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Literacy volunteers and TaRL: A phenomenological study in Indonesian elementary education

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ABSTRACT

This study investigates the lived experiences of university student volunteers implementing the Teaching at the Right Level (TaRL) approach to support early-grade literacy in Indonesian elementary schools. Using a descriptive phenomenological design, the research draws on in-depth interviews and direct observations with 20 purposively selected volunteers assigned to urban and rural schools in West Nusa Tenggara. Findings reveal that the volunteers conducted diagnostic reading assessments, grouped students by ability rather than grade, and applied differentiated strategies to address varied reading levels. Instructional practices ranged from phonics and syllable recognition for beginners to sentence building, expressive reading, and story-based tasks for more advanced learners. While the volunteers demonstrated creativity and commitment, they faced persistent challenges, including limited access to engaging printed materials, inadequate learning media, under-resourced libraries, minimal parental involvement, and concerns about the sustainability of literacy programs. These constraints often required them to improvise, create low-cost teaching aids, and conduct sessions outside formal classrooms. The study highlights the potential of volunteer-led, community-based interventions in bridging foundational literacy gaps, particularly in low-resource settings. It also emphasizes the need for institutional collaboration, consistent material support, and sustainable program structures to ensure lasting impact. By documenting the human dimensions of TaRL implementation, this research offers practical insights for policymakers and educators seeking scalable approaches to early literacy development.

Contribution/Originality: This study contributes to the existing literature by examining the implementation of Teaching at the Right Level (TaRL) in the Indonesian context. It documents how TaRL strategies improve learning outcomes among underperforming groups. The paper's primary contribution is providing original empirical evidence of TaRL's effectiveness in basic education.

1. INTRODUCTION

Although many countries have pursued educational reforms for decades, the ability of young learners to read fluently remains a major concern, particularly in low-resource areas where early literacy is often overlooked (Comings, 2020). Literacy goes beyond the basic acts of reading and writing; it also involves accessing information, participating in community life, and continuing to learn throughout one's lifetime (Seyda & Sevcik, 2024). In the first years of elementary school, reading ability forms the bedrock of children's academic progress and cognitive growth. When these skills are not developed early, pupils tend to fall behind and may face long-term barriers to learning. On the other hand, strong literacy in the early grades supports participation in today's knowledge-driven societies and

enables ongoing personal and academic development (Xiao, Chen, & Wang, 2024). It also serves as a pathway to greater social mobility, offering children the tools to overcome economic and social limitations (Fute, Wan, & Oubibi, 2023). Literacy is, therefore, more than decoding words; it is about making sense of what is read and interacting meaningfully with texts. Such comprehension helps spark and sustain children's interest in reading from an early age (Liu, Zhang, & Cheung, 2025). For these reasons, early reading deserves focused attention as the foundation upon which lifelong literacy is built.

Early reading is an essential skill that students must master (Sultan, Rapi, Mayong, & Suardi, 2020). This early reading ability can be improved through reading aloud, storytelling, and interactions that enrich language (Alramamneh, Saqr, & Areepattamannil, 2023). By learning it, students can be helped to understand various readings in the subject matter at school. In other words, students must be skilled at reading in grades I and II (Mustadi et al., 2021).

Often, students do not move up a grade because they have not been able to master the reading text well. Many students in grades I-III of elementary school do not yet have the basics of early reading skills. Reading ability is one of the factors that influence student achievement (Annetta, Newton, Franco, Johnson, & Bressler, 2024). As a result, it also impacts the quality of learning when progressing to the next level. This is what prompted the government to enhance students' early reading skills.

If we look at the facts nationally, the ability of 15-year-old students in reading literacy shows that students' abilities are still relatively low. Compared to the same age in neighboring countries, Indonesian students are in the 10th-to-last position in reading (Sultan et al., 2020). The latest data from the Programme for International Student Assessment (PISA) 2022, published in December 2023, shows that Indonesia is ranked low with a score of 359 for reading, 366 for mathematics, and 383 for science, compared to the Organisation for Economic Co-operation and Development (OECD) average scores of 476 for reading and science, and 472 for mathematics. This score indicates a decline from 2018, which marked the lowest score recorded since Indonesia began participating in the PISA assessment. From 2018 to 2022, the gap between the top 10% and bottom 10% of students widened in mathematics while remaining relatively unchanged in reading and science. Furthermore, fewer Indonesian students achieved level 5 or higher in reading skills, compared to the OECD average of 7%. These results highlight significant challenges in Indonesia's education system, which requires more intensive education (Sari, Winasis, Pratiwi, & Nuryanto, 2024).

The above data, reinforced by the findings of Inovasi as an independent institution consistent in literacy studies, shows that students' basic literacy skills in elementary schools are very low. In various districts, most students fail the basic literacy test, especially those in the first grade of elementary school. Based on gender, the abilities of male students are consistently lower than female students (Sultan et al., 2020). The findings are detailed based on the level of provincial areas related to students who failed the basic literacy test, namely: (1) East Nusa Tenggara (NTT), at 81%; (2) West Nusa Tenggara (NTB), at 39%; (3) North Kalimantan, at 48%; and (4) East Java, at 20%.

