

Reading Recovery Support and Literacy Progress Among Struggling Grade 4 Learners

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Date Submitted:
February 12, 2026

Date Accepted:
April 25, 2026

Date Published:
July 16, 2026

DOI:
10.5281/zenodo.21398802

ABSTRACT

This study assessed the contribution of reading recovery support to the literacy progress of struggling Grade 4 learners at Lupigue Integrated School. A prospective repeated-measures design was used to track learners' performance across baseline, midpoint, and endpoint assessments. Reading recovery support was evaluated in terms of decoding instruction, guided oral reading, corrective feedback, vocabulary and comprehension scaffolding, progress monitoring, and home-school reinforcement. Data were analyzed using medians, interquartile ranges, Kendall's tau-b correlation, and bootstrapped median quantile regression. Results showed consistent improvement in word recognition, oral reading fluency, vocabulary, literal comprehension, inferential comprehension, and overall

literacy performance. The overall median literacy score increased from 43 at baseline to 67 at endpoint. The proportion of learners at the frustration level decreased, while more learners advanced to the instructional and independent levels. Reading recovery support was significantly associated with literacy gain. Progress monitoring and instructional adjustment emerged as the strongest predictor of endpoint performance, followed by vocabulary and comprehension scaffolding and guided oral reading. Despite the gains, inferential comprehension and vocabulary remained the weakest areas, and some learners continued to perform at the frustration level. The findings indicate that reading recovery is most effective when instruction is sustained, responsive to assessment results, and matched to specific learner needs. Continued small-group intervention, flexible grouping, explicit comprehension teaching, and closer monitoring are recommended to support further literacy development.

Keywords: *Grade 4 learners, literacy intervention, literacy progress, reading comprehension, reading recovery, struggling readers*

INTRODUCTION

Reading allows learners to gain information, follow classroom instructions, express ideas, and participate meaningfully in different learning areas. By Grade 4, children are generally expected to move from learning how to read toward using reading as a tool for learning. Texts become longer, vocabulary becomes more demanding, and classroom tasks require learners to locate information, draw conclusions, and connect ideas across passages. The Progress in International Reading Literacy Study treats the fourth year of schooling as an important stage because learners at this level are expected to read literary and informational texts with increasing independence. Learners who reach Grade 4 without adequate word recognition, fluency, vocabulary, and comprehension may therefore face difficulties that extend beyond the language classroom (Mullis et al., 2023).

Available evidence shows that weak reading proficiency remains a serious educational concern. UNESCO reported that only 58 percent of learners worldwide reached the minimum proficiency level in reading by the end

of primary education. The situation is particularly pressing in the Philippines. The World Bank estimated that 91 percent of Filipino children at late primary age were unable to demonstrate minimum reading proficiency when school participation was also considered. Results from the Programme for International Student Assessment likewise showed that Filipino learners performed below the Organisation for Economic Co-operation and Development average in reading. Although PISA assesses 15-year-old students, its findings suggest that reading difficulties left unresolved during the elementary years may continue into secondary education (Organisation for Economic Co-operation and Development [OECD], 2023; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2025; World Bank, 2024).

For struggling Grade 4 learners, reading is often slow, effortful, and marked by frequent errors. Much of their attention may be spent identifying words, leaving fewer mental resources for understanding the message of a passage. This difficulty can affect their ability to answer comprehension questions, identify main ideas, make inferences, and remember information from what they have read. A synthesis of reading fluency interventions found that learners with reading disabilities commonly experience difficulties in both fluent word reading and comprehension. It also showed that repeated reading, assisted reading, and multicomponent instruction can improve reading rate, accuracy, and understanding when learners are given suitable texts, models of fluent reading, and corrective feedback (Stevens et al., 2017).

Reading difficulty, however, does not appear in the same form among all learners. One child may recognize familiar words but read slowly, while another may read aloud with reasonable speed but fail to understand the passage. Other learners may have limited vocabulary, weak decoding skills, poor recall, or difficulty identifying relationships among ideas. Effective support must therefore begin with an accurate description of each learner's reading performance. In the Philippines, the revised Philippine Informal Reading Inventory was adopted as a classroom-based assessment tool for learners in Grades 3 to 6. It measures and describes reading performance and provides teachers with information that can guide the selection of appropriate instruction, reading materials, and school-based reading activities (Department of Education, 2018).

Assessment becomes more useful when its results lead to instructional decisions. Reading recovery support should respond to the skills that a learner has already developed and the areas that still require direct assistance. It may include guided oral reading, repeated practice, vocabulary development, word analysis, teacher modeling, comprehension questioning, and structured opportunities to discuss a text. The intensity and form of support may also need to change when a learner shows limited improvement. Filderman et al. (2018) found that reading interventions strengthened through data-based decision-making produced better outcomes for struggling readers than instruction that was not systematically adjusted according to performance information. Their findings support the use of regular monitoring rather than waiting until the end of a reading program before judging whether the support has worked.

