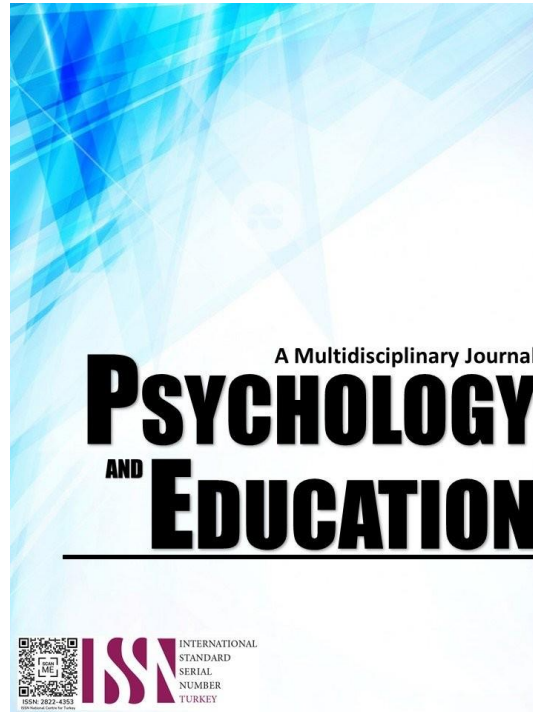# PROJECT PAGE (PROMOTING A PASSION FOR READING AND GROWTH IN EDUCATION) INTERVENTION FOR GRADE 6 PUPILS EXPERIENCING READING COMPREHENSION DIFFICULTIES

PROJECT PAGE (Promoting a Passion for Reading and Growth in Education) Intervention for Grade 6 Pupils Experiencing Reading Comprehension Difficulties

Ryza J. Regala,* Promise Joy B. Agmata, Liezel Mae D. Bumatay, Jonelson C. Escandallo,
Kristy Jane R. Muegna, Deveyvon L. Espinosa, Regine L. Generalao, Conie B. Cerna
For affiliations and correspondence, see the last page.

Abstract

This study examines the effectiveness of Project PAGE in improving the reading comprehension skills of sixth-grade students at Clementa F. Royo Elementary School is investigated. The study aimed to address the high number of students experiencing difficulties understanding what they read, as seen in national and local educational settings. An action research approach was used in the study, which involved selecting 30 students purposefully and categorizing them into instructional and frustration groups based on their pretest scores. The intervention included using the Alabama Reading and Mathematics Test (ARMT) to evaluate reading comprehension before and after implementing Project PAGE. The methodology consisted of conducting a pretest, followed by a two-week intervention period, and concluding with a post-test. Data analysis involved calculating the mean and standard deviation and conducting a paired sample t-test to assess the significance of score improvements. The study's ultimate finding is that Project PAGE is a successful intervention for enhancing reading comprehension, suggesting that similar programs could be advantageous for other students facing challenges.

Keywords: *reading comprehension, Project PAGE. interactive learning approaches*

Introduction

Reading is the cognitive process of decoding and understanding written or printed symbols, typically in the form of words and sentences. It involves the ability to interpret and comprehend the meaning of written language. It is a fundamental language skill, along with listening, speaking, and writing. It helps individuals learn, get information, and enjoy stories or texts.

In Canada, according to Stouffer (2023), the release of the Right to Read report by the Ontario Human Rights Commission marks a significant milestone in advocating for the rights of all students. The report focuses particularly on those who face difficulty in reading. This initiative underscores the commitment to ensuring equitable access to education for every student, addressing the crucial aspect of literacy and learning challenges within the educational landscape. This posits that children should have equitable access to literacy education that includes access to supportive learning environments and high-quality resources.

In the Philippines, there is a significant proportion of students with low academic performance compared to other nations and economies participating in PISA. Specifically, 80% of Filipino students fell below the minimum proficiency level in reading, contributing to their English, Mathematics, and Science. The Department of Education (DepEd) responded to this challenge by initiating the Hamon: Bawat Bata Bumabasa (3Bs Initiatives), a program aimed at strengthening the promotion of reading. Through this initiative, DepEd is dedicated to ensuring that every learner achieves reading proficiency at their respective grade level (Tomas, 2021).

In the Division of Davao del Norte, particularly in Clementa F. Royo Elementary School, it was observable that some pupils were facing difficulty in reading. The school has limited resources and has no early intervention programs to address this problem. It is important to understand and address their specific learning needs to create interventions to foster a supportive and inclusive learning environment.