The students who failed were due to low performance in three aspects: letter recognition, syllable recognition, and word recognition. From the findings, East Nusa Tenggara Province found that 58% did not recognize letters, 70% did not recognize syllables, and 78% did not recognize words. West Nusa Tenggara Province found that 22% did not recognize letters, 30% did not recognize syllables, and 35% did not recognize words. North Kalimantan Province found that 24% did not recognize letters, 37% did not recognize syllables, and 46% did not recognize words. East Java Province found that 10% did not recognize letters, 12% did not recognize syllables, and 18% did not recognize words.

By observing the data above, it is evident that various efforts have been made by the government to address low literacy levels. Significant progress has been achieved in expanding access to basic education. Over the past fifteen years, the government's education budget has doubled, reflecting a stronger national commitment to improving literacy. In West Nusa Tenggara Province, one notable initiative was the INOVASI program, implemented by the Department of Education, Youth, and Sports. This program catalyzed the recruitment and training of 400 literacy

volunteers, with the aim of supporting early-grade students in developing foundational reading skills. The involvement of diverse stakeholders in such programs aligns with findings by Tighe, Tock, Petscher, and Kaldes (2024), which highlight how inclusive participation can enhance literacy outcomes across demographic groups.

Recent national and regional efforts have encouraged more research on the contribution of literacy volunteers to young learners' reading development. Much of this scholarship, however, has concentrated on quantifiable outcomes such as gains in reading comprehension or literacy proficiency using survey-based or experimental designs (Alramamneh et al., 2023; Gao & Chen, 2025; Nichols, Kim, & Nichols, 2020; Ruan, Maurer, & McBride, 2024; Zhang, Jin, & Fan, 2024). While these studies have deepened our understanding of how volunteer programs can influence academic achievement, they reveal far less about the everyday work of the volunteers themselves. The realities of classroom interactions, the methods they adapt, and the obstacles they face especially in rural or low-resource schools are still not well documented. Similarly, there is limited evidence on how structured approaches like Teaching at the Right Level (TaRL) are interpreted and adapted in different teaching contexts. This lack of perspective leaves a notable gap in the literature, one that requires a closer look at the human dimensions of volunteer-led literacy initiatives. Addressing this gap, the present study employs a phenomenological approach to explore the voices and lived experiences of literacy volunteers working with early-grade pupils in Indonesia. Specifically, it examines the question: "How do literacy volunteers experience and navigate the challenges of supporting early-grade reading through the TaRL approach in low-resource elementary schools in Indonesia?"

2. LITERATURE REVIEW

2.1. Early-Grade Literacy Challenges in Indonesia and Globally

Foundational literacy in the early years is widely recognized as a decisive factor for children's long-term academic success and capacity for lifelong learning (Comings, 2020; Seyda & Sevcik, 2024). Large-scale international assessments such as the Programme for International Student Assessment (PISA) consistently reveal stark disparities between education systems, with low- and middle-income countries often falling behind. The PISA 2022 results placed Indonesia significantly below the OECD average, with a reading score of 359 compared to the OECD mean of 476 (Sari et al., 2024). This performance reflects not only challenges in teaching quality and resource allocation but also the persistence of early-grade learning deficits.

In rural and marginalized areas, early-grade students frequently advance through grades without mastering basic reading skills (Sultan et al., 2020). Surveys conducted in East Nusa Tenggara, West Nusa Tenggara, and parts of Kalimantan and East Java show high proportions of Grade 1–3 students unable to recognize letters, syllables, or words (INOVASI, 2022). Similar trends are observed in other regions of the Global South. For example, in sub-Saharan Africa, as many as 87% of children in late primary grades are unable to read a simple sentence (UNESCO, 2022), while in rural India, over 50% of Grade 5 students struggle to read Grade 2-level texts (Banerji & Chavan, 2020). These patterns underscore a global learning crisis in foundational literacy, where socio-economic disadvantage, inadequate teacher preparation, and lack of home literacy environments exacerbate the problem (Fute et al., 2023; Liu et al., 2025).

2.2. Volunteer-Based Literacy Programs

Volunteer-based interventions have emerged as an important supplementary strategy to strengthen early literacy in under-resourced schools. Nichols et al. (2020) found that volunteer involvement, especially when integrated with parental engagement, significantly enhanced reading motivation and fluency among young learners in the United States. In Morocco, Zhang et al. (2024) reported that community volunteers contributed to narrowing literacy disparities between urban and rural students. Similarly, Alramamneh et al. (2023) highlighted the role of volunteer-led early literacy activities in shaping positive reading attitudes among Emirati children.

In the Indonesian context, programs such as INOVASI have mobilized university students and local community members to provide one-on-one and small-group reading support for early-grade learners, with positive gains in decoding and fluency (Mustadi et al., 2021). However, research also points to recurring challenges, including limited training (Bouaamri, 2024), lack of culturally relevant and engaging materials (Meesad & Mingkhwan, 2024) and short-term program cycles that raise concerns about sustainability (Berwal & Dahiya, 2025). The reliance on volunteers also makes such programs vulnerable to turnover, inconsistencies in instructional quality, and gaps in pedagogical expertise (Tighe et al., 2024).

