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Optimizing Remote Learning: Contextualized Learning Material in Teaching Reading and Writing Skills

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ABSTRACT

This quasi-experimental study evaluated a contextualized course learning material for Reading and Writing Skills and determined its effectiveness in remote learning. Using a matched-pair random assignment procedure, 60 Grade 11 students were paired according to pretest scores and then assigned to either a comparison group using regular course materials or an experimental group using the contextualized material as supplementary instruction. Data from pretests, formative tests, summative tests, and posttests were analyzed through paired and independent t-tests, with Cohen's d used to measure effect size. Findings show that the experimental group consistently outperformed the comparison group in key competencies, including Techniques of Information Selection and Organization, Writing Development Patterns, and Properties of a Well-Written Text. Large effect sizes further indicate that the contextualized material produced substantial learning gains beyond those achieved through traditional resources. Participant feedback also highlighted the material's relevance and usefulness, offering insights for future revisions.

Keywords: contextualized learning material, reading and writing skills, remote learning

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Introduction

Instructional materials must be appropriate and effectively utilized to ensure that learners achieve the desired outcomes. Although teachers can use a variety of materials to teach language including models, realia, graphical representations, and textbooks, it is crucial to ensure these materials provide the necessary experiences for learners to facilitate learning and retention (Ajoke, 2017). The emphasis for centuries has been on the instructional materials in teaching the target language skills, as it should be efficient and effective for teaching. These materials can increase student engagement by shifting the focus of the learning process to be more learner-centered, thereby improving classroom performance. Two major approaches are recommended for effective instruction of Reading and Writing. One is the learner-centered approach, which begins on a deep understanding of the learners and adapts lesson delivery to their individual and collective capabilities. However, Selangan as cited by Jaca et. al, (2019) observed that classroom outputs reflect a decline on students' reading and writing skills. Since teaching approaches and strategies have significant implication to meet curriculum requirements, teachers are encouraged to be involved in the process. This observation aligns Pablo and Lasaten (2018) findings, reporting that Grade 11 students struggle to diversify ideas and thoughts when writing essays. They also face challenges in idea organization, word appropriation, sentence structures, conventional writing methods adherence, neutral tone composition, and proper citation and list reference sources.

Reading Association of the Philippines (RAP) President, Perez (2018) mentioned that Program for International Student Assessment (PISA) (2019) results found that Filipino high school students scored lower in reading comprehension, mathematics, and science compared to their international peers as around 80% of them failed to reach at least the minimum level of reading proficiency. This emphasized the relevance of contextualizing and regionalizing the reading instruction, to strengthen literacy and comprehension among learners. Meanwhile, the K to 12 curriculum highlights curriculum's need for localization and indigenization. Lubrica et al. (2018) describe contextualization as a teaching and learning process that allows students to apply real-life situations to lessons, shifting the focus to applying the acquired basic skills and knowledge to relevant contexts.

Educators are encouraged to use local contexts and situations when teaching language skills like reading and writing. This process is defined by the British Council as contextualization wherein items for language are placed in a meaningful and real context not isolated to manipulate its practice. Learners apply communicative skills in authentic situations using the target language and recall becomes easier.

In the Philippines, the acquisition of both effective and comprehensive reading and writing skills is expected among students within the SHS curriculum through the Reading and Writing Skills subject. It aims to develop the skills among students and apply them in academic and non-academic situations. Yet, studies and standardized results show that there are existing challenges faced by teachers while teaching the course.

Jaca et.al (2019) found that there's a need to tailor activities and teaching materials to the student's comprehension level using contextualization. This is need also expressed by the teacher-participants in the study. While a

study by Totto and Ramos (2021) revealed that senior high school students show positive attitude in gaining the skills even if their performance is poor. It recommended additional support including programs and material development in leading students to language proficiency. Additionally, adequate teacher training can also address the weak foundation of learners and help teachers with supplemental materials development.

The study aims to (1) determine the participants' performance in pretest, posttest, formative, and summative assessments, (2) evaluate the effectiveness of the contextualized learning materials for Reading and Writing Skills in both remote asynchronous and synchronous learning environments, and (3) identify emergent themes and codes from participants' evaluations of the developed contextualized course e-learning materials in terms of content, usability, and effectiveness.

