short films we chose.

During the movie night, 77 children and teenagers of various ages participated in the movie night. Since the plan accounted for approximately 40 children, a quick adaptation was necessary as the initial plan needed no volunteers to become group leaders, with just several main teachers asking the children guiding questions regarding the movie. However, the increased participants created time constraints during the event, and hence the decision was made to make the questions into audience-answered questions, where one child would be given the opportunity to share their thoughts for each question.

Another feedback came in the form of the class objectives. Initially, the schedule was planned around art as a process and a form of literacy. Each session introduced a new gamification strategy or arts-based learning. Through gamification, the kids learned English vocabulary and grammar by playing group games like Pictionary, charades, or the telephone game. In other sessions, students learned by visual representation; they drew the words or shaped them with clay. We observed kids' hesitation due to the unfamiliarity of both forms of activity. New games confused students, resulting in a lack of material recall. Many students expressed a dislike of drawing or perceived that they were incompetent at the subject. This outcome was also observed by community parents during the sessions. Alternatively, they

suggested teaching the kids through events that equipped them with learning tools, such as competition or debate. We agreed and determined to maintain our literacy focus with a different specialization. As a result, we restructured the material around the skill of storytelling to harness reading literacy as a tool. We planned a two-week activity centered around a short story. For two classes, kids read the story and then changed the ending. The following two classes, they acted it out before reviewing their two-week journey. From these changes, it could be observed that students' confidence increased based on their familiarity with the story and the consistent practice of returning to the text, despite the continuous change in activity. Lastly, students began to recall more information than in the weeks prior to the restructuring.

One of the issues regarding classroom management is the distraction caused by the male students in the class. Throughout the program, we have noticed that many male students stick together, play, and create noises that disrupt the classroom. They would also not pay attention to the instructions and explanations given by the teacher, causing them to miss crucial information. Some would insult classmates and use inappropriate words to their peers. This has caused the other students, primarily the females, to get distracted and uncomfortable, during the classes, as well as the teachers and volunteers to be overwhelmed and tired, as warnings do not address this behavior. After a thorough discussion among the teachers, we decided to place a teacher or volunteer near the group of male students, to monitor potential issues, and give further warnings regarding their participation in the classroom activities. This has helped with the issue a lot since the students were cooperative and would not miss the classroom activities, as they were eager to participate in.

Another issue we faced was the lack of volunteers. At the beginning of the program, there were always around 3-4 volunteers to help with all kinds of tasks, such as assisting with the lessons, managing the classroom, operating the camera and livestreaming devices, and helping with distributing consumption and other teaching materials. However, in the middle of the program, there was a lack of volunteers, especially during classes where assistance was necessary, such as with complicated lesson plans and overcrowded classrooms. Upon discussions with volunteers, the majority have other commitments, thus deterring their attendance at the classes. A solution was to reopen the volunteer registration and invite new people who live nearby, reducing the possibility of them getting tired or having other priorities. This attempt was successful, as more volunteers assisted us nearing the end of the program.

Discussion

Overall, during the nine weeks of the literacy activities, the students showed enthusiasm during the lessons and were engaged from start to end. However, there were some lessons that needed to be updated, as different students had varying interests, which were evaluated and

reflected upon accordingly before planning new activities and lesson objectives while still remaining in the same overall objective of enhancing literacy. Studies have shown that when students are bored in a lesson, they will be less ready and enthusiastic in learning (Derakhshan et al., 2024). Hence, to alleviate the issue, new teaching strategies were implemented during classes, with several projects aligned with artwork, movies, and story books. These different mediums of learning can develop students as they experience autonomy and perceive relatedness in the sessions (Dinihari et al., 2024). Further developments of the teaching and learning experience can increase the use of technology-based learning tools to enhance participation (Gunawan, 2025).

Furthermore, parents often mention that through the activities presented, the children would mention their happiness when joining the classes. Consequently, parents are also satisfied with the availability of an alternative program within their free time, as they mentioned that their children would be playing smartphone games without the program's existence. A study has shown that while parents allow their children to play smartphone games, an overwhelming majority disagrees with their own behavior, mentioning that children should not be given phones to play with (Shah & Phadke, 2023). Their satisfaction is validated by several papers citing that a child's increased use of smartphones may lead to a loss in cognitive and physical functions alongside loneliness and social emotional growth (Al-Amri et al., 2023; Muppalla et al., 2023; Stevic & Matthes, 2021). Hence, the emergence of such a program must be maintained to empower parents during their child's development.

