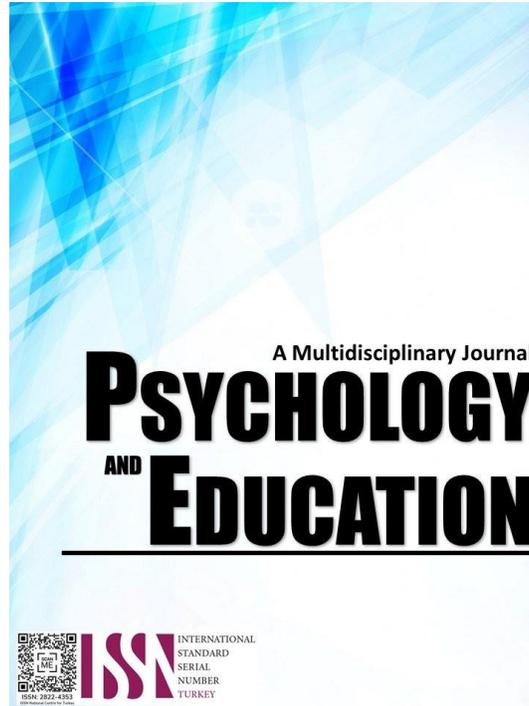


# DEVELOPMENT OF REMEDIATION MATERIALS: A TOOL TO ENHANCE READING PROFICIENCY OF LEARNERS



**PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL**

Volume: 37

Issue 7

Pages: 664-673

Document ID: 2025PEMJ3597

DOI: 10.70838/pemj.370701

Manuscript Accepted: 05-13-2024

## Development of Remediation Materials: A Tool to Enhance Reading Proficiency of Learners

Lilian Guia B. Burgos,\* Ana Marie J. Matalines  
For affiliations and correspondence, see the last page.

### Abstract

This one-group pretest-posttest design of the study aimed at determining the reading proficiency of Grade 3 pupils as influenced by reading remediation materials. This study utilized the purposive sampling method wherein a total of 31 learners from Apolinar Franco Sr. Elementary School, Bato, Sta. Cruz, Davao del Sur during the third quarter period were selected as the research subjects of this study. The research subjects' reading proficiency was measured by a phonemic awareness screener employed by the researcher. The statistical tools utilized were the mean and Paired Sample T-test. Results revealed that before implementing the remedial reading materials, the level of reading proficiency of the learners needs intervention, which implies that learners struggle with phonemic awareness development. The result showed an improvement in the reading proficiency of the learners afterwards being exposed to the Localized, Guided and Results-Based (LGB) Remediation Materials. The reading proficiency of the learners was found to be at mastery level. Finally, the study revealed that the Localized, Guided and Results-Based (LGB) Remediation Materials improves the reading proficiency of the Grade 3 pupils.

**Keywords:** *remedial reading materials, reading proficiency of learners*

### Introduction

Reading is a crucial skill that every student must learn. Reading, to become fully successful has numerous areas to consider before being mastered. One of which is on being proficient in phonemic awareness. When one is proficient in phonemic awareness, one can read with comprehension. Thus, most teachers particularly in the elementary level do their best to guarantee that learners are capable and have grasped the competencies of phonemic awareness.

According to the global literacy rate of 86%, there are 774 million individuals who cannot read nor write (Mmasa & Anney, 2016). Illiteracy is among the most significant social problems in the world today. Millions of children and adolescents are illiterate or have poor reading skills. Lots of children and adolescents are illiterate or have poor reading skills. Matasci (2020) said that UNESCO found that 258 million young people did not know how to read or write in 2018. One out of every four children in places that are not very well off cannot read. Literacy in South Asia and Sub-Saharan Africa are among the lowest in the world. India has the world's largest child population and is facing a massive reading and literacy crisis.

Surveys conducted in government schools over the past decade indicate a constant and considerable reading ability disparity among students. Surprisingly, the reading issue strikes several developed nations as well. More than two-thirds (65%) of 4th grade students in the United States read under or even at the basic range. According to the United Kingdom's Ministry of Education, one in five English children cannot read by the end of Year 11.

This reading problem is even immensely observed in the Philippines. According to San Juan (2019), the Philippines ranked worst in reading and comprehension out from 79 nations that participated in the 2018 Programme for International Student Assessment (PISA).

Reading literacy is described in the SEA-PLM 2019 Assessment Framework as the capability to comprehend, apply, and react to a variety of written material in order to satisfy social, economic, civic, and personal demands (2017a). The Philippines' result in SEA-PLM 2019 informs stakeholders about what Grade 5 children can and cannot do in reading, writing, and mathematics.

According to SDG 4.1.1, many Filipino students in Grade 5 did not reach the necessary level of reading and math literacy. More importantly, a large number of Filipino Grade 5 students failed to meet the required competence in mathematics and reading at the end of fourth grade. When compared to other SEA-PLM 2019 participants, the Philippines performed below the regional average in all three domains. Hence, the goal of preparing every Filipino child for the twenty-first century remains a pipe dream, and the hurdles are significant considering the learning loss caused by the COVID-19 pandemic (UNICEF, 2020).

Notably, the same reading problem has been observed locally. Results in the pre-test in the Phil-IRI reading profile of the Sta. Cruz South School District during School Year 2022-2023 foretell that out of the 3,550 learners were 1,913 or 54% of the learners belong to the frustration level and 375 or 11% were categorized under the non-reader level.