Theoretical Framework

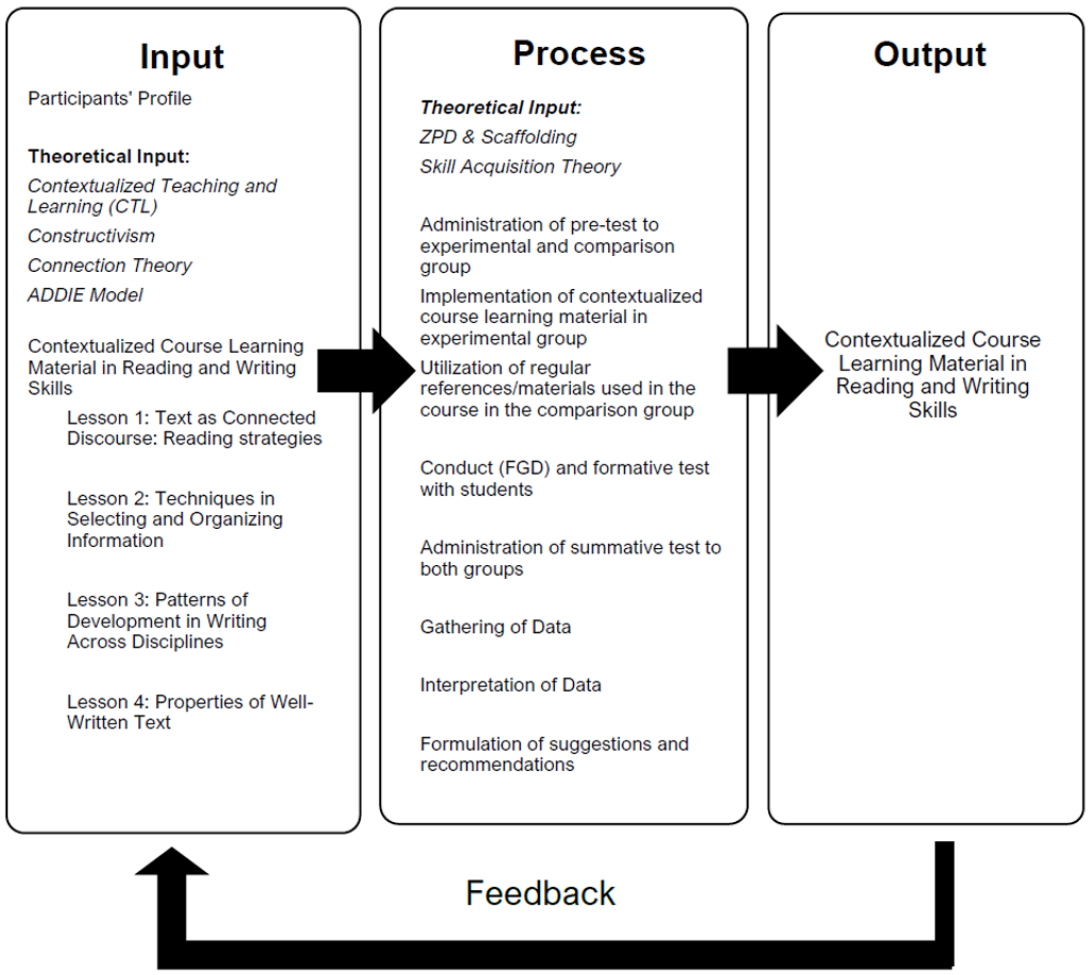
This study is anchored in several theories that explain how learners construct knowledge, relate new content to prior experiences, and develop skills progressively. At the core of this framework is Contextualized Teaching and Learning (CTL), which emphasizes connecting academic skills to authentic, real-world applications. Kalchik and Oertle (2010) and Mazzeo (2008) note that learning becomes more effective when instruction is embedded in meaningful contexts supported by active, hands-on engagement. This enables learners to view knowledge as connected rather than isolated. Connection Theory further explains how learners activate prior knowledge, apply new concepts, and recognize their relevance to real-life situations, a threefold process outlined by Hudson and Whistler (2007). This aligns with Vygotsky's Zone of Proximal Development (as cited in Hudson et al., 2007), where learners construct meaning as they bridge the gap between what they know and what they are learning. Complementing this, Constructivist Theory highlights learning as an active process in which knowledge gains meaning when applied in authentic contexts (Suhendi & Purwano, 2018). To support learners through increasingly complex tasks, Scaffolding (Bruner, Wood, & Ross, 1976) provides strategic assistance that enables movement from guided to independent performance. Skill Acquisition Theory (VanPatten & Benati, 2010) explains progression from explicit understanding to automatic skill through practice, while the ADDIE model (Aldoobie, 2015) offers a systematic structure for designing effective, learner-centered materials. These theories establish the framework for contextualized, scaffolded, and skill-oriented learning.

