



Contextualized learning activities in enhancing learners' semantics

Maridel Ogena Bien *

Graduate School, Tabaco College Tomas Cabiles Avenue, Tabaco City, Philippines.

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Abstract

This study examined the effectiveness of contextualized learning activities in enhancing the semantic skills in terms of contextual clues, structural analysis of words, and word recognition of Grade 4 learners at San Lorenzo Elementary School in Tabaco City during the School Year 2025–2026. Also, it focused in addressing the challenge that many pupils experience difficulty in vocabulary development due to limited exposure to meaningful reading materials and the continued use of traditional instructional approaches that emphasize memorization rather than contextual application.

The study employed a quasi-experimental pretest–posttest research design involving 32 Grade 4 pupils who were divided into controlled and experimental groups. A teacher-made vocabulary test served as the primary instrument to measure learners' semantic skills before and after the intervention. Statistical tools such as mean, standard deviation, frequency and percentage distribution, paired samples t-test, and independent samples t-test were used to analyze the quantitative data, while thematic analysis was applied to qualitative observations.

The developed materials were characterized by real-life integration, explicit instruction in semantic strategies, activities that promoted morphological awareness, visual supports, and learner-centered tasks that encouraged meaningful application of new words.

Overall, the findings suggested that contextualized learning activities are effective strategy in enhancing learners' semantic skills and recommends their integration into English vocabulary instruction to support meaningful and sustain language development. By connecting vocabulary instruction to students' everyday experiences and cultural background, teachers created more engaging and meaningful learning environments that supported long-term language development.

Keywords: Contextualized Learning Activities; Semantic Skills; Quasi-Experimental Research Design; Real-Life Integration; Explicit Instruction

1. Introduction

Contextualized learning activities offer a practical and effective way to enhance learners' semantics. By connecting lessons to the learners' daily experiences, cultural background, and local environment, words and meanings become more relatable and functional. Instead of learning words in isolation, pupils encounter them within familiar contexts—through stories, community activities, local traditions, and real-life scenarios. This approach not only deepens their understanding of meaning but also encourages motivation, participation, and creativity in language use. Contextualized learning also aligns with the principles of authentic education, which emphasize that learning should be meaningful, engaging, and connected to the learners' world. Through this method, pupils are not just memorizing words—they are constructing meaning and applying it in ways that make sense in their everyday lives.

* Corresponding author: Maridel Ogena Bien.

Consequently, this study was conducted in San Lorenzo Elementary School Tabaco City, a dynamic urban center in Albay that blends rural and urban cultures, making it an ideal setting for contextualized learning. The city's schools served learners from diverse linguistic and socio-economic backgrounds, where English, Filipino, and Bikol are commonly used in daily interaction. Despite exposure to multiple languages, many pupils still struggled with understanding word meanings and applying them accurately in academic contexts. Teachers, on the other hand, often depended on uniform textbooks and conventional teaching approaches that may not fully respond to learners' diverse needs and experiences. Thus, there was the need to explore and implement contextualized learning activities that can bridge the gap between classroom instruction and real-life language use.

Hence, this study sought to determine how contextualized learning activities effectively enhanced learners' semantics, promoted deeper understanding of word meanings, and contributed to improving the overall quality of language learning in Tabaco City.

1.1. Statement of the Problem

This research determined the Contextualized Learning Activities in enhancing the Grade 4 pupils' vocabulary of San Lorenzo Elementary School, School Year 2025-2026. Specifically, the study answered the following questions:

- What is the level of learners' semantic skills of the learners along
 - Contextual clues
 - Structural analysis of words
 - Word recognition
- What are the constraints affecting the learners' semantic skills?
- What is the level of the learners' semantic skills after using contextualized learning activities designed by the teachers along
 - Contextual clues
 - Structural analysis of words
 - Word recognition?
- Is there a significant difference in the level of the learners' semantic between the controlled and experimental groups?
- What are the features of the contextualized learning materials developed?

1.2. Scope and Delimitation

This study focused on enhancing pupils' vocabulary skills through the use of contextualized learning activities. It specifically examined the vocabulary levels of Grade 4 elementary pupils in San Lorenzo Elementary in Tabaco City, the constraints affecting their vocabulary development, and the effectiveness of contextualized activities designed by teachers. The study aimed to describe the features of contextualized learning materials that integrate pupils' culture, environment, and real-life experiences. The main respondents of the study were the 33 elementary pupils in San Lorenzo Elementary School whose inputs and participation were essential in both assessing current vocabulary skills and in developing contextualized instructional materials.