Also, the Phil-IRI reading profile in Apolinar Franco Sr. Elementary School revealed that from the total of 520 learners were 251 or 48% were frustrated readers while 45 or 9% were non-readers. Moreover, when explored by grade level and section, data of the Grade 3 section Jade under the advisory of the researcher revealed that out of the 31 pupils were 17 or 55% belong to frustration level and 5 or 16% are non-readers.

As classes resumed after the pandemic, research conducted about reading problems are on general manner, thus only relies in the PHIL-IRI as main tool in determining reading proficiency of learners. Thus, the researcher would like to determine the root cause of these

reading problems using a phonemic awareness screener. Also, the researcher had not found a study that looked at how remediation materials can help learners in the local scenario improve their reading proficiency. In this case, the researcher is trying to figure out whether a development of remediation materials can improve the reading proficiency of the learners in Apolinar Franco Sr. Elementary School as this may have an impact on the study's intended beneficiaries.

The findings of this research will aid for other learning institutions seeking to improve the right and careful use of remediation materials to optimize pupils' reading proficiency, making this research with social relevance; therefore, there was a dire need to conduct this research.

### Research Objectives

The primary goal of this study was to measure the reading proficiency of learners as optimized by the development of remediation materials at Apolinar Franco Sr. Elementary School, Bato, Sta. Cruz, Davao del Sur. The following were the specific objectives:

1. Determine the reading proficiency of the learners.
2. Develop a remedial reading material based on the common needs of the low-level performers.
3. Determine the reading proficiency of the learners after the remedial reading.
4. Determine the significant difference on the reading proficiency of the learners before and after the conduct of remedial reading.

## Methodology

### Research Design

This research utilized a pre-experimental design in concurrence with a one-group pretest-posttest design. In this study, the tests were given before and after treatment to see how well it worked. The one group pretest-posttest design has 3 steps: 1) a pre-test measurement of the dependent variable, 2) administration of the experimental treatment X to the respondents, and 3) a post-test measurement of the same dependent variable. Then, by comparing the scores before and after, the effects of the experiment treatment may be determined (Ary et al., 2010).

In this study, the following steps were taken: 1. Giving a pre-test using the phonemic awareness screener, which was meant to measure how well a learner could read before a treatment was given. 2. Using the remediation materials to teach reading with an intervention. 3. Giving a posttest using the same phonemic awareness screener that was going to be used to measure how well learners could read after a treatment.

The goal of the study is to determine whether learners' reading proficiency improve significantly after being exposed to remediation materials. The aim of this one-group pretest-posttest study is to determine whether learners' reading proficiency significantly differs before and after being exposed to the remediation materials.

### Respondents

The subjects of this study were the 31 purposively selected Grade 3 pupils of Apolinar Franco Sr. Elementary School. During the third quarter of the School Year 2022-2023, the study was conducted. Among the five (5) sections in Grade 3, only the section Jade will be included in the study since the researcher handles them. Being the grade level of transition, they should have already mastered the basics of reading. The mastery attained is essential to their transition to the higher grades in the elementary level, where reading proficiency of learners is expected to be independent.

This employed purposive technique. First, all the 31 learners were assessed using the phonemic awareness screener. Moreover, poor areas in the reading proficiency of learners identified by the phonemic awareness screener were the contents of the remediation materials. Second, the learners agreed to consent together with their parents to participate in the remedial activities after classes addressing the reading problem with the use of the remediation materials created by the researcher. Lastly, learners willingly participated before and after the assessment.

Purposeful sampling is a kind of non-probability sampling in which researchers pick participants from a wider population at their own discretion; it is also known as discriminating, selective, or subjective sampling. In order to identify appropriate volunteers, this strategy implies that field researchers will have prior awareness of the purpose of their investigations. Purposive sampling was used by researchers when they need to target a certain group of people, because all study participants were picked because they fit a specified profile (Foley, 2018).

A Pretest-Posttest design is a type of Quasi-experimental. The goal of quasi-experimental methods is to find out why an intervention, stimulus, or treatment influences a unit of study. Even though these methods are like scientific experiments in many ways, they do not have the benefits of randomly assigning treatments to a population, which is needed for wide generalizability.

Purposeful sampling is also useful, especially when evaluating minor subgroups that can be missed by random sampling. These techniques are used by researchers to ensure that the variables that impact main outcomes are essentially the same in treatment and

control groups, and may be tested in two ways: over time, such as pre- and post-tests, or across space, such as one-time comparisons (Barrett & Anderson, 2017).

### **Instrument**

To describe the performance of the subjects' reading proficiency, the researcher used a phonemic awareness screener that can measure the reading proficiency of the subjects before and after the intervention. Also, remediation materials were used to address the weak areas.

The phonemic awareness screener focused on the grammatical aspects from word awareness to phoneme manipulation. The researcher rated the areas of the screener based on learners' responses with 5 points. The scores that are below the cut off 4/5 are the skills the learners need to work on and were the basis of the remediation materials. The remediation materials were checked and validated by school principal and two Education Program Supervisors.

### **Procedure**

The researcher conducted the study using the following procedures. Initially, a letter was sent to the Dean of the Institute of Graduate and Professional Education of Davao del Sur State College requesting formal authorization to implement the study. The researcher then requested permission to perform the study at Apolinar Franco Sr. Elementary School in Sta. Cruz, Davao del Sur Division, from the Schools Division Superintendent.

