Reading Remediation Program for Struggling Readers: An Impact Study

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ABSTRACT
One of the most important aspects of education is reading, which is essential to progress in a literate society. It is important then to speed up reading through reading programs. Reading remediation is a supplemental reading program that focuses on correct phonological processes. The study established the value of reading remediation as a tool for helping struggling readers in grade 2 to learn more effectively. In particular, it sought to ascertain how the program had affected a child's reading ability before and after its implementation. The experimental pretest-posttest research design was used for this investigation. Microsoft Excel was utilized to simplify the statistical computation of the data. Results showed that the respondents' performance ratings in the pretest were poor, but they were good in the post-test, indicating that there is an improvement in performance after giving struggling readers reading remediation. Therefore, the Reading Remediation is a useful tool for improving learning for the struggling grade 2 readers of Sevilla Elementary School.

Keywords: Results, Improvement, Statistical, Program

INTRODUCTION
Situation Analysis
Reading is the prime skill in learning a language that gives access to bright employment opportunities by understanding education materials that are available across the world (Dessemontet et al., 2021). Various research works have been conducted on the reading skill of students and various techniques for its betterment. Based on the studies, students have been classified into two major categories namely developing and struggling readers. According to a study conducted by National Reading Panel, five literacy skills namely, phonemic awareness, vocabulary, fluency, phonics, and comprehension goes into the making of a reader with skills in reading (NICHHD, 2000). Various studies have emphasized the inclusion of these areas of reading in the academic curriculum (Castles, Rastle, & Nation, 2018). A platform should be made available for students for improving their reading skills with prompting systems and remedial feedback. This should also include the awareness in the sound system of language (phonetics) (Dessemontet et al., 2019).

A survey conducted by Bowers Educational Psychology Review, 2020 after examining 12 meta-analytic syntheses, discounted the importance of systematic phonics when compared to other reading methodologies. It also emphasizes the importance of customizing education on phonics based on the requirements of individual learners. The field of education has been undergoing a sea change, of late, by focusing on a rational combination of the components of good reading in a coherent manner tailored to suit the unique needs of the student in question.

A national program named the Every Kid a Reader Initiative (ECARP) designed to improve the capability of every Filipino child to read and write at the prime of their education was introduced by the department of education, (DepEd,2004) so that they may turn into individual readers and writers at a later stage. Additionally, it offers educators a full year of training to help them become multilingual and autonomous problem solvers. By the time students complete Grade III, the key goals of the Basic Education Curriculum (BEC) is to make sure, they can comprehend what they read. The "Philippine Informal Reading Inventory" is its main evaluation tool (PHIL-IRI). The reading proficiency level of public elementary school students across the country is assessed using the PHIL-IRI, an authentic reading assessment tool. The children's usage of understanding, vocabulary, and word identification are assessed using this unofficial metric. It gives educators quantitative data on the students' reading abilities.

Furthermore, the Department of Education has been strictly implementing the non-promotion to the next higher grade of pupils in each grade level who cannot read as stipulated in DepEd Memorandum No. 324 s. 2004, also known as "Reading Literacy Program in the Elementary Schools". The "No Read, No Move" policy, according to DepEd Undersecretary for Regional Operations Ramon Bacani, not only promotes the "Every Child a Reader Program," but it is also intended to improve the teaching of reading in every public grade school, particularly in the rural areas.

In the Philippines, the introductory literacy rate is more than 85.5 percent, which is perceived to have declined over the years (DepEd, 2004). As more than six million people of the total population in Philippines are considered to be functionally illiterate, any attempt by Government or Private organizations to promote literacy is received without any dissent.

Communicating at the 2014 NLC and Awards, Department of Education (DepEd) LCCOIC, Dina Ocampo said, "It is through literacy that one is empowered to interact in his community and realizes his worth, what he can do, and ultimately makes him do things that contribute in the sustainable development of his society."

The country's literacy rate based on the census taken by the NSO in 2010 showed a significant progress of 97.5% in a population of 71.5 million compared to that of the 2000 CPH record which was only 92.3%.

