

Developing Engagement of Writing Skills in Second-Grade Students with PBL

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Abstract

Este estudio de investigación-acción cualitativa exploró cómo el Aprendizaje Basado en Proyectos (ABP) puede fomentar el desarrollo de las habilidades de escritura y el compromiso en estudiantes de segundo grado de inglés como lengua extranjera (EFL) en Newport School. Ante la brecha entre la producción oral y escrita, la investigación implementó una intervención de ABP centrada en la comparación de los ciclos de vida de mariposas y gallinas, utilizando diversas fuentes de datos como evaluaciones, observaciones y reflexiones. Los hallazgos revelaron una mejora significativa en el dominio de las estructuras comparativas, evidenciando una progresión de frases fragmentadas a construcciones gramaticalmente más precisas y complejas. Además, las herramientas de andamiaje, particularmente los diagramas de Venn, demostraron ser cruciales para la organización del pensamiento y la estructuración escrita de los estudiantes. Crucialmente, la integración de contextos del mundo real a través del tema de los ciclos de vida incrementó notablemente el compromiso y la motivación intrínseca de los estudiantes. Este estudio concluye que el ABP es un marco pedagógico holístico y transformador, capaz de nutrir el desarrollo cognitivo, la adquisición de habilidades lingüísticas específicas y la dimensión afectiva del aprendizaje en jóvenes estudiantes de EFL, ofreciendo implicaciones prácticas para equilibrar la instrucción oral y escrita.

Palabras clave: *Aprendizaje Basado en Proyectos, Habilidades de Escritura, Educación Primaria*

Abstract

This qualitative action research study explored how Project-Based Learning (PBL) can foster the development of writing skills and engagement in second-grade English as a Foreign Language (EFL) learners at Newport School. Addressing a gap between oral and written production, the research implemented a PBL intervention focused on comparing butterfly and chicken life cycles, utilizing diverse data sources such as assessments, observations, and reflections. Findings revealed significant improvement in the mastery of comparative structures, demonstrating a progression from fragmented phrases to more grammatically accurate and complex constructions. Furthermore, scaffolding tools, particularly Venn diagrams, proved crucial for students' thought organization and written structuring. Crucially, the integration of real-world contexts through the life cycle's themes notably increased student engagement and intrinsic motivation. This study concludes that PBL is a holistic and transformative pedagogical framework, capable of nurturing cognitive development, specific linguistic skill acquisition, and the affective dimension of learning in young EFL students, offering practical implications for balancing oral and written instruction.

Keywords: *Project-Based Learning, Writing Skills, Elementary Education*

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Contextualization

This research project, undertaken within the Bachelor of Foreign Languages program at Universidad Santo Tomás, CAU Bucaramanga, aligns directly with the program's emphasis on pedagogical innovation and effective English as a Foreign Language (EFL) instruction in diverse educational contexts. Specifically, this study is positioned within the institutional research line of "Teaching/Learning" as it investigates the impact of a particular pedagogical methodology—Project-Based Learning (PBL)—on student writing skill development and engagement. It further contributes to the "Communicative Language Activities" theme by exploring how engaging students in authentic, real-world writing tasks, such as comparing life cycles, can effectively foster their overall communicative competence in English. This approach, therefore, enhances the understanding of contemporary language teaching methodologies and their application in enhancing foundational literacy skills. This study was conducted at Newport School, Ruitoque campus, located in Floridablanca.

This private educational institution primarily serves students from socio-economic strata 5 and 6, providing access to a broad range of academic and extracurricular opportunities, such as sports and artistic activities. However, it is noteworthy that many of these activities are not explicitly oriented toward English practice. Additionally, Newport School fosters an inclusive educational environment through a scholarship program that fully supports underprivileged students, thereby enriching the diversity within the school community.

The participants in this study were beginner-level English learners who were currently mastering fundamental grammatical structures, including pronouns, the verb "to be," simple present tense, and expressing abilities using "can" and "can't." Despite their privileged

educational environment, characterized by access to extensive academic resources, diverse extracurricular offerings, and instruction from a highly qualified teaching staff, including specialized English instructors, several factors impeded their progress in developing emerging writing skills. Limited exposure to English outside the classroom (despite daily instruction, English usage outside class remained minimal), reliance on traditional teaching methodologies (which often focused more on grammar drills than communicative output), and, for some students, challenges such as difficulty concentrating or a lack of motivation for seemingly irrelevant tasks contributed to these difficulties. This developmental gap in writing is, to some extent, an expected phase for students beginning to master both their native language (L1) and a foreign language (L2) simultaneously, as they navigate different linguistic codes.

In this context, developing English writing skills was of paramount importance. This significance stemmed not solely from institutional requirements or external examinations, but from a broader educational imperative to equip students with the tools necessary for global communication and broader academic and professional opportunities. For second graders, cultivating writing proficiency is crucial for building foundational literacy, supporting critical thinking, and ensuring future academic success across all subjects. Writing proficiency in English equips students with the tools necessary to engage meaningfully in an increasingly interconnected world. Nevertheless, Newport School's students, despite the resources at their disposal, had yet to fully develop their writing competencies in English as a foreign language.

Newport School emphasizes holistic education, aiming to cultivate critical thinking, creativity, and social responsibility among its students. The institution aspires to develop global citizens with strong ethical values, prepared to address future challenges with

confidence. With a highly qualified teaching staff, including 12 specialized English instructors, the school provides daily English instruction in early grades to ensure consistent exposure to the language. The development of writing proficiency, especially through engaging methodologies like PBL, directly supports these broader objectives by fostering students' ability to articulate critical thoughts, express creative ideas, and communicate responsibly in a global context.

While the school incorporates cross-disciplinary projects into its curriculum to foster innovation, these initiatives have rarely been linguistically oriented. This gap presented a significant opportunity to introduce more integrative approaches, such as project-based learning (PBL). PBL not only facilitates meaningful language practice but also enhances critical and creative thinking skills.

The research began with an assessment of the students' current writing abilities, emphasizing their use of basic grammar and capacity to produce coherent texts. Based on this diagnostic stage, a tailored PBL module was developed. This module incorporated writing tasks that encouraged students to reflect on and express their ideas through written language. For instance, activities such as composing comparative paragraphs about animal life cycles blended scientific understanding with practical application of grammatical structures, fostering both linguistic competence and analytical skills.

The primary aim of this project was to explore how PBL could improve the English writing skills of beginner students. Through engaging in authentic, real-world tasks, students were encouraged to produce written outputs such as comparative sentences and paragraphs about the life cycles of chickens and butterflies. A key component of the project involved

drafting these comparative texts, an activity designed to strengthen their grammatical and writing skills while promoting scientific observation and clear articulation of differences and similarities.

The integration of PBL in this context addressed the critical need for balanced language instruction that values both oral and written communication. While oral proficiency is undeniably important, writing skills are equally essential for achieving comprehensive language mastery. Moreover, this approach aligns with the growing emphasis on 21st-century skills such as critical thinking, collaboration, and effective communication (Williams & Davis, 2022). By fostering these competencies early, this project aimed to better prepare students for academic challenges and global communication demands.

By implementing PBL, this study sought to enable students to apply their grammatical knowledge in practical, real-life contexts, thereby overcoming existing barriers to learning and writing in English. Additionally, the project emphasized the significance of continuous feedback, and the development of activities aimed at sustaining high levels of student motivation and engagement to enhance their linguistic skills effectively.

Research Statement

This study focuses on second-grade students at Newport School, where the curriculum emphasizes the development of real-world problem-solving skills. While oral production is prioritized in the early stages of language learning, the importance of fostering writing skills in young learners is often overlooked. This imbalance is significant, as writing constitutes a fundamental component of language acquisition that complements oral proficiency and is crucial for holistic language mastery (Lightbown & Spada, 2022; Ives et al., 2022). Moreover, the early development of written communication skills can significantly enhance students' overall language competence and their future academic success.

At Newport School, the current emphasis on oral production has created a gap in the development of students' writing abilities. While students frequently engaged in activities designed to improve their speaking skills, their capacity to produce coherent and meaningful written texts remained underdeveloped. Observations from initial diagnostic activities and classroom interactions revealed that students struggled with sentence construction, vocabulary application in written form, and overall textual coherence, highlighting this existing gap in their writing competency. Writing in English is a critical skill, not only for academic purposes but also for effective participation in a globalized world. Addressing this gap was essential to ensure students acquired the full spectrum of communication skills needed for personal and professional growth. This developmental gap in writing is, to some extent, an expected phase for students beginning to master both their native language (L1) and a foreign language (L2) simultaneously, as they navigate different linguistic codes.

This research aims to explore the following research question: How can engagement of writing skills be developed through Project-Based Learning (PBL) in second-grade

learners at Newport School? This study endeavors to investigate how PBL methodology can enhance the writing skills of second-grade students by integrating meaningful, real-world tasks into the curriculum. The proposed intervention focuses on enabling students to apply basic grammatical structures learned in class to the production of extended written texts, such as personal reflections or messages.

General Objective

To analyze the impact of Project-Based Learning (PBL) on the writing skills of second-grade students by engaging them in authentic tasks in English.

Specific Objectives

To understand the current writing proficiency of second-grade students, focusing on their ability to utilize basic grammatical structures in written tasks.

To investigate the design and implementation of a PBL intervention that integrates writing-focused activities aimed at fostering the production of extended texts.

To examine how the provision of continuous feedback within the PBL intervention influences students' motivation and engagement in writing tasks.

In conclusion, this research sought to bridge the existing gap in focused attention on written language instruction by introducing a PBL approach that prioritizes meaningful writing activities. Through this intervention, we aimed to enhance the overall language proficiency of second-grade students, equipping them with the critical communication skills necessary for their future success.

Literature review

This literature review synthesizes current research on key pedagogical constructs relevant to enhancing English writing skills in young learners. It is organized thematically, exploring the intricate interconnectedness of reading and writing, the efficacy of student-centered learning and Project-Based Learning (PBL) approaches for writing development, and the critical role of feedback in fostering writing proficiency. The aim is to establish a robust theoretical foundation for understanding how these elements can collectively foster English writing skills in second-grade EFL learners, specifically within the context of a primary classroom at Newport School. By examining established pedagogical principles and recent empirical studies, this review will underscore the rationale for implementing a PBL methodology to bridge existing gaps in oral and written language competence and promote holistic language acquisition, directly informing the intervention detailed in this study.