Fluency practice alone may not fully address the needs of learners who can read words but struggle to construct meaning. Upper elementary learners also need direct guidance in activating background knowledge, identifying main ideas, summarizing information, understanding text structure, and making reasonable inferences. A review of interventions for struggling readers in Grades 3 to 12 found that explicit instruction in summarizing and main idea identification improved reading comprehension outcomes. A broader meta-analysis also reported positive effects from comprehension interventions, particularly those that combined strategy instruction with the development of background knowledge (Filderman et al., 2022; Stevens et al., 2019).

Reading recovery support should therefore address connected areas of literacy rather than treat reading as a single skill. Foundational abilities such as decoding and word recognition support fluent reading, while vocabulary, oral language, background knowledge, and comprehension strategies help learners interpret what a text means. Denton et al. (2022) found that small-group and individual reading interventions produced meaningful gains in comprehension among learners with or at risk for reading difficulties. Peng et al. (2024) further found that reading comprehension interventions were more effective when teachers selected suitable combinations of strategies instead of relying on an isolated activity. These findings favor organized support that joins explicit teaching, guided practice, feedback, and continuing assessment.

Literacy progress must also be examined over time. A learner's improvement may first appear through fewer oral reading errors, better recognition of familiar words, increased reading confidence, or greater willingness to complete a passage. Gains in comprehension may emerge as the learner becomes able to retell events, identify important details, explain unfamiliar words, or answer questions using evidence from the text. Regular monitoring enables teachers to recognize these smaller but meaningful changes and to decide whether instruction should be continued, modified, or intensified. It also prevents reading support from becoming a routine activity that is disconnected from the learner's actual response (Filderman et al., 2018).

At Lupigue Integrated School, examining reading recovery support among struggling Grade 4 learners can provide a clearer account of how assistance is delivered and how learners respond to it. School-level evidence is important because learners' reading needs, access to materials, instructional time, and opportunities for guided practice may differ across classrooms. A careful examination of literacy progress can help teachers identify which forms of support are responsive to learners' needs and which areas require further attention. It may also provide a basis for strengthening intervention plans, selecting appropriate reading materials, involving families in guided practice, and improving the monitoring of learners who remain below the expected reading level.

The study seeks to examine the support provided to learners who continue to experience reading difficulties and the progress they demonstrate in literacy. It is grounded in the view that struggling readers can improve when instruction is timely, purposeful, responsive, and based on evidence of their performance. By focusing on Grade 4 learners at Lupigue Integrated School, the study aims to produce findings that can guide teachers and school leaders in refining reading assistance and helping learners participate more confidently in academic tasks that depend on reading.

Literature Review

Intensity and Organization of Reading Recovery Support

Reading recovery support becomes more effective when it is organized as sustained instruction rather than occasional remediation. Struggling learners often require additional teaching time, smaller instructional groups, carefully sequenced lessons, and repeated opportunities to apply reading skills with teacher guidance. A synthesis of elementary reading programs found that one-to-one tutoring and small-group tutoring produced positive outcomes for struggling readers, while schoolwide approaches that combined classroom improvement with targeted tutoring also showed considerable promise. The review further indicated that merely adding technology or assigning more independent work did not consistently improve reading achievement. These findings suggest that the quality, frequency, and organization of support matter more than the presence of an intervention program alone. For struggling Grade 4 learners, reading recovery should therefore be delivered through regular sessions with clear objectives, direct feedback, and activities suited to their actual reading level. Such arrangements allow teachers to address persistent difficulties while giving learners enough time to develop accuracy, confidence, and independence in reading (Neitzel et al., 2022).

Word Recognition and Reading Fluency

Difficulty in reading complex and multisyllabic words can prevent Grade 4 learners from reading smoothly and understanding grade-level texts. When learners pause frequently, misread words, or depend on guessing, much of their attention is directed toward identifying words rather than constructing meaning. Evidence-based guidance for learners in Grades 4 to 9 recommends explicit instruction in decoding complex words, purposeful fluency practice, attention to phrasing and expression, and exposure to varied reading materials. Fluency development should not be limited to speed because accurate pronunciation, appropriate pauses, and expressive oral reading also contribute to comprehension. Learners benefit when teachers model how words are divided into meaningful parts, demonstrate fluent reading, provide supported oral practice, and correct errors without causing embarrassment. These practices are particularly important for struggling Grade 4 learners whose foundational reading gaps may have continued from the primary grades. Reading recovery support must therefore

retain direct instruction in word analysis and fluency even when classroom lessons already demand higher-level comprehension (What Works Clearinghouse, 2022).

Vocabulary and Informational Text Comprehension

Grade 4 learners encounter a growing number of informational texts in English, Science, Mathematics, and other learning areas. These materials often contain unfamiliar vocabulary, dense sentences, technical concepts, and text structures that differ from those used in simple narratives. Struggling readers may identify individual words yet remain unable to determine the main idea, connect supporting details, or explain what a passage means. Ritchey et al. (2017) examined an informational text reading intervention for learners with poor comprehension and found favorable effects on measures closely related to the skills taught during the intervention. The lessons included systematic comprehension strategy instruction using informational science texts, showing that learners can improve when teachers make the processes of understanding a passage visible and manageable. Reading recovery support should therefore include vocabulary preparation, questioning, identification of important information, summarizing, and guided discussion of texts. These activities help struggling learners move beyond oral word reading and develop the ability to obtain, organize, and explain information from written material.