2.3. Application and Adaptation of TaRL in Different Contexts

The Teaching at the Right Level (TaRL) approach, pioneered by Pratham in India, has been extensively studied for its ability to improve foundational learning by grouping students according to actual skill level rather than age or grade (Banerjee et al., 2016; Banerji & Chavan, 2020). Randomized controlled trials in India, Zambia, and Kenya demonstrated that TaRL could accelerate learning for students who were several years behind grade-level expectations (Vromant, 2021). The approach's simplicity in diagnosing reading ability, grouping students, and tailoring instruction makes it adaptable to varied contexts.

Adaptations in African settings have shown that TaRL can be delivered effectively by trained community volunteers with minimal formal teaching experience (Tomorrow, 2018). In Southeast Asia, pilot projects in Cambodia and the Philippines revealed that TaRL principles could be integrated into after-school reading clubs and NGO-led literacy programs, with notable improvements in comprehension and fluency (Bhardwaj & Yarrowriaz, 2020). In Indonesia, however, studies remain limited and have primarily reported quantitative gains in reading scores (Gao & Chen, 2025; Ruan et al., 2024), leaving a gap in understanding the lived experiences and adaptive strategies of the implementers themselves.

2.4. Research Gap

Although substantial evidence supports the effectiveness of volunteer-based literacy interventions and the TaRL approach in improving reading outcomes, there remains a lack of qualitative exploration into how university student volunteers in Indonesia experience and adapt TaRL in diverse school and community settings. Most existing studies focus on measurable gains (e.g., test scores, fluency rates) without examining the human, pedagogical, and contextual dimensions of implementation (Alramamneh et al., 2023; Ruan et al., 2024). Addressing this gap is essential for designing scalable, sustainable models of volunteer-led literacy programs that not only produce measurable outcomes but also respond to the realities of teaching and learning in low-resource environments.

3. RESEARCH CONTEXT AND DATA

This study was conducted in West Nusa Tenggara Province, Indonesia, encompassing eight districts and two cities located across Lombok and Sumbawa islands. The research was part of a literacy initiative jointly implemented by the West Nusa Tenggara Department of Education, Youth, and Sports and the Elementary School Teacher Education Program at Universitas Islam Negeri Mataram. The program engaged 100 undergraduate volunteers to support early-grade reading in a mix of urban and rural primary schools.

For the present study, 20 volunteers were purposively selected from this cohort, each assigned to one of 20 participating schools two in each district and city. The selected sites represented a variety of socio-economic contexts and geographical settings, providing a diverse basis for exploring volunteer experiences in implementing the Teaching at the Right Level (TaRL) approach. The dataset comprised qualitative materials drawn from interviews and observations, capturing both the instructional practices and contextual realities of literacy work in low-resource environments.

4. THEORETICAL FRAMEWORK

This research draws on three key theoretical perspectives that shape the understanding of early literacy challenges in low-resource settings and guide the use of volunteer-based interventions.

4.1. Literacy as a Social and Developmental Right

Literacy encompasses far more than the mechanical skills of reading and writing; it is a fundamental capability that opens access to knowledge, fosters active participation in community life, and creates opportunities for economic advancement (Fute et al., 2023; Seyda & Sevcik, 2024). Within the context of early childhood education, literacy functions as a means of empowerment. When children fail to develop strong literacy skills in the first years of schooling, the consequences often extend well into their academic journey, limiting both achievement and confidence. Recognizing literacy in this way underscores the need for urgent attention to early reading challenges, particularly in communities that face systemic barriers to quality education.

4.2. Teaching at the Right Level (TaRL) Approach

A core element of this study is the Teaching at the Right Level (TaRL) model, first introduced by Pratham in India and extensively evaluated by Banerjee et al. (2016). Rather than relying solely on a student's age or formal grade placement, TaRL uses diagnostic assessments to group learners according to their current proficiency. Evidence from multiple studies indicates that this method can produce marked gains in basic reading and numeracy skills, especially among pupils who are significantly behind expected grade-level performance (Banerji & Chavan, 2020). In the present study, the adaptation of TaRL by literacy volunteers illustrates how the model can be scaled and applied effectively in cultural contexts quite different from where it originated.

4.3. Descriptive Phenomenological Methodology

To investigate the perspectives and day-to-day realities of literacy volunteers, this research employs a descriptive phenomenological approach as outlined by Giorgi and Giorgi (2003). This methodology encourages the researcher to set aside prior assumptions and focus closely on participants' accounts, making it possible to identify recurring themes that reflect their roles, challenges, and instructional practices with early-grade children. Using a phenomenological lens is particularly useful for uncovering the layered nature of community-driven education programs and for understanding the ways in which such work can influence the volunteers' own personal and professional development.