Conceptual Framework

Anchored on the theories discussed, Contextualized Teaching and Learning, Connection Theory, Constructivism, Scaffolding, and Vygotsky's Zone of Proximal Development, Skill Acquisition Theory, and the ADDIE-aligned design principles, the conceptual framework illustrates how the study's variables and processes interact to address the identified instructional gaps. These theories collectively establish the assumptions that learning is constructed through meaningful, real-world contexts; supported through guided instruction; connected to prior experiences; and strengthened through progressive skill development.

Figure 1

IPO Framework of the Study



As shown in Figure 1, the study adopted an Input–Process–Output (IPO) model. The Input component includes the learners' profiles and the Contextualized Course Learning Material designed by the researcher. CTL, Constructivism, and Connection Theory inform the nature of this material by ensuring it activates prior knowledge, embeds real-world scenarios, and promotes authentic meaning-making. The Process component represents the implementation and utilization of the contextualized material. Consequently, Scaffolding and the Zone of Proximal Development guide how instructional support is structured. Meanwhile, Skill Acquisition Theory explains the progression from explicit understanding to more automatic performance through repeated, contextualized practice. Lastly, the Output component captures the effectiveness of the material as measured through learners' performance scores. The movement from input to output reflects the theoretical expectation that contextualized,

scaffolded, and skill-oriented instruction yields improved academic performance. Thus, the IPO model operationalizes the study's theoretical foundations, providing a coherent structure for examining how contextualized instruction influences learning outcomes.

Literature Review

Several studies widely acknowledge that the current curriculum must be improved to meet the learning demands of the 21st century, particularly in the language classroom. Scholars argue that a major barrier to effective literacy development is the persistent separation of classroom knowledge from learners' real-world experiences. Contextualized Teaching and Learning (CTL) is proposed as a strategic response to this gap, as it integrates concepts and skills with authentic situations that reflect learners' interests. Rather than teaching language skills in isolation, CTL encourages hands-on and meaningful learning experiences. It strengthens the connections across concepts and is considered an approach that directly counters the fragmented instruction noted by Andriotis (2017). Barrot (2018) likewise emphasizes that embedding learning in relevant contexts enhances retention and supports sustained motivation, suggesting that contextualization strengthens the cognitive and affective dimensions of literacy development.

The theoretical grounding of CTL, drawing from learning styles, problem-based learning, motivation theory, and social cognitive theory, further explains why contextualization benefits literacy. These theories collectively argue that learners process information more effectively when new knowledge is connected to real-life situations, reinforcing Labiste's (2019) assertion that skills must be applied "in context" to be meaningful. However, research also indicates that contextualization is shaped by cultural and disciplinary factors. Nashon and Anderson's (2013) interpretative case study with Kenyan students reveals that contextualized instruction is perceived differently depending on learners' cultural experiences, suggesting that CTL must be adapted carefully to specific environments. This implication becomes central when considering contextualization in reading and writing instruction.

