

Sustainable Texts to Enhance Students' Reading Comprehension Among Senior High School Students at Tanauan Institute, Tanauan City, Batangas

Leny A. Lat¹

1 – Golden Gate Colleges: Tanauan Institute Incorporated
lenyllatt@gmail.com / 0009-0004-5313-2821

Publication Date: June 1, 2026

DOI: **10.5281/zenodo.20491399**

Abstract

Reading comprehension remains a significant challenge among Senior High School students, particularly in higher-order skills such as inferential and critical analysis, despite relatively strong performance in basic comprehension tasks. This study aimed to determine the effectiveness of sustainable texts in enhancing the reading comprehension skills of Senior High School students at Tanauan Institute, specifically in terms of literal understanding, inferential comprehension, critical analysis, and evaluative interpretation.

The study employed a quantitative pre-experimental design using a one-group pretest posttest approach. The participants consisted of 40 Senior High School students selected through purposive sampling. Data were gathered using a researcher-made reading comprehension test administered as pre-test and post-test, as well as a Likert-scale questionnaire to measure students' perceptions. Statistical tools such as frequency, percentage, composite mean, and weighted mean were utilized for data analysis.

The findings revealed that students had an overall pre-test mean of 3.41, indicating an excellent level of comprehension, although performance in critical analysis was comparatively lower ($M = 2.55$). After exposure to sustainable texts, the post-test results showed notable improvement across all domains, with an overall mean of 4.71, and the greatest gain observed in critical analysis.

In addition, students demonstrated highly positive perceptions of sustainable texts, with an average weighted mean of 3.75, indicating strong agreement in terms of engagement, motivation, and relevance. The study concludes that sustainable texts are effective instructional materials for enhancing reading comprehension and promoting higher-order thinking skills.

Keywords: *sustainable texts, reading comprehension, critical thinking, senior high school, contextualized learning*



I. INTRODUCTION

This study investigated the effectiveness of sustainable texts in enhancing the reading comprehension skills of Senior High School students at Tanauan Institute, Tanauan City, Batangas. Reading comprehension is a fundamental literacy skill that enables learners to interpret, analyze, and evaluate written information. However, students often demonstrate varying levels of proficiency, particularly in higher-order comprehension skills such as inferential reasoning, critical analysis, and evaluative interpretation.

In response to these challenges, the study explored the use of sustainability-themed texts as instructional materials. These texts are grounded in real-world issues such as environmental protection, social responsibility, and community development. By embedding authentic and meaningful content into reading instruction, the study aimed to determine whether such materials could improve students' comprehension skills and engagement.

The research was guided by the following questions:

1. What is the level of reading comprehension of Senior High School students before exposure to sustainable texts?
2. How do sustainable texts influence students' reading comprehension skills in terms of:
 - 2.1 literal understanding
 - 2.2 inferential comprehension
 - 2.3 critical analysis
 - 2.4 evaluative interpretation
3. What improvement in reading comprehension can be observed after exposure to sustainable texts?
4. How do students perceive the use of sustainable texts in enhancing their reading comprehension skills?
5. Based on the findings, what enhancement activities may be proposed?

II. METHODOLOGY

Research Design

This study employed a quantitative experimental research design using a pre-test and post-test approach. The design aimed to determine the effect of sustainable texts on students' reading comprehension skills. According to Muhammad Hassan (2024), experimental research allows systematic manipulation of variables to identify their effects on dependent outcomes, making it suitable for educational interventions.

Participants of the Study

The participants were 40 Senior High School students from Grade 11 at Tanauan Institute, Tanauan City, Batangas during the first semester of the academic year 2025-2026. The respondents consisted of 20 male and 20 female students from Grade 11 Accountancy and



Business Management. All students participated in the pre-test, post test, while a subset was involved in focused qualitative observations.

Research Instruments

The study utilized:

- A teacher-made reading comprehension test (pre-test and post-test)
- A researcher-made Likert-scale questionnaire
- Reading passages based on sustainable texts

The test assessed four domains: literal understanding, inferential comprehension, critical analysis, and evaluative interpretation.

Data Gathering Procedure

Permission was secured from the school administration prior to data collection. Consent forms were distributed to parents and students to ensure voluntary participation in compliance with Republic Act No. 10173 (Data Privacy Act of 2012).

The pre-test was administered first to determine baseline comprehension levels. This was followed by exposure to sustainable texts integrated into reading activities. After the intervention, a post-test and survey questionnaire were administered. All responses were collected, tabulated, and analyzed with the assistance of a statistician.