Home-School Continuity in Reading Practice

Progress in reading may be strengthened when school-based instruction is supported by regular reading opportunities outside the classroom. Learners who struggle often need more practice than the regular class period can provide, but home activities should remain manageable and should not place the full responsibility for intervention on parents. Kim et al. (2016) evaluated a large-scale reading program that combined classroom comprehension lessons with access to narrative and informational books for home reading. The study showed the value of connecting teacher-directed preparation with opportunities for children to continue reading beyond school hours. For Grade 4 learners, home-school continuity may include lending suitable books, providing short reading guides, asking learners to retell what they have read, and encouraging family members to listen without criticizing mistakes. Teachers must also consider differences in parents' time, literacy skills, and access to learning materials. Home reading is most useful when it supports, rather than replaces, structured intervention provided by the school. A coordinated approach can increase reading exposure while helping learners view reading as a meaningful activity practiced both at school and at home.

METHODS

Research Design

The investigation employed a prospective instructional-response panel design that combined repeated literacy measurement with predictive analysis. The same group of struggling Grade 4 learners was followed across baseline, midpoint, and endpoint assessments to document changes in literacy performance during the delivery of reading recovery support. The design allowed the researchers to describe how literacy scores and reading-level classifications changed over time while also determining whether differences in the support received were associated with the magnitude of learner progress. It was predictive rather than experimental because the study did not randomly assign learners to intervention and control conditions. Consequently, the findings were interpreted as patterns of improvement, association, and statistical prediction rather than definitive evidence of causation.

Research Locale

The study was conducted at Lupigue Integrated School, located at Purok 1, Cabecería 10, Lupigue, City of Ilagan, Isabela. The school served learners from the surrounding community and implemented school-based reading activities for children who had not yet reached the expected level of literacy proficiency. The locale was selected because it provided an appropriate setting for observing reading recovery practices and tracking the

literacy development of struggling Grade 4 learners within their regular school environment. Data collection was carried out in designated reading areas and classrooms where the learners normally received literacy instruction and supplemental reading assistance.

Participants and Sampling Technique

The participants consisted of Grade 4 learners who demonstrated persistent reading difficulties based on the school's reading assessment records and the results of the baseline Philippine Informal Reading Inventory. A criterion-based census procedure was applied, through which all learners who satisfied the established eligibility conditions were included during the data collection period. To qualify, a learner had to be officially enrolled in Grade 4, classified at the frustration level or identified as requiring intensive reading assistance, available for the three assessment occasions, and covered by written parental consent and learner assent. Teacher observations and previous reading records were used only to confirm the need for support and were not treated as participant profile variables. Learners who had incomplete baseline, midpoint, or endpoint assessment data were not included in the longitudinal statistical analysis, although they continued to receive reading assistance as part of the school program.

Research Instrument

Two complementary instruments were used. The first was the Reading Recovery Support Observation Inventory, which measured the consistency of support received by each learner in six areas: explicit word analysis and decoding instruction, guided oral reading and fluency practice, vocabulary and comprehension scaffolding, corrective feedback and learner participation, progress monitoring and instructional adjustment, and home-school reading reinforcement. Each indicator was rated on a four-point scale ranging from 1, rarely observed, to 4, consistently observed. Composite scores were interpreted as follows: 3.25 to 4.00, consistently observed; 2.50 to 3.24, often observed; 1.75 to 2.49, sometimes observed; and 1.00 to 1.74, rarely observed. Ratings were based on structured session records, classroom observations, learner work, assessment documentation, and home-reading records rather than on learner self-report.

The second instrument was the Literacy Progress Assessment Battery, which measured word recognition and decoding, oral reading fluency, vocabulary in context, literal comprehension, and inferential comprehension. Parallel forms were used during the baseline, midpoint, and endpoint administrations to limit the influence of repeated exposure to the same passages and questions. Raw domain scores were converted to a 100-point scale to permit comparison across literacy areas and assessment periods. Reading performance levels were classified as frustration, instructional, or independent using the official scoring and interpretation procedures of the Philippine Informal Reading Inventory.

The instruments underwent content and face validation by specialists in elementary reading instruction, educational assessment, and research methodology. The validators examined the relevance, clarity, developmental suitability, scoring procedures, and alignment of each item with the study variables. Revisions were made to ambiguous directions, overlapping indicators, and passages that were considered unsuitable for the intended reading level. The scale-level content validity index was 0.94, indicating strong agreement among the validators regarding the adequacy of the instrument content.

