

Effectiveness of a Phonics-Based Reading Intervention in Improving the Beginning Reading Skills of Key Stage 1 Learners at Pedro Redondo Elementary School, Surigao del Sur Division: A Quasi-Experimental Study

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ABSTRACT

This study determined the effectiveness of a phonics-based reading intervention in improving the beginning reading skills of Key Stage 1 learners at Pedro Redondo Elementary School during the School Year 2025-2026. The study employed a quantitative one-group pretest-posttest quasi-experimental design. The respondents were Key Stage 1 learners who participated in structured phonics-based activities focused on letter-sound recognition, word decoding, oral reading fluency, and reading comprehension. The reading assessment was adapted from the Comprehensive Rapid Literacy Assessment (CRLA) framework, and data were analyzed using mean, standard deviation, mean gain, and paired-samples t-test. Results showed that the learners' pretest performance was at the Developing level, with reading comprehension registering the lowest

mean score. After the intervention, overall reading performance improved to the Proficient/Grade Ready level, particularly in letter-sound recognition, word decoding, and oral reading fluency. Paired comparison results revealed significant improvements across all components, with reading comprehension showing the greatest mean gain, followed by word decoding, oral reading fluency, and letter-sound recognition. The findings indicate that a phonics-based reading intervention is an effective strategy for strengthening beginning reading skills among early-grade learners. However, reading comprehension remained at the Developing level, suggesting the need for continued comprehension-focused support. The study recommends the implementation of Project PHONICS-PLUS as a sustained school-based reading enhancement program.

Keywords: *phonics-based reading intervention, beginning reading skills, letter-sound recognition, word decoding, oral reading fluency, reading comprehension, Key Stage 1 learners, CRLA, quasi-experimental study*

INTRODUCTION

Reading literacy is a foundational skill that allows learners to access knowledge, participate meaningfully in society, and succeed across academic disciplines. Early reading proficiency is especially critical because difficulties in the primary grades often continue into later schooling and affect performance in all subject areas. Global reports on learning poverty and minimum proficiency levels show that many children remain unable to read and understand simple texts, making foundational literacy one of the most urgent educational concerns (UNESCO, 2023; World Bank, 2023).

In the Philippines, reading proficiency remains a persistent challenge. The PISA 2022 results showed continuing difficulty in reading among Filipino learners, reinforcing the need for systematic early-grade literacy support (OECD, 2023). Local literature likewise points to weak phonemic awareness, limited vocabulary, and insufficient decoding skills as barriers to reading development (Bernardo, 2020). In this context, schools are expected to implement targeted and evidence-based interventions that strengthen the core components of beginning reading.

Phonics-based instruction is one of the most widely supported strategies for early reading development. It teaches learners the relationship between letters and sounds, guides them in blending and segmenting words, and supports automatic word recognition. Research on early literacy shows that systematic phonics instruction improves word reading and decoding, which then supports fluency and comprehension (Ehri, 2020; National Reading Panel, 2000). For struggling readers, phonics instruction provides a structured path from sound-symbol mastery to meaningful reading.

At Pedro Redondo Elementary School, classroom observations and reading assessment results showed that many Key Stage 1 learners experienced difficulty in letter-sound recognition, word decoding, oral reading fluency, and reading comprehension. These gaps required a focused intervention that directly addressed foundational reading skills. Thus, this study examined the effectiveness of a phonics-based reading intervention in improving the beginning reading skills of Key Stage 1 learners and served as the basis for a continuing reading enhancement program.

Literature Review

Beginning Reading Skills

Beginning reading involves the development of several interrelated skills: recognizing letters, connecting letters to sounds, decoding words, reading orally with accuracy and fluency, and understanding the meaning of texts. The Simple View of Reading explains that reading comprehension depends on decoding and language comprehension, indicating that learners need both accurate word reading and meaning-making skills (Gough & Tunmer, 1986; Lonigan et al., 2018).

Early literacy research emphasizes that children develop reading competence when they receive explicit instruction in phonological awareness, letter knowledge, decoding, vocabulary, fluency, and comprehension (National Early Literacy Panel, 2008; Snow et al., 1998). Weakness in one component may limit progress in another; for example, poor decoding slows oral reading fluency and reduces the learner's capacity to focus on comprehension.

