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# STRATEGIC READING INTERVENTION FOR LEFT-BEHIND LEARNERS IN THE PHILIPPINES

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## Abstract
Education for all means no one should be left behind; thus, teachers should provide effective strategies for struggling readers. The "one-size fits all strategy" further divides the gap between the slow and advanced learners. This study used a quantitative observational research design to determine the reading ability of 30 struggling readers in terms of word recognition, reading comprehension, and reading speed using reading stories, Dolch's basic sight words and the Phil-IRI Manual 2018. The study develops strategic reading intervention materials to support teachers and students during the remedial programs. The pre-tests revealed that the reading ability of the struggling readers was at a frustration level. Furthermore, the develop strategic intervention reading materials used in remedial programs were composed of 4 parts: learning content, learning task guide, assessment guide, and enhancement guide. The post-tests show that the participants reading ability progressed to instruction and independent level after the remedial program. It was concluded that determining the student's present ability is beneficial to develop effective intervention materials. It was suggested that the school leaders and program specialists should develop faculty and student support programs ideally to uplift the student's literacy.

Keywords: left-behind learners, reading intervention, reading comprehension, reading speed, word cognition

## Introduction
Education facilitates social mobility and is essential for evading poverty (Ferguson & Roofe, 2020). Access to education and school enrolment rates at all levels, especially for females, have increased substantially during the previous decade (United Nations Educational, Scientific, and Cultural Organization Institute for Statistics, 2021). However, more than half of all children and adolescents globally do not exceed

the minimal criteria of reading and arithmetic competency (United Nations, 2021). The global competitiveness for the best quality education relies on the country's economic strength (Hazelkorn, 2014). Many economically capable students prefer to enroll in developed countries for their studies (Yang et al., 2019). Nevertheless, the most common expectation for developing and least developed countries in terms of education is lack of quality or low quality (Peng et al., 2014; Pocaan, 2022).

Essential skills learned in schools, such as reading and writing, are considered a fundamental necessity (Sukma et al., 2017); likewise, children in primary grades are expected to acquire specific competencies of these skills (Collins, 2018). Learners require tailored language assistance to promote academic reading comprehension (Brooks et al., 2021). The classroom environment and the teachers' approach must be conducive to learning (Anagün, 2018). Furthermore, such education systems' ideal goals and expectations interfere with the different considerations (Scott-Clayton, 2015; Jenkner & Hillman, 2004). Specifically, in the Philippines, the deterioration of quality education is constant due to problems faced by the country (Orbe et al., 2018; Durban et al., 2012; Galang, 2021).

In reading, arithmetic, and science, 15-year-old Filipinos performed worse than other Programme for International Student Assessment (PISA) 2018 participants; moreover, the Philippines and the Dominican Republic scored 340 and were considered the lowest (Organisation for Economic Co-operation and Development (OECD), 2019). This alarming result needs immediate action to ensure Filipino learners are not left behind. Although the Department of Education (DepEd) vows to improve the quality of education (DepEd) through the implementation of the Edukalidad (DepEd, 2019), the cooperation of the parents is significant since it is considered their obligation (Akemoglu et al., 2021). Moreover, emphasis on remedial programs for slow and non-readers are also necessary.

The findings and reports suggest that every educator and education leader needs to develop effective student support programs to secure student achievement in reading. Thus, the present study aimed to employ effective strategic reading intervention materials for remedial programs to provide teachers with adequate materials for struggling readers. The study output may help increase the number of proficient students in the country.

### *Framework of the Study*

Learning is a dynamic process involving students, educators, and learning. Teachers may create an atmosphere conducive to the efficient learning of their students if they are aware of the interrelationships between the components that impact learning. Thus, the potential to learn is a dynamically complicated system that seeks equilibrium. Biggs (1996) developed the Presage-Process-Product (3P) model to illustrate the interactions between instructors and students depending on their expectations for teaching and learning. The 3Ps model describes the arrangement of learning-related elements at three separate times. Individual states of being that precede the teaching process constitute the paradigm. The first stage of Biggs' model is the presage stage, which happens before learning, followed by the process stage, which occurs during

learning, and finally, the product stage, which is the consequence of learning. In connection with the study, the presage displays the pre-test results on the reading ability of the struggling readers in terms of word recognition, reading comprehension, and reading speed. The process displays the implementation of the remedial program using the developed strategic reading intervention materials, while the product is the results of the post-test that illustrates the improvement of the learners' reading ability. Identifying the present status of the learners in solving learning problems requires scientific investigations that primarily identify the problem's nature. It provides a better understanding of developing suitable interventions that target specific goals for the students' beneficiaries. Strategic reading interventions may support students' reading improvement and as an effective tool in remedial programs.