5. METHOD

This research adopted a phenomenological design, chosen for its ability to examine and convey the lived experiences of people engaged in a specific phenomenon (Creswell & Creswell, 2018; Squires, 2023). In this context, the focus was on how literacy volunteers contribute to early reading development in elementary schools. The researcher acted as the primary instrument for both gathering and interpreting data, allowing for direct and sustained interaction with participants. This approach made it possible to obtain detailed, nuanced descriptions of their experiences (Giorgi & Giorgi, 2003).

This study was conducted from April to July 2023 in West Nusa Tenggara Province, Indonesia, which consists of eight regencies and two cities across two major islands: Lombok and Sumbawa. The literacy initiative involved 100 university students from the Elementary School Teacher Education Program at a public university in the research setting, who volunteered to support early-grade reading in this province. Participation in the literacy program was entirely voluntary, and no financial compensation was provided. These student volunteers were distributed across all districts and cities, working in both urban and rural settings. For research purposes, twenty literacy volunteers were selected purposively based on their active involvement and direct experience in assisting

students' reading development (Squires, 2023). The research setting included 20 elementary schools, with two schools from each district and city where the volunteers were assigned. Their assistance was conducted both in school settings and in students' homes, typically three times per week over four months.

Data were collected through in-depth interviews and direct observation. Interviews were audio-recorded with the consent of participants to ensure accuracy and completeness. Immediately after each interview, recordings were transcribed verbatim in Bahasa Indonesia by the researcher to preserve the authenticity of participants' narratives, including pauses, repetitions, and non-verbal cues when relevant.

The transcriptions were then cross-checked against the audio files to correct any omissions or misinterpretations. Since the research was intended for an English-language publication, the interview transcripts were subsequently translated into English. The translation process followed a meaning-preservation approach, prioritizing the accurate conveyance of participants' intended messages rather than a word-for-word rendering. To ensure linguistic and conceptual equivalence, the translated texts were reviewed by a bilingual academic with expertise in literacy education. In cases where idiomatic expressions or culturally specific terms had no direct English equivalent, explanatory notes were added to maintain contextual clarity. This dual process of transcription and translation ensured that the data retained its original nuance while being accessible for analysis and international scholarly dissemination.

Observation notes were used to complement and add depth to the interview data. The analysis process unfolded in several stages: transcribing the interviews, identifying recurring themes, and interpreting the essential meanings behind the experiences (Lewis, 2015). By reading the transcripts multiple times and engaging in reflective interpretation, the researcher was able to trace patterns and uncover deeper insights, leading to a comprehensive picture of each volunteer's experience.

To enhance the trustworthiness of the findings, credibility was ensured through member checking and triangulation (Yeasmin & Rahman, 2012). Participants were invited to review the interpretations of their narratives and confirm their accuracy. Triangulation involved comparing information from interviews with observation notes, allowing for a more reliable and nuanced understanding of the data.

Prior to data collection, informed consent was obtained from all participants (Newman, Guta, & Black, 2021). Anonymity and confidentiality were safeguarded by assigning codes such as P1, P2, and so forth to represent each volunteer. They were also informed that participation was voluntary and that they could withdraw from the study at any stage without facing any consequences (Creswell & Creswell, 2018).

6. RESULTS

This section presents the main findings from the fieldwork, highlighting how literacy volunteers contributed to early reading development and the difficulties they faced in the process. Drawing on data from interviews and classroom observations, the results are organized into two broad themes: the volunteers' experiences in implementing the Teaching at the Right Level (TaRL) approach, and the challenges encountered when working in schools with limited resources. These themes are illustrated with excerpts from participants' accounts and supported by field notes, offering a grounded and context-rich portrayal of their roles and daily realities.

6.1. Literacy Volunteers' Experiences in Supporting Early-Grade Reading

Based on the findings, this study identified how literacy volunteers supported students' early reading skills in elementary schools. For clarity, the key results are summarized in Table 1.

Table 1. Literacy volunteers' experiences in supporting early-grade reading.

No.	Theme	Observation notes	Interview excerpts
1.	Literacy volunteers were given briefing materials, including (a) volunteerism and child protection, (b) developing mindset, (c) communicating with teachers and parents of assisted students, (d) how to determine a child's reading ability level, and (e) guiding students.	Literacy volunteers attended three days of online briefing.	*P3:* "We attended this literacy volunteer briefing for three days. We attended it online, and the materials were sent to Google Classroom. The Innovation Team presented the materials as the person in charge of literacy volunteer activities." *P6:* "Yes, we were given a briefing for three days. As far as I remember, the materials were related to volunteerism and child protection, developing mindset, communicating with teachers and parents of assisted students, determining a child's ability level, and guiding a child." *P12:* "Initially, we were confused about what to do. As a literacy volunteer, I didn't know what to do. Alhamdulillah, we were given briefings and several video examples to help us understand what we would do in the field or at our respective assisted places."
2.	Literacy volunteers introduced to the TaRL Approach	Literacy volunteers simulate the TaRL approach	*P5:* "We were introduced to the TaRL approach, namely the Teaching at the Right Level approach. We use this approach in this literacy volunteer activity. This approach has been helpful because it directs early reading learning based on the level." *P7:* "As far as I understand, there are three steps that I will take to implement this TaRL approach. First, I assess students' reading ability. Second, I group them into groups at each level. Third, I teach them according to students' abilities based on their level. For example, students at the beginner level, I am a student at the beginner level. Students at the word level, I group them with the word level, and so on, even though these students are different in age or class." *P11:* "During this literacy volunteer activity, I used the TaRL approach first, a diagnostic assessment of students' reading ability. Second, I group them according to level. Finally, I guide them according to level. In this way, I feel helped, and the child can read very quickly."
3.	Literacy volunteers conduct diagnostic assessments.	Literacy volunteers conduct diagnostic assessments to determine students' reading levels.	*P1:* "We group the students based on the test results. If it is like that, it is also easier for us to accompany them in reading." *P10:* "The assessment is conducted to determine students' reading levels. These levels start from the beginner level, letter level, word level, sentence level, paragraph level, and story level. If these levels are known, student reading literacy assistance is more focused." *P20:* "At first, we planned to teach reading directly. But after the briefing, we realized it was important to assess students' reading levels first, using paragraph, sentence, word, and letter tests. The results helped us group them by ability and provide more targeted, effective instruction."