The DepEd curriculum is based on the belief that functional literacy, in its broadest sense, is the skill that is most crucial for continuing education in our perilous new environment. Filipino students who achieve functional literacy will have developed sufficient self-discipline, which when paired with our people's intrinsic ability to adapt to change can result in durable accomplishments. With functional literacy, Filipino students are better able to manage their own learning. With enough drive, they can read instructional materials, look up information on their own, and conduct research on the subjects or themes that interest them.

The students of Laos and Guatemala struggled to read and write after getting admission in primary schools of other developing countries. This was due to the lack of proper education system, incompetent teachers, classes overcrowded with students, little exposure to reading, and influence of mother tongue in second language learning. Various literacy development measures were carried out through Social welfare organizations to improve the literacy of children of grade 1 and 2.

The Philippines proposed a new scheme called the education to all in 2015, that targeted to improve the literacy and essential life skills of adults up to 50 percent with age 15 and above.

The department of education aimed to improve the reading skills of teachers through various scholarships and training programs. Apart from the department of education, other departments should also concentrate on such programs to improve the literacy rate, like the RELP (Reading Literacy Extension Program) in the UNP (University of Northern Philippines), Tamag, Vigan.

Theoretical Framework

Nobody has ever been able to adequately explain how reading works. There are two major schools of psychology namely, behaviorism and cognitivism. While behaviorism believes that language learning takes place by imitating from the parents, cognitivism recognizes the cognitive capability of the learner concerned. In contrast, most of the reading models limit themselves to perceptual and cognitive phases, or reading modalities. They don't make an effort to take into account every aspect of reading. No single model can be referred to as the most acceptable.

The Traditional View

Dole et al. (1991) stress that beginners in reading first gather a set of subskills and arrange them hierarchically, for improving their comprehension gradually and they are capable of understanding the materials they read.

Nunan (1991) is of the firm belief that the process of reading entails conversion of visual signs to their sound equivalents to understand the text. He described this method as the "bottom-up" approach to reading.

This viewpoint, which McCarthy (1999) referred to as "outside-in processing," holds that meaning is there on the written page before being understood and absorbed by the reader.

Bottom-up Models

The reading is popularly understood as a bottom-up process, where decoding takes place from the alphabet and word level to sentence level, meaning relegated to the background. Here, as the reader pays attention to the letters or other larger units, he starts to guess what words they will spell. After being recognized, the words are translated into inner speech, from which the reader can infer meaning much like while listening. In this procedure, accurate word recognition is thought to automatically lead to reading comprehension. These models, which are largely acceptable for beginning readers, are informed by behaviorist psychology and structural linguistics.

Top-down Models

Top-down reading model advocates the importance of cognitive and linguistic abilities of the readers to comprehend. The psycholinguistic theory form the base for the various learning models emphasizing the link between the language and the thinking process (Goodman, 1967; Smith, 1971). They further stated that reader's predictions help in choosing accessible linguistic signals for perceptible inputs (Goodman (1967)).

Top-down reading process comprises of the use of a reader's cognitive and linguistic capabilities in comprehending the written text and in most of the processes revolve around the concept that thinking and

language interact (Goodman, 1967; Smith, 1971). It the reader's prediction that form the input for using the linguistic signals accessed there from (Goodman(1967)).

Interactive Models

Top-down and bottom-up processing in reading are thought to happen simultaneously, at least for proficient or experienced readers, according to interactive model theorists like Rumelhart (1980). According to Rumelhart, the reader's mental information and graphic details both play a role in comprehension.

Behaviorism Theory

By giving repetitive practice in a set of rules, the students imitate and learn from them. Number of discrete exercises are given to students for practice before they learn to read. In a school, the students follow the teacher's words and their phrases by repeating them. Here, the child indirectly learns to use the words and phrases without much effort. Many schools still employ this method of teaching language to their students.

Social Constructivist Theory

Unlike the behaviorist school of language learning, social constructivist theory lays emphasis on the meaning of the text. In other words, meaning of the words in the text is understood contextually. The culture in which the child grows and the guidance that it receives from the elders shapes their learning skill.

Cognitivist Theory

Reading comprehension, also known as simply reading, is the skill of creating linguistic meaning from written representations of language from a cognitive standpoint of learning to read. Based on two equally significant competencies, this capacity. In the graphic representation of this cognitive framework, the two supporting legs stand in for these two fundamental components of reading.