The original objective in the action research was to embed new forms of literacy through art and gamification. This objective aligns with previous international research. Areljung et al. (2021) indicated that using art to critically interpret visual media aids students' representational practices in the classroom, giving students a real-world context to enhance their visual literacy. The study concluded that teachers' framing of material allows children to use drawing as a communicative tool. However, the results observed here indicate that this preliminary approach did not effectively demonstrate culturally reflective practices for our program. The students' confusion and hesitancy instead aligned with conclusions made by Kelly et al. (2021), who found that children often demonstrate difficulty in distancing themselves from immediate meanings and contextual cues during the learning process. We found that we had to adapt our class objectives based on collaboration with parents and the community, a tenet of culturally reflective learning. Thus, we conclude that culturally informed objectives in social programs must have tangible correlations to students' lives, subsequently reinforced by students' improvements in the second phase of the objective (Kelly et al., 2021).

Apart from diverse literacy practices, the variety of activities allows students to reach a deep level of understanding in their own contexts. The program's activities such as students'

financial literacy implemented a roleplaying technique to visualize the use of money in everyday life. This activity is aligned with the skills mentioned from the National Community Service Program guidelines such as reflecting and demonstrating (Sumarmi et al., 2022). In addition, committees expressed a deep understanding of students' cultural environment, especially concerning the spending habits of the students. This is aligned with objectives of the National Community Service Program for the Higher Education students concerning their role in understanding the difficulties faced by the community and encouraging communal growth (Hesti & Markos, 2024). Furthermore, this creates a synergy of relation between the committees and the community, fostering long-term social progress.

However, while the activities have brought a positive impact, a limitation was reached in terms of human resources. Since the activities heavily relied on groups and real-life practices, several experts, such as teachers and volunteers, are required to ensure that group works are completed according to objectives. Group work has the potential to encourage students to share their ideas and become active participants in a class (Hasanah, 2025). However, when the quota of experts does not reach a certain amount, the participants may idle, focusing on other subjects instead of completing the task given to them (Suhendar & Rambe, 2023). Therefore, to ensure that following programs continue to run, stakeholders of the project, especially the planners, must evaluate their lesson plan according to the available resources.

Conclusion

During the nine-week Kampung Literasi Pancoran program, elementary students engaged in literacy activities, with the focus on English literacy. The program utilized diverse materials—physical games, computer games, art, and films—to introduce students to various English learning methods and build their confidence in using the language across different contexts. The initial plan and the eventual approach differed according to the observations. This necessitated adaptive changes to the class objectives, shifting towards culturally informed practices through collaboration with parents and the community. By structuring activities around storytelling and consistent text engagement, students' confidence and information recall improved. The action research methodology allowed for continuous adaptation and improvement based on real-time observations and feedback. The challenges were addressed through responsive strategies like opening classes to all, dividing sessions, adjusting financial literacy workshop times, and recruiting more volunteers. The program also integrated diverse literacy practices which aligned with national community service guidelines by fostering students' practical skills and committees' understanding of the community's environment.

This synergistic relationship between both parties holds promise for long-term social

progress. To ensure more synergistic and holistic programs in the future, a ward-wide study can be conducted to ensure that the differing needs of every community can be met. Future collaborations between the ward and university in terms of literacy can be continued, increasing the students who can be enrolled in the program, including additional age ranges, such as middle school and high school students. Moreover, various issues can also be covered by including more faculties from the university, including but not limited to engineering departments, enabling creative and meaningful real projects involving adults, such as waste management.

Acknowledgements

The authors would like to extend their gratitude to Drs. Rachmat Basuki, M.Si. as the head of Pancoran ward and Pak Nendra as the head of RT11, as they have graciously accepted our presence within the community and have been very supportive during the period. Furthermore, this community service program would not have gone through without the support of Sampoerna University's Center of Research and Community Service (CRCS) and the Faculty of Education, both of which granted us the necessary funding to operate and maintain the events and projects accomplished during the period.