Studies on reading and writing support the same principle that underlies CTL. Learners develop literacy skills more effectively when these skills are encountered in meaningful, relevant situations. Jouhar and Rupley (2020) demonstrate that independent reading strengthens narrative and descriptive writing, influencing content, organization, grammar, mechanics, and spelling. Their findings also show that comprehension improves across learner levels, although proficiency may moderate these effects highlighting the need for instructional practices that recognize learner diversity. Kim et al. (2020) similarly emphasize that L2 vocabulary knowledge is a strong predictor of both reading and writing performance. Their work reveals that exposure to meaningful L2 contexts enhances comprehension, mirroring the CTL principle that language learning becomes more effective when situated in real-world experiences. This connection suggests that contextualization may directly support vocabulary, comprehension, and written expression.

Furthermore, Turcotte and Caron (2020) argue that reading and writing should be taught together to improve text comprehension and writing quality, pointing out that integration enhances learners' ability to articulate ideas. Their emphasis on the need for teacher training aligns

with Grabe and Stroller's (2020) observation that instructional support is crucial for successful literacy development. These insights parallel the challenges identified in CTL research: both literacies and contextualized instruction require intentional design, teacher preparation, and relevant materials to be effective.

These literatures reveal a shared argument across CTL and literacy studies. Learning becomes more powerful when instruction is authentic, integrated, and context-driven. Whether through contextualized tasks or reading-writing integration, research consistently shows that learners benefit from instruction that reflects real-world communication and meaningful engagement. This highlights the importance of developing contextualized materials tailored to specific disciplines. Such materials support not only learner motivation but also deepen reading comprehension, vocabulary growth, and writing performance outcomes that traditional, decontextualized instruction struggles to achieve.

Research Questions

The study envisioned to assess researcher-developed contextualized course learning material and its effectiveness in teaching Reading and Writing Skills among senior high students in a remote learning environment. Specifically, answering the following:

1. What are the comparison and experimental groups' pretest, formative test, summative test, and posttest mean scores?

2. Is there any significant difference between the participants' posttest mean scores?

3. Is there any significant difference between comparison group's pretest and posttest mean scores?

4. Is there any significant difference between experimental group's pretest and posttest mean scores?

Participants

The random block design with matched-pair sampling was used in the study focusing on Grade 11 students enrolled in a Reading and Writing Skills subject in a private senior high school in Calamba, Laguna, Philippines. Subjects are paired using a blocking variable such as the study's pretest result, and assigned to two treatment conditions. Subjects were then randomly assigned to different treatments within each pair. Comparison group, consisting of 30 participants, used traditional materials for the subject and Reading and Writing Skills references, while the experimental group, also with 30 participants, supplemented these traditional materials and the contextualized course learning material.

Methodology

Research Design

The quasi-experimental design for the study is utilized by the researcher. Christensen et al. (2015), described it as a design that employs experimental procedures. However, it does not include all requirements of an experimental study and does not control for the possibility of extraneous variables influencing the condition. Though manipulation of the independent variable is included, participants' random assignment to conditions and situations of participants usually

present in strong experimental designs is not conducted. In a quasi-experimental study, the dependent variable is examined before altering the independent variable to avoid issues on directionality

Instrument

The study employed researcher-developed pretests, posttests, formative tests, and a summative test to evaluate the effectiveness of the Contextualized Course Learning Material. A 30-item multiple-choice pretest/posttest aligned with Grade 11 Reading and Writing Skills competencies was constructed using a Table of Specifications based on the Department of Education curriculum and Bloom's taxonomy. The 30-item pretest and posttest underwent item analysis during the pilot testing phase. Items with discrimination indices below .20 were revised. The final instrument attained acceptable reliability, with a Cronbach's alpha of .86, indicating internal consistency suitable for research purposes. The content validity was established through expert review by four English teachers, and the instrument was refined following their feedback. Content validity ratings from four experts yielded a mean CVI (Content Validity Index) of .92, reflecting strong alignment with the Grade 11 competencies. The conducted pilot testing with 20 Grade 11 students provided data for item analysis and reliability testing, leading to further revisions and finalization of the test. The material itself was developed from the curriculum guide and LRMD system, then validated by four subject-matter experts and enhanced using inputs from a student focus group to ensure accuracy, relevance, and alignment with target competencies. Focus group feedback from 12 students indicated high usability of the material, across criteria: alignment to course objectives and lessons, relevance to chosen strand, readability, platform accessibility, and timeliness of practice situation and content.