Next, to solicit assistance and cooperation, the researcher sent the District Supervisor of Sta. Cruz South District and the School Principal of the research site a copy of the Schools Division Superintendent's endorsement and letter outlining the study. Afterwards, following permission of the Schools Division Superintendent, the researcher established a timetable for the conduct of the study. The researcher met the respondents and assesses them individually using the phonemic awareness screener.

Subsequently, the researcher painstakingly innovated and contextualized the remediation materials specially created to teach learners on the poor areas identified by the phonemic awareness screener. The sources of the reading remediation materials were a combination of contextualized and adopted contents from the Phil-IRI material used by the Department of Education. After the expert validation of research instruments, the remediation in reading was conducted to the respondents for four (4) consecutive weeks. A researcher-made Phonemic Awareness Assessment Checklist was utilized to track learners' progress and mastery in every activity.

Following, the remediation materials were created with adherence to the Gender and Development policy of DepEd. With this, materials were screened to preserve gender-sensitivity. Then, the procedures after the intervention utilized the same phonemic awareness screener for the learners. The phonemic awareness scores of the learners were recorded, and analyzed by the researcher. They were compared to the scores of the respondents before the reading remediation. Lastly, the subjects were guaranteed that their responses would be considered confidential. All phonemic awareness screener scores gathered before and after reading remediation were encoded and tabulated for statistical analysis.

### **Data Analysis**

The following statistical approaches were employed in data processing:

To calculate the mean scores of subjects before and after the intervention, the mean was utilized.

Paired Sample T-test was employed to answer objective 4. According to Bevans (2020), this tool compares and assesses the means of two groups to determine whether the treatment has an effect on the population of interest. As a result, the instrument will be used by the researcher to identify the significant differences of the reading proficiency of learners before and after the intervention.

### **Ethical Considerations**

In order to observe ethical considerations, the subjects and administrator were informed about the study. The researcher explained to them that the conduct of the study will contribute to the schools' objective to optimize the reading proficiency of learners. The subjects were then given invitation and information to become part of the study. They were given the freedom to choose to participate or not. Also, since the subjects were minors, a formal letter of assent and informed consent forms were signed by them as a proof of their agreement for their participation.

### **Results and Discussion**

This research aimed to evaluate the learners' reading proficiency as optimized by the development of remediation materials at Apolinar Franco Sr. Elementary School in Bato, Sta. Cruz, Davao del Sur. of which the result can be a basis for action plans. The conclusions and analysis of the data gathered are detailed in this section.

### ***Reading Proficiency of the Learners Before the Conduct of Remedial Reading***

Table 1 shows the learners' reading competence mean scores prior to remedial reading. The reading proficiency mean score of the learners before developing remedial reading materials was 3.69 described as Needs Remediation. The results showed that learners at this level struggle with phonemic awareness development since fundamental and prerequisite knowledge were not gained or developed properly to facilitate reading proficiency.

*Table 1. Reading Proficiency of the Learners Before the Conduct of Remedial Reading*

<i>Phonemic Awareness Development Area</i>	<i>Mean</i>	<i>Reading Proficiency</i>
Word Awareness	3.77	Needs Remediation
Rhyme Identification	2.58	Needs Remediation
Rhyme Production	0.42	Needs Remediation
Initial Sound Identification	4.48	With Mastery
Final Sound Identification	4.23	With Mastery
Medial Sound Identification	2.42	Needs Remediation
Syllable Identification	4.71	With Mastery
Syllable Segmentation	4.65	With Mastery
Syllable Blending	4.71	With Mastery
Syllable Deletion	4.00	With Mastery
Sound Blending	2.84	Needs Remediation
Sound Segmentation	3.03	Needs Remediation
Initial Sound Substitution	4.10	With Mastery
Final Sound Substitution	4.32	With Mastery
Medial Sound Substitution	3.45	Needs Remediation
Initial Sound Addition	3.61	Needs Remediation
Final Sound Addition	4.58	With Mastery
Initial Sound Deletion	4.03	With Mastery
Final Sound Deletion	4.23	With Mastery
Overall	3.69	Needs Remediation

Moreover, phonemic awareness development in areas such as word awareness, rhyme identification, rhyme production, medial sound identification, sound blending, sound segmentation, medial sound substitution, initial sound addition are not mastered since the learners are struggling with their reading proficiency due to lack of essential knowledge and skills.

Along this finding, the performance of the Philippines in SEA-PLM 2019 revealed that just 10% of Filipino Grade 5 pupils met the SDG 4.1.1b reading competence like of primary school. They can read texts with clear structures and sort through different kinds of information when looking for ideas and specifics. Also, they can find several connected pieces of information in texts with familiar structures and draw conclusions by making connections between details and ideas.

In line with the result, San Juan (2018) said the Philippines got the lowest reading comprehension score of all 79 nations and economies that participated in the 2018 PISA. However, Pamintuan (2020) pointed out the results of the Phil-IRI in Bicol showed that more than 70,000 elementary school students could not read. Also, Rimando (2006) stipulated that the Departments of Education (DepEd) and Science and Technology (DOST) recognized low reading comprehension as a significant factor in pupils' disappointing performance on the National Achievement Test.

This means that learners require assistance in the form of remedial reading materials in order to optimize their reading abilities. Reading abilities are improved via exposure to reading and the process of reading in a diverse environment focusing on areas of reading that needs attention.