Phonics-Based Reading Intervention

Phonics-based reading intervention is grounded in the idea that learners must understand the alphabetic principle and apply letter-sound knowledge to read unfamiliar words. Systematic phonics has been associated with improved word reading, decoding accuracy, and spelling, particularly when instruction is explicit, sequenced, and supported by repeated practice (Ehri et al., 2001; Moats, 2020).

In multilingual and second-language learning contexts, phonics instruction is also helpful because it provides concrete patterns for recognizing and producing sounds. Studies in Asian settings have shown that phonics-based activities can improve decoding and reading comprehension among primary learners (Ismail et al., 2018; Mohamed & Yunus, 2017; Prasertsin & Chaisanit, 2021). In the Philippine context, Barrot (2021) reported positive effects of phonics instruction on the reading performance of Filipino learners.

Letter-Sound Recognition, Decoding, Fluency, and Comprehension

Letter-sound recognition is the starting point for decoding. When learners know the sounds represented by letters, they are more prepared to blend sounds into words. Decoding then enables learners to identify unfamiliar words, while repeated reading builds fluency through accuracy, speed, and expression (LaBerge & Samuels, 1974; Perfetti, 2007).

Reading comprehension is the ultimate goal of reading instruction. It requires vocabulary knowledge, background knowledge, inference-making, and the ability to connect ideas across a text (Duke & Pearson, 2002; Snow, 2002). Although phonics strengthens the decoding foundation, comprehension still requires explicit support through vocabulary preview, questioning, retelling, sequencing, and story mapping. This is important because a learner may decode words accurately but still struggle to understand and explain the meaning of a passage.

Synthesis of Literature

The reviewed literature consistently shows that beginning reading skills must be developed through systematic, explicit, and sustained instruction. Phonics instruction is especially valuable for learners who need support in letter-sound recognition and word decoding. However, fluency and comprehension should also be intentionally developed so that learners move from word reading to meaningful reading. This study therefore integrated phonics drills, word decoding practice, guided oral reading, and comprehension-building activities to address the full range of beginning reading skills.

METHODS

Research Design

The study used a quantitative quasi-experimental design, specifically the one-group pretest-posttest design. This design was appropriate because the same group of learners was assessed before and after the implementation of the phonics-based reading intervention. Random assignment to experimental and control groups was not used because the study was conducted in an existing school setting with identified Key Stage 1 learners who needed reading support (Creswell & Creswell, 2018; Johnson & Christensen, 2020).

Research Locale

The study was conducted at Pedro Redondo Elementary School in Sitio Maribojoc, Barangay Valencia, Municipality of Lingig, Province of Surigao del Sur. Lingig is located in the southern part of Surigao del Sur within the Caraga Administrative Region. The school was selected because it serves early-grade learners in a community where foundational reading support is highly relevant.

Participants and Sampling Technique

The respondents were Key Stage 1 learners of Pedro Redondo Elementary School during the School Year 2025-2026. Complete enumeration was used so that all learners in the identified Key Stage 1 classes were included in the intervention. The distribution of learners is shown in Table 1. Valid assessment records varied across analyses because some learners had incomplete pretest or posttest results; the paired comparison used 61 complete matched cases.



Figure 1. Location maps showing Surigao del Sur and the Municipality of Lingig.

Source: Original manuscript figures retained for locale context.

Table 1. Distribution of Key Stage 1 Learners

Key Stage 1	Population	Sample Size
Kinder	17	17
Grade 1	15	15
Grade 2	29	29
Grade 3	22	22
Total	83	83

Research Instrument

The primary instrument was a reading assessment test adapted from the Comprehensive Rapid Literacy Assessment (CRLA) framework. It measured four components of beginning reading skills: letter-sound recognition, word decoding, oral reading fluency, and reading comprehension. The tool included letter identification tasks, word reading exercises, oral reading passages, and comprehension questions. The instrument was reviewed by experienced teachers and reading coordinators to ensure content validity and suitability for Key Stage 1 learners.

Data Gathering Procedure

Permission to conduct the study was secured from the school head. The pretest was administered before the intervention to establish learners' baseline reading performance. The phonics-based reading intervention was then implemented through structured activities such as sound drills, blending and segmentation exercises, word-family

practice, decodable reading, repeated reading, and comprehension tasks. After the intervention, the posttest was administered using the same reading skill components. Assessment results were checked, encoded, and analyzed according to the objectives of the study.