A pilot test was conducted among struggling Grade 4 learners from a comparable public school who were not included in the main investigation. The Reading Recovery Support Observation Inventory obtained an overall Cronbach's alpha coefficient of 0.91. The reliability coefficients of its six dimensions ranged from 0.79 to 0.88, indicating acceptable to high internal consistency. The literacy assessment obtained a Kuder-Richardson coefficient of 0.87 for its objectively scored items. Two trained raters independently scored a sample of oral reading performances, producing an intraclass correlation coefficient of 0.93. These results indicated that the instruments produced sufficiently consistent measurements for the main data collection.

Data Gathering

Permission to conduct the study was secured from the appropriate education authorities and the school administration before any learner was approached. Written informed consent was obtained from parents or legal guardians, while the purpose and procedures were explained to the learners in language appropriate to their age. The reading teachers and research assistants underwent an orientation on the administration of the assessment battery, the recording of oral reading errors, the use of the observation inventory, and the protection of confidential information.

The baseline assessment was administered before the organized reading recovery period began. Learners were assessed individually or in small, controlled groups, depending on the literacy domain being measured. Oral reading tasks were conducted individually to ensure accurate recording of miscues, reading rate, phrasing, and comprehension responses. The baseline results were used to identify priority skills and organize learners into flexible instructional groups.

Reading recovery sessions were then delivered over a 12-week period. The sessions included word analysis, guided oral reading, repeated reading, vocabulary preparation, comprehension questioning, summarization, corrective feedback, and short home-reading activities when family support was available. Teachers maintained session records showing the activities completed, learner responses, reading errors, assessment results, and instructional adjustments. These records served as supporting evidence for the Reading Recovery Support Observation Inventory.

The midpoint assessment was administered at the end of the sixth week using a parallel form of the literacy battery. The results were reviewed to determine whether learners required regrouping, additional practice, easier or more challenging reading selections, or changes in instructional focus. The endpoint assessment was conducted after the twelfth week using another parallel form. All completed forms were checked for missing responses and scoring inconsistencies. Oral reading records were reviewed by a second scorer when the initial rating was uncertain. The data were then coded without learner names and entered into a password-protected database for statistical analysis.

Data Analysis

The analysis emphasized robust statistical procedures because the reading recovery ratings were ordinal, the literacy scores were not assumed to follow a normal distribution, and several learners obtained tied scores. Medians and interquartile ranges were used to describe the level and variability of each reading recovery support dimension. The same measures were used to summarize literacy performance at baseline, midpoint, and endpoint. Median gain scores were obtained by subtracting each learner's baseline literacy score from the corresponding endpoint score. Frequencies and percentages were used to show movement across the frustration, instructional, and independent reading levels.

Kendall's tau-b was employed to determine the direction and strength of the association between each reading recovery support dimension and literacy progress. This coefficient was selected because it handled tied observations effectively and did not require normally distributed scores. The overall reading recovery support score was also correlated with the baseline-to-endpoint literacy gain. Relationships were interpreted according to their direction, magnitude, and statistical significance.

Bootstrapped median quantile regression was used to determine which aspects of reading recovery support predicted endpoint literacy performance. Endpoint literacy score served as the dependent variable, while baseline literacy score and the six reading recovery support dimensions were entered as predictors. Controlling for baseline performance allowed the model to distinguish the contribution of reading recovery support from differences that were already present before the intervention period. Median quantile regression was preferred over ordinary least squares regression because it was less influenced by extreme scores and provided an estimate of the conditional median performance of the learners. Bootstrap standard errors and 95 percent confidence intervals were generated from 5,000 resamples. Regression coefficients, bootstrap standard errors, confidence intervals, probability values,

and pseudo-R-squared were reported. The level of significance was set at .05, and probability values smaller than .001 were presented as $p < .001$ rather than $p = .000$.

Ethical Consideration

The study followed principles of voluntary participation, respect for children, confidentiality, fairness, and protection from harm. Parental consent and learner assent were obtained before data collection, and participation did not affect grades, class standing, access to instruction, or eligibility for school services. Learners were informed that they could decline to answer or discontinue their participation without penalty. Codes were used in place of names in the data files, tables, and manuscript, and only authorized members of the research team had access to the identification list.

Assessment and intervention activities were conducted in ways that avoided labeling, embarrassment, or public comparison among learners. Results were discussed privately with the appropriate teachers and parents when instructional action was needed. Learners who showed limited progress continued to receive school-based support and were not removed from the program because of their research participation. Digital records were stored in secured files, while printed materials were kept in a locked location. The data were used solely for the approved research and instructional improvement purposes and were scheduled for secure disposal after the required retention period.

RESULTS AND DISCUSSION

Table 1. *Observed Level of Reading Recovery Support*

Reading Recovery Support Dimension	Median	IQR	Interpretation	Rank
Guided oral reading and fluency practice	3.24	0.48	Often Observed	1
Explicit word analysis and decoding instruction	3.18	0.51	Often Observed	2
Corrective feedback and learner participation	3.10	0.56	Often Observed	3
Vocabulary and comprehension scaffolding	2.96	0.63	Often Observed	4
Progress monitoring and instructional adjustment	2.72	0.74	Often Observed	5
Home-school reading reinforcement	2.31	0.88	Sometimes Observed	6
Overall Reading Recovery Support	2.92	0.63	Often Observed	

Note. 3.25 to 4.00 = Consistently Observed; 2.50 to 3.24 = Often Observed; 1.75 to 2.49 = Sometimes Observed; 1.00 to 1.74 = Rarely Observed. IQR = interquartile range.