### ***Development of Remedial Reading Materials Based on the Common Needs of the Low-Level Performers***

Table 2 reveals that out of the 19 areas in the phonemic awareness development, there are 8 areas that majority of the learners had gained scores below 4; particularly in Word Awareness, Rhyme Identification, Rhyme Production, Medial Sound Identification, Sound Blending, Sound Segmentation, Medial Sound Substitution, and Initial Sound Addition.

*Table 2. Areas that Need Remediation*

<i>Phonemic Awareness Development Area</i>	<i>Activities Undertaken</i>
Word Awareness	- Sentence Train - Clap it up - Circle Game - Let's move and count
Rhyme Identification	- Word Match - All ears on me! - Rhyming Bingo

Rhyme Production	- Circle the Rhyming Word - Rhyme and Freeze - Show and Tell - Flip it up!
Medial Sound Identification	- Rhyme Time - See It, Say It! - Clip Cards - Let's Sing! - What's Missing
Sound Blending	- Repeat After Me - Letter Hopping - Come Forward - Choose the Correct Word
Sound Segmentation	- Count the Sound - Phoneme Segmentation - Pick and Speak - Sound it up!
Medial Sound Substitution	- Write the missing vowel - Complete the box - Change the Medial Sound
Initial Sound Addition	- Let's Check - Add it up! - Connecting Letters - Tachistoscope - Add and Check

The mean score obtained in these areas is below 4, thus, this was the basis for the development of remediation materials. The crafted, adopted, and contextualized materials aimed to address common needs of the learners were designed to be implemented for four weeks. The localized materials also intended to cater pupil's individuality, and learning needs as various activities were developed (See Appendix 9).

Aligned to the finding, it has been noted in the study of Pocaan et al. (2022) wherein by using reading tales, Dolch's core sight words, and the Phil-IRI Manual 2018, they evaluated the readers' skills in word identification, reading comprehension, and speed. The results of the post-test showed that after completing the remedial program, the students' reading skills reached the instructional and independent levels.

In connection, Suson et al. (2020) found that regardless of the situation, pupils learned from all facets of their intelligence. It is recognized that everyone has a unique intelligence for learning, which made this so exciting. On a pedagogical level, the findings suggest that educators must innovate to help meet the requirements of various students, and that enriched reading activities and customized instruction must be combined to increase students' basic reading comprehension competency. Even though kids learn differently, they do share some learning situations with the same entity, which is an unexpected discovery. Therefore, teachers must acknowledge that children have diverse learning styles.

Further, Park and Lombardino (2013) suggested that teachers may aid students who are having trouble reading by instructing them on phonemic awareness, phonics/decoding, spelling, lexicon, and morphology. These constituents collaborate during word study to boost learners' phonological skills. Teachers that are skilled at helping their learners learn to read make use of all of these strategies throughout reading instruction time.

To improve phonemic awareness skills among the learners; the researcher crafted a remediation material suitable to the common needs of the pupils based on the pre-test result.

The contents of this material are divided into eight areas of phonemic awareness. The first area is the word awareness, basically this helps the learner understand that a sentence or a phrase is made up of individual words.

The second area is rhyme identification; focused more on the listening skill of the learner that allows them to identify words having the same rhyme as enunciated by the teacher. Similar to the third area which is the rhyme production, the learners created and produced words having the same sound aside from identifying rhymes.

The fourth area of the material is the medial sound identification; this allows the learners to manipulate the middle sound of the given words using short vowel sounds.

For sound blending and segmentation respectively, the activities focused more on giving of individual letter sounds, blending it together to form a word. On the other hand, the last two areas of the material which are the medial sound substitution and initial sound addition, focused on changing middle and initial phonemes and forming new words.

### ***Reading Proficiency of the Learners After the Conduct of Remedial Reading***

Table 3 presents the learners' reading proficiency mean scores following the administration of remedial reading materials. The learners' reading comprehension mean score is 4.45, placing them in the with mastery category.

*Table 3. Reading Proficiency of the Learners After the Conduct of Remedial Reading*

<i>Phonemic Awareness Development Area</i>	<i>Mean</i>	<i>Reading Proficiency</i>
Word Awareness	4.58	With Mastery
Rhyme Identification	4.19	With Mastery
Rhyme Production	4.03	With Mastery
Initial Sound Identification	4.71	With Mastery
Final Sound Identification	4.55	With Mastery
Media Sound Identification	4.03	With Mastery
Syllable Identification	4.94	With Mastery
Syllable Segmentation	4.94	With Mastery
Syllable Blending	5.00	With Mastery
Syllable Deletion	4.32	With Mastery
Sound Blending	4.03	With Mastery
Sound Segmentation	4.10	With Mastery
Initial Sound Substitution	4.45	With Mastery
Final Sound Substitution	4.32	With Mastery
Medial Sound Substitution	4.13	With Mastery
Initial Sound Addition	4.42	With Mastery
Final Sound Addition	4.71	With Mastery
Initial Sound Deletion	4.39	With Mastery
Final Sound Deletion	4.65	With Mastery
Overall	4.45	With Mastery

When compared, the reading proficiency mean scores of learners before and after the development of remedial reading materials has a huge difference. This means that the learner exceeds fundamental requirements in phonemic awareness development, which he or she may exhibit spontaneously and effectively through reading.