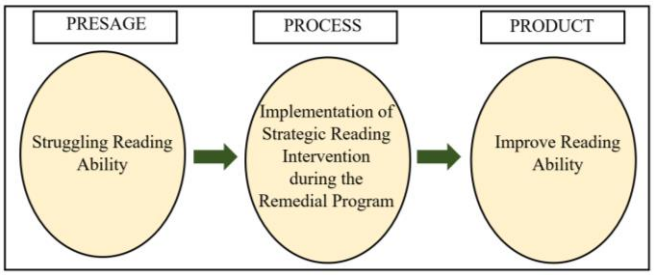



Figure 1. Adaptation of Presage-Process-Product Model

***Research Aim***

The study aimed to provide effective intervention to aid students reading ability; specifically, the study sought the following objectives:

1. Determine the reading ability of grade 6 struggling readers;
2. Develop strategic reading intervention materials to be used in a remedial program to improve the reading ability of grade 6 struggling readers; and
3. Determine the reading ability of grade 6 struggling readers following the implementation of strategic reading intervention material.

## Method

***Research Design***

The study used a quantitative observation approach to analyze the participants' reading ability before and after implementing the developed strategic reading intervention materials. The quantitative observation approach is an objective method of data analysis that uses numerical and statistical characteristics to quantify study variables (Mohajan, 2020). The observation technique considers the study variables in terms of amount, which was connected with quantities such as scale (Heinze et al., 2018).

***Context of the Study***

The study was conducted in one big school in Albay. The school annually provides remedial programs for struggling readers to avoid being left behind. In connection, the study utilized the developed strategic reading intervention material in

the remedial program to determine the reading improvement among the participants. Moreover, the study participants were the 38 grade 6 struggling readers aged 11 to 14 and were purposively selected using the 3 types of students in Nederveld's (1967) "The Effective Remedial Reading Program." Regarding selection, 184 grade 6 pupils from 5 sections underwent reading tests. The results were subjected to scrutiny to identify the qualified students. The criteria were reading achievement, reading potential, grade placement, and chronological age.

Moreover, the study used the school form 1 to identify the participants' chronological age. Furthermore, the study used reading stories, Dolch's (1936) basic sight words, and the Philippine informal reading inventory manual (Phil-IRI) Manual 2018 (Education, 2018) to assess the participants' word recognition, reading comprehension, and speed. Moreover, the study utilized basic sight words in the word recognition test, while the reading comprehension, which includes the speed test, was a three-page test composed of a 375-word reading selection that had to be read silently and orally by the participants.

Table 1. Participants groups based on Nederveld's 3 types of students

| Group | Reading Ability | Number of Participants |
|---|---|---|
| Group 1 | Reading achievement is below grade placement, reading potential and chronological age | 13 |
| Group 2 | Reading Achievement is below grade placement and chronological age | 17 |
| Group 3 | Reading Achievement is below reading potential but at grade level and chronological age | 10 |

***Data Gathering and Analysis***

The study underwent several phases of the data gathering process. It involves the collection and analysis of the pre-test and post-test results. After determining the participants' groups, the study provides a pre-test to measure the participants' reading ability. Through the oral reading of tales, paragraphs, and Dolch's fundamental sight words, the participants' word identification and comprehension abilities were assessed. Moreover, the reading comprehension test consisted of 4 parts: literal, interpretative, creative analysis, and application and creation. To measure reading speed, the participants engaged in oral reading of 220 words and silent reading of 375 words. The study used descriptive statistics such as mean score and standard deviation to quantify the reading ability of each group. Furthermore, after implementing the developed strategic reading intervention material, the post-test with the same assessment was conducted to measure the participants' improvement.