Data Analysis Plan

The following statistical tools were used:

- **Frequency and Percentage** – to describe distribution of scores and performance levels
- **Weighted Mean** – to analyze questionnaire responses
- **Composite Mean** – to determine overall performance across domains
- **Ranking** – to identify comparative performance across indicators

III. RESULTS AND DISCUSSION

1. Pre-Test Reading Comprehension Level

The pre-test results revealed that students demonstrated a good level of baseline reading comprehension, particularly in literal understanding. However, performance in inferential comprehension and critical analysis was comparatively lower, indicating difficulty in higher-order thinking skills.

This suggests that while students are able to identify explicit information, they still struggle with deeper interpretation, analysis, and evaluation of texts.

Table 1
Literal Understanding

Indicator	Mean	SD	Interpretation
Literal Understanding	3.35	0.80	Excellent
Inferential Comprehension	3.20	0.85	Good
Critical Analysis	2.70	0.95	Good
Evaluative Interpretation	3.15	0.88	Good
Total	3.10	0.87	Good

Legend: Excellent (3.26-4.00); Good (2.51-3.25); Fair (1.76-2.50); Poor (1.00-1.75)

2. Influence of Sustainable Texts on Reading Comprehension

2.1 Literal Understanding

Students strongly agreed that sustainable texts improved their ability to identify key ideas and recall information. This indicates that contextualized texts enhance surface-level comprehension by making content more relatable.

Table 2
Literal Understanding

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Sustainable texts helped me identify important details and facts in the passage.	3.90	Strongly Agree	1.5
2. I can easily recognize the main idea when reading sustainable texts.	3.90	Strongly Agree	1.5
3. Sustainable texts improved my ability to recall specific information.	3.70	Strongly Agree	4
4. I can clearly differentiate between major and minor details in a sustainable text.	3.50	Strongly Agree	5
5. Sustainable texts strengthened my ability to follow the sequence of events in a passage.	3.83	Strongly Agree	3
Average Weighted Mean	3.77	Strongly Agree	

Legend: Strongly Agree (3.26-4.00); Agree (2.51-3.25); Disagree (1.76-2.50); Strongly Disagree (1.00-1.75)

Table 2 shows that students strongly believed that sustainable texts improved their literal comprehension skills, reflected in the overall weighted mean of 3.77 (Strongly Agree). The highest mean scores (3.90) indicate that these texts effectively supported learners in recalling facts and identifying key details with greater accuracy.

2.2 Inferential Comprehension

Findings show that students improved in interpreting implied meanings, using context clues, and predicting outcomes. Sustainable texts encourage readers to construct meaning beyond literal information.

Table 3
Inferential Comprehension

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Sustainable texts helped me read “between the lines” to understand implied meanings.	3.75	Strongly Agree	1
2. I can make logical assumptions based on the details in sustainable texts	3.58	Strongly Agree	4
3. Sustainable texts improved my ability to connect ideas not directly stated in the text.	3.55	Strongly Agree	5
4. I can interpret meanings of unfamiliar words through context clues in sustainable texts.	3.73	Strongly Agree	2
5. Sustainable texts helped me predict possible outcomes or consequences based on the text.	3.65	Strongly Agree	3
Average Weighted Mean	3.65	Strongly Agree	

Legend: Strongly Agree (3.26-4.00); Agree (2.51-3.25); Disagree (1.76-2.50); Strongly Disagree (1.00-1.75)

Table 3 shows that students strongly agreed that sustainable texts contributed to the improvement of their inferential comprehension skills, as reflected in the average weighted mean of 3.65. Learners indicated that these materials helped them better understand implied ideas, use contextual clues, and anticipate possible outcomes.

2.3 Critical Analysis

Students demonstrated improved ability to evaluate arguments, compare real-world issues, and assess textual credibility. This reflects the role of sustainability-related content in promoting analytical thinking.

Table 4
Instructional Supervision

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Sustainable texts encouraged me to examine the author's purpose and viewpoint.	3.70	Strongly Agree	2.5
2. I can identify bias or assumptions in sustainable texts.	3.70	Strongly Agree	2.5
3. Sustainable texts helped me compare the ideas in the text with real-world issues.	3.73	Strongly Agree	1
4. I can evaluate the reliability and credibility of information in sustainable texts.	3.58	Strongly Agree	5
5. Sustainable texts improved my ability to question and critique the arguments presented.	3.60	Strongly Agree	4
Average Weighted Mean	3.66	Strongly Agree	

Legend: Strongly Agree (3.26-4.00); Agree (2.51-3.25); Disagree (1.76-2.50); Strongly Disagree (1.00-1.75)

Table 4 shows that students also *Strongly Agreed* (average mean **3.66**) that sustainable texts supported the development of analytical reading skills. The strongest indicator—comparing ideas with real-world issues (3.73)—demonstrates the value of thematic relevance. The ability to evaluate credibility scored lower but still high (3.58), suggesting growing competence in identifying reliability and bias. This reflects the claims of Albadi and Mahdi (2022) that sustainability-focused texts naturally require learners to critique information, thus fostering analytical reasoning.