Table 1 shows that the struggling Grade 4 learners generally received reading recovery support on a regular basis, as reflected by the overall median of 2.92. The result suggests that the intervention was implemented with reasonable consistency, although not all components were delivered at the same level. Guided oral reading and fluency practice obtained the highest median of 3.24. Learners were frequently given opportunities to read passages aloud, listen to a model of fluent reading, repeat difficult sections, and receive support when they encountered unfamiliar words. This finding indicates that oral reading practice formed the most visible component of the recovery sessions.

Explicit word analysis and decoding instruction ranked second with a median of 3.18. The learners were regularly taught to examine syllables, letter patterns, prefixes, suffixes, and familiar word parts. This was appropriate because many of the participants entered the program with difficulty recognizing unfamiliar and multisyllabic words. Instruction in these areas allowed learners to approach words systematically instead of depending entirely on guessing or teacher assistance. Guidance for learners in the intermediate grades similarly recommends continued decoding instruction when foundational difficulties remain unresolved, even when the learners are already expected to read more complex texts independently (What Works Clearinghouse, 2022).

Corrective feedback and learner participation also received a favorable result, with a median of 3.10. Teachers commonly corrected reading errors, asked learners to reread mispronounced words, and encouraged them to explain their answers. The finding suggests that the recovery sessions were generally interactive rather than limited to silent worksheets or independent seatwork. Immediate and respectful correction was particularly important for learners who had developed inaccurate word-reading habits. It also helped prevent errors from being repeated during later reading activities.

Vocabulary and comprehension scaffolding obtained a median of 2.96. Although it was often observed, its lower position indicates that activities involving word meaning, summarizing, questioning, and inference were less consistent than oral reading and decoding exercises. This difference may have occurred because teachers placed greater attention on visible oral reading errors. Struggling readers, however, may pronounce a passage with increasing accuracy without fully understanding its message. Reading support must therefore give comparable attention to understanding vocabulary, identifying important information, and explaining relationships among ideas. Ritchey et al. (2017) found that systematic instruction using informational texts could improve comprehension skills when teachers explicitly demonstrated how learners should process and organize meaning.

Progress monitoring and instructional adjustment had a median of 2.72 and a comparatively wider IQR of 0.74. The variation indicates that some learners were monitored closely, while others received less regular assessment and lesson adjustment. Teachers appeared to conduct reading checks, but the results were not always used immediately to modify text difficulty, group placement, pacing, or instructional focus. This was an important weakness because reading recovery depends on how quickly teaching responds to evidence of progress or continuing difficulty. Filderman et al. (2018) reported that interventions strengthened through data-based instructional decisions produced more favorable outcomes for struggling readers than approaches that were not systematically adjusted.

Home-school reading reinforcement was the least evident component, with a median of 2.31 and the widest IQR of 0.88. Reading assignments, parent monitoring, take-home materials, and communication regarding learner progress were implemented inconsistently. Differences in family availability, access to reading materials, and adults' capacity to assist may have contributed to this result. The weak home-school component did not mean that parents were uninterested, but it showed that reading practice outside school was not yet dependable for all learners. School-based intervention therefore remained the principal source of structured reading assistance.

The overall result indicates that Lupigue Integrated School had an active reading recovery effort, but the implementation was stronger in teacher-directed oral reading than in progress-based instructional adjustment and home-supported practice. The pattern suggests a need to preserve existing fluency and decoding activities while strengthening comprehension teaching, regular progress documentation, and practical coordination with families.

Table 2. *Literacy Performance at Baseline, Midpoint, and Endpoint Assessments*

Literacy Domain	Baseline Median	Baseline IQR	Midpoint Median	Midpoint IQR	Endpoint Median	Endpoint IQR	Median Gain
Word recognition and decoding	52	13	66	12	77	10	25
Oral reading fluency	45	14	58	13	69	11	24
Vocabulary in context	40	12	51	13	62	12	22
Literal comprehension	47	15	60	12	72	11	25
Inferential comprehension	33	11	44	12	56	13	23
Overall literacy score	43	12	55	11	67	10	24

Note. Scores were expressed on a 100-point scale. Median gain was computed by subtracting the baseline median from the endpoint median.

Table 2 presents a steady increase in literacy performance from the baseline assessment to the endpoint assessment. The overall literacy median rose from 43 at baseline to 55 at midpoint and 67 at endpoint, producing a median gain of 24 points. The result indicates meaningful improvement during the reading recovery period. The decreasing IQR, from 12 at baseline to 10 at endpoint, also suggests that differences among the learners became slightly narrower. Learners who began with particularly weak skills appeared to make progress instead of being left further behind.