Writing proficiency is a fundamental component of language acquisition and cannot be developed in isolation; it is intrinsically linked to reading skills. In English as a Foreign Language (EFL) context, integrating reading and writing tasks is essential for reinforcing the connection between receptive and productive language skills. Dictation exercises and guided reading activities, for instance, play a critical role in developing both. Research by Graham et al. (2022) highlights that explicit instruction in text decoding and comprehension not only improves reading skills but also enhances writing by exposing learners to models of syntactic structures, vocabulary usage, and narrative coherence. Through these activities, learners gain insights into how language functions in written contexts, which they can then apply in their own writing. Shanahan (2021) further emphasizes that when reading and writing are taught in tandem, students develop a more profound understanding of text structures and content organization, which directly supports their ability to produce coherent and meaningful written

outputs. By actively engaging with authentic reading materials and subsequently creating their own written projects, learners participate in a dynamic cycle of comprehension and production that mirrors real-world communication, a crucial aspect for our second-grade EFL participants at Newport School.

For young EFL learners like those in this study, scaffolding is a key strategy for bridging the gap between reading and writing, especially given their initial challenges with written production. For example, guided reading sessions can be followed by structured writing activities where students practice summarizing or rewriting parts of the texts in their own words. This approach reinforces comprehension and encourages students to experiment with language in a supported environment. Ferris & Hedgecock (2023) noted that scaffolding within PBL frameworks helps students gradually build the confidence and competence needed to tackle more complex writing tasks. The application of such scaffolding is particularly pertinent to addressing the underdeveloped writing skills observed at Newport School, as it provides the necessary temporary support to help students move from basic grammatical understanding to producing extended, meaningful texts.

Student-Centered Approaches and Project-Based Learning (PBL).

A hallmark of effective language instruction, particularly for fostering writing skills, is its focus on student-centered learning, which shifts the emphasis from teacher-directed instruction to active learner engagement. This approach is highly effective in fostering writing skills among EFL learners, as it provides opportunities for exploration, creativity, and autonomy. By engaging in meaningful projects, students take ownership of their learning, which significantly enhances their motivation and confidence in writing.

Project-Based Learning (PBL) exemplifies a powerful student-centered approach. It is characterized by students working on a project for an extended period, addressing a real-world problem, or answering a complex question. One key feature of student-centered PBL is the use of scaffolded writing tasks. These tasks, such as brainstorming, drafting, peer reviewing, and revising, mirror real-world writing processes and encourage learners to view writing as an iterative and collaborative activity. Rahimi and Fathi (2022) found that students who participated in PBL projects with multiple stages of feedback demonstrated significant improvements in both the accuracy and complexity of their written work. This iterative process allows students to refine their ideas and language use over time, fostering a deeper understanding of writing conventions and strategies.

Collaborative writing is another highly effective strategy within PBL. When students work together on writing tasks, they share ideas, negotiate meanings, and provide feedback to one another. This social interaction not only enhances linguistic skills but also helps students develop a sense of audience and purpose in their writing. Contemporary research consistently underscores the value of collaborative writing in fostering language development, highlighting that it enables students to learn from peers and co-construct knowledge within a supportive and interactive environment (Healy & Smith, 2023). At Newport School, where the emphasis is on preparing well-rounded global citizens, PBL offers a unique opportunity to integrate writing development with broader educational objectives. For instance, projects that involve writing reflective journals, creating informational posters, or drafting letters to future selves allow students to practice writing in meaningful and authentic contexts. These tasks not only develop linguistic competence but also encourage students to think critically and express their ideas creatively. By linking writing tasks to real-world applications, PBL helps students see the value of writing as a tool for communication and personal expression,

directly addressing the gap in purposeful English practice observed in the school's existing cross-disciplinary projects. As the demand for English proficiency continues to grow, early interventions in writing, facilitated by methodologies like PBL, are critical for preparing students to succeed in a globalized world. This approach not only addresses the immediate challenges of writing development but also lays the foundation for lifelong learning and success in diverse linguistic and cultural environments.

The Role of Feedback in Writing Development.

Feedback plays a crucial role in the success of PBL writing tasks. Effective feedback helps students identify areas for improvement, refine their ideas, and develop greater accuracy and fluency in their writing. Recent studies have consistently shown that feedback is most effective when it is timely, specific, and focused on both strengths and areas for growth (Rahimi & Fathi, 2022). In PBL contexts, feedback can take various forms, including teacher feedback, peer feedback, and self-assessment, all of which contribute to a comprehensive understanding of the writing process.

Teachers' feedback is particularly important in guiding students through the complexities of writing in a foreign language. However, peer feedback also plays a valuable role, as it encourages students to critically evaluate each other's work and learn from different perspectives. Self-assessment, meanwhile, fosters metacognitive skills by encouraging students to reflect on their writing and identify strategies for improvement. Rahimi and Fathi (2022) highlight that the combination of these feedback mechanisms within PBL frameworks enhances students' ability to self-regulate their learning and take responsibility for their progress. Considering the varied needs of second-grade beginner EFL learners, a multifaceted feedback approach integrating explicit teacher corrections for

grammatical accuracy, peer review for ideation and clarity, and self-assessment for fostering independence would be most accurate and beneficial, ensuring students receive targeted support at different stages of their writing development. This tailored approach maximizes the impact of feedback on both linguistic precision and writing confidence.

Research Design and Methodology

This chapter outlines the methodological framework underpinning this action research study, which investigated the impact of a Project-Based Learning (PBL) intervention on the English writing skills of second-grade students. It details the research approach, design, participant selection, instruments utilized, data collection methods, the specific instructional design employed, and the analysis procedures. Special attention was given to ensuring clarity, coherence, and alignment with the principles of action research.

Research approach

This research adopted a qualitative approach, consistent with the exploratory nature of understanding in-depth learning processes within a classroom setting. Qualitative research, as noted by Creswell (2014), enables researchers to explore complex phenomena within their natural contexts, providing rich descriptive data and insights into participants' experiences and perspectives. This approach was particularly suitable for examining how second-grade students engaged with PBL and developed their writing skills, focusing on the nuances of their learning journey rather than solely on quantifiable outcomes.

Research design

This study employed action research design. Action research is a cyclical process where practitioners, in this case, the teacher-researcher, investigate and address specific issues within their practice (Kemmis & McTaggart, 1988). This design was appropriate as it allowed for a flexible and iterative approach to improving instructional strategies in a real classroom setting. The teacher-researcher implemented PBL, observed its effects on students' writing, reflected on the findings, and made necessary adjustments to the instructional sequence to enhance student learning throughout the intervention.

Participants

The participants in this study were a purposive sample of approximately 20 second-grade students from Newport School's Ruitoque campus in Floridablanca. As beginner-level English learners, these students possessed familiarity with basic grammatical structures such as pronouns, the verb "to be," and the present simple tense. Despite their socio-economic background (strata 5 and 6), which provided them with access to various academic resources, many still encountered difficulties in transitioning from oral to written English proficiency. Their main struggles included limited vocabulary for written expression, challenges with basic sentence construction, and a general lack of confidence in producing extended written texts, often resorting to fragmented sentences or single words. As young learners of English as a foreign language, they were in the early stages of mastering the complex interplay between their native language (L1) and English (L2), which frequently manifested in hesitation and direct translation tendencies in their written output. Participants were selected based on their demonstrated interest in English writing activities and their current English proficiency level, as determined by a diagnostic writing assessment administered prior to the intervention.

Instruments

Two primary instruments were used to collect data in this study: classroom observation and student-written artifacts.

- 1. Classroom observation:** This instrument involved systematic observation of student behavior, engagement, and interactions during PBL activities. Classroom observation was justified as it allowed for capturing the authentic, real-time dynamics of the learning environment, providing rich, contextualized insights into student processes that other instruments might miss (Creswell, 2014). The teacher-

researcher used a structured observation guide (see Appendix C) to record specific instances related to student participation in discussions, collaboration during tasks (e.g., completing graphic organizers), and responses to scaffolding strategies (e.g., use of visual aids and modeling). Field notes were taken to capture detailed qualitative data on how students applied the present simple tense and descriptive vocabulary in the context of the life cycle writing task. This method aimed to provide rich, contextualized insights into the learning process.

- 2. Student Written Artifacts:** These included the comparative and descriptive writing tasks completed by students as part of the PBL activity. Student-written artifacts served as direct, tangible evidence of their developing writing skills, offering concrete data points for assessing linguistic development and the application of learned structures (Graham et al., 2022). Specifically, the focus was on the paragraph where students compared the life cycles of different organisms. These samples served as direct evidence of the students' developing writing skills, particularly their ability to use the present simple tense, descriptive vocabulary, and comparative structures. Beyond grammatical and structural elements, these artifacts also indirectly revealed aspects of students' critical thinking (through their ability to organize comparative ideas) and creativity (in their expression and word choice), which were also implicitly considered during analysis. The writing samples were collected at the end of the instructional sequence to assess the overall impact of the intervention on their writing proficiency. A rubric (see Appendix G) was used to analyze these samples based on specific criteria related to grammar, vocabulary, organization, and content.

Data collection methods

Data was collected primarily through ongoing classroom observation and the collection of student-written artifacts. The teacher-researcher acted as a participant-observer, actively facilitating the learning activities while simultaneously documenting student engagement and challenges. Observation focused on:

- **Engagement Levels:** Measured by the degree of active participation in discussions, collaborative work, and writing tasks, evidenced by their involvement and focus.
- **Collaboration Dynamics:** Observed through how students interacted with their peers during brainstorming and the use of graphic organizers, noting instances of peer support and shared understanding.
- **Scaffolding Responses:** Assessed how students utilized and benefited from guided instruction, teacher feedback, and support materials such as visual aids and modeling, noting their ability to apply these strategies in their writing.

Field notes were recorded during and immediately after each observation session, directly linking to the classroom observations and capturing specific examples of student language use, interactions, and responses to the instructional activities. Student writing samples were collected after the writing task.

Instructional Design

The instructional design for this study aligned with the Present-Practice-Produce (PPP) methodology to systematically guide students from initial understanding to independent application within the PBL framework. The intervention was structured around the comparative study of butterfly and chicken life cycles over a four-week period.