Transactional Theory

Transactional theory states that a good text brings the reader close to the author there by initiating a relationship between them, such that, it has an impact on the reader and the reading which finally shapes the poem (Rosenblatt, 1986). In other words, transactional theory requires consideration of the readers' identities, contributions to the text, expectations for texts, and reading decisions. This relationship is some what reciprocal in nature.

Metacognition

Metacognition is a sophisticated aspect of thought and learning that integrates linguistic and cognitive processes (Schreiber, 2005).

Thinking about what one is doing while reading is known as metacognition. According to Klein et al. (1991),discussed about the strategies followed by the strategic readers:

Defining the reading's goal before beginning

Before reading, determining the form or kind of the text

Making ongoing predictions about what will happen next using knowledge learned in earlier phases, prior knowledge, and information collected from those stages.

Jean Piaget's Learning Theory of Reading

The primary step in the process of learning language skills is absorbing sensory perceptions like smell, taste, sound, sight, and sense. In this preoperational stage of learning, the student starts to comprehend the concepts by repetition but needs practice to understand the sequence of the words.

Maturation Theory

According to the maturation idea, children would be ready to read once they had acquired specific essential skills, and instructors and parents had little control over the rate of cognitive growth. In other aspects, the approach promotes delaying the start of reading instruction until kids are old enough (2013) Godwin, Herb, Ricketts & Wymer.

Theory of Literacy Development

According to the theory that Holdaway developed in 1979, oral language development in children naturally precedes the acquisition of reading skills. According to Holdaway's theory of literacy, the foundation for literacy development is meaningful learning experiences, which start in children's homes.

Construction-Integration Theory

Although it can be used for writing, this notion mostly applies to reading. The relationship between letters and words, as well as between words and sentences, is shown at the micro-level in order to explain writing. The

macro-level would involve understanding a text in its whole and how sentences are connected to generate ideas (Kintsch, 2013).

From the aforesaid theorists' concepts, the study was conceptualized. Hence, the study aimed to assess the effectiveness of reading remediation program to Grade 2 struggling readers of Sevilla Elementary School, significantly sought to determine the pre-reading an post-reading assessment of struggling readers in terms of Vowel sounding (V), Consonant sounding (C), Consonant-Vowel Sounding (CV), Vowel-Consonant-Consonant Sounding (VCC), Consonant-Vowel-Consonant (CVC), Vowel-Consonant-Vowel (VCV), Consonant-Vowel-Consonant-Consonant (CVCC), Consonant-Consonant-Vowel-Consonant-Consonant sounding(CCVCC), Phrases and Simple sentences reading and the significant difference of pre-reading and post-reading assessment.

Problem Statement

This study assessed the effectiveness of reading remediation for Grade 2 Struggling Readers of Sevilla Elementary School of the City of San Fernando, La Union.

It primarily aimed to provide solutions to the following aspects:

1. What is the performance of the struggling readers in the pre-reading and post-reading assessment in terms of:
   a. Vowel sounding (V);
   b. Consonant sounding (C);
   c. Consonant-Vowel Sounding (CV);
   d. Vowel-Consonant-Consonant sounding (VCC);
   e. Consonant-Vowel-Consonant (CVC);
   f. Vowel-Consonant-Vowel (VCV);
   g. Consonant-Vowel-Consonant-Consonant (CVCC); and
   h. Consonant-Consonant-Vowel-Consonant-Consonant (CCVCC).

2. Is there a significant difference between the performance of struggling readers on the pre-reading and post-reading assessment?

METHODOLOGY

Research Design

This study used a single pre-test and post-test in an experimental research design. When analyzing the impact of an intervention on a particular sample, behavioral researchers frequently use a single pretest and post-test design (Mike, 2017).

The experimental manipulation process on the participants is carried out. The participants are observed both before and after this manipulation process, and this stops the random selection of the participants. Both the tests help in giving the efficiency of the participant and the difference between these two tests give the efficiency of the manipulations process.

Source of Data

The study was conducted at Sevilla Elementary School City of San Fernando La Union.

Purposive sampling was used to determine the respondents of the study. Also termed as the non-probability sampling, here the process is carried out on a selective and judgmental basis. According to Ritchie (2003), purposive sampling is also a non-probability sampling where the researchers are not objective in their approach in selecting the criteria for sampling.

