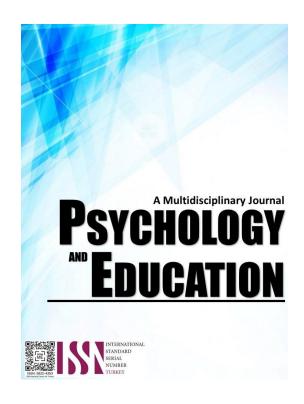
UTILIZATION OF CONTEXTUALIZED INSTRUCTIONAL MATERIALS IN EDUCATION: A SYSTEMATIC REVIEW



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 44 Issue 2 Pages: 203-214

Document ID: 2025PEMJ4249 DOI: 10.70838/pemj.440203 Manuscript Accepted: 07-26-2025



Utilization of Contextualized Instructional Materials in Education: A Systematic Review

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Abstract

This systematic review examines the use of contextualized instructional materials in Philippine education and their implications for student learning across various subject areas and regions. Analyzing seven data-driven analyses with other methodologies, such as quasi-experimental design, action research, and meta-analysis. The review emphasizes the reliability of the use of contextualized instructional materials (CIMs) in enhancing students' knowledge, comprehension, participation, and academic performance. The findings indicate that the students can learn more if the lessons are designed to relate to their culture, local context, and, most importantly, their real-life examples, and this can lead to better knowledge retention, motivation, and a deeper understanding of different subject areas. Despite all the benefits, there are still challenges that need to be addressed, such as a lack of teacher training and a lack of contextualized materials to use, and these gaps remain unresolved in the literature. The study highlights the role of teachers in collaboration with the parents and other stakeholders in creating relatable and contextualized instructional materials. Furthermore, this study supports the vision of the DepEd to have learner-centered teaching and inclusive education that outlines Sustainable Development Goal 4 (Quality Education). Overall, this study advocates for systemic support and recommends collaborative efforts with the parents, teachers, community, and school to create more relevant, inclusive, and teacher-centered lessons through contextualization.

Keywords: Contextualized Instructional Materials, Academic Performance, Systematic Review, Quality Education

Introduction

Instructional materials are essential in teaching students to catch their attention easily, enhance engagement, and help to facilitate learning. Using contextualized materials enhances the engagement of the students by making an example relatable to the real-life situation of the student (Reyes et al., 2019). Looking at the lens of the educational system of the Philippines, the lack of instructional resources highlights the prevailing concern, yet remains unresolved. This is accompanied by limited training for teachers, support from the community, and the ability to go with the new trends in teaching that make students engage or relate in their everyday lives. This makes the learners' learning experiences less engaging and less effective. To effectively address this problem, the Department of Education of the Philippines developed contextualized instructional material that can reflect the culture, environment, and experiences of the students to make the learning more effective, engaging, and relevant. By utilizing the contextualized instructional materials, the learning gap of the children in educational resources is addressed (Picardal & Sanchez, 2022). This pattern is seen in the existing literature and studies in the Philippines. This study aims to assess the influence of employing learning resources based on students' experiences on their interest, learning, and academic achievement, to produce competent students equipped with 21st-century skills by analyzing existing literature.

Teacher used contextualized instructional materials in teaching that are suitable to students' learning environments to offer teaching scaffolding to learners to stimulate learning by encouraging them to learn and helping them comprehend their lesson at a fast pace. According to Montero and Geducos (2022), a particular genre of literature incorporates local culture, language, and day-to-day experience into instructional material, making learning more meaningful to students. The utilization promotes inclusivity as it fills the learning gap and improves learning outcomes. Contextualized instructional materials make learning easier and more engaging for students by relating lessons to their everyday experiences and culture. This helps students grasp the lessons more quickly and provides an engaging educational experience that is in line with their unique cultural backgrounds (Pedroso et al., 2023). Thus, using contextualized instructional materials that connect to Filipino students' daily lives makes lessons easier to understand, more engaging, and more meaningful, helping them learn better and faster.

According to Almacen (2024), the utilization of instructional materials explores how the use of these tailor-made materials can enrich student engagement, comprehension, and academic outcomes across educational settings. The effective usage or application of the materials and resources in and over the teaching and learning process, ensuring their satisfaction of the purposes of the intended educational objectives as they are interrelated in the teaching and learning process. According to Bender and Tisha (2023), this technique encourages a better understanding of theories as it connects theoretical education to their practical application, enhancing their ability to understand the links among topics. This not only advances the academic experience but it also encourages multi-disciplinary thinking, which helps students draw meaningful connections between diverse fields and practical contexts, hence enriching the learning experience as a whole (Manlunas, 2023).