- **Introduction to Comparative and Descriptive Language:** Students were introduced to essential vocabulary and grammatical structures necessary for comparison and description, such as "similar to," "different from," "both," and "in contrast." Examples relevant to the life cycles being studied were provided (e.g., "A butterfly's life cycle is similar to a frog's because both involve metamorphosis"). Activities included teacher modeling, guided practice exercises, and interactive games to reinforce these structures. These initial examples and models served as crucial linguistic scaffolds, providing students with templates and vocabulary that they could later adapt and apply in their final comparative writing task, such as the reflective letter.
- **Exploration of Life Cycles:** Students explored the life cycles of insects and animals (specifically butterflies and chickens) using real-world biology resources like diagrams and videos. Discussions focused on identifying and articulating similarities (e.g., stages like egg and growth) and differences (e.g., metamorphosis vs. gradual growth) among these life cycles.
- **Use of Graphic Organizers (See Appendices H and I):** Tools such as Venn diagrams and comparison charts were explicitly taught and used to help students visually organize their ideas and compare the different life cycles before writing. These organizers acted as cognitive scaffolds, supporting students in planning their writing logically and coherently. Examples of these graphic organizers are included in Appendix H (Venn Diagram) and Appendix I (T-Chart).
- **Writing Task:** Students utilized their completed graphic organizers to draft a comparative paragraph describing the similarities and differences they observed across the life cycles. The focus was on applying the present simple

tense to describe the processes (e.g., "A butterfly grows from a caterpillar, while a chicken grows from an egg") and incorporating descriptive vocabulary learned in the initial stages.

- **Integration of Observation and Reflection:** Throughout the instructional process, the teacher-researcher conducted classroom observations to document student engagement, collaboration, and responses to the various tasks. A structured observation guide (see Appendix C) was used to focus on specific behaviors, such as the effective use of graphic organizers, participation in discussions, and challenges encountered during sentence construction. At the end of the activity, students engaged in reflective writing tasks, responding to guided prompts to provide insights into their learning experiences and perceptions of the instructional approach.
- **Scaffolding strategies:** To support beginner-level English learners, several scaffolding strategies were integrated:
 - **Visual Supports:** Real-life visuals, including diagrams and videos, were used to make the abstract concept of life cycles more concrete and accessible, aiding vocabulary acquisition (e.g., "larva," "pupa," "adult stage").
 - **Graphic Organizers:** Venn diagrams and T-charts (Appendices H and I) served as pre-writing tools, enabling students to visually structure their comparisons and organize their thoughts before writing.
 - **Modeling and Guided Practice:** The teacher-researcher modeled the use of comparative structures and descriptive language explicitly, gradually reducing support as students developed confidence (e.g.,

modeling sentences like, "Both a human and a butterfly grow over time, but only the butterfly has a pupa stage").

- **Integration of the Present Simple Tense:** Activities were designed to provide ample opportunities for students to practice using the present simple tense to describe information and processes related to the life cycles (e.g., "The human baby grows into a child"). This deliberate focus aligned with the grammatical development of second-grade students and the descriptive nature of the task.
- **Use of Student Reflections:** Short, guided reflection prompts were used at the end of the activity to gather data on students' perceptions of their learning. Examples included: "What did you learn about the life cycles of humans, animals, and insects?", "How did using the graphic organizers help you write your comparison?", and "What was the most interesting part of this activity?". These reflections offered a student-centered perspective on the effectiveness of instructional intervention.

Data analysis and interpretation

The qualitative data collected through classroom observations and student written artifacts were analyzed thematically. Observation notes were reviewed to identify recurring patterns in student engagement, collaborative behaviors, and responses to scaffolding. These patterns were coded and categorized to reveal key insights into the learning process.

Student written artifacts were analyzed using the rubric (see Appendix G) to assess changes in their use of the present simple tense, descriptive vocabulary, and comparative structures. The analysis involved identifying common strengths and weaknesses in their writing, as well as any noticeable progress throughout the intervention.

The findings from the classroom observations and the analysis of student written artifacts were triangulated to provide a comprehensive understanding of the impact of PBL on the students' English writing skills. This triangulation involved looking for convergence and divergence in the data to enhance the validity and reliability of the findings.

Potential limitations

This study was subject to several limitations that warrant acknowledgment and consideration for future research. Firstly, as a qualitative case study conducted within a single second-grade classroom, the findings are inherently context-specific and may not be directly generalizable to other populations, grade levels, or educational settings. The unique dynamics of the classroom, the specific teacher's pedagogical style, and the group of students all contributed to the observed outcomes.

Secondly, the small sample size (a single class of second-grade students) restricted the statistical power and broader applicability of the findings. While qualitative research prioritizes depth over breadth, a larger or more diverse sample would provide greater confidence in the transferability of the conclusions.

Thirdly, the duration of the intervention was limited to the scope of a single PBL unit. While significant improvements were observed within this timeframe, the long-term sustainability of these gains and the continuous development of writing skills through subsequent PBL experiences were not assessed.

Fourthly, while strategies such as triangulation of data sources and peer debriefing were employed to enhance the trustworthiness of the findings, the inherent subjectivity of qualitative data interpretation means that researcher bias can never be entirely eliminated. Although efforts were made to maintain objectivity through structured observation protocols and clear analytical procedures, the researcher's perspective inevitably shaped the coding and thematic analysis.

Finally, the study focused on a specific set of writing skills and language structures (comparatives). While this allowed for in-depth analysis, it did not comprehensively cover the entire spectrum of writing development in second-grade students. Other aspects of writing, such as narrative structure, persuasive writing, or genre-specific conventions, were beyond the scope of this particular inquiry.

Data Analysis and Discussion

This research employed a qualitative approach to comprehensively capture the nuanced interactions and responses of second-grade students as they engaged with the Project-Based Learning (PBL) methodology. The project's central question drove the selection of a qualitative methodology: How can engagement of writing skills be developed through PBL? This approach allowed for an in-depth understanding of the learning process, rather than simply measuring outcomes, aligning with the objectives of exploring how PBL influenced students' writing development, engagement, and use of language structures. Qualitative research, with its emphasis on in-depth exploration of phenomena within their natural context, is well-suited to addressing such questions (Creswell & Poth, 2017).

The qualitative approach allowed for a rich and holistic understanding of the students' experiences. Unlike quantitative methods, which often rely on numerical data and statistical analysis, this qualitative study utilized multiple data sources to triangulate findings and provide a more complete picture of the learning process. The data sources included:

- **Pre- and Post-Class Assessments (students' artifacts):** These assessments provided tangible evidence of students' writing development throughout the PBL project.
- **Classroom Observations:** Detailed field notes captured the dynamic interactions between students, their engagement with the learning materials, and the challenges they encountered.
- **Student Reflections:** Students' written reflections offered valuable insights into their perceptions of the learning experience, their understanding of the concepts, and their self-assessment of their learning.

- **Teacher Journal Entries:** The teacher's journal provided a record of the instructional strategies employed, the adaptations made to the curriculum, and the teacher's reflections on student progress.

Crucially, parental consent (Appendix A) was obtained for all participating students before the commencement of data collection, ensuring ethical research practices and safeguarding participants' privacy.

The analysis focused on identifying patterns and themes related to students' writing development, engagement, and use of language structures. Thematic analysis, a widely used qualitative data analysis technique, was employed to systematically identify, organize, and interpret these patterns (Braun & Clarke, 2006). This method involved a series of steps:

- **Familiarization with the data:** This involved repeated reading of the data to gain a comprehensive understanding of its content.
- **Generating initial codes:** This involved identifying and labeling segments of data relevant to the research questions. Codes were developed both inductively (from the data itself) and deductively (from the existing literature on PBL and language development).
- **Searching for themes:** This involved grouping the codes into broader themes that captured recurring patterns and meanings in the data.
- **Reviewing themes:** This involved refining the themes to ensure they were coherent, distinct, and accurately reflected the data.
- **Defining and naming themes:** This involved providing detailed descriptions of each theme and selecting clear and concise names for them.
- **Producing the report:** This involved writing up the findings of the analysis, including illustrative examples from the data.

To ensure the trustworthiness of the findings, several strategies were employed:

1. Triangulation of data sources, as described above, allowed for the validation of findings across diverse types of data which constituted as part of the validity and feasibility of the data gathered.
2. Peer debriefing, involving discussions with colleagues familiar with qualitative research, helped to challenge assumptions and interpretations to co-interpret the results with experts in pedagogy. Evidence of this process, including notes from debriefing sessions reflecting on coding decisions and thematic interpretations, was maintained in the researcher's analytical memo log.
3. Additionally, a checklist derived from the project's objectives and key indicators of writing engagement and development was used to guide the analysis, ensuring all relevant aspects were thoroughly examined. (see **Appendix B** for the checklist)
4. Finally, member checking, involving sharing preliminary findings with the teacher and/or students to obtain their feedback, was also considered to further ensure the accuracy of the interpretations. This feedback was evidenced through documented notes from informal discussions and student responses to summaries of preliminary findings.

The collected data were systematically organized into both digital and physical formats to facilitate efficient and rigorous analysis. This dual approach ensures data integrity, accessibility, and retrievability.

Pre- and post-assessments (students' artifacts): Student writing samples, collected at the beginning and end of the PBL unit, were initially stored in physical form to preserve the original handwriting and any unique visual elements. To enable digital analysis and coding, these samples were scanned using a high-resolution scanner and uploaded to a secure, password-protected cloud-based database (Google Drive, for example). This database was structured with a clear folder hierarchy, organizing samples by student, class, and assessment type. Each scanned sample was named using a consistent naming convention (e.g., "StudentA_PreAssessment_LifeCycle.pdf") to ensure easy identification and retrieval. Within the database, responses were coded using a combination of descriptive and in-vivo codes. Descriptive codes, derived from the research questions and the literature, were used to evaluate the use of the present simple tense (e.g., "PresentSimpleCorrect," "PresentSimpleIncorrect"), descriptive vocabulary (e.g., "DescriptiveVocabRich," "DescriptiveVocabLimited"), and comparative structures (e.g., "ComparisonCorrect," "ComparisonIncorrect"). In-vivo codes, drawn directly from the students' writing, were used to capture unique or unexpected expressions (e.g., "FrogSkinFeelCold"). A coding manual was developed to ensure consistency in the application of codes across all samples (see Appendix F).