The purpose of this study is to determine the improvement of the student's reading comprehension upon the implementation of Project PAGE and develop an intervention plan to further enhance the reading comprehension skills of the students. It highlights the pre-test to determine the pupils who were in instructional and frustration levels. Also, the post-test to determine the effectiveness of Project PAGE implementation. Then, the researchers will determine the differences between the pre-test and post-test to know the impact of Project PAGE to the grade 6 learners.

This study aims to apply Project PAGE using the Alabama Reading and Mathematics Test (ARMT) in enhancing the reading comprehension of Grade 6 pupils. The researchers identified a gap in the study by highlighting the need for improved reading comprehension among Grade 6 learners who are at the instructional level and frustration level. The goal is to provide a foundation for schools' agendas and initiatives, ultimately enhancing reading programs.

In relation to a research study, study conducted by Estremera (2018) entitled, "Factors Affecting the Reading Comprehension of Grade Six Pupils in the City Division of Sorsogon, Philippines as Basis for the Development of Instructional Material" which focused on the language factors affecting reading comprehension abilities, it was revealed that due to limited vocabulary, poor grammar, and spelling can lead to difficulty in finding the main idea of what is being read. Another research study conducted by Cadiong (2021) entitled, "Factors Affecting the Reading Comprehension Level of Grade VI Learners of Selected Elementary School in the District of Tanza, Cavite" revealed that the majority of the grade 6 learners comprised the instructional level of reading comprehension; the parent, home,

teacher and learner factors all have moderate extent of association to the learner's level of comprehension thus, all the factors considered significantly affect the reading comprehension of the 6th grade learners. This research identifies a gap in the literature, which currently lacks sufficient focus on improving the reading comprehension skills of Grade 6 learners. Given the critical importance of addressing these skills through various comprehension strategies, particularly in light of ongoing concerns about elementary students' reading abilities, previous studies have highlighted this gap. Consequently, this study aims to contribute significantly to the existing literature by emphasizing the need to enhance overall academic success through targeted interventions aimed at strengthening reading comprehension among Grade 6 students.

Research Questions

The research questions below are to investigate reasons on how to address reading difficulties on Elementary learners. Alabama Reading and Mathematics Test (ARMT) Tool will be an intervention for the learners to address this problem. The research questions that guided this study are the following:

1. What is the level of students' reading comprehension before the project PAGE intervention on the reading skills of the elementary grade pupils?
2. What is the level of students' reading comprehension after the project PAGE intervention on the reading skills of the elementary grade pupils?
3. What is the effect of Project PAGE intervention on the reading comprehension of elementary grade pupils?

Proposed Intervention/Action Plan

On the first day of assessment, a pre-test was administered using an 11-item test based on material from the Alabama Reading and Mathematics Test (ARMT). This test was designed to evaluate the initial comprehension levels of the students. Each item on the test aimed to gauge the understanding and grasp of the text material among the pupils. This pre-test served as a benchmark to ascertain the starting point of comprehension abilities before any instructional interventions or further assessments were conducted.

In line with this, the Think-Pair-Share strategy was introduced to boost student understanding and encourage teamwork. Students first reflected independently on a text, then discussed their interpretations in pairs, and finally shared insights and questions with the whole class. This approach aimed to deepen comprehension through individual reflection, collaborative discussion, and group engagement.

On the second day, researchers handed out practice texts or storybooks along with assessment tools, enabling students to practice reading using the Think-Pair-Share Strategy. This allowed students to independently reflect on the texts, collaborate in pairs to discuss interpretations and participate in whole-class discussions to share insights and questions. The goal was to strengthen reading comprehension through active engagement and structured learning activities.

Between Day 3 and Day 9, the intervention was actively carried out with frequent follow-ups and progress assessments. Educators consistently monitored student participation and understanding through the strategies implemented. These regular checks ensured students stayed aligned with their learning goals and allowed for ongoing evaluation of their progress in comprehending and applying the intervention. The focus was on maintaining momentum and making necessary adjustments to enhance learning outcomes.

Lastly, on Day 10, the effectiveness of the Think-Pair-Share strategy was evaluated through a post-test using an 11-item parallel test adapted from the ARMT. This assessment aimed to gauge the students' comprehension levels following the implementation of the strategy. The test measured how well students applied the strategy to understand and interpret the material presented. It served as a means to assess the impact of the intervention on their comprehension abilities, providing valuable feedback on the effectiveness of the instructional approach over the course of the study.

Methodology

Research Design

This chapter presents the method used in this quantitative descriptive research design. Specifically, the following are included: research design, sampling design, the role of the researcher, conversational partners, data sources, data gathering procedure, instrumentation, face-to-face interview, data analysis, trustworthiness of the study, and ethical considerations.

