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LEADING PRACTICES IN EDUCATION: COMPENDUIM OF RESEARCH ON STRATEGIES INTERVENTION AND EDUCATOR WELL-BEING

PROJECT GREEN: GUIDED READING EXPLORATORY EXPERIENCES WITH NATURE

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Abstract

This study examined the effectiveness of Project GREEN (Guided Reading and Exploratory Experiences with Nature) in enhancing the reading and comprehension skills of Grade 3 students at Baras-Pinugay Phase 2 Elementary School during the 2024–2025 academic year. A quasi-experimental design was utilized, employing control and experimental groups with pre-test and post-test assessments to evaluate student performance. Data analysis included statistical measures such as mean, standard deviation, and t-tests, complemented by qualitative analysis to support the findings.

The results indicated that, prior to the intervention, students in both groups performed at a frustration level in reading. Following the implementation of Project GREEN, the experimental group demonstrated significant progress, reaching the independent reading level. The control group, which received traditional reading instruction, also showed improvement but remained at the instructional level. Statistical analysis confirmed a significant difference in performance between the two groups post-intervention.

The study concludes that Project GREEN is an effective method for enhancing students' reading and comprehension skills, offering experiential learning opportunities that actively engage students and support literacy development

Keywords – *Project GREEN, Guided Reading, Exploratory Experiences, Nature-Based Learning Reading Comprehension*

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INTRODUCTION

The foundation of a child's educational journey is established through primary education, where the development of reading and comprehension skills becomes a crucial focus. Literacy serves as a cornerstone of learning, essential for acquiring knowledge, enhancing critical thinking, and promoting intellectual growth. Reading proficiency, especially during the early years, lays the groundwork for long-term academic success and lifelong learning. Recognizing its significance, educational systems across the

globe continue to prioritize literacy as a key component of early education. In the Philippine context, however, reading difficulties among learners remain a persistent concern.

At the start of the 2024–2025 academic year, data from Baras-Pinugay Phase 2 Elementary School revealed that 87 out of 575 Grade 3 students—or 15.73%—were classified as non-readers. This alarming statistic reflects a broader issue in foundational literacy and highlights the need for innovative and targeted interventions. According to James (2014), reading comprehension challenges continue to impede student performance and must be addressed early to prevent wider learning gaps. Although traditional reading instruction has long been implemented, many students remain disengaged and unmotivated, particularly in confined classroom environments. With the increasing digitization of today's world, there are growing concerns that children are becoming detached from nature, which may negatively affect their overall development and well-being. Thus, there is a need for an approach that not only strengthens reading skills but also fosters students' connection with the natural world.

To respond to these challenges, Project GREEN: Guided Reading and Exploratory Experiences with Nature was conceptualized. The primary goal of this project is to improve students' reading and comprehension skills through the integration of guided reading sessions and nature-based activities. By conducting reading instruction outdoors, the project provides an alternative to traditional classrooms, offering students a refreshing, enjoyable, and engaging way to learn. Through nature-themed texts and hands-on exploration, students are encouraged to connect literacy with real-world experiences, thereby deepening their understanding and stimulating curiosity. Furthermore, the project fosters collaboration and social interaction, which are essential in sustaining students' motivation and engagement.

The theoretical underpinning of Project GREEN lies in Lev Vygotsky's (1962) social constructivist learning theory, which emphasizes the importance of social interaction and scaffolded support in the learning process. Guided reading, as a strategy rooted in this theory, allows learners to construct meaning with the support of peers and teachers while engaging with developmentally appropriate

texts. Prior to the implementation of guided reading, it is essential to assess each student's reading level and habits through data collection tools such as the Comprehensive Rapid Literacy Assessment (CRLA). This five-minute diagnostic tool allows educators to identify students' reading profiles quickly and design strategies that meet individual needs. The Department of Education has also introduced literacy-focused programs such as Project BRB4 (Blue Rizal: Barangayan para sa Bawat Bata Bumabasa) to support struggling readers, showing a commitment to improving literacy outcomes through localized and community-based efforts.

By integrating Vygotsky's theory with practical assessment tools and nature-based learning strategies, Project GREEN aims to achieve five key outcomes: improved literacy and comprehension, increased engagement through outdoor learning, enhanced teacher effectiveness in using nature as a pedagogical tool, positive shifts in students' attitudes toward reading and the environment, and evidence-based evaluation of reading progress. A pretest-post test design will be used to assess the project's impact, comparing the performance of students exposed to Project GREEN with those in a control group. Through this initiative, teachers at Baras-Pinugay Phase 2 Elementary School hope to address the reading challenges their students face and foster a deeper, more meaningful learning experience that connects language, literacy, and nature

OBJECTIVES OF THE STUDY

This research study aims to determine the effectiveness of Project GREEN (Guided Reading and Exploratory Experiences with Nature) on the reading comprehension of the Grade 3 pupils of Baras-Pinugay Phase 2 Elementary School for the School Year 2023 – 2024. Specifically, the study will answer the following questions:

1.What is the level of the reading and comprehension skills of the controlled group as revealed by the pretest and post test results?