Word recognition and decoding showed one of the largest gains. The median increased from 52 to 77, indicating that many learners became more capable of reading unfamiliar words and recognizing recurring spelling patterns. This result was consistent with the strong implementation of explicit word analysis shown in Table 1. Repeated encounters with syllable patterns, word parts, and teacher-guided decoding may have reduced the learners' dependence on guessing. By endpoint, word recognition was the only domain whose median exceeded 75, showing that the most noticeable recovery occurred in a foundational skill that had been directly and repeatedly taught.

Literal comprehension also improved by 25 points, from a median of 47 to 72. Learners became more successful in recalling stated details, identifying characters or events, and locating answers directly presented in a passage. This improvement may have been supported by gains in decoding and fluency. When learners read words more accurately and with fewer interruptions, they could direct more attention toward understanding the information presented in the text.

Oral reading fluency increased from 45 at baseline to 69 at endpoint. The gain of 24 points was substantial, although the endpoint median remained below the expected mastery level. Learners generally read with fewer pauses and errors, but some continued to struggle with phrasing, expression, and the smooth reading of longer sentences. The result reflects the gradual nature of fluency development. Frequent guided oral reading can improve accuracy and rate, but learners with long-standing reading difficulties may need continued practice before they can read grade-level material comfortably and independently.

Vocabulary in context improved from 40 to 62, producing the smallest median gain of 22 points. Although the improvement was evident, vocabulary remained one of the weaker domains. Learners could understand more familiar words by endpoint, but they still had difficulty interpreting unfamiliar terms through surrounding clues. Limited vocabulary may also have affected their performance in comprehension tasks, particularly when passages included academic or subject-specific language. The result supports the need for deliberate vocabulary instruction instead of expecting word knowledge to develop only through repeated reading.

Inferential comprehension remained the lowest-performing domain at every assessment period. Its median rose from 33 at baseline to 56 at endpoint. The gain of 23 points showed progress, but the endpoint result indicated that many learners still struggled to combine information, determine unstated relationships, explain causes, or draw conclusions from textual evidence. These tasks require more than accurate oral reading. They depend on vocabulary, background knowledge, working memory, and the ability to connect ideas across sentences. Peng et al. (2024) explained that comprehension interventions are more effective when teachers use appropriate combinations of strategies instead of depending on a single routine.

The overall endpoint median of 67 shows that the learners improved but had not fully reached grade-level literacy expectations. This is a realistic recovery pattern. The intervention reduced the severity of the reading difficulty, but it did not eliminate all learning gaps within one implementation period. The results support the continuation of reading assistance, especially for vocabulary, fluency, and inferential comprehension. Ending the intervention immediately after initial gains could place learners at risk of losing progress when they encounter more difficult texts.

Table 3. Distribution of Learners According to Reading Performance Level

Assessment Period	Frustration Level	Instructional Level	Independent Level	Total
Baseline	79%	21%	0%	100%
Midpoint	55%	39%	6%	100%
Endpoint	32%	54%	14%	100%

Table 3 shows a clear movement from the frustration level toward the instructional and independent levels. At baseline, 79 percent of the struggling Grade 4 learners were classified at the frustration level, while none reached the independent level. This finding confirmed the seriousness of the reading problem before the recovery support was implemented. Most learners required extensive teacher assistance to recognize words, maintain fluency, and understand the passages assigned to them.

By midpoint, the percentage at the frustration level had declined to 55 percent. At the same time, 39 percent had moved to the instructional level and 6 percent had reached the independent level. This shift indicates that measurable progress began to appear during the implementation rather than only after its completion. The midpoint assessment was therefore useful in identifying learners who were responding to the intervention and those who required additional or modified support.

At endpoint, 54 percent were at the instructional level, while 14 percent had reached the independent level. The percentage remaining at the frustration level fell to 32 percent. These changes show that the recovery program helped a considerable proportion of the learners move into a level where they could read suitable material with teacher guidance. The result is educationally meaningful because learners at the instructional level can participate more actively in classroom reading when texts and questions are properly supported.

The independent-level percentage remained modest. Only 14 percent could read and understand the assessed materials without substantial assistance. This shows that improvement should not be confused with complete recovery. Many learners became more responsive to instruction but still required guided practice. The 32 percent who remained at the frustration level represented the group requiring the greatest attention. These learners may have had more severe decoding gaps, limited vocabulary, irregular attendance, weak reading confidence, or insufficient practice outside the intervention sessions.

The movement across performance levels supports the use of tiered reading assistance. Learners at the independent level may be given enrichment and increasingly complex texts, while those at the instructional level may continue in guided small-group sessions. Learners remaining at the frustration level require more intensive lessons, shorter and more accessible texts, frequent individual feedback, and closer progress monitoring. Neitzel et al. (2022) reported that structured tutoring and targeted small-group instruction can produce positive effects for struggling elementary readers, particularly when support is matched to learner need.

The distribution also indicates that a single intervention format may not be equally suitable for all learners. The differences in response justify periodic regrouping based on current performance rather than maintaining the original groups throughout the program. Learners who demonstrate rapid progress can move to more advanced tasks, while those with slower improvement can receive added instructional time and more explicit teaching.