Based on the result of the Focus Group Discussion (FGD) under the theme of "Implementation Perspective", discussed **"Alignment to Course Objectives and Lessons"** obtained from the participants. The participants cited it as an impact of the material's implementation. Examples of this was *"Yung information and examples written in these learning materials were relevant and accurate enough for me to understand."* (FGD, P3, L30-31).

Under the theme ``Implementation Perspective", it discussed about **"Relevance to Chosen Strand"** obtained from the participants. The participants cited it as an impact of the material's implementation. Examples of this was *"I have observed that the contents of the material are relevant to my chosen strand. It helps me with things that I would need in the future, such as creating resumes and application letters that I will need in college and when I apply for jobs."* (FGD, P2, L23-24) CTL is a method in teaching that uses familiar contexts to help students acquire learning abilities. This technique can ensure educational quality, meet the requirements of students, and improve basic training. Because the contexts are culturally anchored and responsive, the learning skills may be readily acquired because they belong to the region where the learning content being studied is known and related to them (Nuqui, 2017).

"Usability of content to various situations" was also obtained from the participants as an impact of the material's implementation. An example of this was *"The material provides me practice on dealing with certain situations or activities that use critical-*

thinking skills, skimming/scanning skills." (FGD, P4, L36-38). According to Rathburn (2015), determining effective strategies to engage students for them to gain literacy is critical. Application of learning to new contexts are provided among students by thinking about personal and academic pursuits, societal challenges, and social life even when not being asked.

Under the theme ``Implementation Perspective", it discussed about **"Suitability of the language used"** obtained from the participants. The participants cited it as an impact of the material's implementation. Examples of this were "*I find the CCLM very efficient and as students we can easily follow on its contents. Let me focus on the level of language used in the course material. I find it suited to my level as it is explained well enough for me to understand the details provided and reflect upon it.*" (FGD, P12, L40-42*)*. According to Lorbis (2019), Samuel stated that learning materials represent a different mode of communication that teachers employed to provide instructional information to students. It is important to expand the variety of materials employed to transmit knowledge through learning materials.

"Accessibility on various platforms" was also obtained from the participants as an impact of the material's implementation. An example of this was *"I'll add that it is available and accessible on all my gadgets such as mobile phones, desktop computers, and laptop computers, the course materials,"* (FGD, P3, L27-29). The International Institute for Educational Planning of UNESCO (2021) said that learning resources are tangible tools to assisting students' learning. It must be built on curricular standards that connect disciplines with broad ideas and concepts, as well as a study product. Learning objectives, content, access and storage, and appropriateness are factors to consider in creating learner materials.

Furthermore, **"Timeliness of practice situation and content"** was also obtained from the participants and cited it as impact of the material's implementation. Example of this was *"I find it po very useful especially the examples and situations used in CCLM is up to date, timely. What I also noticed is that the situations in the course material are not possible to be googled. Which lead me to think and believe that the practice exercises and examples are well-thought of."* (FGD, P7, L66-69). According to Hasibuan et al. (2019), timeliness, legitimacy, practicality, and promotion of student's problem-solving abilities, as well as independent learning must be considered in designing learning materials.

Table 1 summarizes participants' implementation perspectives, with thematic analysis revealing six key dimensions: alignment with course objectives, relevance to students' strands, usability across academic and real-life tasks, appropriateness of language level, accessibility across platforms, and timeliness of examples and practice situations. Participants affirmed that the material aligned well with required competencies, supported strand-specific needs, and enhanced skills such as critical thinking, writing, and task performance across subjects. They also reported that the content was understandable, the language was suited to their proficiency level, and the material was easily accessible on multiple devices, an essential feature in current learning environments. Additionally, students emphasized that the examples and scenarios were current, relatable, and thoughtfully