Data Analysis

Frequency and percentage were used to describe the participants, while mean and standard deviation were used to determine pretest and posttest levels of beginning reading skills. Mean gain was used to identify the component with the greatest improvement. A paired-samples t-test was used to determine whether the differences between pretest and posttest scores were statistically significant at the 0.05 level of significance.

Ethical Consideration

The study followed basic ethical research procedures. Permission was obtained from the school, and the learners' assessment data were handled with confidentiality. Results were used only for academic and instructional improvement purposes. The intervention was designed as a supportive reading activity and did not expose learners to harm or disadvantage.

RESULTS AND DISCUSSION

Pretest Level of Beginning Reading Skills

Table 2 shows that before the implementation of the phonics-based reading intervention, the learners' overall beginning reading skills were at the Developing level. Letter-sound recognition recorded the highest pretest mean (73.81%), followed by oral reading fluency (66.16%) and word decoding (63.69%). Reading comprehension had the lowest pretest mean (30.63%), indicating that learners had greater difficulty understanding and responding to texts than identifying or reading words. This pattern suggests that the learners had partial mastery of foundational decoding skills but still needed strong support in meaning-making.

Table 2. *Pretest Level of Beginning Reading Skills*

Component	N	Mean %	SD	Descriptive Level
Letter-sound recognition	63	73.81	28.31	Developing
Word decoding	63	63.69	34.52	Developing
Oral reading fluency	63	66.16	38.54	Developing
Reading comprehension	63	30.63	28.02	Developing
Overall	63	58.57	32.35	Developing

The low comprehension score supports the view that decoding alone does not automatically produce understanding. While learners may recognize letters or read some words, they still need vocabulary, background knowledge, questioning, and guided discussion to construct meaning (Duke & Pearson, 2002; Snow, 2002).

Posttest Level of Beginning Reading Skills

After the intervention, learners showed marked improvement in all assessed components. The overall posttest mean reached 84.26%, interpreted as Proficient/Grade Ready. Oral reading fluency obtained the highest mean (90.19%), followed by letter-sound recognition (90.08%) and word decoding (89.62%). Reading comprehension improved substantially to 67.13%, but it remained at the Developing level.

Table 3. *Posttest Level of Beginning Reading Skills*

Component	N	Mean %	SD	Descriptive Level
Letter-sound recognition	66	90.08	16.04	Proficient/Grade Ready
Word decoding	66	89.62	19.73	Proficient/Grade Ready
Oral reading fluency	66	90.19	24.33	Proficient/Grade Ready
Reading comprehension	66	67.13	31.19	Developing
Overall	66	84.26	22.82	Proficient/Grade Ready

These results indicate that structured phonics activities supported learners in connecting letters and sounds, decoding words, and reading with improved accuracy and fluency. The remaining need in comprehension implies that follow-up instruction should move beyond phonics drills and include explicit comprehension strategies such as retelling, sequencing, and answering inferential questions.

Difference Between Pretest and Posttest Scores

The paired-samples t-test revealed significant differences across all reading components. The overall mean increased from 59.75% to 84.30%, with a mean gain of 24.55 percentage points. All p-values were less than .001, leading to the rejection of the null hypothesis. These findings show that the phonics-based reading intervention significantly improved the learners' beginning reading skills.

Table 4. *Significant Difference Between Pretest and Posttest Scores*

Component	N	Pretest Mean %	Posttest Mean %	Mean Gain	t-value	p-value	Decision
Letter-sound recognition	61	74.92	90.25	15.33	5.47	<.001	Significant
Word decoding	61	64.96	89.39	24.43	6.17	<.001	Significant
Oral reading fluency	61	67.49	89.98	22.49	4.97	<.001	Significant
Reading comprehension	61	31.63	67.6	35.96	8.51	<.001	Significant
Overall	61	59.75	84.3	24.55	7.62	<.001	Significant

The significant gains are consistent with the literature on systematic phonics instruction, which emphasizes explicit teaching of sound-symbol relationships, blending, and decoding as essential supports for early word reading (Ehri, 2020; National Reading Panel, 2000). The results also support studies showing that phonics can improve reading performance among Filipino and Asian learners (Barrot, 2021; Ismail et al., 2018).