This implies that the developed remedial material is highly successful and effective in improving reading proficiency of learners since the content of the material focused on the phonemic awareness development areas that needs remediation. In spite of the increase of scores, the remedial reading materials were only a supplementary material to aid learning that still requires teacher-learner interaction. It cannot totally replace the teacher's role in the acquiring learners' reading proficiency.

In support with the finding, Ali and Razali's (2019) literature review of 27 studies on the topic, ESL/EFL instructors must regularly update their pedagogical practices in order to meet the needs of their students, particularly in the area of reading instruction, where cognitive and metacognitive reading techniques have been shown to be the most effective.

Also, Bogaerds-Hazenberg et al. (2021) showed that teaching pupils about text structure improved their comprehension almost immediately, but the size of effect was very different for questions, summarization, memory, and text structure knowledge. At delayed posttests, though, students who had been taught about text structure no longer did better than students in control groups.

Further, Bagolong and Usop (2021) found that students' reading abilities in terms of phonemic awareness were found to be quite effective. This newfound knowledge of the reading process will help the students become better readers in the future.

Remedial reading materials is effective in improving reading proficiency of learners, but still requires teacher-learner interaction. It is the responsibility of every educator to adapt their methods of instruction to best serve their learners. It has been discovered that learning about how texts are put together helps with reading comprehension right away.

### ***Significant Difference on the Reading Proficiency of the Learners Before and After the Conduct of Remedial Reading***

Table 4 illustrates the test of significant differences in the learners' reading proficiency before and after remedial reading. As seen in the table, the word awareness category obtained a t-value of -4.429 having a p-value than 0.001, the rejection of the null hypothesis is well supported.

The results show that there is a substantial difference in the learners' level of reading proficiency in the context of word awareness following the remedial reading activity. This means that after the conduct of the remedial reading materials, the learners were able to gain the ability to read written words correctly and almost effortlessly. Also, learners were able to pick out individual words from the material without using similar words to figure out what they mean.

However, the t-value for the rhyme identification category was -4.985%, and the p-value was less than 0.001., providing very strong evidence for rejecting the null hypothesis. The findings point to a statistically significant difference in the reading proficiency of the

learners in the context of rhyme identification after the remedial reading activity. This means that the learner was able to listen to a pair of words and decide whether they rhymed because of the remedial reading materials.

Table 4. *Significant Difference on the Reading Proficiency of the Learners Before and After the Conduct of Remedial Reading.*

<i>Areas that Need Remediation</i>	<i>t-value</i>	<i>p-value</i>	<i>Decision</i>	<i>Interpretation</i>
Word Awareness	-4.429	<0.001	Reject Ho	Significant
Rhyme Identification	-4.985	<0.001	Reject Ho	Significant
Rhyme Production	-10.734	<0.001	Reject Ho	Significant
Media Sound Identification	-6.180	<0.001	Reject Ho	Significant
Sound Blending	-5.208	<0.001	Reject Ho	Significant
Sound Segmentation	-3.829	<0.001	Reject Ho	Significant
Medial Sound Substitution	-3.159	<0.001	Reject Ho	Significant
Initial Sound Addition	-3.102	<0.001	Reject Ho	Significant

More so, the rhyme production category got a t-value of  $-10.734$  with a p-value lower than 0.001 level of significance, hence, there is substantial evidence in rejecting the null hypothesis. The finding shows a statistically significant difference in the level of reading proficiency of the learners in the context of rhyme production after the remedial reading activity. This means that after learning the material, students were able to come up with words that rhyme with a given word, which is an important task for phonological awareness.

In line with the result, there is very strong evidence exists to reject the null hypothesis in the case of the medial sound identification, since the t-value was  $-6.180$  and the p-value was less than 0.001. The data indicates that there is a statistically significant difference in the level of reading proficiency of the learners with regards to medial sound identification after the remedial reading activity. The result implies that after the conduct of remedial material, it enabled learners to identify appropriate sounds for each letter symbol.

The t-value for the sound blending category is  $-5.208$ , and as the p-value was less than 0.001, there is strong evidence to reject the null hypothesis. The findings suggest that there is a significant difference in the level of reading proficiency of the learners in terms of sound blending after the remedial reading activity. The results show that the students were able to make words out of individual sounds by putting the sounds together in the right order.

Also, the sound segmentation obtained a t-value of  $-3.829$  and p-value lower than 0.001, thus very strong evidence in rejecting the null hypothesis. The findings suggest that there is a significant difference in the level of reading proficiency of the learners in terms of sound segmentation after the remedial reading activity. This implies that learners could break up spoken words into their separate sounds after being exposed from the reading material.

Additionally, medial sound segmentation achieved p-value less than the 0.001 level of significance, with a t-value of  $-3.159$ , it shows enough proof of rejecting the null hypothesis. This indicate that there is a significant difference in the level of reading proficiency of the learners in the context of medial sound substitution after the remedial reading activity. This means that learners could change a single phoneme in a word to a different phoneme to make a new word.

Moreover, the initial sound addition acquired a t-value of  $-3.102$  and p-value lower than 0.001 level of significance that rejects the null hypothesis. Which means that there is a significant difference in the level of reading proficiency of the learners in the context of initial sound addition after the remedial reading activity. This means that the learners learned that one can make new words by adding a sound. This helped the learners understand that words are made up of smaller units of sound, and that changing these units changes the word as a whole.