Respondents

The respondents of this study were the Grade 6 pupils under instructional level and frustration level from Clementa F. Royo Elementary School. 30 students were purposively selected as participants in this study in which it is based on their pre-test scores. This study included 11-12 year-old students from Clementa. The intervention focused solely on fluency and reading comprehension, appropriate for the participants' grade level. The researchers specifically selected Grade 6 pupils, to enhance their reading comprehension skills as they are particularly prone to challenges in transitioning from elementary to secondary education. The research aims to enhance students' reading skills. By the end of the study, students at the frustration level should improve their reading comprehension and be able to read texts thoroughly using the Project PAGE approach.

Instrument

The researchers used the Alabama Reading and Mathematics Test (ARMT) Tool to assess learners' reading comprehension levels before and after the implementation of Project PAGE. The test consisted of Passages with Items, three (3) literal-level questions, six (6) interpretative questions, and two (2) applied questions for a total of eleven (11) questions.

Procedure

The researchers utilized questionnaires before and after the implementation of intervention and innovation. The pre-test questionnaire will measure the average of the students who are having difficulty with reading comprehension before the implementation. The post-test questionnaire will measure the knowledge of the pupils through reading and answering questions and determine comprehension ability.

To gather the necessary data for this research, the following steps were taken by the researchers. First, before starting the study, the researchers sent a request to the principals of the schools where the participants were enrolled. Then, the researchers administered a pretest using the ARMT tool to determine the participants' initial reading comprehension levels. Following the pretest, Project PAGE was introduced, followed by a two-weeks intervention period. At the end of the research process, a posttest was conducted using the same tool to evaluate any improvements in the participants' reading comprehension levels after the intervention. The data from the pretest and posttest were then collected and tabulated.

Ethical Considerations

Observing ethical standards in research is essential. At the core, this helped shape the true aims of the study, such as knowledge, truth, and avoidance of error and promoted values essential to collaborative work, such as trust, accountability, mutual respect, and fairness. To ensure ethical research, this study followed and respected the principles of research ethics from the Belmont Report (2010). These principles respect a person's autonomy, beneficence and non-maleficence, justice, informed consent, confidentiality and data protection, integrity, and conflict of interest.

Results and Discussion

This section presents the findings and elaboration of results of Project PAGE as a strategy for enhancing reading comprehension among grade 6 pupils of Clementa F. Royo Elementary School. This section of the study presents the data gathered by the researchers, which was meticulously organized, presented, analyzed, and interpreted to achieve a comprehensive understanding of the collected information.

This section presented the answers to the research questions presented earlier in this paper. This is composed of the analysis of data on the performance of the students on their pre-test and posttest.

Research Question No.1: What is the level of students' reading comprehension before the project PAGE intervention on the reading skills of the elementary grade pupils?

The Table 1 shows the pre-test data on the reading comprehension of grade 6 learners. Out of 50 students in one section, there were 30 students considered as participants for the Project PAGE implementation. It revealed that it has an overall mean of 5.27 indicating low performance by the pupils in pre-test. The highest score achieved was 8 that has an equivalent percentage of 73% and it has a total percentage of 16.67%, while the lowest scores was 2 that has an equivalent percentage of 18 and it has a total percentage of 10.00%. The most frequent score was 7, obtained by 7 students.

Table 1. *Pre-Test*

Pre-Test Score	Frequency	Equivalent Percentage of Score	Interpretation for Reading Comprehension Level	Percentage
2	3	18%	Frustration	10.00%
3	4	27%	Frustration	13.33%
4	6	36%	Frustration	20.00%
5	3	45%	Frustration	10.00%
6	2	55%	Frustration	6.67%
7	7	64%	Instructional	23.33%
8	5	73%	Instructional	16.67%
Total	30			100.00%
Overall Mean				5.27
Description				Low

To support the findings, Delfin (2020) stated that, there are different ways that can be effective remedies for students struggling with reading difficulties. Teachers and learners can create most of these ways in the learning process. Definitely, the struggling readers in school who are not receiving remediation are making little to no progress. Hence, it is essential for them to intensely take the intervention needed. Potentially, integrating reading strategies into daily classroom routines could lead the improvement of the learners

not only in reading, but across the curriculum.

Research Question No.2: What is the level of students' reading comprehension after the project PAGE intervention on the reading skills of the elementary grade pupils?