References (Times New Roman, size 13)

- Adipat, S., Laksana, K., Busayanon, K., Asawasowan, A., & Adipat, B. (2021). Engaging students in the learning process with game-based learning: The fundamental concepts. *International Journal of Technology in Education (IJTE)*, 4(3), 542-552. <https://doi.org/10.46328/ijte.169>
- Akther, F. (2022). English for personal and career development and its importance for better employment opportunities. *Journal of Languages Linguistics and Literary Studies*, 2(3), 95–100. <https://doi.org/10.57040/jlls.v2i3.258>
- Al-Amri, A., Abdulaziz, S., Bashir, S., Ahsan, M., & Abualait, T. (2023). Effects of smartphone addiction on cognitive function and physical activity in middle-school children: A cross-sectional study. *Frontiers in Psychology*, <https://doi.org/10.3389/fpsyg.2023.1182749>
- Areljung, S., Due, K., Ottander, C., Skoog, M., & Sundberg, B. (2021). Why and how teachers make use of drawing activities in early childhood science education. *International Journal of Science Education*, 43(13), 2127–2147. <https://doi.org/10.1080/09500693.2021.1953186>
- Derakhshan, A., Fathi, J., Pawlak, M., & Kruk, M. (2024). Classroom social climate, growth language mindset, and student engagement: The mediating role of boredom in
-

- learning English as a foreign language. *Journal of Multilingual and Multicultural Development*, 45(8), 3415–3433. <https://doi.org/10.1080/01434632.2022.2099407>
- Dinihari, Y., Rafli, Z., Boeriswati, E., & Hidayat, F. (2024). Generating interest in literacy among elementary school students through gamification technology. *IJLECR (International Journal of Language Education and Cultural Review)*, 10(2), 176–187. <https://doi.org/10.21009/ijlecr.v10i2.45173>
- East Asia and Pacific regional brief—Programme for International Student Assessment (PISA) 2018. (2020). [Text/HTML]. World Bank Group. <http://documents.worldbank.org/curated/en/876861593415668827>
- Gultom, S., & Oktaviani, L. (2022). The correlation between students’ self-esteem and their English proficiency test result. *Journal of English Language Teaching and Learning*, 3(2), 52–57. <https://doi.org/10.33365/jeltl.v3i2.2211>
- Gunawan, I. D. (2025). Gamification in teaching English to young learners: A review of recent studies. *Journal of English Education Program*, 6(2). <https://doi.org/10.26418/jeep.v6i2.94890>
- Hasanah. (2025). The effectiveness of group discussion method in improving student learning outcomes in science learning at MIN 7 Central Aceh. *Indonesian Journal of Education and Social Humanities*, 2(1), 217–228. <https://doi.org/10.62945/ijesh.v2i1.490>
- Hata, A., Kim, S., & Nomura, S. (2024). Learning in the shadow of the pandemic: COVID-19 learning loss and widening learning disparities in Indonesia. Washington, DC: World Bank. <https://doi.org/10.1596/42393>
- Hesti, M., & Markos, V. (2024). Exploring the efficacy of student community service programs (KKN) in higher education institutions: A Case Study in Indonesia. *Különleges Bánásmód*, 10(2). <https://doi.org/10.18458/KB.2024.2.77>
- Ismail, S. M., Rahul, D. R., Patra, I., & Rezvani, E. (2022). Formative vs. summative assessment: Impacts on academic motivation, attitude toward learning, test anxiety, and self-regulation skill. *Language Testing in Asia*, 12(1), 40. <https://doi.org/10.1186/s40468-022-00191-4>
- Ivankova, N. V., Anderson, J. L., Herbey, I. I., Roussel, L., & Kim, D. (2023). Intersecting mixed methods with translational research: Implications for educational research and practice. In R. J. Tierney, F. Rizvi, & K. Ercikan (Eds.), *International Encyclopedia of Education (Fourth Edition)* (pp. 588–598). Elsevier. <https://doi.org/10.1016/B978-0-12-818630-5.11058-9>
- Jacobson, E. (2023). (Mis)understanding adult literacy. In R. J. Tierney, F. Rizvi, & K.
-