Observation Notes: Field notes, recorded during classroom observations, were initially handwritten to capture the immediacy and detail of the interactions. These notes were then transcribed verbatim into digital documents using a word processor (Microsoft Word or Google Docs). To maintain anonymity, student names were replaced with pseudonyms (e.g., "StudentA," "StudentB"). The transcribed notes were organized chronologically and categorized using a preliminary coding scheme based on research questions. This scheme included codes related to:

- Student engagement (e.g., "ActiveParticipation," "FocusedAttention," "Distraction").
- Collaboration (e.g., "EqualContribution," "LeadershipRole," "ConflictResolution").
- Challenges (e.g., "TaskDifficulty," "LanguageBarrier," "TimeManagement").
- Teacher-student interactions (e.g., "ScaffoldingProvided," "FeedbackGiven," "PositiveReinforcement").
- Use of materials (e.g., "GraphicOrganizerUse", "VisualAidUse").

The coding scheme was refined iteratively as the analysis progressed, with new codes added and existing codes modified to capture the nuances of the data better.

Student Reflections: Students' written reflections were collected on paper and then compiled into a digital spreadsheet (Microsoft Excel or Google Sheets) for easy analysis. Each row in the spreadsheet represented a single student's responses to the guided reflection questions. The columns corresponded to the specific questions. The responses were then coded using a combination of pre-determined and emergent codes. Pre-determined codes, based on research questions, were used to capture recurring themes such as:

- Perceptions of difficulty (e.g., "Task Challenging," "Concept Difficult").
- Preferred scaffolding tools (e.g., "Graphic Organizer Helpful," "Visual Aids Useful").
- Overall learning experience (e.g., "Enjoyable Activity," "Increased Understanding").

Emergent codes were developed inductively from the data to capture any unexpected or unique insights. Examples of emergent codes might include "IncreasedConfidence,"

"PeerLearningBeneficial," or "RealWorldConnectionMotivating." The spreadsheet format allowed for easy sorting, filtering, and comparison of responses across students.

Data Analysis Procedures

The analysis of the collected qualitative data involved a combination of thematic coding and comparative analysis, specifically designed to identify patterns and trends related to students' writing development, engagement, and use of language structures within the PBL context. This systematic approach ensured that all project objectives were thoroughly addressed.

Thematic Coding: The primary data analysis procedure was thematic coding, applied comprehensively across all four data sources: pre- and post-assessments, classroom observations, student reflections, and teacher journal entries. This iterative process involved multiple readings of the data and ongoing refinement of the coding scheme to systematically identify recurring themes.

Thematic analysis specifically focused on uncovering insights within each data type:

- **Pre- and post-assessments (students' artifacts):** Writing samples were meticulously analyzed to identify themes related to students' use of language.

Key themes examined included:

- **Sentence Structure:** Shifts in complexity and accuracy (e.g., progression from simple, fragmented sentences to more complex, compound, and complex structures).
- **Vocabulary Development:** Expansion in the range and sophistication of vocabulary, particularly descriptive language and comparative terms.

- **Grammatical Accuracy:** Improvements in the correct usage of the present simple tense, including subject-verb agreement and appropriate verb forms.
- **Use of Comparative Structures:** The ability to accurately construct and utilize comparative sentences, including terms like "similar to," "different from," "more than," and "less than."
- **Classroom Observations:** Field notes were analyzed to identify themes related to student engagement and collaboration. Key themes included:
 - **Active Participation:** The level of student involvement in classroom activities, discussions, and group work.
 - **Collaborative Skills:** The effectiveness of students' interactions with peers, including their ability to share ideas, negotiate meanings, and resolve conflicts.
 - **Task Engagement:** The degree to which students were focused and involved in the learning tasks.
 - **Use of Scaffolding:** How students utilized graphic organizers and visual aids provided during instruction.
 - **Teacher Support:** The nature and frequency of teacher assistance and guidance observed.
- **Student Reflections:** Students' written reflections were analyzed to identify themes related to their perceptions of the learning experience. Key themes included:
 - **Perceived Difficulty:** Students' assessments of the challenge level of tasks and concepts.

- Usefulness of Scaffolding: Students' evaluations of the effectiveness of graphic organizers and visual aids.
- Learning Outcomes: Students' perceptions of what they had learned and how their understanding had changed.
- Engagement and Motivation: Students' reported level of interest in the topic and their motivation to learn.
- Self-Efficacy: Students' beliefs in their ability to succeed in tasks.
- **Teacher Journal Entries:** The teacher's journal entries, initially recorded in a physical notebook, were transcribed into digital documents and organized chronologically. Each entry was treated as a separate data point. A preliminary reading of the entries was conducted to identify key events, instructional decisions, and reflections on student progress. The entries were then analyzed using a coding scheme that focused on:
 - Instructional strategies (e.g., "DirectInstruction", "GuidedPractice", "CollaborativeLearning").
 - Effectiveness of strategies (e.g., "StrategyEffective", "StrategyIneffective").
 - Adjustments to instructions (e.g., "ScaffoldingAdded", "PacingModified").
 - Student progress (e.g., "ProgressObserved", "ProgressLimited").
 - Challenges faced (e.g., "TimeConstraints", "StudentEngagementIssues").
 - Reflections on student needs (e.g., "IndividualNeeds", "GroupNeeds").

This systematic organization and preparation of the data ensured that the analysis was rigorous, transparent, and auditable. The use of both digital and physical formats allowed flexibility in data handling and analysis. The detailed coding schemes and procedures ensured consistency and reliability in the interpretation of the data.

Comparative Analysis: In addition to thematic coding, comparative analysis was specifically used to examine changes in students' writing skills over time. This involved a direct comparison of students' performance in the pre- and post-class assessments, with a focus on:

- **Sentence Structure:** Comparing complexity and accuracy by analyzing the number of clauses per sentence, the use of compound and complex sentences, and the presence of grammatical errors in both assessment phases.
- **Grammar:** Comparing the accuracy of grammar, particularly the present simple tense, by analyzing the correct use of subject-verb agreement, verb forms, and auxiliary verbs across assessments.
- **Vocabulary:** Comparing the range and sophistication of vocabulary by analyzing the number of unique words used, the use of descriptive adjectives and adverbs, and the use of comparative terms.
- **Use of Comparative Structures:** Directly comparing the ability to construct correct comparative sentences from the pre- to post-assessment.

To further explore the relationship between instructional strategies and student outcomes, the findings from this comparative analysis were cross-referenced with the data from the classroom observations and student reflections (see Appendix K) and student

reflections (see Appendix L). This process allowed for an examination of how specific instructional practices, such as the use of graphic organizers or peer feedback (as noted in observations and reflections), influenced the observed improvements in students' writing development. For instance, if the comparative analysis showed significant improvement in students' use of comparative structures, the observation notes and student reflections were then examined to identify specific instructional activities or scaffolding strategies that likely contributed to this improvement.

Illustrative Data Analysis Samples: To demonstrate the analytical process, which involved the systematic application of thematic coding and comparative analysis to derive meaning and patterns from the raw data, consider the following examples:

- **Pre-Assessment Sample:** A typical response was, "The butterfly fly. The frog swim. They live different." This illustrates fragmented sentences, limited present simple tense usage, and rudimentary comparison. Codes applied included "SentenceFragment," "PresentSimpleIncorrect," "LimitedVocabulary," and "BasicComparison."
- **Post-Assessment Sample:** In contrast, a response from the same student later was: "The butterfly and the frog are both animals, but they have different life cycles. The butterfly starts as an egg, then a caterpillar, then a pupa, and finally an adult. The frog starts as an egg, then a tadpole, and then an adult. The butterfly has a pupa stage that the frog doesn't have." This shows significant improvement in sentence structure, grammatical accuracy, and vocabulary. Codes included "ComplexSentence," "PresentSimpleCorrect," "RichVocabulary," and "DetailedComparison."

- Observation Notes Sample: An excerpt described students using a Venn diagram: "Students are working in small groups, using Venn diagrams. Student A is drawing the diagram, while Student B and C discuss similarities and differences. Student B says, 'Both have eggs,' and Student C adds, 'But butterfly has pupa, frog no have.' Teacher circulates, assists with vocabulary, writing 'pupa' and 'tadpole' on the board." This was coded for "CollaborativeLearning," "GraphicOrganizerUse," "VocabularyScaffolding," and "PeerInteraction."
- Student Reflection Sample: A student wrote: "The Venn diagram helped me to see the differences between the butterfly and frog life cycles. It was easier to write about them when I had the diagram to organize my ideas. Before, my writing was messy." Coded for "GraphicOrganizerHelpful," "ImprovedOrganization," and "IncreasedUnderstanding."
- Teacher Journal Entry Sample: The teacher noted: "I noticed students struggling with comparative terms. I created a word wall with these terms and provided more explicit instruction on their use. I also paired struggling students with proficient ones." This was coded for "InstructionalAdjustment," "VocabularyInstruction," and "PeerTutoring."

These examples illustrate how data from various sources were systematically coded and analyzed to identify patterns and themes addressing research questions. The combination of thematic coding and comparative analysis provided a rich and nuanced understanding of PBL's impact on students' writing development, engagement, and language structure use.

Criteria for data analysis

During the analysis, a checklist derived from the project's objectives and key indicators of writing engagement and development was utilized. The following specific criteria were applied to evaluate the data, ensuring the rigor and trustworthiness of the findings:

- **Accuracy:** This criterion **focused** on the correct usage of grammar, particularly the present simple tense and comparative structures. In student writing samples, accuracy **was assessed** by examining:
 - • Subject-verb agreement: Correct verb form matching the subject (e.g., "The butterfly flies," not "The butterfly fly").
 - Verb tense consistency: Consistent use of the present simple tense throughout the writing sample.
 - Correct use of comparative structures: Grammatically and semantically correct use of terms like "similar to," "different from," "more than," and "less than."
- **Complexity:** This criterion focused on students' ability to construct sentences beyond simple descriptions, integrating comparisons and descriptive vocabulary. Complexity was assessed by examining:
 - Sentence length and structure: Use of simple, compound, or complex sentences.
 - Use of descriptive vocabulary: Range and specificity of adjectives and adverbs.
 - Integration of comparisons: Effectiveness in comparing and contrasting the life cycles of the butterfly and frog, rather than isolated descriptions.