No.	Theme	Observation notes	Interview excerpts
4.	Literacy volunteers carry out learning based on students' reading ability levels.	a. Literacy volunteers support beginner and letter groups by teaching basic skills such as recognizing vowels, consonants, syllables, and familiar words. They plan lessons, prepare materials, and use varied strategies to engage students.	*P2:* "Before entering class, I always make sure I've prepared materials and simple media, sometimes with recycled items. For beginner groups, I break lessons down slowly so they really understand each sound." *P9:* "We're not just teaching letters, we're building their confidence. I adjust my strategies depending on how quickly each child responds, and I make the session as fun as possible."
		b. Literacy volunteers support word and paragraph groups through activities such as sentence building, paragraph writing, expressive reading, and story creation. These tasks are carried out with dedication, supported by careful planning, materials, media, and varied teaching strategies.	*P15:* "In one session, we started with sentence-making using cards, then moved on to building simple paragraphs. Students also enjoyed activities like chain messages and making stories from pictures. It keeps them active and creative." *P17:* "I always prepare different strategies for this group. Expressive reading, mind mapping, and 'Let's Make a Story' are some of their favorites. The key is helping them organize their ideas step by step."
		c. Literacy volunteers led story group activities such as reading aloud, identifying key information, rewriting stories, describing characters, predicting events, and creating alternative endings. They also encouraged reflection, personal writing, and creative responses through comics. These ten activities were delivered in engaging ways, supported by thorough preparation of materials, media, and varied teaching strategies.	*P5:* "For the story group, I usually start with reading aloud, then ask them to describe their favorite characters or imagine a different ending. They get really excited when we turn stories into drawings or comics." *P12:* "Each session, I prepare materials like short announcements or comics. After reading, they rewrite the story or reflect on it, sometimes even connect it to their own holiday experiences. It's a fun way to help them think critically." *P18:* "Before each session, I plan the materials carefully. We often link the reading to their real-life experiences, such as writing about holidays or engaging in self-reflection. This approach makes the learning more personal and meaningful."

6.2. Challenges Faced by Literacy Volunteers in Supporting Early-Grade Reading

Volunteers encounter several challenges in supporting early reading development among elementary school students. These challenges include limited access to engaging teaching materials, a lack of appropriate learning media, inadequate facilities and infrastructure, poorly equipped school libraries, and a shortage of diverse storybooks. In addition, weak parental involvement and concerns about the long-term sustainability of literacy programs further complicate their efforts. To illustrate these findings more clearly, the data are summarized in Table 2.

Table 2. Key challenges encountered by literacy volunteers in early reading support.

No.	Challenges	Observation	Interview
1.	Availability of interesting teaching materials.	The teaching materials are still in the form of document files that need to be printed. With their limitations, the volunteers can only view the teaching materials on their gadgets. This makes the volunteers feel less than optimal when assisting.	*P2:* "We were given teaching materials, but they weren't engaging because they weren't printed. If they had been printed, it would have been much easier to guide the children in learning to read." *P10:* "I had to display the materials on my device, but the format was not appealing, and the small screen made it difficult to present the content effectively." *P12:* "If we had been provided with proper digital materials, it would have made our work as volunteers much easier. Fortunately, I was only assigned two students. If I had to manage ten, I can't imagine how challenging it would have been."
2.	Availability of learning media.	Literacy volunteers use existing learning media or whatever they can get, such as textbooks available at school.	*P7:* "I mostly used books that were already available. I had ideas to create letter cards as additional media, but since I am also a student, I just used what I had access to." *P8:* "I used simple materials, mostly handmade. I created alphabet cards from Manila paper for beginner groups. For students at the word, paragraph, or story level, I relied on standard textbooks." *P18:* "Media really helps make learning successful. But since I'm volunteering without pay, I use whatever I can find. I simply can't afford to buy extra materials, and I also have other responsibilities."
3.	Availability of facilities and infrastructure	Literacy volunteers accompany students at home.	*P4:* "Right now, we mostly guide the children outside of school, usually at home. Ideally, we would use the school library, but the space isn't conducive, and the available books are mostly textbooks, which aren't engaging. We want the children to read storybooks too, not just textbooks." *P11:* "In many cases, the school libraries aren't really functional. In my area in North Lombok, the library is just a repurposed storage room, and the only books available are textbooks. I eventually decided it was better to work with the children at home, where I can lend them books from my own collection or borrow storybooks from relatives and neighbors. Sometimes, I ask the students to bring books from home and exchange them with one another." *P10:* "I initially planned to guide my students at school, especially in the library. But when I visited, I found the space poorly organized, the books unappealing, and the room unsuitable for learning. Everything was textbook-based. Ideally, the government could help by supplying storybooks to schools, but our location is far from the regional library, which makes that difficult."
4.	Parental support	Students are not accompanied by their parents because they are busy working, and students live with their grandmothers because their parents have passed away.	*P9:* "The child I am mentoring has parents busy in the rice fields. I have been to the house of the child I am mentoring. The house is quiet, and there is no one there. I also feel sorry for him. But what can I do? The role of parents is also important during these times so that their children can read." *P13:* "My mentor is an orphan. His mother and father have passed away. This child lives with his grandmother. What's worse, his grandmother can't read or write." *P16:* "For me, the child I mentor has his parents. His parents are also busy working. The parents admit that their role in accompanying their children is only a few