Table 4. Kendall's Tau-b Correlation Between Reading Recovery Support and Literacy Progress Gain

Reading Recovery Support Dimension	Kendall's Tau-b	p-value	Interpretation	Decision
Explicit word analysis and decoding instruction	0.36	.009	Moderate positive relationship	Significant
Guided oral reading and fluency practice	0.48	< .001	Moderate positive relationship	Significant
Vocabulary and comprehension scaffolding	0.52	< .001	Strong positive relationship	Significant
Corrective feedback and learner participation	0.40	.004	Moderate positive relationship	Significant

Progress monitoring and instructional adjustment	0.57	< .001	Strong positive relationship	Significant
Home-school reading reinforcement	0.27	.041	Weak positive relationship	Significant
Overall reading recovery support	0.60	< .001	Strong positive relationship	Significant

Note. Literacy progress gain represented the difference between the endpoint and baseline literacy scores. Statistical significance was evaluated at $\alpha = .05$.

Table 4 shows a significant positive relationship between overall reading recovery support and literacy progress gain, $\tau_b = 0.60$, $p < .001$. Learners who experienced more consistent and responsive support generally demonstrated greater literacy improvement. The coefficient indicates a strong association, although it does not suggest that reading support alone explained every difference in learner progress. Attendance, prior knowledge, reading motivation, language exposure, and opportunities for practice may also have contributed to the observed outcomes.

Progress monitoring and instructional adjustment had the strongest relationship with literacy progress among the individual dimensions, $\tau_b = 0.57$, $p < .001$. Although this component received a relatively low implementation median in Table 1, it was closely associated with learner improvement. This means that the learners whose performance was checked more regularly and whose lessons were adjusted accordingly tended to make larger gains. The finding highlights an important practical issue. Progress monitoring was not the most consistently implemented component, yet it was one of the components most strongly related to recovery.

The result supports the principle that assessment should guide instruction. Reading checks become valuable when teachers use the information to change the difficulty of a passage, reteach a skill, regroup learners, or provide more intensive practice. Filderman et al. (2018) similarly found that data-based decision-making could strengthen reading intervention outcomes. The present result suggests that strengthening progress monitoring at Lupigue Integrated School may produce greater benefits than simply increasing the number of activities without examining how individual learners respond.

Vocabulary and comprehension scaffolding had the second strongest relationship with progress, $\tau_b = 0.52$, $p < .001$. Learners who received clearer explanations of unfamiliar words, guided questioning, summarizing exercises, and assistance in connecting ideas tended to demonstrate greater overall gains. This result is important because vocabulary and inference remained among the lowest endpoint domains. It suggests that these skills were responsive to instruction, but the support may not yet have been frequent enough to bring most learners to mastery.

Guided oral reading and fluency practice had a moderate positive relationship with literacy gain, $\tau_b = 0.48$, $p < .001$. The finding confirms the value of modeling, repeated reading, supported oral practice, and immediate correction. Improved fluency may have helped learners read more efficiently and devote greater attention to comprehension. The relationship was not as strong as that of progress monitoring or comprehension scaffolding, showing that oral reading practice alone was not sufficient to address all literacy needs.

Corrective feedback and learner participation were also significantly related to progress, $\tau_b = 0.40$, $p = .004$. Learners benefited when they were asked to reconsider errors, reread portions of the text, explain answers, and participate actively during sessions. Feedback appeared to be more helpful when it guided learners toward the correct process rather than merely identifying a wrong response.

Explicit word analysis and decoding instruction had a moderate positive relationship with gain, $\tau_b = 0.36$, $p = .009$. The lower coefficient may be explained by the learners' differing needs. Some entered the intervention with severe word-recognition difficulties and benefited strongly from decoding instruction, while others needed more support in vocabulary and comprehension. The finding indicates that decoding remained necessary, but it was only one part of literacy recovery among Grade 4 learners.

Home-school reinforcement produced the weakest correlation, although it remained statistically significant, $\tau_b = 0.27$, $p = .041$. The limited relationship may reflect the inconsistent delivery of take-home reading activities and differences in family capacity to supervise practice. It should not be interpreted as evidence that family support is unimportant. Instead, it indicates that the home component was not implemented with enough regularity or uniformity to produce a stronger relationship in the observed data.

Table 5. *Bootstrapped Median Quantile Regression Predicting Endpoint Literacy Score*

Predictor	B	Bootstrap SE	95% Bootstrap CI	p-value	Result
Baseline literacy score	0.47	0.09	[0.29, 0.66]	< .001	Significant
Progress monitoring and instructional adjustment	5.62	1.54	[2.55, 8.71]	.001	Significant
Vocabulary and comprehension scaffolding	4.38	1.58	[1.29, 7.54]	.007	Significant
Guided oral reading and fluency practice	3.71	1.48	[0.82, 6.67]	.014	Significant
Explicit word analysis and decoding instruction	2.16	1.39	[-0.59, 4.93]	.124	Not significant
Corrective feedback and learner participation	2.03	1.34	[-0.61, 4.66]	.133	Not significant
Home-school reading reinforcement	1.42	1.27	[-1.07, 3.93]	.267	Not significant

Model pseudo- $R^2 = .46$. Estimates were based on 5,000 bootstrap resamples.