Table 1

Valued Responses on Implementation Perspective

Themes	Code	Exemplar
lmplementation Perspectives	Alignment to course objectives and lessons	*"I also find the contents match the course objectives and topics or lessons to be covered."* (FGD, P1, L 18-19) *"Yung information and examples written in these learning materials were relevant and accurate enough for* me *to understand and do matches according to what was presented in the course guide."* (FGD, P3, L30-31)
	Relevance to chosen strand	*"Napansin ko din po that the contents of the material are relevant to my chosen strand. It helps* me *with things that I would need in the future, such as creating resumes and application letters that I will need in college and when I apply for jobs." (FGD, P2, L23-24)* *"Uhmmm, pinaka nagamit ko po siya sa* mga *different paper writings po, sa pagenhance po ng grammatical skills ko po at tsaka* *sa* mga *specific writing activities po sa future profession ko po in Allied Health " (FGD, P5, L72-73)*
	Usability of content to various situations	*"Naeenhance niya po at napa-practice aka on dealing with certain situations or activities na gingamitan po ng critical-thinking skills, skimming/ scanning skills, and even paying attention to the simplest* *details po".* (FGD, P4, L36-38) *"Nagagamit ko din po siya in creating papers such as resumes, formal letters po, sa pagcreate po ng email na magagamit ko po sa college."* (FGD, P7, L76-77) *"Nagagamit ko po siya in writing essays and activities in different subject din po and nagamit ko din po yung* case *study sa MIL, and business proposal sa GenMath."* (FGD, P78, L79-80) *"Nagagamit ko po siya para makasagot sa recitation ng ibang subject, tapos uhmmm nagamit ko din po siya in terms of, sa* mga *activities po like writing essays and paragraphs, especially po in correct way of doing it. Like sa formulation po ng conclusions and defenses in papers sa Science sub1ect po "* (FGD, P1, L84-86)

designed, which increased engagement and comprehension. These findings are consistent with the literature underscoring the value of contextualized, accessible, and well-

designed learning materials in promoting meaningful learning, skill transfer, and learner independence.

Data Collection Procedure

The researcher asked permission from the school administration to conduct her research. After receiving approval, tests are administered to participants. Test results are analyzed and a focus discussion to gather additional insights was conducted. The data was analyzed using statistical tests in comparing the scores before and after the intervention.

Data Analysis

The differences between the two groups were analyzed using t-test. Descriptive and inferential statistics were used to examine the pretest, posttest, formative test, and summative test. Participants' performances are described using mean and standard deviation. The significant differences of test mean scores such as formative, summative, and posttest were determined through an independent t-test while determining the significant differenced of both groups pretest and posttest means scores is through a paired t-test. Moreover, to estimate the effect size of material implementation during the study, Cohen's d was calculated.

Findings and Discussion

The results of pretest, posttest, formative test, and summative test administered to both groups were outlined in this section. The developed contextualized learning material in conjunction with usual course references was used by the experimental group, whereas only the course references was used by the comparison group.

Table 2

Pretest Mean Scores

Group	Mean	SD	Interpretation
Experimental Group	25.90	5.40	High
Comparison Group	26.77	6.07	High

The pretest results in Table 2 indicate that the experimental group (M = 25.90, SD = 5.40) and comparison group (M = 26.77, SD = 6.07) possessed comparable baseline competencies in Reading and Writing Skills. The minimal mean difference (MD = 0.87) demonstrates no meaningful initial disparity between groups. This confirms that the there is an existing group equivalence prior to intervention.This similarity is critical in quasi-experimental research because it strengthens the internal validity of subsequent comparisons. These results suggest that prior to the intervention, both groups possessed similar competencies in reading strategies, information organization, writing patterns, and characteristics of well-written texts. Such readiness aligns with Cabigao (2021), citing Badayos, who emphasizes that learners completing basic education should already demonstrate essential writing and communication skills. This establishes an important foundation: any difference in later scores can more confidently be attributed to the instructional materials rather than pre-existing disparities. The comparable starting point aligns with Connection Theory, which posits that learning effectiveness depends on learners' existing knowledge structures. Since both groups began with similar schema, differential growth is attributable to instructional context rather than learner background.