Table 2. Adapted scoring criteria for word recognition and reading comprehension

| Reading Ability | Classification of Reading Ability | | |
|---|---|---|---|
| | Frustration | Instruction | Independent |
| Word Recognition | 89-below | 90-96 | 97-100 |
| Reading Comprehension | 58 below | 59-79 | 80-100 |

Table 3. Scoring criteria for reading speed based on number of words for grade 6 learners

| Reading Ability | Classification of Reading Ability | | |
|---|---|---|---|
| | Slow | Average | Fast |
| Reading Speed | 160-below | 161-189 | 190-above |

Formula for assessing word recognition:

$$Word\ Recognition = \frac{No.of\ miscues/pronounce}{No\ of\ words}\ x\ 100$$

Formula for reading comprehension:

$$Reading\ Comprehension = \frac{Total\ correct\ answers}{Total\ number\ of\ questions}\ x\ 100$$

Formula for assessing reading speed:

$$Reading\ Comprehension = \frac{No.of\ words\ in\ the\ passage}{Reading\ minute}$$

***Ethical Considerations***

Permission to conduct the study was granted by the school principal and school superintendent through a response from the letter of research undertakings introduced to the respective offices. Arrangements were also made to meet research governance requirements. Moreover, the participants signed an informed consent form, which discussed the study background and observation procedures, confidentiality, benefits from participation, voluntary participation, and consent.

## Results

***The Reading Ability of the Participants***

Table 4. Pre-test results of the participants in word recognition and reading comprehension

| Groups | N | Word Recognition | | | Reading Comprehension | | |
|---|---|---|---|---|---|---|---|
| | | Level | Mean Score | Std. Dev. | Level | Mean Score | Std. Dev. |
| Group 1 | 13 | Frustration | 77.60 | 3.10 | Frustration | 19.70 | 6.71 |
| Group 2 | 17 | Frustration | 71.56 | 1.71 | Frustration | 21.33 | 4.16 |
| Group 3 | 10 | Frustration | 84.56 | 1.12 | Frustration | 39.88 | 4.23 |

Based on Table 4, the pre-test results of participants in word recognition and reading comprehension indicate frustration. Group 1 has a mean score of 77.60 for word recognition and 19.70 for reading comprehension. Moreover, group 2 has a mean score of 71.56 in word recognition and 21.33 for reading comprehension. Lastly, group 3 has a mean score of 84.56 in word recognition and 39.88 for reading comprehension.

Table 5. Pre-Test Results of Participants' Reading Speed

| Groups | N | Oral Reading | | | Silent Reading | | |
|---|---|---|---|---|---|---|---|
| | | Level | Mean Score | Std. Dev. | Level | Mean Score | Std. Dev. |
| Group 1 | 13 | Slow | 74.70 | 6.71 | Slow | 81.40 | 4.15 |
| Group 2 | 17 | Slow | 90.22 | 6.18 | Slow | 81.89 | 2.23 |
| Group 3 | 10 | Slow | 96.13 | 4.91 | Slow | 86.63 | 1.54 |

According to Table 5, the participants were classified as slow readers. Group 1 has a mean score of 74.70 in oral reading and 81.40 in silent reading. Furthermore, group 2 has a mean score of 90.22 in oral reading and 71.89 in silent reading. Moreover, group 3 has a mean score of 96.13 in oral reading and 86.63 in silent reading.

### *Strategic Reading Intervention Materials for the Remedial Program*

Table 6. Proposed Strategic Reading Intervention Materials

| Parts | Components | Teaching Strategy |
|---|---|---|
| Learning Content | Composed of competencies, learning objectives, topics, short instruction, phonetic readings, short stories with relevant designs, e.g., drawing of animals, objects, and colors, and video presentation. | Small group and one-on-one tutoring |
| Learning Tasks Guide | Composed of tasks and sub-tasks, the students were conditioned with question-and-answer activities and corrected the wrong responses. | Small group tutoring and one-on-one tutoring |
| Assessment Guide | Composed of scoring rubrics and item tests. | Teacher-assisted assessment; individual and group |
| Enhancement Guide | Composed of refresher activities and assessments based on the students' difficulties reflected in the assessment. | Small group tutoring and one-on-one tutoring |
| Learning Materials | The intervention used colored modules, illustrations, printed manipulative drawings, a portfolio, marker, video presentation, and PowerPoint presentation. | |

Table 6 shows the summary of the proposed strategic reading intervention material. The proposed strategic reading intervention materials were assessed using the evaluation rating sheet for print resources based on the guidelines and processes for learning resources management and development system (LRMDS) assessment and evaluation V1.0 by the DepEd (2019). The materials were evaluated by the field experts and showed very satisfactory results.