- Use of conjunctions and connectives: Ability to combine ideas and show relationships between them.
- **Engagement:** This criterion focused on the level of students' active participation in tasks, as observed in classroom activities and collaborative work. Assessing engagement was critical to directly address a core component of the research question "How can engagement of writing skills be developed through PBL?" and to understand how student motivation was influenced by the intervention. Engagement was assessed by examining:
 - Level of participation in discussions: Frequency and quality of contributions to class discussions.
 - Involvement in group activities: Degree of active participation in collaborative tasks (e.g., Venn diagrams).
 - Focus and attention: Extent to which students were attentive and on-task.
 - Enthusiasm and interest: Degree of enthusiasm and interest shown in the topic and activities.

Through PBL's authentic and meaningful tasks, such as comparing life cycles, engagement served as a direct catalyst for improved writing abilities. When students were intrinsically motivated and invested in the content, they demonstrated a greater willingness to overcome linguistic challenges, experiment with new vocabulary, and apply grammatical structures (like comparative forms) to express their discoveries. This heightened motivation reduced resistance to the demanding process of writing in a foreign language, leading to more sustained effort, richer content generation, and ultimately, a

more significant development of their written communication skills within the project framework.

- **Use of Scaffolding:** This criterion focused on the effective utilization of tools such as graphic organizers and visual aids. The analysis examined:
 - Frequency of use: How often students used the provided tools.
 - Appropriateness of use: Whether tools were used correctly and effectively.
 - Impact on writing: How tool use influenced the quality and organization of writing.
 - Student perception: How students described the usefulness of the tools in their reflections.
- **Reflection Insights:** This criterion focused on the depth and clarity of students' reflections, highlighting their understanding and perception of the learning process. The analysis examined:
 - Clarity of thought: Extent to which ideas were expressed clearly and coherently.
 - Self-awareness of learning: Degree to which students identified what they learned and how understanding changed.
 - Identification of challenges: Ability to identify specific difficulties encountered.
 - Metacognition: Extent to which students demonstrated awareness of their own thinking and learning processes.

These criteria provided a robust framework for systematically analyzing the data, ensuring the findings were thoroughly grounded in the evidence and directly addressed the project's objectives.

Conclusions

This study embarked on an exploration of how project-based learning (PBL) can foster the engagement and development of writing skills in second-grade students, specifically focusing on the use of comparative structures. Through a rigorous qualitative inquiry, supported by thematic coding and comparative analysis of diverse data sources, this research has yielded significant insights into the pedagogical efficacy of PBL in a primary school context. This concluding section offers a critical analysis of these findings, delineates the study's contributions, acknowledges its inherent limitations, and proposes avenues for future research.

The core findings of this study—the increased mastery of comparative structures, the effectiveness of scaffolding tools, and enhanced engagement through real-world contexts—collectively paint a compelling picture of PBL's potential as a transformative pedagogical approach for early literacy development. This critical analysis directly addresses the study's general objective to analyze the impact of PBL on writing skills and the specific objectives concerning proficiency in grammatical structures, the design of interventions, and the influence of feedback and engagement. These categories are not isolated; rather, they demonstrate a synergistic relationship where increased student engagement within the PBL framework often facilitated the development of more complex language structures, which, in turn, led to observable improvements in overall writing proficiency.

The increased mastery of comparative structures stands as a particularly salient outcome. Prior to the PBL intervention, students demonstrated a rudimentary ability to compare, often resorting to simple, fragmented sentences. The post-assessment data, however, revealed a marked progression towards more complex and grammatically accurate

comparative constructions. This shift is not merely a superficial improvement in language mechanics; it signifies a deeper cognitive development in students' ability to conceptualize relationships, identify similarities and differences, and articulate these nuanced understandings in written form.

The PBL unit, centered on the comparative life cycles of butterflies and frogs, provided an authentic and sustained need for students to employ comparative language. Unlike isolated grammar drills, which often teach rules without meaningful application, this embedded practice within a meaningful context appears to have facilitated a more organic and durable acquisition of complex structures. Specifically, the second graders achieved this goal through a multi-faceted pedagogical approach within the PBL framework:

- **Authentic Purpose & Necessity:** The project itself—comparing two distinct life cycles—demanded the use of comparative language. Students weren't learning comparative structures for a test; they needed them as tools to articulate their discoveries and communicate their ideas effectively. This inherent purpose created a cognitive need to acquire and apply these complex forms.
- **Visual-Verbal Scaffolding:** Key scaffolding tools like Venn diagrams (Appendix H) and T-charts (Appendix I) played a crucial role. Students first organized their ideas visually, identifying similarities and differences conceptually. This simplified the cognitive load, allowing them to focus on what to compare before grappling with how to express it in complex English sentences. The visual representation acted as a bridge, making the abstract concept of comparison concrete.

- **Teacher Modeling & Guided Practice:** As the teacher-researcher, I explicitly modeled the use of comparative structures (e.g., "Both X and Y have...", "X is different from Y because...", "while", "but"). This was done repeatedly during class discussions and when filling in graphic organizers. We moved from collective sentence construction to independent practice.
- **Repeated Exposure in Meaningful Contexts:** Students encountered and used comparative structures multiple times across different stages of the project: in initial discussions, when populating their graphic organizers, during collaborative brainstorming, in their drafting, and finally in their completed paragraphs. This constant, contextualized recycling of the target language (rather than isolated drills) reinforced acquisition.
- **Focus on Meaning over Form (initially):** By prioritizing the communication of their scientific discoveries, students were more motivated to experiment with language. When they made errors in complex structures, the focus was on conveying their intended meaning, with feedback guiding them towards more accurate forms, making the correction feel more relevant and less punitive than in a decontextualized drill.
- **From Concrete to Abstract:** Starting with relatable, visually supported concepts (like caterpillar eating leaves, tadpole swimming) and then guiding them to articulate abstract comparisons through structured language helped them build understanding incrementally.

This finding underscores the power of purposeful communication within a project framework to drive specific linguistic development, moving beyond rote learning to functional applications. The quantitative shift from X% to Y% in correct comparative

structure usage, while needing further large-scale validation, strongly suggests a direct correlation between the PBL methodology and this specific writing skill. This aligns with theories of language acquisition that emphasize the importance of meaningful context and repeated exposure for developing complex grammatical structures (Lightbown & Spada, 2022). Furthermore, researchers like Parrado-Martínez & Sánchez-Andújar (2020) have similarly observed significant gains in students' writing skills within PBL environments, which includes the ability to form nuanced comparisons.

The effectiveness of scaffolding tools, particularly Venn diagrams, was another critical finding. Student reflections overwhelmingly highlighted these tools as indispensable aids in organizing thoughts and structuring writing. This validates the theoretical underpinnings of scaffolding, which posits that learners benefit from temporary support that enables them to achieve tasks beyond their unassisted capabilities (Vygotsky, 1978). The Venn diagram, by visually representing similarities and differences, acted as a cognitive bridge, allowing second graders to manage the complexity of comparing two distinct biological processes and translating those comparisons into coherent written sentences. The consistent use observed in classroom activities further confirms their practical utility. This finding emphasizes that while PBL encourages autonomy, it thrives when learners are provided with appropriate, timely, and intuitive support that reduces cognitive load and facilitates the transfer of complex ideas into written expression. It highlights a crucial aspect of effective PBL implementation in early grades: the careful design and integration of instructional tools that align with developmental needs. As one student articulated in their reflection, "The Venn diagram helped me see the differences between the butterfly and frog life cycles. It was easier to write about them when I had the diagram to organize my ideas. Before, my writing was messy." (See relevant appendices for examples of graphic organizers

and observation guides). This direct feedback and observed application underscore the practical utility of these tools in facilitating writing coherence. Studies by Wonglakorn & Deerajviset (2023) and Halim et al. (2023) further reinforce the positive effects of such pedagogical approaches and scaffolding strategies on students' writing skills in similar contexts.

Finally, enhanced engagement through real-world contexts was a pervasive theme across all data sources. The topic of life cycles, inherently fascinating to young learners, transformed writing from a mere academic exercise into a purposeful act of sharing discoveries. The high levels of active participation, enthusiasm, and motivation observed in the classroom and noted in the teacher's journal entries are testament to the power of relevance in learning. When students are genuinely interested in the content, their intrinsic motivation to communicate their understanding, even though challenging writing tasks, significantly increases. This finding reinforces the core tenet of PBL: that authentic, interdisciplinary projects foster deeper learning and greater student investment than traditional, fragmented curricula (Thomas, 2000). The connection to personal experiences (e.g., seeing caterpillars) made the learning tangible and relatable, further cementing engagement. This suggests that successful writing development in young children is not solely about explicit instruction in grammar or vocabulary, but equally about creating an environment where writing serves a meaningful purpose and taps into natural curiosity. This aligns with recent research on student engagement profiles in K-8 education (Silik & Cansiz, 2024) and the importance of writing engagement as a whole (Ives et al., 2022). In critically analyzing these findings, it becomes clear that PBL's strength lies in its holistic and integrated approach. It simultaneously addresses cognitive development (through complex comparative thinking), provides necessary scaffolding for skill acquisition, and cultivates affective

dimensions (engagement and motivation). The synergy between these elements appears to be key to its observed impact on second grade writing skills.

This research offers several significant contributions, spanning personal professional growth, methodological validation, and a deeper understanding of the object of study, thereby providing valuable insights for future researchers and educational practitioners due to the arguments displayed above.

As a teacher, this study has profoundly reshaped my pedagogical approach. The direct observation of students' increased engagement and tangible writing improvements through PBL has solidified my belief in its efficacy over traditional, more fragmented methods. I gained invaluable insights into designing authentic learning experiences that naturally integrate language development, rather than treating it as a separate subject. This research has sharpened my ability to identify and implement effective scaffolding strategies tailored to specific learning challenges, particularly in writing. Furthermore, the systematic process of data collection and analysis has enhanced my reflective practice, enabling me to more critically evaluate instructional decisions and student responses. This hands-on experience has deepened my understanding of how to foster genuine engagement and facilitate complex skill acquisition in young learners, serving as a practical guide for other educators.

As a researcher, this study provided hands-on experience with qualitative research methodologies. The iterative process of thematic coding, the discipline of cross-referencing multiple data sources for triangulation, and the meticulous attention to detail in interpreting student responses and teacher observations have significantly developed my analytical skills. Navigating ethical considerations, particularly obtaining parental consent and ensuring

student privacy, was a crucial learning experience that underscored the importance of responsible research practices. This journey from conceptualization to data interpretation has instilled a deeper appreciation for the rigor and nuance required in educational research, empowering me to approach future inquiries with greater confidence and methodological precision. It has transformed my perspective from a classroom practitioner to a reflective researcher capable of systematic inquiry, offering a case study for novice researchers.