- Ercikan (Eds.), *International Encyclopedia of Education (Fourth Edition)* (pp. 456–462). Elsevier. <https://doi.org/10.1016/B978-0-12-818630-5.07003-2>
- Jhonson, B., Andriani, R., Noviana, I., & Tamara, D. (2023). Influence of digital financial literacy on financial well-being through spending, saving, and investment behavior in Indonesia. *Journal of Business Studies and Management Review*, 6(2), 157–168. <https://doi.org/10.22437/jbsmr.v6i2.24793>
- Kelly, L. B., Wakefield, W., Caires-Hurley, J., Kganetso, L. W., Moses, L., & Baca, E. (2021). What is culturally informed literacy instruction? a review of research in p–5 contexts. *Journal of Literacy Research*, 53(1), 75–99. <https://doi.org/10.1177/1086296X20986602>
- Kustini, S. (2023). A Project-Based Multiliteracies Instruction to Improve Students' Multimodal Literacy. 632–647. https://doi.org/10.2991/978-2-38476-054-1_54
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2(4), 34–46. <https://doi.org/10.1111/j.1540-4560.1946.tb02295.x>
- Likhar, A., Baghel, P., & Patil, M. (2022). Early childhood development and social determinants. *Cureus*. <https://doi.org/10.7759/cureus.29500>
- Muppalla, S. K., Vuppalapati, S., Reddy Pulliahgaru, A., & Sreenivasulu, H. (2023). Effects of excessive screen time on child development: An updated review and strategies for management. *Cureus*, 15(6), 1–5. <https://doi.org/10.7759/cureus.40608>
- Palmer, C. E., & Jernigan, T. L. (2023). Brain development. In G. G. Brown, B. Crosson, K. Y. Haaland, & T. Z. King (Eds.), *APA handbook of neuropsychology: Neuroscience and neuromethods* (pp. 33–55). American Psychological Association. <https://doi.org/10.1037/0000308-002>
- Parameswari, R., & Ginny, P. L. (2022). The effect of paylater payment methods on the increase of impulse purchases. *Primanomics Jurnal Ekonomi & Bisnis*, 20(2), 175–185. <https://doi.org/10.31253/pe.v20i2.1183>
- Rizal, M. K., Rochmiyati, R., Ambarita, A., & Hainilah, E. Y. (2021). Portfolio assessment in primary schools. *Jurnal Ilmiah Teunuleh*, 2(2), 329–336. <https://doi.org/10.51612/teunuleh.v2i2.54>
- Rusydiyah, E. F., Tamin Ar, Z., & Rahman, Moh. R. (2022). Literacy policy in Southeast Asia: A comparative study between Singapore, Malaysia, and Indonesia. *Center for Educational Policy Studies Journal*. <https://doi.org/10.26529/cepsj.1214>
- Sefton, T., Smith, K., & Tousignant, W. (2020). Integrating multiliteracies for preservice
-

- teachers using project-based learning. *Journal of Teaching and Learning*, 14(2), 18–32. <https://doi.org/10.22329/jtl.v14i2.6320>
- Shah, S. A., & Phadke, V. D. (2023). Mobile phone use by young children and parent's views on children's mobile phone usage. *Journal of Family Medicine and Primary Care*, 12(12), 3351–3355. https://doi.org/10.4103/jfmpe.jfmpe_703_23
- Somekh, B. (2006). *Action research: A methodology for change and development*. Open University Press.
- Stevic, A., & Matthes, J. (2021). A vicious circle between children's non-communicative smartphone use and loneliness: Parents cannot do much about it. *Telematics and Informatics*, 64, 101677. <https://doi.org/10.1016/j.tele.2021.101677>
- Suhendar, A., & Rambe, R. F. A. K. (2023). Group discussion effectiveness in increasing student learning interest in Pancasila and citizenship education subjects. *Pancasila and Civics Education Journal (PCEJ)*, 2(2), 43–46. <https://doi.org/10.30596/pcej.v2i2.15851>
- Sumarmi, S., Wahyuningtyas, N., Sahrina, A., & Aliman, M. (2022). The effect of environmental volunteer integrated with service learning (EV_SL) to improve student's environment care attitudes and soft skills. *Pegem Journal of Education and Instruction*, 12(1), 168–176. <https://doi.org/10.47750/pegegog.12.01.16>
- The next generation of literacy statistics: Implementing the Literacy Assessment and Monitoring Programme. (2009). UNESCO Institute for Statistics.
-