Reading Skill Component with the Greatest Improvement

Reading comprehension recorded the greatest improvement, with a mean gain of 35.96 percentage points. This was followed by word decoding, oral reading fluency, and letter-sound recognition. The large gain in comprehension suggests that improved decoding and fluency may have helped learners allocate more attention to understanding text. However, because comprehension remained Developing after the intervention, it should remain the central focus of the follow-up program.

Table 5. *Ranking of Reading Components Based on Mean Gain*

Rank	Component	Pretest Mean %	Posttest Mean %	Mean Gain
1	Reading comprehension	31.64	67.6	35.96
2	Word decoding	64.96	89.39	24.43
3	Oral reading fluency	67.49	89.98	22.49
4	Letter-sound recognition	74.92	90.25	15.33

Proposed Reading Enhancement Program: Project PHONICS-PLUS

Based on the findings, Project PHONICS-PLUS is proposed as a continuing school-based reading enhancement program. The program is intended to sustain gains in letter-sound recognition, word decoding, and oral reading fluency while strengthening comprehension through vocabulary development, questioning, retelling, and story-mapping activities.

Table 6. *Project PHONICS-PLUS Program Implementation Plan*

Program Components	Activities	Target Learners	Time Frame	Persons Involved	Success Indicator
Daily Phonics Drill	Letter-sound drills, sound blending, syllable reading, and word-family practice	Beginning and Developing readers	10-15 minutes daily	Class advisers and reading teacher	Improved letter-sound and decoding scores
Word Decoding Practice	Decodable words, flashcards, word ladders, blending boards, CVC and multisyllabic words	Learners with low decoding scores	3-4 times per week	Teacher and reading volunteers	Increased word decoding accuracy
Guided Oral Reading	Choral reading, echo reading, paired reading, and repeated reading of short passages	Learners with low fluency	3 times per week	Teacher and peer tutors	Improved oral reading fluency
Comprehension Booster Sessions	Picture walk, vocabulary preview, WH-questions, sequencing, retelling, and story mapping	All Key Stage 1 learners, especially those at Beginning level in comprehension	2-3 times per week	Teachers and school reading coordinator	Improved comprehension scores
Progress Monitoring	Short CRLA-aligned assessment tasks and reading logs	All participating learners	Weekly or monthly	Teachers and reading coordinator	Learners' progress is regularly tracked

CONCLUSION

The study concludes that Key Stage 1 learners had Developing beginning reading skills before the implementation of the phonics-based reading intervention. Their weakest area was reading comprehension, indicating that learners required support not only in decoding but also in understanding texts.

The phonics-based reading intervention significantly improved the learners' beginning reading skills. The overall performance increased from Developing to Proficient/Grade Ready, and significant gains were found in letter-sound recognition, word decoding, oral reading fluency, and reading comprehension.

Reading comprehension benefited the most from the intervention but remained the area needing the greatest continuing support. Thus, phonics instruction should be sustained and complemented with explicit comprehension-building activities. The proposed Project PHONICS-PLUS is appropriate as a follow-up program because it directly responds to the learners' remaining reading needs.

Recommendations

- The school should continue implementing phonics-based reading interventions for Key Stage 1 learners as part of its regular reading program.
- Teachers should provide explicit and systematic instruction in letter-sound recognition, blending, segmentation, word decoding, and decodable text reading.
- Reading comprehension activities should be strengthened through vocabulary preview, picture walk, WH-questions, sequencing, retelling, story mapping, and guided discussion.
- Oral reading fluency practice should be conducted regularly through choral reading, echo reading, paired reading, and repeated reading.
- Learners should be grouped according to reading level so that Beginning, Developing, and Proficient/Grade Ready learners receive appropriate reading support.
- Parents and guardians should be involved through simple take-home reading materials, reading logs, and short daily home reading routines.
- Project PHONICS-PLUS should be implemented as a continuing school-based reading enhancement program, with regular assessment and progress monitoring using CRLA-aligned tasks.
- Future researchers may conduct similar studies with a wider scope, longer implementation period, comparison group, or additional variables such as attendance, home reading environment, and learner motivation.

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