2.What is the reading skill level of Grade 3 pupils before and after exposure to Project GREEN (Guided Reading and Exploratory Experiences with Nature) as revealed by the pretest and post test results?

3.Is there a significant difference on the level of reading and comprehension skills of the controlled and experimental groups as revealed by the post test results?

4.How can the experiences of the pupils who were exposed to Project GREEN (Guided

Reading and Exploratory Experiences with Nature) be described?

METHODOLOGY

The study will utilize an experimental design, incorporating both control and experimental groups to assess the impact of Project GREEN: Guided Reading and Exploratory Experiences with Nature on students' reading proficiency. To establish a baseline for reading skills, a uniform pretest will be administered to both groups. This pretest, adopted from the Philippine Informal Reading Inventory (PHIL-IRI) materials, consists of 20 multiple-choice items designed to evaluate the students' current reading and comprehension levels. A similar posttest will be administered after the intervention to measure any changes in performance.

The data collected from these pretest and posttest assessments will allow for a detailed comparison of reading proficiency levels before and after the implementation of the project. The researcher will analyze the test results to identify trends, patterns, and improvements in the experimental group's reading skills as compared to the control group, which will receive traditional instruction.

To measure and categorize the reading and comprehension skills of the students, a defined scale will be used. This scale will provide a clear framework for interpreting the pretest and posttest results, ensuring that the findings are both reliable and valid. By using this systematic approach, the study will provide concrete evidence of the effectiveness of the Project GREEN intervention in enhancing reading

To ensure fairness and equal opportunity for participation, the sections will be selected using a random sampling technique. The Grade 3 cohort consists of two sections: one will serve as the control group, while the other will be the experimental group. The control group will receive traditional teaching methods, while the experimental group will be exposed to Project GREEN and its nature-based guided reading approach.

The selected respondents are appropriate for this study as they represent Key Stage 1 learners, a critical stage in a child's language and reading development. This approach is particularly relevant for students who struggle with reading, as it provides them with an opportunity to improve their literacy skills in a more engaging and interactive learning environment.

To assess the reading and comprehension skills of the control group as indicated by the

pretest and posttest results, mean and standard deviation will be calculated.

To evaluate the reading skill levels of Grade 3 pupils before and after their exposure to Project GREEN: Guided Reading and Exploratory Experiences with Nature, mean and standard deviation will also be used to analyse the pretest and post test data.

To determine whether there is a significant difference in the reading skill levels of Grade pupils before and after exposure to Project GREEN, a dependent t-test will be applied to compare the pretest and post test results.

To examine whether there is a significant difference in the reading and comprehension skills between the control and experimental groups, based on their post test results, an independent t-test will be used for comparison.participants about the purpose of the instrument administration and the overall objectives of the study. Please ensure that sub-headings and their levels are formatted appropriately.

RESULTS AND DISCUSSION

Level of Performance of the Respondents in the Control Group Before and After Exposure to Project GREEN (Guided Reading and Exploratory Experiences with Nature) with Respect to Reading and Comprehension Skills

Table 1 on the next page presents the level of performance respondents in the control group before and after exposure to Project GREEN (Guided Reading and Exploratory Experiences with Nature) with respect to reading and comprehension skills. As revealed by the results of the table on the next page, it shows that the pretest result of the control group obtained an average of 1.45, 2.93 and 2.73 in reading and comprehension skills in terms of literal, inferential and critical respectively. These are

verbally interpreted as Frustration which implies that students need to improve them performances in reading and uplift comprehension skills of pupils through the help of their increased mean scores and corresponding changes in verbal interpretation

The increase in the grand total mean from 7.11 (F) to 13.59 (I) reflects an overall positive development in their reading and comprehension abilities after the intervention.

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In addition, the pretest standard deviations of the control group revealed a result of 0.85, 0.31 and 0.13 while posttest standard deviations are 2.37, 1.59 and 0.08 for literal inferential and critical respectively. This means that pupils' performances are close to each other, and their performances are likely the same. Overall, the pretest result for control group is 7.11 which is verbally interpreted a Frustration with a standard deviation of 0.66. While the posttest result obtained a mean of 13.59 with a standard deviation of 1.16. The result in the pretest did not exceed half the total score of 20 which means that an action must be taken to address the need of these pupils and to ensure the increase in pupils' reading and comprehension skills. On the contrary, the

post-test is more than the total score yet it is still under the instructional readers.