Overall, the result indicates there was sufficed indication to reject the null hypothesis (Ho). This shows that statistically, there is a significant difference in the learners' reading proficiency before and after remedial reading. As a result, there is substantial evidence that the usage of remedial reading resources could improve the learners' weak phonemic development areas. Therefore, the remedial reading materials developed by the researcher can be of great help in improving the reading proficiency of learners.

The findings reveal that the difference in mean scores between the control and experimental groups is practically identical to the study conducted by Angeles et al. (2022) that is curious in the efficacy of locally adapted reading materials for first graders. The findings reveal that the experimental group, on average, performed better than the control group.

Further, Suson et al. (2020) found that educators must innovate to help meet the requirements of various students, and that enriched reading activities and customized instruction must be combined to increase students' basic reading comprehension competency. Even though kids learn differently, they do share some learning situations with the same entity, which is an unexpected discovery. Therefore, teachers must acknowledge that children have diverse learning styles.

Also, Dion et al. (2010) examined the results of reading assistance in the elementary years and found it to be beneficial. Addressing reading difficulties early on is crucial. Early exposure to reading and writing instruction increases the likelihood that a learner will

continue to improve over time.

Moreover, there are five major components of reading proficiency: phonics, vocabulary, comprehension, phonics awareness, and fluency (Cassidy et al., 2010). These sections aid in the development of foundational reading abilities. The ability to read and write is foundational to academic and professional success (Hausheer et al., 2011; Hirsch, 2010; Patton et al., 2010).

Additionally, Park and Lombardino (2013) said that several studies have shown the value of phonological awareness and phonics training for learners. Phonological awareness is a powerful and substantial predictor of word reading ability in elementary school pupils. In the first stages of reading, when pupils need explicit guidance from teachers, decoding abilities are crucial. Word identification requires phonological awareness, which is necessary for reading comprehension.

In the same vein, Park and Lombardino (2013) claimed that instructors may aid pupils who are having problems reading by instructing them on phonological awareness, phonics/decoding, spelling, vocabulary, and morphology. Together, these components of word study strengthen pupils' ability to decode spoken language. In order to assist their pupils learn to read, effective instructors employ all of these strategies during reading teaching: modeling, coaching, and direct instruction.\

## Conclusions

The reading proficiency of learners before developing the remedial reading materials needs intervention. As a result, the level of reading competency of the Grade 3 students before to being exposed to remedial reading materials was determined to be low. It was revealed that out of the 19 areas in the phonemic awareness development, there are 8 areas that need the intervention of the remedial reading materials; particularly in Word Awareness, Rhyme Identification, Rhyme Production, Medial Sound Identification, Sound Blending, Sound Segmentation, Medial Sound Substitution, and Initial Sound Addition.

The learners' reading proficiency mean scores demonstrate a significant increase after the conduct of the remedial reading materials. In particular, learners' performance improved from needs intervention to with mastery level.

The reading proficiency means scores of the learners using the remedial reading materials was positive and implies that learners' mean scores are greater after the conduct of remedial reading materials.

In comparing before and after the learners' reading proficiency scores as optimized by the remedial reading materials, it reveals that those learners with phonemic awareness development areas that needs intervention performed significantly better and has significant increase of scores after being exposed to the remedial reading materials.

Division Reading Focal Persons may perform a more in-depth study, focusing primarily on how remedial reading materials that affect the reading proficiency of learners. Furthermore, the data suggest that remedial reading materials can be an effective technique for enhancing learners' reading proficiency. Furthermore, the data suggest that remedial reading materials can be an effective technique for enhancing learners' reading proficiency. Consequently, its application still depends on the efficacy of the teacher, and it can be supplemented with a more manageable system that can be used to create an effective Reading program.

The use of remedial reading materials as a strategy for improving the reading proficiency of learners in grades one to six is permissible if sufficient time sequences and acceptable distribution of resources and materials are available. School heads may also develop a program to assist teachers in understanding how to successfully utilize the remedial reading materials. In addition, they may provide teachers with training to improve their application of this strategy.

Teachers are encouraged to improve the performance of their learners through remedial reading materials since it yielded in the result that when this approach is used, the learners' reading proficiency improved.

Elementary pupils with frustration and non-reader proficiencies may continue to use remedial reading materials to develop reading proficiency. and together with the school, parents can assist and monitor learners at home.

Future researchers may implement longitudinal series if it would yield the same result given longer duration of implementation.

## References

- Abril, J. G., Acerbo, C. T., & Abocejo, F. T. (2022). The Philippine informal reading inventory (Phil-IRI) program: A critical analysis. *Budapest International Research and Critics in Linguistics and Education (BirLE)Journal*, 5(4),432-441. <https://doi.org/10.33258/birle.v5i4.7270>
- Ali, A. M., & Razali, A. B. (2019). A review of studies on cognitive and metacognitive reading strategies in teaching reading comprehension for ESL/EFL learners. *English Language Teaching*, 12(6), 94-111. <https://doi.org/10.5539/elt.v12n6p94>
- Almutairi, N. R. (2018). Effective reading strategies for increasing the reading comprehension level of third –grade students with learning disabilities (Publication No. 3247). [Doctoral dissertation, Western Michigan University]. WMA Campus Repository.