Table 3

Formative Test Mean Scores

Group	Mean	SD	Interpretation
Experimental Group	39.00	3.66	High
Comparison Group	35.00	5.45	High

Table 4

Summative Test Mean Scores

Group	Mean	SD	Interpretation
Experimental Group	46.53	4.44	High
Comparison Group	42.27	6.01	Average

Table 3 shows that the experimental group obtained a higher formative test score (M = 39.00, SD = 3.66) than the comparison group (M = 35.00, SD = 5.45). This reflects early evidence of the contextualized material's influence. The mean difference (MD = 4.00) suggests that students exposed to contextualized materials demonstrated earlier mastery of lesson concepts.The smaller standard deviation in the experimental group suggests more consistent performance among its learners. This finding supports the principles of Contextualized Teaching and Learning (CTL), which asserts that content connected to real-world contexts facilitates comprehension and recall. Additionally, this improvement reflects Vygotsky's Zone of Proximal Development (ZPD), wherein learners progress effectively when scaffolded using familiar, meaningful contexts. Rather than merely demonstrating content mastery, these results point to the potential of contextualization to support immediate comprehension and application, consistent with Qudsyi et al. (2017), who found that contextualized instruction enhances writing ability more effectively than traditional approaches.

Table 4 presents how the experimental group continued to outperform the comparison group in the summative assessment (M = 46.53, SD = 4.44) versus (M = 42.27, SD = 6.01). The difference (MD = 4.26) illustrates sustained learning benefits beyond recall and toward higher-order skill application. The results suggest that contextualized learning materials helped students more effectively transfer and apply concepts such as information selection techniques, writing patterns, and text evaluation. This deeper understanding echoes the theoretical underpinnings of contextualized teaching and learning, which enhance cognition by linking content to learners' lived experiences (De Lott Baker et al., 2010). The experimental group's sustained high performance indicates that contextualization supports not only short-term recall but also more complex learning processes. Summative performance requires transfer of knowledge to new tasks. The experimental group's results reflect Constructivist Theory, which posits that knowledge becomes durable when learners actively construct meaning through contextual engagement.

Table 5 displays posttest scores, which further revealed significant group performance

Table 5

Posttest Mean Scores

Group	Mean	SD	Interpretation
Experimental Group	34.50	4.35	Very High
Comparison Group	30.50	5.55	High

Table 6

Significant Difference on Formative Test Mean Scores

Group	Mean	SD	t-value	df	Mean-Diff	Cohen's d	Effect Size
Experimental	39.00	3.66	-3.337 **	58	-4.000	0.862	Large
Comparison	35.00	5.45					

Table 7

Significant Difference on Posttest Mean Scores

Group	Mean	SD	t-value	df	Mean-Diff	Cohen's d	Effect Size
Experimental	34.50	4.35	-3.108 **	58	-4.000	0.802	Large
Comparison	30.50	5.55					

differences, with the experimental group achieving a very high rating (M = 34.50, SD = 4.35) compared to the comparison group (M = 30.50, SD = 5.55).The tighter score distribution within the experimental group suggests that contextualized materials may help reduce performance gaps by supporting diverse learners more equitably. This aligns with Skill Acquisition Theory, which explains that repeated, meaningful practice leads learners from declarative knowledge toward automaticity, thus improving independent task execution. Bello et al. (2023) highlight the long-term learning benefits of localization and contextualization, reinforcing the value of integrating such materials across subject areas.

Table 6 shows that the independent samples t-test revealed a statistically significant difference in formative performance between groups, t(58) = −3.337, p = .005, with a large effect size (d = 0.862). The magnitude of the effect indicates that the intervention was not only statistically significant but practically consequential. The large Cohen's d confirms that contextualized instruction substantially improved learning outcomes relative to traditional methods. This provides empirical support for CTL and ZPD, demonstrating that learning accelerates when students are provided scaffolded, context-rich tasks that bridge existing knowledge with new concepts. The significant difference in formative test performance (t(58) = -3.337, p = .005) strengthens the argument that contextualized materials positively affect learning. The large effect size (d = 0.862) suggests meaningful practical impact, not just statistical significance. This implies that the experimental group not only learned more but did so in ways that represent real instructional improvement. Andriotis (2016) similarly asserts that contextualization enhances learning outcomes by making instructional content more relevant and adaptable to various situations.