Table 2 shows the post-test data on the reading comprehension of grade 6 learners. 30 students participated in Project PAGE implementation. It revealed that it has an overall mean of 10.50 indicating very high performance by pupils in the post-test. The highest score achieved was 11 which has an equivalent percentage of 100% and it has a total percentage of 56.67%, while the lowest score was 9 which has an equivalent percentage of 82 and it has a total percentage of 6.67%. The scores 11 were obtained by 17 pupils making them the most frequent scores.

Table 2. *Post-Test*

Post-Test Score	Frequency	Equivalent Percentage of Score	Interpretation for Reading Comprehension Level	Percentage
9	2	82%	Independent	6.67%
10	11	91%	Independent	36.67%
11	17	100%	Independent	56.67%
Total	30			100.00%
Overall Mean				10.50
Description				Very High

To support the findings, there are previous and recent research regarding comprehension. One case is the study of Lumayog (2020) on the reading interests associated with the reading comprehension of Grade VI pupils. The result showed that reading comprehension was dependent upon one's exposure to several kinds of reading materials and there exists a significant association between reading interests and reading comprehension. There was comprehension if one had developed an interest in reading.

Further, Gadgahan (2022) conducted the correlation between factors and levels of reading comprehension of the grade six pupils in Aurora Province. It looks into the comprehension level of the pupils using the following indicators: noting details, getting the main idea of the selection, sequencing events and predicting outcomes. She found out that the reading comprehension of pupils in terms of noting details in independent which mean that the pupils can read with ease without the help of the teacher. Whereas, in getting the main idea, the pupils' comprehension is classified an independent or instructional. In the study, it was found that the pupils' oral reading is rhythmical with conversational tone and correct interpretation. However, in sequencing events and in predicting outcomes, many fell under frustration level which means that the pupils answered from 0-1 questions out of the six questions based on the passage or selection.

Presented in Table 3 are the results of the significant difference between the pre-test and post-test scores, indicating the reading comprehension levels of 30 pupils in the descriptive research analysis, $t(29)=12.152, p<.001$. Since the probability value ($p<.001$) is less than the level of significance ($=0.05$), the null hypothesis is being rejected. Therefore, there is a significant difference between the pre-test and post-test.

Table 3. *Significant Difference Between Pretest and Post-Test*

Type of Test	N	df	Mean	SD	t-value	P-value	Decision $\alpha=0.05$
Pre-Test	30		5.27	2.05	-12.152	< .001	Significant
Post-Test	30	29	10.50	0.63			

In terms of mean scores, the pre-test showed a mean of 5.27, with a standard deviation (SD) of 2.05, while the post-test showed a mean of 10.50, with a standard deviation (SD) of 0.63. This indicates a notable increase in performance from the pre-test to the post-test among the descriptive research analysis.

The study showed a clear boost in students' reading comprehension ability, as evidenced by the substantial difference between their pretest and post-test scores. This improvement underscores the success of the Project PAGE intervention in enhancing the reading comprehension of grade 6 learners. This finding aligns with prior research by Eli (2021), which emphasizes the efficacy of interactive learning approaches in improving academic performance. Eli's study suggests that students are more engaged and motivated when learning through participatory methods, like those employed in Project PAGE.

Furthermore, recent research by Son and Fatimah (2020) corroborates the positive impact of interactive interventions on learners' reading comprehension abilities. Their analysis indicates that hands-on learning experiences and guided practice, such as those offered by Project PAGE, not only enhance reading comprehension but also improve students' communication and reasoning skills. By actively engaging in reading passages in an inclusive environment, pupils develop skills and abilities that enhance their academic performance.

Additionally, the study's findings align with the research conducted by Malik and Zhu (2023), which emphasizes the importance of incorporating hands-on activities in educational interventions. Their work suggests that experiential learning approaches, such as those implemented in Project PAGE, offer avenues for personalized instruction and timely feedback, resulting in enhanced learning outcomes. Through the utilization of interactive workshops and real-world simulations, educators can cultivate engaging learning

atmospheres that accommodate various learning preferences and foster continuous academic progress.

Conclusions

The study conclusively demonstrates that the Project PAGE intervention significantly enhances the reading comprehension abilities of grade 6 learners. The comparison of pretest and post-test scores indicates a marked improvement, transitioning students from a fairly satisfactory level to an outstanding performance. This improvement underscores the effectiveness of the targeted support and teaching methods provided by Project PAGE.

The results affirm that Project PAGE is a successful intervention for improving reading comprehension among students. The program's structured approach, which focuses on procedural reflection, conceptual understanding, adaptive reasoning, and strategic analysis, equips students with essential skills for better reading comprehension. Over a brief two-week period, students exhibited substantial progress, highlighting the program's efficiency and effectiveness.