Furthermore, the strategic reading intervention was composed of 4 parts: the learning content guide, learning tasks guide, assessment guide, and enhancement guide. Moreover, the teaching strategies employed while implementing the materials were small group tutoring, one-on-one tutoring, and assisted individual and group assessment. It also used significant learning materials such as colored modules,

illustrations, printed manipulative drawings, a portfolio, marker, video presentation, and PowerPoint presentation. The advisers used the materials during the remedial sessions in the third and fourth quarters of the school year 2020-2021.

### *Reading Ability of the Participants After the Implementation of Strategic Reading Intervention Material*

Table 6. Post-Test Results of Participants' Word Recognition and Reading Comprehension

| Groups | N | Word Recognition | | | Reading Comprehension | | |
|---|---|---|---|---|---|---|---|
| | | Level | Mean Score | Std. Dev. | Level | Mean Score | Std. Dev. |
| Group 1 | 13 | Instruction | 94.40 | 2.24 | Instruction | 73.40 | 4.90 |
| Group 2 | 17 | Independent | 98.44 | 1.07 | Instruction | 88.44 | 3.80 |
| Group 3 | 10 | Independent | 99.06 | 1.25 | Independent | 91.69 | 2.39 |

According to Table 6, the post-test results of participants' word recognition and reading comprehension show improvement. Group 1 has a mean score of 94.40 (instruction) in word recognition and 73.40 (instruction) in reading comprehension. On the other hand, Group 2 has a mean score of 98.44 (independent) in word recognition and 88.44 (instruction) in reading comprehension. Meanwhile, group 3 has a mean score of 99.06 (independent) in word recognition and 91.69 (independent) in reading comprehension.

Table 7. Pre-Test Results of Participants' Reading Speed

| Groups | N | Oral Reading | | | Silent Reading | | |
|---|---|---|---|---|---|---|---|
| | | Indicator | Mean Score | Std. Dev. | Indicator | Mean Score | Std. Dev. |
| Group 1 | 13 | Average | 172.30 | 7.39 | Average | 178.80 | 9.22 |
| Group 2 | 17 | Average | 187.33 | 4.08 | Average | 188.78 | 3.88 |
| Group 3 | 10 | Average | 188.81 | 5.21 | Average | 194.75 | 4.18 |

Based on Table 7, the participants' mean scores also show improvement in reading speed. Group 1 has a mean score of 172.30 in oral reading (average) and 178.80 (average) in silent reading. While group 2 has a mean score of 187.33 (average) in oral reading and 188.78 (average) in silent reading. Finally, group 3 has a means a score of 188.81(average) in oral reading and 194.75 (average) in silent reading.

## Discussion

### *Reading Ability of Grade 6 Struggling Readers*

Although it was expected that the participants' reading ability was at a frustrating and slow level, the mean scores showed their problematic status in reading. The results of the participants' pre-test were strong evidence that although education in the country is free and accessible, many students still struggle with learning acquisition. A similar study by Tomas et al. (2021) revealed that most of the examined 4216 learners were at the frustration level in English reading ability. In addition, the World Bank's report showed that 10 to 22 percent of Grade 4, 5, and 9 pupils in the Philippines scored "at

or above minimal competency" across all three global assessments (Graham & Kelly, 2018).

The participants' frustrations in word recognition, reading comprehension, and speed can also be associated with low economic status; provided that the study was conducted in a public school, most students belonged to low-income families. According to the findings of a machine learning (ML) study conducted by the Dr. Andrew L. Tan Data Science Institute (ALTDSI), the majority of the Filipino students who scored poorly in reading comprehension on the Programme for International Student Assessment (PISA) in 2018 (Haw et al., 2021) came from low-income backgrounds where family and school environments do not promote growth mindsets (Pabalate, 2021). The existence of bad health, a lack of interest in reading, a lack of orientation and training to teach reading, and the frequent absence of students may have further consequences for the findings (Tomas et al., 2021).