<https://scholarworks.wmich.edu/dissertations/3247/>

Angeles, J. A. P. R., Manaig, K. A., Sapin, S. B., Yazon, A. D., & Tesoro, J. F. B. (2022). Effectiveness of localized reading activity sheets in enhancing the reading skills of grade 1 learners a quasi-experimental research design. *International Journal of Theory and Application in Elementary and Secondary School Education*, 4(2), 125-136. <https://doi.org/10.31098/ijtaese.v4i2.1087>

Ardhian, T., Ummah, I., Anafiah, S., & Rachmadtullah, R. (2020). Reading and critical thinking techniques on understanding reading skills for early grade students in elementary school. *International Journal of Instruction*, 3(2), 107-118. <https://doi.org/10.29333/iji.2020.1328a>

Ary, D., Jacobs, C. L., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education*. Canada: Wadsworth Cengage Learning.

Bagolong, N., & Usop, A. (2021). Reading Skills of Elementary Pupils as Basis for an Intervention Plan: The Case of Don E. Sero Elementary School, Philippines. *JPAIR Institutional Research*, 16(1), 13-27. <https://doi.org/10.7719/irj.v16i1.615>

Baldevarona, S. B. (2020). *Behind the Reading Program: A Phenomenological Study on Teachers' Challenges and Strategic Reading Interventions to Help Struggling Readers* (Doctoral dissertation, Foundation University). <https://doi.org/10.13140/RG.2.2.27846.80966>

Barrett, S., & Anderson, S. (2017). *Quasi-experimental methods*. International Institute for Environment and Development.

Bevans, R. (2020, January 31). An introduction to t-tests: definitions, formula, and example. <https://www.scribbr.com/statistics/t-test/#:~:text=A%20t%20test%20is%20a,are%20different%20from%20one%20another>.

Bogaerds-Hazenberg, S. T., Evers-Vermeul, J., & van den Bergh, H. (2021). A meta-analysis on the effects of text structure instruction on reading comprehension in the upper elementary grades. *Reading Research Quarterly*, 56(3), 435-462. <https://doi.org/10.1002/rrq.311>

Chang, L. (2015). Proficient readers' reading behavior in Taiwan: The study of young Chinese readers. *Ujer Universal Journal of Educational Research*, 3(4), 283-287. <https://doi.org/10.13189/ujer.2015.030405>

Daniels, E., Pirayoff, R., & Bessant, S. (2013). Using peer observation and collaboration to improve teaching practices. *Universal Journal of Educational Research*, 1(3), 268-274. <https://doi.org/10.13189/ujer.2013.010318>

Darwish, S. A. (2014). Literacy and children's literature: Evidence from actual classroom practice. *Journal of Education and Training Studies*, 3(1). <https://doi.org/10.11114/jets.v3i1.591>

Ditona, G. D., & Rico, F. M. (2021). Reading Level of Grade II Pupils Scaffolding for Reading Program of Eastern Schools in Botolan District, Philippines. *American Journal of Humanities and Social Sciences Research*, 5(8), 86-94. <https://www.ajhssr.com/wp-content/uploads/2021/08/K21588694.pdf>

Foley, B. (2018). Purposive sampling 101. What is purposive sampling.

Hibbert, L., & Foncha, J. W. (2019). Improving student's performance in english as language of learning and teaching in teacher pre-service education. *Journal of English as an International Language*, 14(2), 29-43. <https://files.eric.ed.gov/fulltext/EJ1244221.pdf>

Gatcho, A. R. G., & Bautista, J. C. (2019). A literature review on remedial reading teachers: The gaps in the Philippine context. *Journal of English Teaching*, 5(2), 91-104. <https://doi.org/10.33541/jet.v5i2.1063>

Hayiou-Thomas, M. E., Harlaar, N., Dale, P. S., & Plomin, R. (2010). Preschool speech, language skills, and reading at 7, 9, and 10 years: Etiology of the relationship. *Journal of Speech, Language, and Hearing Research*. 53, 311-332. [https://doi.org/10.1044/1092-4388\(2009/07-0145\)](https://doi.org/10.1044/1092-4388(2009/07-0145))

Katzir, T., Goldberg, A., Aryeh, T. J. B., Donnelley, K., & Wolf, M. (2013). Intensity vs. Duration: Comparing the Effects of a Fluency-Based Reading Intervention Program, in After-School vs. Summer School Settings. *Journal of Education and Training Studies*, 1(2), 61-73. <https://doi.org/10.11114/jets.v1i2.143>

Kepe, M. H., Foncha, J. W., & Maruma, M. W. (2017). Towards overcoming poor readership and building reading culture of in schools. *Gender and Behaviour*, 15(2), 8790-8797. <https://www.ajol.info/index.php/gab/article/view/163234>

Ligudon, J., & Ildefonso, L. (2022). Reading strategies employed by senior high school english teachers in the Philippines. *Quantum Journal of Social Sciences and Humanities*, 3(2), 93-106. <https://doi.org/10.55197/qjssh.v3i2.134>

Luckner, J. L. (2013). Using the dynamic indicators of basic early literacy skills with students who are deaf or hard of hearing: Perspectives of a panel of experts. *American Annals of the Deaf*, 158(1), 7-19. <https://doi.org/10.1353/aad.2013.0012>

Matasci, D. (2020). Assessing needs, fostering development: UNESCO, illiteracy and the global politics of education (1945-1960). In *Measuring the Unmeasurable in Education* (pp. 35-53). Routledge. <https://doi.org/10.1080/03050068.2017.1254952>