Moreover, the success of Project PAGE suggests that similar interventions could be beneficial for other students struggling with reading comprehension. By providing targeted lessons and support, such programs can help students achieve higher proficiency levels, better grades, and greater confidence in reading. This strong foundation in reading comprehension is crucial for their future academic success, particularly as they transition to secondary education.

In conclusion, Project PAGE is a valuable educational tool that significantly enhances students' reading comprehension, thereby improving their overall academic performance and preparing them for future challenges.

The lack of variation in the process of reading is one of the causes of low reading skills in students. Therefore, it is necessary to maintain interest in learning so that students can improve reading skills. Based on the statement above, the use of interactive learning media is regarded as one of the ways or methods of learning to improve reading skills. This study comprised students from Clementa who were Grade 6 learners at Clementa F. Royo Elementary School. The intervention used in this study aims to address the reading comprehension considering the grade level of the participants.

In general, the researchers have determined that Project PAGE is useful and helpful in improving students' reading comprehension. The researchers recommend this strategy as an intervention for students under frustration level and as a metacognitive strategy for students at instructional and independent levels. The researchers will employ this strategy to promote and improve reading comprehension in their school. Project PAGE may also be adapted by their Schools Division. It is also recommended that future studies expand the scope of the research to other sections of a scholarly research paper and broaden the sample of the study to include the primary pupils who are in the early stages of developing reading comprehension.

References

Caraig, R. & Quimbo, MA. (2022) Assessing reading comprehension difficulties in core science subjects of senior high school students in a private school in Calamba City, Philippines. International Journal of Curriculum and Instruction 14(3) (2022) 1983- 2010

Cadiong, A.M. (2021). Factors Affecting the Reading Comprehension Level of Grade VI Learners of Selected Elementary School in the District of Tanza, Cavite

Clark, J.S., Porath, S., Thiele, J., Jobe, M. (2020) Action Research. Kansas State University Libraries

Darling-Hammond, L., Ross, P., & Milliken, M. (2006). High school size, organization, and content: What matters for student success?. Brookings papers on education policy, (9), 163-203.

Eli, T. (2021). Studentsperspectives on the use of innovative and interactive teaching methods at the University of Nouakchott Al Aasriya, Mauritania: English department as a case study. International Journal of Technology, Innovation and Management (IJTIM), 1(2), 90-104.

Estremera, M. (2018). Factors Affecting the Reading Comprehension of Grade Six Pupils in the City Division of Sorsogon, Philippines as Basis for the Development of Instructional Material.

Flippo, F (2014). Reading assessment and Instruction received glowing reviews for its unabashed belief in the capabilities of students.

Frazier, L., Carlson, K., & Clifton Jr, C. (2006). Prosodic phrasing is central to language comprehension. Trends in cognitive sciences, 10(6), 244-249.

Hadaway (2018). Data Gathering. https://fuelcycle.com/blog/the-3-most common-observation researchmethods

Hotjar, D. (2018). The ultimate guide to quantitative data analysis. https://www.hotjar.com/quantitative-data-analysis/

Lemberger, M. E., Brigman, G., Webb, L., & Moore, M. M. (2012). Student success skills: An evidence-based cognitive and social change theory for student achievement. Journal of Education, 192(2-3), 89-99.

Malik, K. M., & Zhu, M. (2023). Do project-based learning, hands-on activities, and flipped teaching enhance student's learning of

introductory theoretical computing classes. Education and information technologies, 28(3), 3581-3604.

Son, A. L., & Fatimah, S. (2020). Students' Mathematical Problem-Solving Ability Based on Teaching Models Intervention and Cognitive Style. Journal on Mathematics Education, 11(2), 209-222.

Affiliations and Corresponding Information

Ryza J. Regala
Kapalong College of Agriculture, Sciences and Technology – Philippines

Promise Joy B. Agmata
Kapalong College of Agriculture, Sciences and Technology – Philippines

Liezel Mae D. Bumatay
Kapalong College of Agriculture, Sciences and Technology – Philippines

Jonelson C. Escandallo, PhD
Kapalong College of Agriculture, Sciences and Technology – Philippines

Kristy Jane R. Muegna, PhD
Kapalong College of Agriculture, Sciences and Technology – Philippines

Deveyvon L. Espinosa, PhD
Kapalong College of Agriculture, Sciences and Technology – Philippines

Regine L. Generalao, MST - Mathematics
Kapalong College of Agriculture, Sciences and Technology – Philippines

Conie B. Cerna, MAEd
Kapalong College of Agriculture, Sciences and Technology – Philippines