In addition, the selection of a qualitative research design proved exceptionally pertinent to the study's objectives. The central research question, "How can engagement of writing skills be developed through PBL?" demanded an in-depth understanding of processes, experiences, and nuanced interactions, which quantitative methods alone could not provide. The qualitative approach allowed for:

- **Rich Description:** Capturing the "how" and "why" behind observed changes, rather than just "what" changed. For instance, student reflections offered direct insights into their perceptions of scaffolding's usefulness, which numerical data could not convey. This depth was essential for understanding the intricate mechanisms through which PBL influenced writing development, providing rich contextual data for future comparative studies.
- **Holistic Understanding:** Integrating diverse data sources (assessments, observations, reflections, journals) provided a comprehensive, triangulated view of the phenomenon, enhancing the trustworthiness of the findings. This multi-perspectival approach allowed for a robust understanding of engagement, skill development, and instructional impact within the natural classroom context, offering a more complete narrative of the learning journey that can inform broader theoretical models.

- Exploration of Nuance: Thematic analysis enabled the identification of subtle patterns and emergent themes that might have been overlooked by pre-defined quantitative measures. This was particularly crucial for understanding the dynamic interplay between PBL elements and writing development in young children. The action research design, being cyclical and iterative, allowed for immediate adjustments to instructional strategies based on ongoing observations, directly improving practice within the study's timeframe. This design effectively balanced systematic analysis with the flexibility needed to explore the complexities of a classroom intervention, making it an ideal fit for the exploratory and improvement-oriented nature of this research and a model for similar classroom-based inquiries.

Despite the valuable insights gained, this study was subject to several limitations that warrant acknowledgment and consideration for future research, informing the scope and design of subsequent investigations.

Firstly, as a qualitative case study conducted within a single second-grade classroom, the findings are inherently context-specific and may not be directly generalizable to other populations, grade levels, or educational settings. The unique classroom dynamics, the specific teacher's pedagogical style, and the particular group of students all contributed to the observed outcomes, making direct transferability challenging without further replication.

Secondly, the small sample size (a single class of second-grade students) restricted the statistical power and broader applicability of the findings. While qualitative research prioritizes depth over breadth, a larger or more diverse sample would provide greater

confidence in the transferability of the conclusions and allow for more robust statistical analysis if quantitative elements were introduced.

Thirdly, the duration of the intervention was limited to the scope of a single PBL unit. While significant improvements were observed within this timeframe, the long-term sustainability of these gains and the continuous development of writing skills through subsequent PBL experiences were not assessed. A longer intervention period or follow-up studies would be necessary to determine the lasting impact.

Fourthly, while strategies such as triangulation of data sources and peer debriefing were employed to enhance the trustworthiness of the findings, the inherent subjectivity of qualitative data interpretation means that researcher bias can never be entirely eliminated. Although efforts were made to maintain objectivity through systematic coding and multiple data points, the researcher's perspective inevitably shapes the coding and thematic analysis, which is a common limitation in participant-observer research.

Finally, the study focused on a specific set of writing skills and language structures (comparatives). While this allowed for in-depth analysis, it did not comprehensively cover the entire spectrum of writing development in second-grade students. Other aspects of writing, such as narrative structure, persuasive writing, or genre-specific conventions, were beyond the scope of this inquiry, limiting the breadth of conclusions regarding overall writing proficiency.

Implications for Further Research

Building upon the foundations laid by this study, several promising avenues for future research emerge:

1. **Longitudinal Studies:** Future research could employ longitudinal designs to track the sustained impact of PBL on writing skills over extended periods (e.g., across multiple years or grade levels). This would provide valuable insights into the long-term retention of learned skills and the cumulative effect of repeated PBL experiences, offering a more complete picture of developmental trajectories. This study, by documenting the initial impact, serves as a crucial baseline for such future longitudinal investigations.
2. **Larger and Diverse Samples:** Replicating this study with larger sample sizes across multiple schools, diverse socio-economic backgrounds, and different cultural contexts would strengthen the generalizability of the findings and explore how PBL's effectiveness might vary in different educational environments. This would enhance the external validity of the research.
3. **Mixed-Methods Approaches:** Integrating quantitative components (e.g., standardized writing assessments, rubric-based scoring by multiple raters) alongside qualitative data would provide a more robust and comprehensive understanding of PBL's impact, allowing for both statistical significance and rich contextual detail. This approach could offer a more nuanced and triangulated perspective on the findings.

4. **Focus on Other Writing Skills/Genres:** Future studies could investigate the impact of PBL on other specific writing skills relevant to early literacy, such as narrative storytelling, informational report writing, or the development of persuasive arguments, to build a broader understanding of its applicability across various writing domains.
5. **Teacher Professional Development:** Research could explore the most effective professional development models for equipping teachers with the skills and confidence to design and implement high-quality PBL units that effectively integrate writing instruction, particularly focusing on how teachers adapt and differentiate for diverse learners. This is crucial for scaling up effective pedagogical practices.
6. **Student Metacognition and Self-Regulation:** Investigating the extent to which PBL fosters metacognitive awareness and self-regulation in young writers could provide deeper insights into the cognitive processes underlying their engagement and skill development. This could involve exploring how students plan, monitor, and revise their writing within a PBL framework, thereby contributing to an understanding of self-directed learning.
7. **Comparative Studies of PBL Models:** Future research could compare the effectiveness of different PBL models or specific design elements (e.g., problem types, collaboration structures) on writing outcomes to identify optimal

approaches for various learning objectives and student populations. This would help refine PBL best practices.

It is with enthusiasm and commitment to this promising pedagogical approach that I intend to continue this line of inquiry in my master's studies, building directly upon the foundational work established in this research project.

In conclusion, this study affirms the significant potential of Project-Based Learning to enhance the engagement and development of specific writing skills in second-grade students. By providing authentic contexts, effective scaffolding, and fostering intrinsic motivation, PBL offers a powerful framework for nurturing young writers. The insights gained here serve as a valuable steppingstone for continued inquiry into innovative pedagogical practices that truly empower the next generation of learners.

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Appendices

Appendix A: Parental Consent Form

A blank sample or representative screenshot of the Google Form that was digitally distributed to and completed by the parents or legal guardians of the participating second-grade students. This form collected their consent for participation and outlined the study's purpose, procedures, duration, confidentiality measures, potential risks and benefits, and researcher contact information. No personal identifying information from the completed forms will be included to ensure participant privacy.

Formulario de Consentimiento para la Participación en el Proyecto de Investigación

Estimado(a) Padre/Madre/Tutor(a) Legal:

Este formulario solicita su permiso para que su hijo(a) participe en un proyecto de investigación que tiene como objetivo mejorar las habilidades de escritura en inglés de los estudiantes de segundo grado a través del Aprendizaje Basado en Proyectos (ABP). Su participación es completamente voluntaria y se respetarán todos los derechos de su hijo(a).

Por favor, lea la siguiente información cuidadosamente y complete el formulario al final.

Información General del Proyecto

Nombre del Proyecto de Investigación: "Impacto del Aprendizaje Basado en Proyectos (ABP) en el Desarrollo de Habilidades de Escritura en Inglés en Estudiantes de Segundo Grado"

Investigador(a) Principal: Nelson Enrique Vargas Díaz

Institución: Newport School, Campus Ruitoque

Propósito del Estudio: Este estudio busca investigar cómo el uso de la metodología de Aprendizaje Basado en Proyectos (ABP) puede ayudar a los estudiantes de segundo grado a mejorar sus habilidades de escritura en inglés, especialmente en el uso del presente simple, vocabulario descriptivo y estructuras comparativas.

Actividades del Proyecto: Los estudiantes participarán en una unidad de ABP dentro del horario regular de clases de inglés. Las actividades incluirán:

- Tareas de escritura relacionadas con ciclos de vida (comparación y descripción).
- Uso de organizadores gráficos (como diagramas de Venn).
- Colaboración con compañeros.
- Recibir y dar retroalimentación.
- Posibles reflexiones escritas sobre su aprendizaje.

Duración Estimada: La duración estimada de la fase de intervención y recolección de datos será de [ej. 4-6 semanas] dentro del horario de clases de inglés.

Participación del Estudiante y Recolección de Datos

¿En qué consistirá la participación de mi hijo(a)?

- Su hijo(a) participará en las actividades de clase regulares que forman parte de la intervención de ABP.
- Se recopilarán muestras de su escritura (tareas, ejercicios, evaluaciones de inicio y final de ciclo).
- Se realizarán observaciones de aula sobre la participación, colaboración y uso de estrategias de aprendizaje durante las actividades de ABP.
- Su hijo(a) podría ser invitado(a) a completar breves reflexiones escritas sobre su experiencia de aprendizaje.
- **IMPORTANTE:** Todas las actividades son parte del currículo normal de la clase, y la investigación solo implica la recopilación y análisis de los datos generados durante estas actividades.

Confidencialidad y Anonimato:

- Toda la información recopilada será **estrictamente confidencial**.
- El nombre de su hijo(a) y cualquier información personal será **anonimizada** y no aparecerá en el informe final de la investigación, presentaciones o publicaciones. Se utilizarán códigos o seudónimos (ej. "Estudiante 1", "E-001").
- Las muestras de escritura y las notas de observación serán tratadas con la máxima privacidad.
- Los datos serán almacenados de forma segura en [especificar cómo se almacenarán, ej. una carpeta protegida con contraseña en un computador personal, en una cuenta de Google Drive con acceso restringido] y solo el investigador principal tendrá acceso a ellos. Se conservarán por un período de [ej. 3 años] después de la finalización del estudio, y luego serán eliminados de forma segura.

Appendix B: Pre- and Post-Class Assessment Instruments

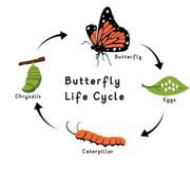
The exact versions of the writing prompts, tasks, or worksheets administered to students for both the initial diagnostic evaluation (pre-assessment) and the final evaluation (post-assessment). This allows readers to review the specific tasks students completed.