Nichols, S. S. (2014). An evaluation of a remedial reading program for middle-grade students in a southeastern state public school. (Doctoral dissertation, Garner-Webb University). [https://digitalcommons.gardnerwebb.edu/cgi/viewcontent.cgi?article=1018&context=education\\_etd](https://digitalcommons.gardnerwebb.edu/cgi/viewcontent.cgi?article=1018&context=education_etd)

- Nugroho, T., Bharati, D. A. L., & Hartono, R. (2019). English teachers perception on strategies in teaching reading comprehension to motivate the students. *English Education Journal*, 9(1), 56-61. <https://doi.org/10.15294/EEJ.V9I1.24741>
- Park, Y., & Lombardino, L. J. (2013). Exploring the nature of effective word study instruction for struggling readers: Practical applications for broader perspective of the simple view of reading. *International Journal of Special Education*, 28(2), 81-90 (EJ1023311).ERIC. <https://files.eric.ed.gov/fulltext/EJ1023311.pdf>
- Phala, T. A., & Hugo, A. (2022). Difficulties in teaching Grade 3 learners with reading problems in full-service schools in South Africa. *African Journal of Disability (Online)*, 11, 1-9. <https://doi.org/10.4102/ajod.v11i0.906>
- Pocan, J. M., Bailon, L. L., & Pocan, J. P. T. (2022). Strategic reading intervention for left-behind learners in the Philippines. *LLT Journal: A Journal on Language and Language Teaching*, 25(2), 367-378. <https://doi.org/10.24071/llt.v25i2.5078>
- Rasinski, T. V., & Hoffman, J. V. (2014). Oral reading in the school literacy curriculum. *Reading Research Quarterly*, 38(4), 510-522. <https://doi.org/10.1598/rrq.38.4.5>
- Roskos, K., & Neuman, S. B. (2014). Best practices in reading. *The Reading Teacher*, 67(7), 507-511. <https://doi.org/10.1002/trtr.1248>
- Sage, K. (2022). Zone of proximal development. Routledge. <https://doi.org/10.4324/9780367198459-REPRW163-1>
- San Juan, R., Philippines lowest in reading comprehension among 79 countries. *The Philippine Star*. <https://www.philstar.com/headlines/2019/12/03/1974002/philippines-lowest-reading-comprehension-among-79-countries>.
- Sanders, S., Losinski, M., Parks Ennis, R., White, W., Teagarden, J., & Lane, J. (2019). A meta-analysis of self-regulated strategy development reading interventions to improve the reading comprehension of students with disabilities. *Reading & Writing Quarterly*, 35(4), 339-353. <https://doi.org/10.1080/10573569.2018.1545616>
- Spear-Swerling, L. (2016). Common types of reading problems and how to help children who have them. *The reading teacher*, 69(5), 513-522. <https://doi.org/10.1002/trtr.1410>
- Suárez, N., Jiménez, J. E., & Sánchez, C. R. (2020). Teaching reading: a case study through mixed methods. *Frontiers in Psychology*, 11, 1083. <https://doi.org/10.3389/fpsyg.2020.01083>
- Suson, R., Baratbata, C., Anos, W., Ermac, E., Aranas, A. G., Malabago, N., ... & Capuyan, D. (2020). Differentiated instruction for basic reading comprehension in Philippine settings. *Universal Journal of Educational Research*, 8(9), 3814-3824. <https://doi.org/10.13189/ujer.2020.080904>
- Talwar, A., Greenberg, D., & Li, H. (2020). Identifying profiles of struggling adult readers: Relative strengths and weaknesses in lower-level and higher-level competencies. *Reading and Writing*, 33(9), 2155-2171. <https://doi.org/10.1007/s11145-020-10038-0>
- Torgesen, J. K., Alexander, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K. K., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of learning disabilities*, 34(1), 33-58.
- UNICEF (2020). SEA-PLM 2019 main regional report: Children's learning in 6 southeast asian countries. <https://www.unicef.org/eap/media/7356/file/SEA-PLM%202019%20Main%20Regional%20Report.pdf>
- Vaughn, S., Wanzek, J., Murray, C. S., & Roberts, G. (2012). Intensive Interventions for Students Struggling in Reading and Mathematics. A Practice Guide. Center on Instruction.
- Vernon-Feagans, L., Bratsch-Hines, M., Varghese, C., Cutrer, E. A., & Garwood, J. D. (2018). Improving struggling readers' early literacy skills through a tier 2 professional development program for rural classroom teachers: The targeted reading intervention. *The Elementary School Journal*, 118(4), 525-548. <https://doi.org/10.1086/697491>
- Weih, T. G. (2014). Student-described engagement with text: Insights are discovered from fourth graders. *International Electronic Journal of Elementary Education*, 6(3), 395-414. (EJ1053588). ERIC. <https://files.eric.ed.gov/fulltext/EJ1053588.pdf>
- Xi, J., & Lantolf, J. P. (2021). Scaffolding and the zone of proximal development: A problematic relationship. *Journal for the Theory of Social Behaviour*, 51(1), 25-48. <https://doi.org/10.1111/jtsb.12260>

## Affiliations and Corresponding Information

**Lilian Guia B. Burgos, MAEd-LT**

Davao del Sur State College – Philippines

**Ana Marie J. Matalines, PhD**

Davao del Sur State College – Philippines