2.4 Evaluative Interpretation

Results indicate that students developed stronger judgment skills, particularly in forming opinions and recommending solutions based on textual issues.

Overall, sustainable texts positively influenced all domains of reading comprehension, with notable improvement in higher-order thinking skills.

Table 5
Critical Analysis

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. Sustainable texts helped me judge the value and relevance of information.	3.78	Strongly Agree	2
2. I can give reasoned opinions about issues presented in sustainable texts.	3.73	Strongly Agree	3
3. Sustainable texts developed my ability to relate reading materials to my personal values.	3.63	Strongly Agree	5
4. . I can provide constructive judgments about the strengths and weaknesses of sustainable texts.	3.68	Strongly Agree	4
5. Sustainable texts improved my ability to recommend actions or solutions based on the issues discussed.	3.83	Strongly Agree	1
Average Weighted Mean	3.73	Strongly Agree	

Legend: Strongly Agree (3.26-4.00); Agree (2.51-3.25); Disagree (1.76-2.50); Strongly Disagree (1.00-1.75)

Table 5 shows that the domain of Critical Analysis showed strong gains, with an average weighted mean of 3.73, again interpreted as Strongly Agree. Students expressed that sustainable texts helped them judge information, form reasoned opinions, and recommend solutions—all core components of evaluative thinking. Villanueva and dela Cruz (2021) likewise emphasized that sustainability themes prompt learners to reflect deeply on societal issues, which enhances their capacity to analyze arguments and provide informed judgments.

3. Post-Test Results and Improvement

The post-test results showed a marked improvement across all comprehension domains. Students achieved significantly higher mean scores, particularly in critical analysis, which showed the greatest development.

This improvement suggests that exposure to sustainable texts enhances not only comprehension accuracy but also cognitive processing skills such as analysis, evaluation, and synthesis of information.

Table 6
Post Test

Indicator	Mean	SD	Interpretation
Literal Understanding	3.80	0.55	Excellent
Inferential Comprehension	3.75	0.60	Excellent
Instructional Supervision	3.60	0.65	Excellent
Critical Analysis	3.70	0.62	Excellent
Total	3.71	0.61	Excellent

Legend: Excellent (3.26-4.00); Good (2.51-3.25); Fair (1.76-2.50); Poor (1.00-1.75)

Table 6 presents the post-test results, showing an overall mean of 3.71, interpreted as excellent. All four domains—literal understanding with a mean of 3.80, inferential comprehension with 3.75, evaluative interpretation with 3.60, and critical analysis with 3.70—showed improvement from the pre-test results.

The highest performance was observed in literal understanding, while critical analysis also showed notable improvement. These results confirm that sustainable texts contributed to the development of both basic and higher-order comprehension skills.

4. Students' Perception of Sustainable Texts

Students expressed **strong positive perceptions** toward sustainable texts. They reported increased engagement, motivation, and interest in reading activities.

They also indicated that sustainability-themed materials helped them:

- connect reading content to real-life situations
- become more aware of environmental and social issues
- improve confidence in reading comprehension

These findings suggest that meaningful and authentic texts contribute to both cognitive and affective learning outcomes.

Table 7
Students Perception in Using of Sustainable Texts in Enhancing their Reading Comprehension Skills

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. I find sustainable texts engaging and interesting to read.	3.68	Strongly Agree	4
2. Sustainable texts motivated me to read more attentively and carefully.	3.85	Strongly Agree	2
3. . I was able to relate the issues in sustainable texts to real-life situations.	3.63	Strongly Agree	5
4. Sustainable texts made me more aware of environmental and social issues.	3.70	Strongly Agree	3
5. I feel more confident in my reading comprehension after working with sustainable texts.	3.90	Strongly Agree	1
Average Weighted Mean	3.75	Strongly Agree	

Legend: Strongly Agree (3.26-4.00); Agree (2.51-3.25); Disagree (1.76-2.50); Strongly Disagree (1.00-1.75)

Table 7 shows that students held highly positive perceptions toward the use of sustainable texts, as indicated by the overall weighted mean of 3.75 (Strongly Agree). Their highest agreement (3.90) reflects that sustainable texts made reading more meaningful and relevant. This is consistent with Reyes and Santos (2020), who reported that learners show greater engagement and motivation when reading materials align with their cultural, social, and environmental realities.

IV. CONCLUSION

Based on the findings, the study concludes that sustainable texts are effective instructional materials for enhancing the reading comprehension skills of Senior High School students.

The pre-test results indicated that students had developing skills in inferential and critical comprehension. However, after exposure to sustainable texts, there was a significant improvement across all comprehension domains, particularly in higher-order thinking skills.