The non-probability sampling involves selecting the sample on the basis of judgements of the researcher. According to Ritchie (2003), purposive sampling is also a type of non-probability sampling where the researcher selects the samples based on his own criteria without considering the characteristics of the sample.

Herewith, the researchers provided phonic letters and words read by all pupils adopted from Reading with Phonics by Julie Hays in assessing the reading performance of the 50 pupil's grade 2. The reading materials were given individually to the pupils wherein researchers conduct the reading assessment in 1:1 ratio (1 researcher: 1 pupil) as a basis to ensure authentic assessment. The assessment resulted in 16 struggling readers who participated in the study.

The table showed the actual number of struggling readers after the conduct of the initial assessment using the phonetic drills wherein a total 10 boys and 6 girls resulted in 16 struggling readers.

Table 1: Distribution of Respondents/ Struggling Readers

Pupils	Struggling Readers
Male	10
Female	6
Total	16

Instrumentation and Data Collection

The main tool used in determining the reading performance of the 6 girl readers and 10 boy readers in Sevilla Elementary School was the pre-reading assessment and post-reading assessment using the remedial reading drills adopted from the book reading with Phonics by Julie Hays, Charles E. Wingo and J.B Lippincott Company.

The researchers conducted the Remedial Reading Program in the Sevilla Elementary School from 2:30 to 4:30 in the afternoon for 10 days (November 2019 to February 2020). During the conduct of the Reading Remediation Program, researchers/trainers used time stopwatch to test the reading skills. The researchers adopted the fluency formula which is the number of letters or words per minute. This formula assesses readers who were either fluent or deficient.

The Reading Remediation Program is composed of pre-tested and post-tested. Part one Vowel Sounding (V), Part two Consonant Sounding (C), Part three Consonant-Vowel Sounding (CV), Part four Vowel-Consonant-Consonant Sounding (VCC), Part five Consonant-Vowel-Consonant (CVC), Part six Vowel-Consonant-Vowel (VCV), Part seven Consonant-Vowel-Consonant-Consonant (CVCC), Part eight Consonant-Consonant-Vowel-Consonant-Consonant (CCVCC).

Data Analysis

Problem one utilized mean rate from the results of the fluency which equal to 50 letters per minute for indicators Vowel sounding (V), Consonant sounding (C), Consonant-Vowel Sounding (CV), Vowel-Consonant-Consonant Sounding (VCC), Consonant-Vowel-Consonant (CVC), Vowel-Consonant-Vowel (VCV), Consonant-Vowel-Consonant-Consonant (CVCC), Consonant-Consonant-Vowel-Consonant-Consonant (CCVCC) while to calculate the percentage of accuracy the total number of words in the text is divided from the words correctly read. While in problem number two, the result of pre-reading assessment and post-assessment were analyzed through purposive test in showing the difference between the pre-test and the post-test.

RESULTS AND DISCUSSION

Struggling reader's efficiency in the Pre-reading and Post-reading Assessments

The study commenced with a pre-test, predictably, average participants were superior to beginners. After the pre-test administration, participants underwent ten days (10) remedial reading program, at the completion of the program, post-test was conducted which was also used in the pre-test. The result of the study based on the conducted pre-reading assessment and post-reading assessment to the respondents is shown in table 2.

Table 2: Struggling reader's efficiency in the Pre-reading and Post-reading Assessments

	Pretest score	Percentage	Posttest Score	Percentage
Vowel	76	95 %	80	100 %
Consonants	254	79 %	302	94 %
Vowel-Consonant	66	83%	73	91 %
Vowel-Consonant-Consonant	31	39 %	69	86 %
Consonant-Vowel-Consonant	28	35%	60	75 %
Vowel-Consonant-Vowel	15	19 %	63	79 %
Consonant-Vowel-Consonant-Consonant	19	24 %	57	71 %
Consonant-Vowel-Consonant-Consonant	3	4%	52	65%