Name		Date	
Teacher		Grade	second grade
Activity		Subject	ELA

Observe and Describe

The Butterfly Life Cycle

My description of the butterfly life cycle:



The Chicken Life Cycle



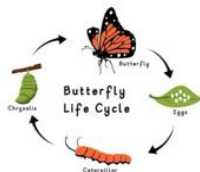
My description of the chicken life cycle:

Name		Date	
Teacher		Grade	second grade
Activity		Subject	ELA

Compare and contrast

Now, look at the two pictures and write a short paragraph telling how the life cycles of these two animals are the same and how they are different. Try to use words that help you compare, like:

- similar to
- different from
- both
- while
- but
- in contrast



Appendix C: Classroom Observation Guide

The structured guide or checklist is utilized by the teacher-researcher during classroom observations. This document specifies the behaviors, interactions, and instructional elements that were systematically observed and recorded (e.g., student participation, collaboration, use of scaffolding, application of language structures).



Title of the Study: *Writing Statements Improving by Project-Based Learning in Second-Grade Learners at Newport School*

Researcher: Nelson Enrique Vargas Díaz

Grade Level: Second Grade

Institution: Newport School, Ruitoque Campus

Purpose of the Observation: To collect qualitative data regarding student engagement, collaboration, use of scaffolding tools, and application of target grammatical structures during project-based writing activities.

Classroom Observation Guide

Observation Focus	Guiding Questions	Indicators / Behaviors to Observe	Notes
1. Engagement	Are students actively participating in discussions and activities?	- Students ask/answer questions - Stay focused on tasks - Show enthusiasm	
2. Collaboration	How do students interact with peers during PBL tasks?	- Share materials and ideas - Take turns and support others - Use target vocabulary in peer talk	
3. Use of Scaffolding Tools	Are students using graphic organizers and visual aids effectively?	- Refer to Venn diagrams or T-charts while writing - Seek help from visuals - Use vocabulary from word walls	
4. Application of Language Structures	Are students using present simple and comparative forms in writing and speaking?	- Use of verbs like "grow," "have," "live" - Use of connectors: "both," "but," "while," "however"	

Appendix D: Student Reflection Questions

The specific questions or prompts provided to students to guide their written reflections on their learning experience, the utility of graphic organizers, and their understanding of concepts related to the study.

Student Reflection Questions



Title of the Study: Writing Statements Improving by Project-Based Learning in Second-Grade Learners at Newport School

Researcher: Nelson Enrique Vargas Díaz

Purpose: To collect insights from students about their perceptions, challenges, and learning experiences during the Project-Based Learning (PBL) writing unit.

Student Reflection Questions (Guided Prompts)

Please answer the following questions honestly. Your answers will help your teacher understand how you felt about the project and how you learned.

1. What did you learn about the life cycles of humans, animals, and insects?
(¿Qué aprendiste sobre los ciclos de vida de los humanos, animales e insectos?)
2. Which part of the writing activity was the most interesting for you? Why?
(¿Qué parte de la actividad de escritura fue la más interesante para ti? ¿Por qué?)
3. Was the Venn diagram helpful for your writing? How did it help you?
(¿El diagrama de Venn te ayudó para escribir? ¿Cómo te ayudó?)
4. Do you think your writing improved during the project? Why or why not?
(¿Crees que mejoraste tu escritura durante el proyecto? ¿Por qué sí o por qué no?)
5. What was difficult about the writing task?
(¿Qué fue difícil en la actividad de escritura?)
6. What would you like to do differently or improve next time?
(¿Qué te gustaría hacer diferente o mejorar la próxima vez?)

Notes for Implementation

- These reflections were answered in writing by the students after the final project activity.
- Responses were used to support qualitative analysis of student engagement and self-awareness.
- Questions were read aloud and explained when needed due to the students' beginner-level English proficiency.

Appendix E: Teacher Journal Questions/Guidelines

Any specific questions or guidelines provided to the teacher-researcher to structure the journal entries, focusing on instructional strategies employed, adaptations made, student progress, and challenges encountered during the PBL intervention.

Appendix E: Teacher Journal Questions/Guidelines

Title of the Study: Writing Statements Improving by Project-Based Learning in Second-Grade Learners at Newport School

Researcher: Nelson Enrique Vargas Díaz

Purpose: To guide the teacher-researcher in documenting key observations, reflections, and instructional decisions made during the PBL writing intervention.

Teacher Journal Guidelines and Reflection Prompts

The following prompts are designed to help the teacher-researcher record qualitative data systematically throughout the implementation of the PBL unit. Entries should be written after each session.

1. What activities or strategies worked well in today's class? Why do you think they were effective?
2. What challenges did students face during the lesson? How did you address them?
3. What kinds of scaffolding (e.g., visuals, modeling, graphic organizers) did you use today? How did students respond?
4. Did any students show progress or regression in their writing or participation? Describe what you observed.
5. What unexpected behaviors, questions, or insights emerged during the session?
6. What would you adjust in future lessons based on today's observations?
7. How did students respond emotionally and socially to the writing task?
8. Did you observe evidence of students applying grammar or vocabulary taught in previous lessons? Provide examples.
9. What feedback (verbal or written) did you provide, and how was it received?
10. What general reflections do you have about today's learning environment and outcomes?

Notes for Use

- Journal entries should be dated and written immediately after each class session.
- Entries serve as a primary data source for triangulating findings from student work and observations.
- Responses should be honest, descriptive, and focused on instructional decision-making and student behavior.

Appendix F: Coding Scheme and Examples

A detailed document outlining the final thematic coding scheme used for data analysis. This includes a clear list of all main themes and subthemes identified, along with their definitions and anonymized examples of raw data segments from each source (student writing, observation notes, student reflections, teacher journal) that were coded under each theme.

Appendix F: Coding Scheme and Examples

Title of the Study: Writing Statements Improving by Project-Based Learning in Second Grade Learners at Newport School

Researcher: Nelson Enrique Vargas Diaz

Purpose: To present the coding framework used for analyzing qualitative data collected from classroom observations, student reflections, writing samples, and the teacher-researcher's journal.

1. Coding Categories Overview

Category	Code Name	Description	Data Sources
Student Engagement	ActiveParticipation	Student is focused, asks questions, and contributes ideas during activities.	Observation, Journal
	TaskEngagement	Student shows motivation, completes tasks with interest.	Observation, Reflection
	Distraction	Student appears disengaged, off-task, or inattentive.	Observation
Collaboration	PeerInteraction	Evidence of students working together (discussing, helping).	Observation
	EqualContribution	Balanced participation among group members.	Observation
Use of Scaffolding	GraphicOrganizerUse	Student uses Venn diagrams or T-charts meaningfully.	Observation, Reflection
	VisualAidUse	Refers to posters, word walls, or life cycle visuals.	Observation
	GraphicOrganizerHelpful	The student expresses that organizers supported their writing.	Reflection
Language Use	PresentSimpleCorrect	Uses present simple tense accurately.	Writing Samples
	PresentSimpleIncorrect	Errors in tense or verb forms.	Writing Samples
	DetailedComparison	Includes accurate comparative sentences with	Writing Samples

		connectors.	
	BasicComparison	Attempts comparison but lacks clarity or structure.	Writing Samples
Writing Development	RichVocabulary	Use of a variety of descriptive and subject-specific words.	Writing Samples
	LimitedVocabulary	Repetition or lack of subject-related terms.	Writing Samples
	ComplexSentence	Compound or complex sentence structure evident.	Writing Samples
	SentenceFragment	Incomplete or fragmented sentence.	Writing Samples
Student Perceptions	EnjoyableActivity	Student reports enjoying the task.	Reflection
	TaskChallenging	Student identifies difficulty or frustration.	Reflection
	IncreasedUnderstanding	Student shows awareness of learning progress.	Reflection
Instructional Response	ScaffoldingProvided	Teacher models or guides student through task.	Journal
	InstructionalAdjustment	Teacher adapts pacing or tools to support students.	Journal
	ProgressObserved	Noted student improvement in language or confidence.	Journal

2. Sample Coded Excerpts

Student Writing Sample (Pre-assessment)

"The butterfly fly. The frog swim. They live different."

Codes Applied:

SentenceFragment, PresentSimpleIncorrect, BasicComparison, LimitedVocabulary

Student Writing Sample (Post-assessment)

"The butterfly and the frog are both animals, but the butterfly has a pupa stage and the frog does not."

Codes Applied:

PresentSimpleCorrect, DetailedComparison, ComplexSentence, RichVocabulary

Observation Note

"Students used Venn diagrams to compare frogs and butterflies. Student A said, 'Both have eggs.'

Student B added, 'But butterfly has pupa.'"

Codes Applied:

GraphicOrganizerUse, PeerInteraction, ActiveParticipation, VocabularyScaffolding

Student Reflection

"It was easier to write because the Venn diagram helped me see the differences."

Codes Applied:

GraphicOrganizerHelpful, IncreasedUnderstanding, EnjoyableActivity

Teacher Journal Entry

"Today I noticed students struggling with connectors. I added a sentence bank on the board and guided them through an example."