No.	Challenges	Observation	Interview
			percent. They can only accompany around 10% if you want to calculate."
5.	Difficulty in managing the sustainability of the literacy program.	Literacy volunteers are happy to be able to contribute to the literacy program, but they also think about its sustainability.	*P1:* "I feel grateful to be a literacy volunteer because I can directly apply what I've learned. I joined this program through my study program; otherwise, I might not have participated. What I hope now is that the program continues. If it does, the children we've supported can keep improving their reading skills. *P5:* "I joined the literacy volunteer program through my university's initiative, though not all of my classmates took part. As a future elementary teacher, I see this experience as highly valuable, especially since it relates to Indonesian language instruction. But I'm concerned about the program's sustainability. My role lasted only four months, and if no one continues the support, I fear the children might lose what they've gained." *P8:* "Although I volunteered for only two months, the experience was deeply meaningful. I met children living in difficult situations. Some came home to empty houses because their parents worked in the fields or abroad, and others lived with extended family after losing their parents. I worry about what will happen if this program doesn't continue. These children need consistent support."

7. DISCUSSION

This study set out to explore the lived experiences of literacy volunteers in supporting early-grade reading through the Teaching at the Right Level (TaRL) approach. The findings revealed two major areas: how volunteers implemented TaRL in real classroom settings, and the challenges they faced in low-resource school environments. These results contribute not only to understanding volunteer engagement in early literacy efforts but also address the research gap on how structured approaches like TaRL are adapted at the grassroots level by non-professional educators.

The first key finding shows that literacy volunteers played an active and strategic role in implementing the TaRL model. Volunteers conducted diagnostic assessments, grouped students based on their reading levels, and used differentiated instruction to support reading development. This result is consistent with the findings of Banerjee et al. (2016) and Banerji and Chavan (2020), which demonstrate that the TaRL approach is effective in closing foundational learning gaps through teaching adapted to students' actual levels. In this study, the volunteers carried out reading assessments that covered a range of skills from recognizing letters to reading sentences and short paragraphs. These assessments allowed them to group students according to their proficiency and to plan instruction that addressed specific needs. As P20 described, "*At first, we thought we could just teach directly. But after the briefing, we realized we had to assess first, starting with paragraphs, then sentences, words, and letters. That helped us know what each child needed.*" This practical implementation of assessment for learning shows how volunteers moved beyond passive assistance into the role of facilitators of differentiated learning. However, unlike most previous studies that involved trained teachers or NGOs, this research presents an original contribution by showing how university student volunteers, after a brief training, were able to operationalize TaRL with notable success. Their ability to identify learning levels, tailor instruction, and create engaging, level-specific activities for students underscores the practical adaptability of TaRL beyond formal educational settings.

One possible explanation for the volunteers' success in applying TaRL despite minimal formal training lies in the situated nature of their learning. Lave and Wenger's concept of "learning through participation" suggests that individuals acquire skills effectively when immersed in authentic contexts where knowledge is immediately applied. The three-day briefing, while short, provided a conceptual scaffold, but the iterative cycles of assessment, grouping, and targeted instruction in real classrooms likely reinforced these skills more than extended theoretical instruction would have. This aligns with evidence from volunteer literacy initiatives in Kenya and India, where experiential immersion enabled community facilitators to adopt structured pedagogies with relatively limited prior exposure to formal teacher education. In this sense, the volunteers' adaptability was not solely a product of the TaRL framework but also of the social and collaborative dynamics within their teaching environments.

In terms of pedagogy, volunteers integrated reading strategies such as phonics, clapping syllables, sentence-building games, and expressive reading, reinforcing the view that early literacy is not merely decoding but involves comprehension, participation, and meaning-making (Liu et al., 2025; Seyda & Sevcik, 2024). Their instructional practices also reflected the idea of literacy as a developmental right and a means of empowerment, consistent with the theoretical position of literacy as a tool for social inclusion (Fute et al., 2023).