These results are considered in the context of the purpose of the current study. In the pre-reading and post-reading assessment on Vowels (V) recognition, all struggling readers read this level however the means rates on pre-tests (95%) varied from post-test (100%). Consonants (C) pre-test (79%), varied from post-test (94%). VC Pre-test (83%) varied from post-test (91%). VCC pre-test (39 %) varied from post-test (86%). CVC pre-test (35%) varied from post-test (86%). VCV pre-test (19%) varied from post-test (79%). CVCC pre-test (24%) varied from post-test (71%). CCVCC pre-test (4%) varied from post-test (65%). This implies that struggling readers read most of the vowels in the pretest and all from the post-test. After the conduct of the program, there was an improvement in the fluency mean rate as seen at the post-test score. This implies that vowels, consonants, vowel-consonants, vowel-consonant-consonant,consonant-vowel-consonant, vowel-consonant-consonant, consonant-vowel-consonant-consonant, consonant-consonant-vowel-consonant-consonant-recognition remediation is effective. A training program was conducted on the vowel identification to the beginners and the advanced participants and they showed a remarkable improvement in the second test. This

program also helped in improving the phonetic knowledge of the beginners to an advanced level (Khaghaninejad, 2013).

Most of the students have difficulties in recognizing letters as well as the combined consonant vowel sounding. The pre-reading performance of the struggling reader is low. And there is an increase in the performance of struggling readers.

Table 3: Struggling Readers' performance difference in the Pre-reading and Post-reading Assessment

	Variable 1	Variable 2
Mean	30.75	50.0625
Variance	138.3333	21.79583
Observations	16	16
Hypothesized Mean Difference	0	
Df	20	
t Stat	-6.10469	
P(T<=t) one-tail	2.88E-06	
t Critical one-tail	1.724718	
P(T<=t) two-tail	5.76E-06	
t Critical two-tail	2.085963	

Based on the table above. In the pre-reading 56 percent of the students are above the mean rate which is 30.75 while in the post-reading 68.75 percent of the student are above the mean rate which is 50.0625. Hence, the struggling readers show better improvement.

As a result, there is a high improvement in the struggling readers in Sevilla Elementary School.

Comparative Analysis between Struggling Readers' performance in Pre-reading and Post-reading Assessment

The result implies that the remedial reading program is effective with the evidence that the program was designed to improve the reading fluency of Grade 2 struggling readers.

As progress in reading takes place in stages and as the progress of no two learners is the same, the child has to be brought to a stage of mental readiness to read. This can be done by providing the child with a variety of materials, techniques and experiences to develop the ability to read, recognize words and word forms and train them towards that end (Dravis 2016). This supports the findings of (International electronic journal of elementary education, 2017) in adopting multiple strategies such as reading intervention to enhance the effectiveness in reading by eliminating the problems faced by students while students.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS
Summary
The study aimed to determine the effectiveness of the remedial reading program for struggling readers of grade 2 pupils. This research utilized experimental research design making use of single pre-reading and port reading assessment as the main gathering tool to test reading performance of the 16 struggling readers in grade 2 of Sevilla Elementary School, Sevilla, City of San Fernando La Union.

The researchers conducted the pre-reading and post-reading assessment to the 10 boys and 6 girls struggling readers in grade 2. Especially to answer the following: what is the pre-reading assessment of the struggling readers on a.) Vowel sounding (V), b.) Consonant sounding (C), c.) Consonant-Vowel Sounding (CV), d.) Vowel-Consonant-Consonant Sounding (VCC), e.) Consonant-Vowel-Consonant (CVC), f.) Vowel-Consonant-Vowel (VCV), g.) Consonant-Vowel-Consonant-Consonant (CVCC), h.) Consonant-Consonant-Vowel-Consonant-Consonant sounding, i.)Phrases j.) Simple sentences and what is the significance difference for pre-reading and post-reading assessment.

The following findings had been drawn:
1. The pre-reading performance of the struggling readers is low while the post-reading performance is high.
2. Performance difference between the pre-reading assessment and post-reading assessment are significant.

Conclusions
Foregoing findings of the study suggest the following conclusions:
1. There is an improvement in the performance of the struggling readers.
2. The remedial reading program for struggling readers is effective.

Recommendations

The researcher has given his recommendations based on the observations of his study:

1. The reading teachers should create a schedule for the reading program every after class to develop the reading skills of the learners.
2. The assessed reading program can be used for struggling readers.
3. Keep on conducting the program and further develop their habits in reading.

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