Table 5 presents the results of the median quantile regression used to identify the reading recovery components that predicted endpoint literacy performance. The model accounted for approximately 46 percent of the variation in the conditional median endpoint score. This indicates that baseline literacy and the observed recovery support dimensions had substantial predictive value, while slightly more than half of the variation remained associated with factors outside the model.

Baseline literacy score was a significant predictor, $B = 0.47$, $p < .001$. For every one-point increase in baseline literacy performance, the predicted median endpoint score increased by approximately 0.47 points when the reading support dimensions were held constant. Learners who began with stronger foundational skills therefore tended to retain an advantage at endpoint. The coefficient was below one, however, which suggests that the intervention reduced some of the original differences. Learners with lower starting scores were able to improve, even though many did not fully catch up with those who entered the program with less severe difficulties.

Progress monitoring and instructional adjustment emerged as the strongest support predictor, $B = 5.62$, $p = .001$. A one-unit increase in the observed consistency of this component was associated with a 5.62-point increase in the predicted median endpoint score after accounting for baseline performance and the other support dimensions. Its bootstrap confidence interval did not include zero, confirming the stability of the association.

This result gives practical direction to the school. More reading activities will not necessarily produce stronger outcomes when the activities remain unchanged despite evidence that a learner is not improving. Teachers must regularly examine oral reading errors, comprehension responses, fluency patterns, and assessment scores. The information should then be used to select the next text, determine the appropriate group, decide whether a skill needs reteaching, and identify learners requiring individual support.

Vocabulary and comprehension scaffolding was the second strongest support predictor, $B = 4.38$, $p = .007$. Learners who received more systematic vocabulary explanations, guided questioning, summarization practice, and inference support were predicted to obtain higher endpoint scores. The result is consistent with the weak endpoint performance in vocabulary and inferential comprehension. These domains remained difficult, but they improved more among learners who received focused support.

Guided oral reading and fluency practice also significantly predicted endpoint literacy performance, $B = 3.71$, $p = .014$. Learners who participated more consistently in modeled reading, repeated reading, assisted oral reading, and phrasing practice tended to obtain higher endpoint scores. The result supports the continued inclusion of fluency activities, especially for learners whose slow and inaccurate reading interferes with comprehension.

Explicit word analysis and decoding instruction did not retain a statistically significant independent contribution after the other predictors and baseline literacy were included, $B = 2.16$, $p = .124$. This does not mean that decoding instruction was ineffective. Word recognition demonstrated the largest descriptive gain, and decoding support had a significant bivariate relationship with progress. Its unique regression effect may have weakened because decoding instruction overlapped with fluency practice and because learners who improved in word reading were also more capable of participating in comprehension activities.

Corrective feedback and learner participation also became nonsignificant in the combined model, $B = 2.03$, $p = .133$. Its effect may have operated through the other instructional components. Feedback was present during decoding, oral reading, vocabulary work, and comprehension questioning, making it difficult to separate its independent influence. It remained an essential teaching practice even though it did not independently predict the endpoint score after adjustment.

Home-school reading reinforcement was not a significant independent predictor, $B = 1.42$, $p = .267$. The confidence interval crossed zero, indicating uncertainty regarding its unique effect. The inconsistency of home practice and the variation in family support may have reduced its predictive contribution. A more structured home-reading system, with short materials, clear directions, reading logs, and regular teacher communication, may be needed before its effect can be evaluated more reliably.

The regression findings show that literacy recovery was most closely associated with responsive teaching. Monitoring learner performance, adjusting instruction, explicitly supporting comprehension, and providing guided fluency practice predicted better endpoint literacy scores even after differences in baseline performance were considered. The result supports a shift from a fixed remediation routine toward a flexible approach in which teaching decisions are regularly revised according to learner response.

CONCLUSION

The reading recovery support contributed meaningfully to the literacy progress of struggling Grade 4 learners, as shown by steady improvements in word recognition, oral reading fluency, vocabulary, literal comprehension, and inferential comprehension across the assessment periods. Most learners moved from the frustration level toward the instructional level, although a considerable number still required continued assistance, particularly in vocabulary development and inferential comprehension. The findings further showed that progress monitoring and instructional adjustment, vocabulary and comprehension scaffolding, and guided oral reading were the strongest predictors of endpoint literacy performance. Based on these results, the school should sustain and strengthen its reading recovery program through regular assessment, flexible grouping, targeted small-group instruction, and immediate adjustment of lessons according to learner performance. Teachers should devote greater attention to vocabulary and higher-order comprehension tasks while continuing decoding and fluency activities. Learners who remain at the frustration level should receive more intensive and individualized support, while those who reach the instructional level should continue guided practice until they demonstrate independent reading. The school may also develop manageable home reading activities, provide suitable materials, and establish clear communication with parents to reinforce reading practice without placing excessive instructional responsibility on families.

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