The scope of the study is delimited to vocabulary instruction and did not cover other aspects of language learning such as grammar, pronunciation, or writing mechanics. The study is further limited to San Lorenzo Elementary School, Tabaco City. Time constraints and the availability of participants also limited to the extent of implementation and evaluation of the developed materials.

2. Materials and Methods

2.1. Research Design

This study employed a quasi-experimental design, specifically the pre-test-post-test design, to determine the effectiveness of contextualized learning activities in enhancing pupils' vocabulary skills. A quasi-experimental design involved the manipulation of an independent variable and the observation of its effect on a dependent variable, but without the full randomization of participants into control and experimental groups (Campbell and Stanley, 1963). In this study, the independent variable was the use of contextualized learning activities, while the dependent variable was the vocabulary performance of the pupils.

2.2. Respondents of the Study

The respondents of this study were 32, the elementary pupils enrolled in San Lorenzo Elementary School Tabaco City during the school year 2025–2026. These pupils were selected as respondents because they are at a crucial stage of language development where vocabulary growth significantly impacts their reading comprehension, writing ability, and overall academic performance. Their participation provided relevant data on their existing vocabulary level and the extent to which contextualized learning activities enhanced their word acquisition and usage. Teachers were also involved in designing the contextualized materials, ensuring that the activities are aligned with the learners' needs, cultural background, and local context.

2.3. Research Instrument

The main research instrument used in this study was a teacher-made vocabulary test composed of a pre-test and post-test. The pre-test was administered to determine the pupils' initial vocabulary level, while the post-test measured the improvement after the implementation of contextualized learning activities. The test items included word recognition, definition, usage in sentences, and contextual application to assess both recall and comprehension.

In addition, an interview guide and observation checklist were utilized to gather qualitative data on the constraints affecting pupils' vocabulary development and to evaluate the features and effectiveness of the contextualized learning materials. These instruments were validated by experts in language education to ensure reliability and appropriateness for the target learners.

3. Results and Discussion

Table 1 Level of Learners' Semantic Skill (Pretest)

Indicators	Mean Score	Number of Pupils	Adjectival Description
Context Clues	4.10	14	Low
Structural Analysis of Words	4.10	14	Low
Word Recognition	4.10	15	Low
Overall Mean	4.16	33	Low

Table 1 presents the learners demonstrated a low level of semantic skills, as reflected by the mean score of 4.16 (5 out of 33 pupils) and a median score of 4.00 (17 pupils obtained a score below the passing rate). These values indicated that most learners performed at the lower end of the scoring scale, showing difficulty in understanding word meanings, analyzing unfamiliar words, and recognizing words beyond basic familiarity. The closeness of the mean and median suggested that the low performance was consistent across the group and not influenced by extreme scores. Furthermore, the minimum score of 2 revealed that some learners possessed very limited semantic knowledge, while the maximum score of 9 indicated that only a few learners demonstrated relatively higher proficiency. The standard deviation of 1.39 showed moderate variability, suggesting uneven semantic skill levels among learners but with a general tendency toward low performance. Overall, these results implied that learners lacked sufficient foundational semantic skills at the start of the study.

This finding is consistent with Graves (2016)¹, who emphasized that limited vocabulary knowledge and insufficient exposure to meaningful reading experiences significantly affect learners' semantic development. Learners with weak semantic skills often struggle with comprehension because they are unable to extract meaning from text effectively.

Table 2 Constraints Affecting the Learners' Semantic Skills

Constraints	Frequency	Percentage (%)
Limited exposure to language-rich reading materials	18	27.27%
Lack of explicit instruction in semantic strategies	20	30.30%
Overreliance on rote memorization	16	24.24%
Multilingual language interference	12	18.18%
Total	66	100%

Table 2 presents the following constraints affecting learners' semantic skills, as revealed by the pretest results and supported by classroom observations and related literature.

3.1.1. Limited Exposure to Language-Rich and Meaningful Reading Materials

One of the primary constraints identified was the learners' limited exposure to language-rich and meaningful reading materials. The pretest results showed that learners struggled to understand word meanings, particularly when words appeared outside familiar contexts. This suggested that learners did not frequently encounter texts that promoted vocabulary growth and semantic understanding. This finding was consistent with Graves (2016), who emphasized that frequent and meaningful exposure to words in context is critical for vocabulary and semantic development. Learners with limited reading materials tend to have restricted vocabulary knowledge, which negatively impacts their ability to infer meaning and comprehend texts.