Codes Applied:

InstructionalAdjustment, ScaffoldingProvided

Appendix G: Rubric for Evaluating Comparative Writing Tasks

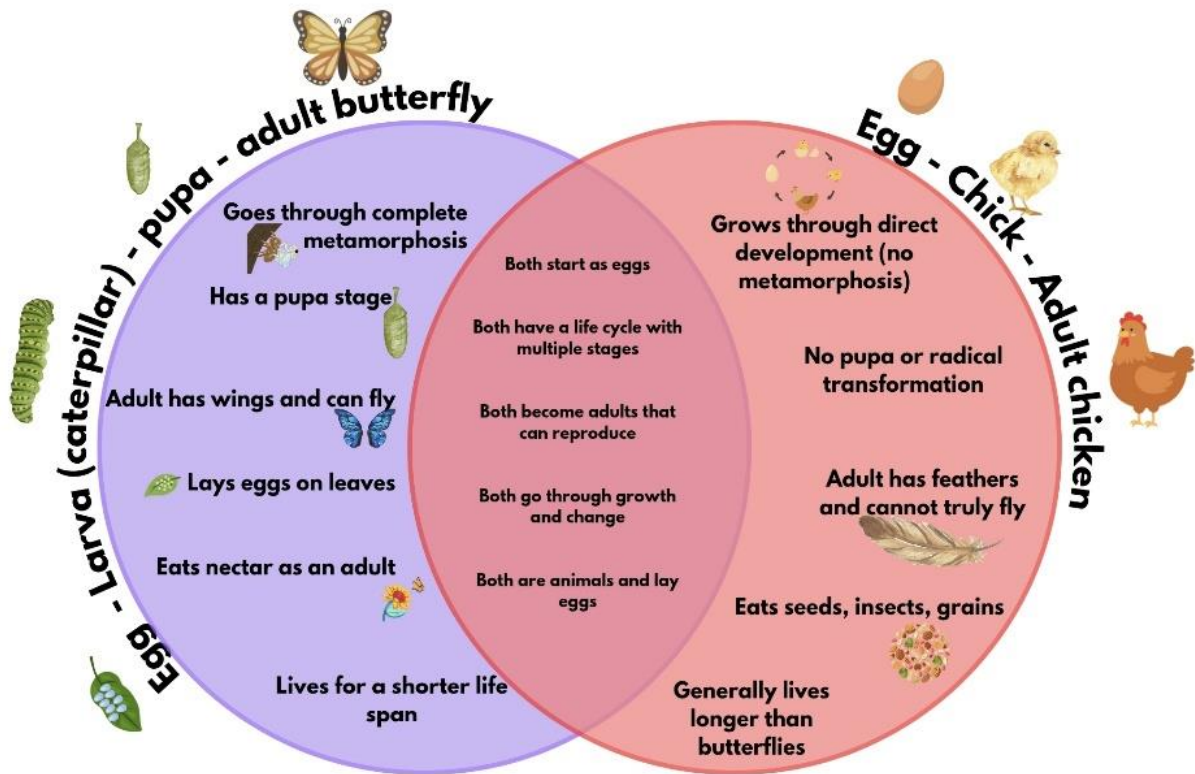
The complete rubric used to evaluate student writing samples. This rubric clearly defines the criteria (e.g., grammatical accuracy, vocabulary use, sentence complexity, use of comparative structures) and the different levels of proficiency for each criterion.

Rubric for Student Comparative Paragraphs

Criteria	4 – Excellent	3 – Good	2 – Basic	1 – Needs Improvement
Grammar (Present Simple & Comparative Structures)	Uses present simple and comparative structures accurately throughout. No noticeable errors.	Minor grammar mistakes; mostly accurate use of present simple and comparisons.	Some errors in present simple or comparative structures that affect clarity.	Frequent grammar mistakes that interfere with understanding.
Vocabulary (Descriptive and Comparative Terms)	Rich and varied vocabulary; uses descriptive and comparative terms correctly.	Good vocabulary use; some descriptive and comparative words.	Limited vocabulary; few descriptive or comparative words used.	Very limited vocabulary; repetitive or irrelevant word choices.
Sentence Structure	Writes complete, varied, and well-structured sentences.	Mostly complete sentences; some variety.	Simple or repetitive sentence structures.	Incomplete or unclear sentences.
Organization & Coherence	Ideas are clearly organized and logically sequenced using connectors (e.g., "both," "but," "while").	Some organizational ideas mostly make sense and follow a logical sequence.	Somewhat disorganized; ideas not always clear or connected.	Ideas lack organization; it is difficult to follow.
Content Accuracy	Accurately compares life cycles with clear, factual details.	Mostly accurate information with minor errors.	Some inaccurate or vague information.	Incorrect or missing content.

Appendix H: Example of Venn Diagram for Comparing Life Cycles

A blank copy of the Venn diagram template utilized as a graphic organizer during the instructional design phase, demonstrating the visual tool provided to students for comparing life cycles.



Appendix I: Example of T-Chart for Comparing Life Cycles

A blank copy of the T-chart template utilized as another graphic organizer during the instructional design phase, showing an alternative visual tool provided to students for comparison.

T-Chart for Comparing Life Cycles



Title of the Study: Writing Statements Improving by Project-Based Learning in Second Grade Learners at Newport School

Researcher: Nelson Enrique Vargas Díaz

Purpose: To provide the blank T-chart used by students to compare the life cycles of two animals (e.g., butterflies and chickens) as a pre-writing activity.

Blank T-Chart Layout

Students filled out the following chart to organize ideas before writing comparative paragraphs.

Sample T-Chart Layout

Below is a sample of how students used the T-chart to compare the butterfly and the chicken.

Butterfly	Chicken

Instructions Given to Students:

- Write characteristics of the butterfly on the left side.
- Write characteristics of the chicken on the right side.
- Use this chart to help you write comparative sentences such as:
'The butterfly has a pupa stage, but the chicken does not.' or
'Both animals start life as eggs.'

Notes

- The T-chart was part of the scaffolding tools used during the pre-writing phase of the PBL sequence.
- It allowed students to visually compare facts and structure their ideas logically.

Appendix J: Anonymous Student Writing Extract Samples

A selection of anonymized excerpts from actual student writing samples (from both pre- and post-assessments) that illustrate key points discussed in the findings, particularly those used as direct examples in the "Discussion of Findings" section.

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=sharing

Appendix K: Anonymous Observation Notes Extract Samples

Anonymized excerpts from the classroom observation field notes that provide concrete examples of student engagement, collaboration, or responses to scaffolding, as discussed in the study's findings.

Anonymous Observation Notes Extract Samples



Title of the Study: *Writing Statements Improving by Project-Based Learning in Second Grade Learners at Newport School*

Researcher: Nelson Enrique Vargas Díaz

Purpose: To present anonymized excerpts from classroom observation notes taken during the implementation of the Project-Based Learning unit, supporting qualitative analysis of student engagement and writing behaviors.

Observation Note 1 – Week 1 (Initial PBL Introduction)

"Students listened attentively to the explanation of the butterfly and chicken life cycles. Several raised their hands to share prior knowledge. One student said, 'I saw a butterfly egg in my garden.' Students appeared curious and motivated."

(Codes: *ActiveParticipation, PriorKnowledge, TaskEngagement*)

Observation Note 2 – Week 2 (T-Chart and Sentence Practice)

"During group work, students filled the T-chart with observations. Student A wrote: 'The butterfly has four stages.' Student B commented, 'The chicken doesn't change like the butterfly.' Use of vocabulary improved compared to previous week."

(Codes: *GraphicOrganizerUse, PeerInteraction, VocabularyDevelopment*)

Observation Note 3 – Week 3 (Venn Diagram & Writing Draft)

"Students used the Venn diagram confidently. Some asked for help with spelling, but most could explain similarities: 'Both have eggs.' One group started using linking words: 'but', 'while', 'and'."

(Codes: *ComparativeLanguage, IndependentWork, VisualAidUse*)

Observation Note 4 – Week 4 (Final Writing Task)

"Students wrote comparative paragraphs using their diagrams. Student C wrote: 'The butterfly has pupa, but the chicken don't.' There was evidence of effort and correct structure despite minor grammar issues."

(Codes: *WritingProgress, PresentSimpleAttempt, SelfCorrection*)

Note:

All student references have been anonymized. These field notes were used to triangulate data alongside student writing samples and reflections.]

Appendix L: Anonymous Student Reflection Extract Samples

Anonymized excerpts from students' written reflections that exemplify their perceptions of the learning experience, the usefulness of instructional tools, or their self-awareness, as cited in the study's findings.

Anonymous Student Reflection Extract Samples



Title of the Study: *Writing Statements Improving by Project-Based Learning in Second Grade Learners at Newport School*

Researcher: Nelson Enrique Vargas Díaz

Purpose: To provide anonymized samples from three student reflections collected after the PBL writing task, highlighting student perceptions of their learning experience.

Reflection Extract 1 – Student A

"I learn about butterfly and chicken. I like to write and use diagram."
(Codes: *IncreasedUnderstanding, EnjoyableActivity, VisualAidUse*)

Reflection Extract 2 – Student B

"The chart help me. I write more easy now."
(Codes: *GraphicOrganizerHelpful, WritingProgress*)

Reflection Extract 3 – Student C

"At first I no understand. Then teacher explain and I write good."
(Codes: *TaskChallenging, ScaffoldingProvided, Self-Confidence*)

Note:

Only three student reflections were collected for this study. All names were removed for anonymity. Spelling and grammar were preserved to maintain authenticity. These reflections supported the analysis of students' writing development and engagement through PBL.

Appendix M: Anonymous Teacher Journal Extract Samples

Anonymized excerpts from the teacher's journal entries that illustrate instructional strategies, adjustments made, or observations of student progress, as referenced and discussed in the study's findings.

Anonymous Student Reflection Extract Samples



Title of the Study: *Writing Statements Improving by Project-Based Learning in Second Grade Learners at Newport School*

Researcher: Nelson Enrique Vargas Díaz

Purpose: To present anonymized excerpts from the teacher-researcher's reflective journal. These entries document instructional strategies, student behaviors, and classroom experiences observed during the implementation of the Project-Based Learning unit.

Journal Entry Extract – Week 1 (PBL Launch)

"I introduced the topic of life cycles using visuals of a butterfly and a chicken. Students seemed genuinely curious. I noticed several raised their hands to share things they knew about animals. The word 'egg' came up often. I think this interest is a good entry point for writing later."

(Focus: Engagement, Prior Knowledge Activation)

Journal Entry Extract – Week 2 (Using the T-Chart)

"Today, students filled in the T-chart to compare butterfly and chicken life cycles. At first, they asked a lot of questions like 'Where do I write the pupa?' but by the end, most had completed the chart with some support. I modeled how to turn facts into sentences like 'The butterfly has a pupa, but the chicken does not.'"

(Focus: Use of Scaffolding, Modeling, Guided Writing)

Journal Entry Extract – Week 3 (Venn Diagram & Writing Start)

"Students used their Venn diagrams to begin writing. I noticed that even lower-level students could say something like 'Both have eggs.' I added a sentence bank on the board with comparative phrases to support sentence formation. This worked well — some students even used 'while' and 'but' correctly."

(Focus: Language Development, Instructional Adjustment, Confidence Building)

Journal Entry Extract – Week 4 (Final Writing Task & Reflection)

"Today we did our final writing. I read a few samples and saw major improvement. Students used more vocabulary, more complete sentences, and better structure. I'm

proud of how they used the tools: the T-chart and Venn diagram really helped. Next time, I want to give them more sentence starters from the beginning."

(Focus: Student Progress, Tool Effectiveness, Pedagogical Reflection)

Note:

These journal entries were anonymized and excerpted for brevity. They reflect the teacher-researcher's observations, reflections, and decisions during the project. They were used alongside student artifacts and classroom observations to triangulate findings.