Importantly, this study also uncovers several structural challenges that limited the volunteers' potential. The most frequently cited issues included the lack of printed and engaging teaching materials, inadequate access to appropriate media, poor library infrastructure, and limited parental support. These findings echo broader concerns in the literature about educational inequity in rural and underfunded schools (Al-Worafi, 2024; Comings, 2020; Muslimin & Harintama, 2022). As P2 noted, *"We only received digital files, and most of them weren't printed. Some children didn't find the materials attractive, so I had to handwrite texts or make visuals myself."* Volunteers often had to improvise by using recycled materials, borrowing books from relatives, or conducting lessons in students' homes due to the poor state of school libraries, findings that align with Bouaamri (2024) and Meesad and Mingkhwan (2024), who emphasize the need to reimagine learning spaces in low-resource contexts.

The persistence of material and infrastructural shortages in the participating schools reflects a broader pattern observed in rural literacy programs globally. UNESCO (2022) identifies inadequate reading resources, weak library systems, and limited parental involvement as common bottlenecks in low-resource contexts. In NTB, these issues are compounded by geographical isolation and economic constraints, which reduce the feasibility of consistent material provision. For instance, volunteers' reliance on improvised teaching aids mirrors strategies in rural Morocco and sub-Saharan Africa, where educators often adapt locally available materials to sustain engagement. Such improvisation, while commendable, risks reinforcing inequities if not supported by systematic investment in culturally relevant and engaging literacy resources. Addressing these systemic barriers requires policy mechanisms that ensure a steady supply of storybooks, locally produced media, and functional reading spaces accessible to all students.

Another important theme that emerged was the concern over the sustainability of the literacy program. While the volunteers observed progress in students' reading abilities, many expressed uncertainty about what would happen once their assignments ended. P1 reflected, *"I hope this program continues. If it does, the children we've supported can keep improving."* Similarly, P5 worried, *"My assignment lasted only four months. If no one continues the support, I fear the children might forget what they've learned."* P8 added, *"Some of these children live in difficult situations. Without continued guidance, they might fall behind again."* Field observations echoed these concerns, showing that in many cases the volunteers were the sole providers of structured literacy support beyond regular classroom teaching. When they were unavailable, no alternative system was in place to fill the gap.

This situation reflects a broader issue identified by Nichols et al. (2020), who note that community-based literacy programs can only achieve lasting impact when backed by sustained institutional support. In a similar vein, Berwal and Dahiya (2025) stress the need for stakeholder awareness and active involvement in advancing inclusive education, cautioning that without it, initiatives risk becoming fragmented and short-lived. Although volunteer-driven programs, such as the one in this study, hold clear promise, their dependence on short-term participation leaves them

vulnerable and difficult to expand. Strengthening cooperation between universities, schools, and local education offices would help prevent these efforts from remaining isolated projects. Integrating volunteer placements into teacher education programs, ensuring a steady supply of learning materials, and appointing school-based literacy facilitators are possible strategies to turn short-term interventions into sustainable systems for early-grade reading support (Sapkota, Berit Emstad, Gamlem, & Vattøy, 2025).
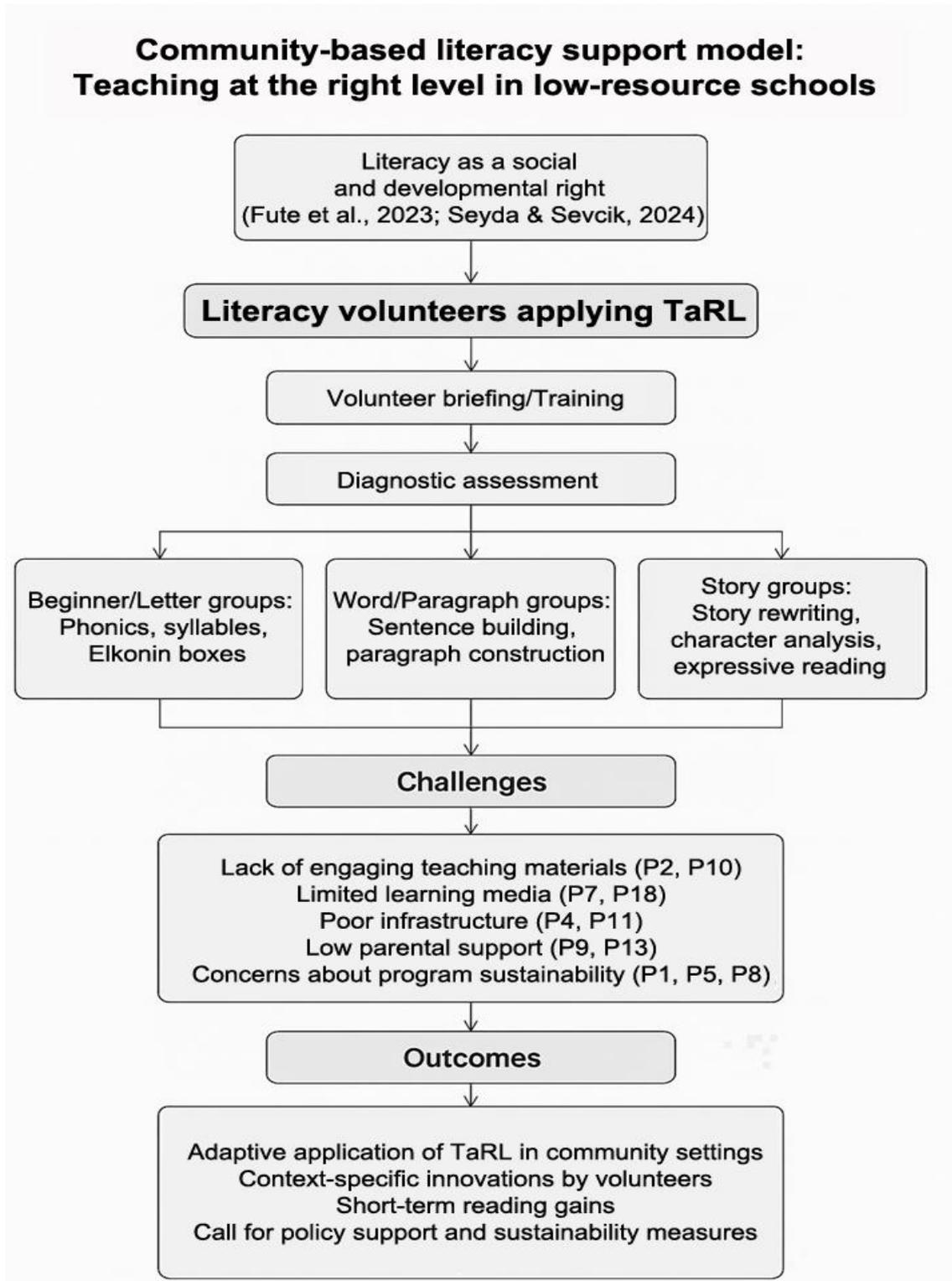
Figure 1. Community-based literacy support model: Volunteer implementation of teaching at the right level (TaRL) in low-resource schools.