Furthermore, students demonstrated positive attitudes toward the use of sustainable texts. They reported increased engagement, motivation, and deeper understanding of reading materials when these were connected to real-world issues.



Overall, the findings suggest that sustainable texts contribute to improved reading comprehension and promote meaningful learning experiences among Senior High School students.

V. RECOMMENDATIONS

Based on the results of the study, the following recommendations are proposed:

- 1. Integration of Sustainable Texts in Reading Instruction**
Teachers are encouraged to incorporate sustainability-themed reading materials such as news articles, essays, and issue-based texts to enhance comprehension and critical thinking skills.
- 2. Development of a Sustainable Text Repository**
The school may establish a curated collection of reading materials focusing on environmental, social, and community issues for consistent instructional use.
- 3. Teacher Training and Development**
Professional development programs should be conducted to train teachers in selecting, designing, and implementing sustainable texts effectively.
- 4. Use of Student-Centered Learning Activities**
Activities such as debates, reflective writing, group discussions, and project-based learning may be used to reinforce comprehension and engagement.
- 5. Cross-Curricular Integration**
Sustainable texts may be integrated into other subjects such as Science and Contemporary Issues to strengthen interdisciplinary literacy.
- 6. Future Research**
Further studies may explore the long-term impact of sustainable texts on academic writing, critical thinking, and decision-making skills using more rigorous experimental designs.

REFERENCES**A. Books**

- OECD. (2023). *PISA 2022 results: Volume I – The state of learning an equity in education*. OECD Publishing <https://doi.org/10.1787/53f23881-en>
- OECD. (2023). *PISA 2022 assessment and analytical framework*. OECD Publishing. <https://doi.org/10.1787/a124aec8-en>
3. OECD. (2023). *What can we learn from the PISA reading-fluency test?* PISA in Focus, No. 121. OECD Publishing. <https://doi.org/10.1787/c698b19a-en>

B. Unpublished Theses / Dissertations

- Santos, R. (2022). *The effect of sustainability-themed reading materials on student motivation and comprehension* (Unpublished master's thesis). University of Batangas.
- Tan, D. N. L. (2019). *Enhancing reading comprehension through culturally relevant texts and literature circles: An action research* (Unpublished master's thesis). De La Salle University, Manila.
- Sususco, R. L. (2020). *Effects of close reading academic texts on Grade 11 students' reading comprehension and attitude toward reading* (Unpublished master's thesis). University of the Philippines Diliman.

C. Journals/Articles

- Cabral, A., & Tarrayo, K. (2020). Using sustainable texts to improve reading comprehension: A Philippine study. *Journal of Literacy and Learning*, 14(2), 135–152.
- Serrano, M., & Abad, L. (2021). Contextualized sustainability reading materials and inferential comprehension among senior high school learners. *Philippine Journal of Educational Research*, 29(1), 47–68.
- Albadi, M., & Mahdi, S. (2022). Sustainability-themed learning materials and critical-thinking skills: Evidence from high school pupils. *International Journal of Environmental Education*, 15(4), 293–310.
- Villanueva, R., & Dela Cruz, J. (2021). Evaluative interpretation through real-world texts: A mixed-methods study among SHS students. *Asian Journal of Educational Innovation*, 8(3), 201–220.

D. Legal Documents

- Republic of the Philippines. (2012). *Republic Act No. 10173 – Data Privacy Act of 2012*. https://lawphil.net/statutes/repacts/ra2012/ra_10173_2012.html
- Republic of the Philippines. (2013). *Republic Act No. 10533 – Enhanced Basic Education Act of 2013*. https://lawphil.net/statutes/repacts/ra2013/ra_10533_2013.html

E. Electronic / Periodical Sources

- Bermudez, P. (2024, April 18). DepEd takes science-based approach in improving literacy. *Philippine Information Agency*. <https://pia.gov.ph/news/dep-ed-takes-science-based-approach-in-improving-literacy>



- Philstar.com. (2023, December 9). Teachers' plight, government neglect led to poor PISA performance. <https://www.philstar.com/headlines/2023/12/09/2317590/teachers-plight-government-neglect-led-poor-pisa-performance>
- Philstar.com. (2023, December 6). Philippines still lags behind world in math, reading and science — PISA 2022. <https://www.philstar.com/headlines/2023/12/06/2316732/philippines-still-lags-behind-world-math-reading-and-science-pisa-2022>
- Imperial, J. M., & Ong, E. (2021). Application of lexical features towards improvement of Filipino readability identification of children's literature. *arXiv*. <https://doi.org/10.48550/arXiv.2101.10537>
- Boussim, O. (2023). Correcting selection bias in standardized test comparisons. *arXiv*. <https://doi.org/10.48550/arXiv.2309.10642>