Table 7 presents that posttest results also revealed a significant difference in achievement, t(58) = −3.108, p = .005, again with a large effect size (d = 0.802). This validates that the intervention's impact persisted beyond formative

Table 8

Significant Difference on Pretest and Posttest Mean Scores

Group	Test	Mean	SD	Mean Difference	df	t-value	Cohen's d	Effect Size
Experimental	Pretest	25.90	5.40	-8.600	29	13.238**	1.754	Large
	Posttest	34.50	4.35					
Comparison	Pretest	26.77	6.07	-3.733	28	-7.360**-	0.641	Medium
	Posttest	30.50	5.55					

assessments. The sustained improvement reflects the principles of ADDIE-based instructional design, where iterative planning, development, and evaluation yield measurable performance gains. The results confirm that contextualized materials do not merely support initial engagement. It fosters deep learning transfer, enabling students to apply skills independently. The improvement aligns with Ambrose et al. (2013), who describe CTL as a method that promotes critical thinking, creativity, and problem solving by grounding learning in real-world applications. The sustained performance gains across tests suggest that contextualization does more than reinforce facts. It strengthens learners' ability to use skills meaningfully.

Table 8 presents that both groups showed statistically significant gains from pretest to posttest. However, the experimental group exhibited a dramatically larger improvement (Mdiff = −8.600, t(29) = 13.238, d = 1.754) compared to the comparison group (Mdiff = −3.733, t(28) = −7.360, d = 0.641). While the comparison group achieved medium-level improvement, the experimental group achieved a very large effect, providing strong evidence that contextualized learning materials are substantively better than standard references. This aligns with Constructivism and Skill Acquisition Theory, demonstrating that learners not only gained knowledge but also internalized and automated skills through meaningful application. Furthermore, this provides strong evidence that contextualized learning materials effectively support deeper learning, consistent with Garin et al. (2016), who concluded that contextualization enhances academic performance and recommended the development of more localized instructional materials.

Implications

The study's findings have significant implications for teacher education and the teaching of Reading and Writing Skills. Teachers will need to enhance their pedagogical knowledge and skills, including proficiency in using technology and creating contextualized learning materials. Additionally, teachers need to align their teaching methods to remote learning environments. The study suggests the importance of personalized learning experiences, enhanced collaboration and communication, and the development of critical thinking and literacy skills to increase student engagement and motivation.

Conclusion

The results of the pretest, formative test, summative test, and posttest collectively demonstrate that the contextualized course learning material significantly enhanced learners' performance compared to the use of standard course references alone. These findings, particularly the higher mean scores, tighter score distributions, and large effect sizes observed in the experimental group, indicate that contextualized materials foster deeper comprehension, more consistent learning outcomes, and greater skill transfer in Reading and Writing Skills. Given this evidence, future researchers may adopt and use the contextualized course learning material developed in this study to further validate and refine its effectiveness.

Continuous evaluation of the material is recommended to address concerns identified through learner experience, ensuring that improvements are grounded in actual performance data. In conducting such evaluations, teachers and schools should follow DepEd's specifications to maintain the material's pedagogical soundness. The study's findings also reinforce the need for sustained development of contextualized learning resources, as the experimental group's substantial gains demonstrate the value of integrating real-world, localized examples into instruction. Thus, the use of supplementary materials and the design of additional contextualized activities are strongly encouraged to further strengthen students' reading and writing proficiency. Greater teacher involvement in producing and enhancing contextualized materials is likewise encouraged, as the results clearly show that such instructional approaches contribute meaningfully to improved learning outcomes in the Reading and Writing Skills course.

■ ■ ■

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3. **Declaration of Generative AI in Scientific Writing.** The researcher used Grammarly, an artificial intelligence tool, to assist with language editing, improving clarity, coherence, and the presentation of methodological content. All academic content and intellectual contributions are the sole responsibility of the researcher.
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