3.1.2. Lack of Explicit Instruction in Semantic Strategies

Another significant constraint was the lack of explicit instruction in semantic strategies, including the use of contextual clues and structural analysis of words. Low pretest scores in these areas indicated that learners had not been adequately trained to analyze word meanings independently. Many learners were unfamiliar with breaking words into prefixes, suffixes, and root words or using sentence context to infer meaning. This aligns with the findings of Nagy and Scott (2000)², who argued that semantic strategies such as contextual analysis and morphological awareness do not develop naturally and require explicit instruction. Similarly, Carlisle (2003)³ emphasized that systematic teaching of word structures is necessary for learners to understand unfamiliar vocabulary effectively. Without such guidance, learners tended to rely on guessing, which contributed to poor semantic performance.

3.1.3. Overreliance on Rote Memorization

The results also suggested that learners relied heavily on rote memorization rather than meaningful application of vocabulary. Traditional teaching methods that emphasized memorizing definitions without contextual usage limited learners' ability to transfer knowledge to reading and writing tasks. This observation corresponded with Villanueva and Ortega (2025)⁴, who noted that rote memorization produces surface-level vocabulary knowledge that is difficult to retain and apply in authentic communication. Words learned in isolation were easily forgotten, which hindered semantic development.

3.1.4. Language and Environmental Factors

The multilingual environment of the learners was another constraint. Learners at San Lorenzo Elementary School regularly used English, Filipino, and Bikol in daily communication. While multilingualism can be advantageous, insufficient instructional support sometimes led to confusion in word meanings and usage, affecting semantic accuracy. Del Mundo and Castillo (2023)⁵ highlighted that learners in multilingual settings require contextualized and culturally responsive instruction to navigate meaning across languages. Without this support, learners struggled to develop full semantic competence in the target language.

Table 3 Level of Learners' Semantic Skills Using Contextualized Learning Activities (Posttest)

Indicators	General Weighted Mean	Frequency (n=33)
Context Clues	6.69	33
Structural Analysis of Words	6.69	33
Word Recognition	6.69	33

Table 3 presents the level of the learners' semantic skills after using the contextualized learning activities designed by the teachers in terms of (a) contextual clues, (b) structural analysis of words, and (c) word recognition. Based on the computed results, the learners' mean score increased from 4.16 (5 out of 33 pupils) in the pretest to 6.69 (29 out of 33) in the posttest. The percentage level also improved from 46.18% to 64.85%, indicating a substantial gain in overall semantic performance. The standard deviation slightly increased from 1.39 to 1.55, suggesting moderate variability but generally improved performance across learners. The paired samples t-test revealed a computed t-value of -8.50 with a p-value of 0.0000000013, which was significantly lower than the 0.05 level of significance, leading to the rejection of the null hypothesis.

Based on the statistical findings, it was concluded that the learners achieved a significantly higher level of semantic skills after the implementation of contextualized learning activities. The substantial increase in mean scores from 4.16 to 6.69 and the highly significant t-test result confirmed the effectiveness of the intervention. The learners demonstrated improved ability to infer meanings using contextual clues, analyze word structures, and recognize vocabulary accurately. The results provided empirical support that contextualized instruction strengthened semantic development more effectively than traditional vocabulary teaching approaches.

Table 4 Significant Difference Between Controlled and Experimental Groups (Posttest)

Indicators	Controlled (Mean)	Experimental (Mean)	Controlled (Description)	Experimental (Description)
Overall Semantic Skills	4.90	6.69	Low	Moderately High

Table 4 shows that the experimental group outperformed the controlled group in the posttest, with a mean difference of 1.79 points (6.69 – 4.90). While both groups initially demonstrated low semantic skills during the pretest phase, only the experimental group exhibited substantial improvement after the intervention. The controlled group remained within the Low descriptive level, indicating that traditional vocabulary instruction did not significantly elevate learners' semantic competence. The statistically significant difference between the two groups, as indicated by the independent samples t-test ($p < 0.05$), confirmed that the improvement observed in the experimental group was not due to chance. The higher mean score of the experimental group suggested that contextualized learning activities enhanced learners' ability to use contextual clues, analyze word structures, and recognize words more effectively.