In the study of Nayak (2011), it revealed that in comparison to the no-treatment control significant improvement in reading accuracy, the children in the guided reading group showed a significant improvement in their not significantly improve in reading comprehension when compared to the no-treatment group to the no-treatment group book reading group did not significantly improve in reading comprehension when compared to the no-treatment group

Table 1

Level of Performance of the Respondents in the Control Group Before and

After Exposure to Project GREEN (Guided Reading and Exploratory Experiences with Nature) with Respect to Reading

Reading and Comprehension Skills	Pretest			Posttest		
	Mean	Sd	VI	Mean	Sd	VI
Literal	1.45	0.85	F	2.99	2.37	I
Inferential	2.93	0.31	F	5.79	1.59	I
Critical	2.73	0.13	F	4.81	0.08	I
Grand Total	7.11	0.66	F	13.59	1.16	I

Legend: F – Frustration, I – Instructional, ID – Independent

Level of Performance of the Respondents in the Experimental Group Before and After

Exposure to Project GREEN (Guided Reading and Exploratory Experiences with

Nature) with Respect to Reading and Comprehension Skills

Table 2 on the presents the level of performance respondents in the experimental group before and after

exposure to Project GREEN (Guided Reading and Exploratory Experiences with Nature) with respect to reading and comprehension skills.

Level of Performance of the Respondents in the Experimental Group Before and After Exposure to Project GREEN (Guided Reading and Exploratory Experiences with Nature) with Respect to Reading and Comprehension Skills

Reading and Comprehension Skills	Pretest			Posttest		
	Mean	Sd	VI	Mean	Sd	VI
Literal	1.91	1.48	F	4.01	2.13	ID
Inferential	3.56	0.18	F	6.96	2.22	ID
Critical	3.93	0.64	F	5.45	0.0004	ID
Grand Total	**9.4**	**0.88**	**F**	**16.42**	**1.20**	ID

Legend: Legend: F – Frustration,
I – Instructional, , ID – Independent

The data presented in the table on the previous page indicates that, in the pretest phase, the experimental group achieved mean scores of 1.91 (Literal), 3.56 (Inferential), and 3.93 (Critical), with corresponding standard deviations of 1.48, 0.18, and 0.64. These scores are indicative of a frustration level in these skill areas. Additionally, the overall pretest score for the experimental group was 9.4, which aligns with the frustration categorization. This suggests a need for intervention programs or projects aimed at enhancing students' reading and comprehension abilities. It is therefore appropriate to engage students in activities designed to strengthen these skills.

Prior to participation in Project GREEN (Guided Reading and Exploratory Experiences with Nature), respondents were functioning at a frustration level across all three domains—literal, inferential, and critical reading—evidenced by their low pretest mean scores and relatively small standard deviations, particularly in inferential skills. This uniformity indicates that students were collectively experiencing difficulties in these areas.

Following exposure to Project GREEN, significant improvements were observed across all domains. The students progressed from the frustration level to an independent level of performance in literal, inferential, and critical reading skills. Specifically, the mean scores increased appreciably: literal comprehension rose from 1.91 to 4.01, inferential skills from 3.56 to 6.96, and critical skills from 3.93 to 5.45. These improvements demonstrate not only

progress but also a transition toward independent reading competence, wherein students can interpret texts with minimal teacher assistance. Though there was a slight increase in score variability—most notably in literal and inferential skills—this trend is expected as students develop at different rates. The near-zero standard deviation in critical skills posttest (0.0004) indicates homogeneity among students in reaching the independent level in critical thinking tasks, suggesting consistent achievement.

Overall, the grand total mean score increased from 9.40 (pretest, frustration level) to 16.42 (posttest, independent level), reflecting a substantial advancement in reading and comprehension abilities attributable to Project GREEN.

The initial pretest scores delineate a consistent struggle among respondents across all skill areas. In stark contrast, post-intervention results reveal a marked improvement, with all students reaching the independent level. The data show that literal comprehension improved from a mean of 1.91 to 4.01, inferential comprehension from 3.56 to 6.96, and critical comprehension from 3.93 to 5.45. The total mean score increased significantly, from 9.40 to 16.42, indicating meaningful gains in overall reading and comprehension skills. The increase in standard deviations—especially for literal and inferential skills—reflects individual differences in learning progress, which is a natural outcome of personalized instruction and varied learning paces.

The posttest results affirm that, following the intervention, students are capable of independently decoding, understanding, and critically analyzing texts. This underscores the positive impact of Project GREEN on developing higher-order reading skills. The findings support the conclusion that integrating outdoor, nature-based activities with guided reading enhances students' literacy development. Through active engagement with natural environments and purposeful reading exercises, students not only improve their reading skills but also foster critical thinking, curiosity, and a deeper connection to the texts they explore.