The study results and similar related study findings suggest immediate actions by the school leaders and educators to formulate effective school interventions and support programs that help struggling students not be left behind. Strong reading abilities improve scholastic performance and self-image. Furthermore, reading literacy is a fundamental necessity for success in the 21st century.

***Strategic Reading Intervention Materials for the Remedial Program***

Through the assistance of the school's principal and class counselors, the developed materials for strategic reading intervention were effectively implemented in the remedial program for struggling readers. The materials acted as instructional tools for the duration of the program. It enables instructors to focus on student needs using premade materials, activities, and evaluations.

The participants progressed by comprehensive or focused tutoring in the developed strategic reading materials. The materials improved the pupils' phonemic awareness, allowing them to develop materials segment and manipulate phonemes provided orally before going on to print. It also facilitates the decoding process, which teaches learners letter-sound correlations and word patterns. Students use the information to decode as they segment and combine letter sounds to construct words. In addition, it separates lessons on high-frequency words from typical phonics lessons so that kids are aware that they must memorize certain words while reading sentences. In addition, the materials instruct students on the six syllable types and require them to divide lengthier multisyllabic words into syllables and legible pieces. Lastly, it directly teaches spelling patterns to pupils and supplements their reading engagement with spelling activities.

Students' difficulties with text comprehension arise from fundamental deficiencies in their literacy abilities (Sabatini et al., 2014). All pupils need a methodical scope and sequencing that teaches each phonics ability using controlled text, beginning with the simplest and graduating to the most complicated (Glazzard & Stokoe, 2017). Lastly, employing strategic interventions that target the students’ needs enhances the students’ learning and achievement.

***Reading Ability of Grade 6 Struggling Readers following the Implementation of Strategic Reading Intervention Materials***

The implantation of the developed strategic reading intervention materials shows progress in learners' reading ability across the groups. Reading intervention is a very successful approach to enhancing a student's reading abilities since it encourages the development of strong readers and confident writers (Finnegan & Mazin, 2016). From frustration and slow reading, the participants progressed from instruction to independent reading ability. It implies that a planned program that targets the students' needs is adequate for such a duration. The combination of varied teaching strategies and planned programs positively affects learning.

A plethora of information suggests that pupils who cannot read effectively by the age of eight or nine, when the focus in school shifts to reading to learn rather than learning to read, often struggle to catch up socially and academically with their classmates (Tomlinson, 2017). Certainly, inquiry and shared methodologies are now available to assist teachers in developing a variety of intervention strategies, from generating literacy-rich classrooms to implementing vital entirety group and direct learning strategies that can help pupils become optimistic, competent, and self-reliant readers (Helmz & Katz, 2016).

## Conclusions and Recommendations

The study's main objective is to develop and implement strategic reading intervention materials for remedial programs to support struggling readers improve their reading ability. Determining the status of struggling readers through observation and tests provides ideas and areas that need to consider in developing teaching intervention, and students support programs.

The findings of the study underpin the following: (1) struggling readers were on frustration level and slow reading ability; hence, Poverty, poor health, a loss of enthusiasm in reading, a lack of orientation and training to teach reading, and pupils' frequent absences may have further implications for the results; (2) teaching experience is a significant factor in developing effective learning materials; (3) a well-planned student support programs with research-based learning materials is effective in enhancing students reading ability. Educators should consider struggling readers an opportunity to explore other effective teaching methodologies rather than as a burden. The students' reading progress relies on their learning strategy and teaching approach, and strategies used by the teachers also greatly influence their performance. Moreover, educators should avoid using the one size fits all teaching strategies and curriculum as it assumes all students learn in the same ways.

To guarantee the success of every student in school, society as a whole should embrace the idea that no student should be left behind. With the aid of the community, every teacher's commitment to cultivating every student's mind might be positively progressive. School-community cooperation that provides vital support services to students' academic aspirations also contributes to nation-building. Students employ competencies learned in school to assist people of the community. Furthermore, school-community relationships contribute to all learners' overall quality of education.

The study focused only on the students' performance through observation and written tests to determine their status to develop the strategic reading intervention materials. Including teachers as participants may suggest deeper information and strategies that further enhance the materials developed. Moreover, the results of this study may guide future researchers to explore other possibilities for helping struggling readers and teachers.

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