This finding was supported by the earlier claim of Graves (2016), who emphasized that vocabulary growth was strengthened when learners encountered words in meaningful and context-rich environments. Similarly, Nagy and Scott (2000) argued that semantic skills developed more effectively when explicit instruction was combined with contextual application. The higher mean score of the experimental group reflected the benefits of guided contextual analysis embedded in the intervention. Furthermore, the results were consistent with the findings of Carlisle (2003), who highlighted that structured instruction in morphological awareness contributed to measurable academic gains. The experimental group's moderately high performance indicated improved word analysis skills, likely resulting from contextualized structural analysis activities. The findings also affirmed contextual learning principles, which posited that learners constructed meaning more effectively when instruction was connected to real-life experiences. The contextualized materials used in the intervention appeared to facilitate meaningful vocabulary engagement, leading to higher semantic performance compared to traditional approaches.

These results were further corroborated by recent studies on significant differences in instructional interventions. A quasi-experimental study on vocabulary strategies found that the experimental group significantly outperformed the control group in post-test vocabulary scores, demonstrating the effectiveness of structured instructional interventions in enhancing learning outcomes (Del Valle Jr., 2025)⁶. Research on contextual clues teaching strategies similarly reported that experimental groups achieved higher post-test scores than control groups, indicating that embedding vocabulary instruction within meaningful contexts improved learners' ability to infer word meanings. Moreover, a study on contextualized lesson exemplars in science instruction found that post-test scores in the experimental group were significantly higher than those of the control group across multiple learning outcomes, confirming the positive effect of contextualized and authentic instructional materials on student performance (Capitolina and Cajurao, 2023)⁷. Collectively, these studies reinforce the findings of the present research, demonstrating that contextualized learning activities are more effective than traditional teaching methods in improving semantic competence.

Table 5 Features of the Contextualized Learning Materials

Indicators	Feature
Context Clues	Real-life and community-based passages; guided inference activities
Structural Analysis of Words	Morphological breakdown tasks (prefix, suffix, root word analysis)
Word Recognition	Visual supports, repeated contextual exposure, picture-word matching activities

Table 5 presents the contextualized learning materials developed in this study were designed to enhance semantic skills through culturally relevant, experience-based, and learner-centered activities. Based on the developed materials the following key features were identified:

3.2. Real-Life and Community-Based Contexts

The materials incorporated familiar community settings such as local markets, barangay activities, school routines, and daily family experiences. For example, Activity 1 (“Meaning from Our Community”) required learners to infer word meanings from a paragraph about local situations.

3.3. Explicit Instruction in Contextual Clues

Activities required learners to infer meaning from surrounding sentences and explain the clues used. This structured practice strengthened learners’ ability to apply contextual strategies independently. This supports Nagy and Scott (2000), who emphasized that contextual analysis must be explicitly taught to develop higher-order vocabulary skills.

3.4. Morphological Awareness Development

Activity 2 (“Word Detective: Break It Down!”) focused on identifying prefixes, suffixes, and root words. Learners analyzed how affixes change meaning, promoting deeper word understanding.

This aligns with Carlisle (2003), who stressed that morphological instruction significantly contributes to vocabulary growth and reading comprehension.

3.5. Visual and Experiential Word Recognition

Activity 3 (“Picture-to-Word Match”) integrated visual cues from familiar local objects such as jeepneys and rice fields. This strengthened word recognition through multisensory learning. According to Ehri (2014)⁸, automatic word recognition is enhanced through repeated exposure and meaningful associations.

3.6. Learner-Centered and Reflective Activities

The “Daily Life Vocabulary Journal” encouraged learners to use new words in personal sentences based on real experiences. This promoted authentic application rather than rote memorization.

This supports Graves (2016), who argued that meaningful vocabulary use leads to long-term retention and deeper semantic understanding.

4. Conclusion

Based on the findings, the study concluded that:

- Learners initially exhibited a low level of semantic skills.
- Contextualized learning activities significantly improved learners’ semantic performance.
- The posttest means scores indicated a significant difference between the controlled group (Mean = 4.90, Low) and the experimental group (Mean = 6.69, Moderately High).
- Contextualized learning materials that integrate real-life experiences, cultural relevance, and explicit semantic strategies effectively enhanced vocabulary development.
- Contextualized instruction was more effective than traditional vocabulary teaching methods in improving semantic competence among elementary learners

Compliance with ethical standards

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Disclosure of conflict of interest

I declare that I have no conflicts of interest related to this research. I have no personal or financial relationships that could influence my work.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study

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