According to Harris (2015), outdoor education facilitates personal growth and provides opportunities for students to learn about their environment. Spending time in nature enables children to gain experiential knowledge of the natural world, develop

resilience through risk-taking, and acquire skills in teamwork, negotiation, creative thinking, and problem-solving. These experiences contribute to the development of key life skills essential for both personal and professional success.

Table 3

Significant Difference on the Level of Performance of the Respondents in Experimental Groups After Exposure to Project GREEN (Guided Reading and Exploratory experiences with Nature) with Respect to Reading and Comprehension Skills

Reading and Comprehension Skills	Group	Mean	Sd.	Mean Difference	t	df	Sig.	Ho	VI
1. Literal	Control	2.99	2.37	1.02	-2.11	84	0.038	R	HI
	Experimental	4.01	2.13						
2. Inferential	Control	5.79	1.59	1.17	-2.83	78	0.0059	R	HI
	Experimental	6.96	2.22						
3. Critical	Control	4.81	0.08	0.64	-52.40	87	4.86	R	HI
	Experimental	5.45	0.004						
Total	**Control**	**13.59**	**1.16**	**2.83**	**-11.18**	**85**	farless than 0.05	R	HI
	Experimental	**16.42**	**1.20**						

The table above illustrates a significant difference in the reading performance of students participating in the Reading and Exploratory Experiences with Nature program. The implementation of this initiative effectively enhanced students' reading and comprehension skills. Data indicates a notable improvement in both the Control and Experimental Groups following exposure to Project GREEN, with the Experimental Group demonstrating substantial progress across all assessed areas: Literal, Inferential, Critical, and Overall scores. These results confirm the efficacy of Project GREEN in improving students' reading and comprehension abilities.

Supporting this, Bates (2023) found that through immersive activities and transdisciplinary approaches, the project fostered students' connections with nature by utilizing real-world imagery derived from participants' reading experiences. The study also revealed that action research increased preservice teachers' self-efficacy and their confidence in utilizing environmental elements and their talents to create visual teaching tools for early reading instruction. It underscores the importance for preservice teachers to consider their personal inclinations and preferred natural settings when selecting images for early reading activities inspired by the natural world.

Additionally, Syahputera (2016) reported that in Classroom Action Research (CAR), the Guided Reading Strategy (GRS) was employed to determine its effectiveness in enhancing students' reading comprehension. During the cycles of implementation, over 85% of participating students responded positively, indicating significant success in improving their reading experiences.

The positive outcomes observed in students involved in Project GREEN—Guided Reading and Exploratory Experiences with Nature—are attributed to experiential learning and supervised outdoor exploration. Such activities enable students to strengthen their reading and comprehension skills while forming meaningful connections with the texts they encounter.

Participants in Project GREEN often demonstrate increased curiosity and enthusiasm for learning, especially when they can relate their reading materials to real-world contexts. They engage in exploration, inquiry, and examination of their natural environment, which contributes to their literacy development. Moreover, the program promotes the development of critical thinking skills and fosters a sense of wonder about the world.

Furthermore, involvement in Project GREEN instills a sense of environmental responsibility and stewardship among students. Active engagement with nature encourages a deeper understanding of conservation and sustainability practices. This experience enhances their environmental awareness and promotes positive attitudes toward preserving the planet for future generations.

The guided reading component of the program further supports student literacy by encouraging active reading strategies, including questioning, summarizing, and predicting. These techniques help students become more strategic and independent readers. Regular interaction with diverse texts and targeted instruction deepens their understanding of literary themes and lay a strong foundation for lifelong literacy.

Overall, students participate in guided reading programs like Project GREEN experience empowering and meaningful learning. They acquire essential skills and knowledge to become effective, passionate readers, thereby supporting their academic success across various disciplines. Additionally, the program nurtures a lifelong love of learning, inspiring students to continue exploring, questioning, and

developing both intellectually and personally.

Conclusion and Recommendation

Based on the findings of the study and conclusions, the following recommendations are hereby presented:

1. Project GREEN is an effective strategy for enhancing literacy and environmental consciousness.

2. Guided reading sessions, when integrated with nature exploration, improve reading proficiency and foster critical thinking.
3. Pupils develop a sense of responsibility for environmental conservation through experiential learning.
4. The project bridges theoretical knowledge and real-world applications, enhancing overall academic engagement.
5. Collaborate with environmental educators or use local green spaces for authenticity.

6. Involve parents in at-home reading tasks related to nature.

7. Ensure inclusivity and accessibility for all learners.

Document best practices for potential scaling school-wide. extensions

1. Collaborate with environmental educators or use local green spaces for authenticity.

2. Involve parents in at-home reading tasks related to nature.

3. Ensure inclusivity and accessibility for all learners.

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Appendix

PHIL IRI Philippine Informal Reading Inventory
Pre-Test in Filipino 3

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