Source: Fute et al. (2023) and Seyda and Sevcik (2024).

This study addresses a largely overlooked dimension of literacy work, the lived experiences of volunteers applying the TaRL approach and, in doing so, fills an important gap in the research. Earlier studies have tended to emphasize measurable outcomes (Alramamneh et al., 2023; Gao & Chen, 2025; Ruan et al., 2024), whereas the present work takes a more human-centered view, exploring the processes, obstacles, and creative solutions that arise when volunteers take on instructional responsibilities (see Figure 1). Beyond adding to the body of knowledge on literacy development and volunteer engagement, the findings offer practical insights for policymakers and education stakeholders who are seeking community-driven strategies that can be scaled to address persistent gaps in foundational literacy.

8. CONCLUSIONS

This study set out to examine how literacy volunteers experience and navigate the task of supporting early-grade reading in elementary schools through the Teaching at the Right Level (TaRL) approach. The findings show that, even with limited training and modest infrastructure, the volunteers were able to assess students' reading abilities, group them by level, and apply instructional strategies suited to their needs. These outcomes illustrate the potential of community-based actors to make a meaningful contribution to foundational literacy in underserved areas, provided that their work is anchored in a clear pedagogical framework. At the same time, several obstacles emerged that limited the program's full potential. These included a shortage of printed and engaging learning materials, restricted access to teaching media, poorly equipped libraries, and low levels of parental involvement. Concerns about the program's sustainability also surfaced, underscoring the need for stronger institutional support. Such challenges point to structural constraints that extend beyond what the volunteers themselves can address.

The study has certain limitations. It focused on a specific cohort of university student volunteers in one province of Indonesia, which may limit the extent to which the findings apply in other contexts. Future studies could involve a wider range of volunteer groups, extend the observation period, or employ mixed methods to explore not only volunteer experiences but also their direct impact on student learning outcomes.

The study offers valuable implications. Theoretically, it extends the application of the TaRL model by demonstrating its adaptability in informal, volunteer-led settings. Practically, it emphasizes the importance of establishing structured volunteer programs with adequate material support and sustainability planning. At the policy level, integrating approaches such as TaRL into national and regional literacy strategies could help close persistent learning gaps, particularly in regions facing teacher shortages and limited resources. This integration should be supported by consistent funding for culturally relevant reading materials, functional school libraries, and community-based reading spaces. At the practical level, partnerships between schools, local education offices, and universities could be formalized to create ongoing volunteer placements, embed parental engagement initiatives, and provide low-cost teaching aids that reflect students' linguistic and cultural backgrounds. Taken together, these measures would help transform short-term volunteer projects into long-term, systemic solutions for improving foundational literacy in low-resource settings. Finally, literacy volunteers, when equipped with the right tools and guidance, can play a significant role in bridging early reading gaps in low-resource settings. However, for their impact to be sustained and scaled, a collaborative effort involving schools, communities, and government institutions is essential.

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