According to Reyes et al. (2019), Contextualization is a key element in engaging students in the teaching and their learning process,

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allowing them to connect their real-life experiences to the lessons. It makes the lesson meaningful and more applicable to students' lives by connecting their own personal context to the mathematical content being taught in school. This study focused on the concepts and practices of mathematics teachers in regard to contextualization, and the students were examined by their conceptual understanding of contextualized lessons in mathematics, which can help students assess how they learned these contextualized lessons from their teachers, focusing on the real-life applications in mathematics lessons. The semi-structured interview was conducted in this study to have a clearer understanding of the stance of the mathematics teacher regarding contextualization. The mathematics teachers revealed the two main ideas of contextualization: one focused on the students' lives and the other on using local materials or information. These ideas were derived from reference materials, the internet, and seminar training that was being conducted by the DepEd, which were seen in their teaching methods. The lessons were delivered more effectively when the mathematics teacher was utilizing available materials or local information, which can enhance students' understanding of mathematical concepts. The students' lives made the class more energetic and engaging, which allowed them to construct their meanings.

Using contextualized instructional materials (CIMs) is key to making kindergarten education better. Teaching young children becomes really tough when teachers don't have enough suitable resources. This research developed additional educational resources that were designed for young children based on gaps and through hearing about teachers' experiences. Fifteen kindergarten teachers from Malapatan 1 District could talk about challenges and successes using the educational resources that were already available to them. Some competencies that were related to self-recognition, age, and birthday needed to be supported with contextualized help, while other competencies already had educational materials created. The teachers agreed that contextualized instructional materials (CIMs) were vital to enhancing children's learning experience. These findings were also supported by Manlunas (2023), indicating an important need for CIMs to effectively teach and learn.

According to Flores (2021), contextualization is an effective strategy for increasing learning by presenting content in a meaningful and relevant way. The study aimed to develop contextualized instructional materials based on the most effective instructional materials used by 90 primary teachers from the Southeast Butuan District School. The findings supported the importance of RA 10533 (Enhanced Basic Education Act of 2013) in promoting a flexible curriculum that allows schools to adapt content to local and global studies. Moreover, the Social Studies teacher's use of only Instructional Materials inside the classroom leads to poor teaching strategy in delivering the content to the learners, and it leads to uninterested. Therefore, the use of Contextualized Instructional Materials helps the teacher logically present the lesson, which will improve the quality of teaching and make learning more interesting and fun. In conclusion, this study shows that using Contextualized Instructional Materials is a significant educational tool that makes learning more fascinating, appealing, and realistic. It also widens the Basic Education Teachers 'understanding of contextualization.

The study highlights how crucial it is to use contextualized instructional materials to enhance students' comprehension. By connecting or relating lessons to students' environment and cultural context, these resources make learning engaging and relatable. Students in Grade 10 who engaged in localized/contextualized activities outperformed those who employed conventional traditional techniques on post–tests (Montero & Geducos, 2022). This implies that students' understanding and academic performance can be improved by adjusting the content to their realities. Additionally, it encourages the creation of materials for other subjects, particularly to help students' performance. Contextualized teaching not only improves learning outcomes but also boosts student confidence in challenging subjects.

According to Picardal and Sanchez (2022), contextualization is employed to link scientific concepts to real-life issues, and it can be utilized as a method to improve student learning in both formal and non-formal settings. This led to a national imperative that science instruction in the Philippines focuses on a deeper understanding and application of knowledge as a key component in developing science and skills for everyday life situations. Research indicates that contextualization leads to better student achievement than traditional instruction. A meta-analysis of ten Philippine-based research conducted between 2017–2020 showed that its efficacy is independent of factors such as educational attainment and scientific expertise. Contextualized education uses different strategies and approaches to help learners achieve learning outcomes. In future studies, other factors that may affect its use in education should be explored to better understand its impact.

According to Rivera et al. (2020), there exist a significance of the use of a contextualized instructional material (CIM) in the teaching of Gas Laws. Two groups of Grade 10 students took part as representatives of the study from a public school in Cebu City in the uptown area. During the fourth quarter of the school year, these students learned from contextualized instructional materials. An initial entry and exit performance was recorded to be below average for this group of students, the study shows. Interestingly, these subjects did not show an improvement in their performance when entering and exiting, which was significantly improved after they were exposed to CIM. Data analysis revealed a significantly greater improvement for those groups where CIM interactivity was exposed. In addition to this, the study demonstrated that neither gender nor age were relevant to the improvement in CIM performance. Another important finding of the study indicated that how literature-based aligned instructional materials placed a contextualized-instruction medium leads to the attainment of maximum learning potential in a more interesting and efficient way, since results showed improvement in the students' performance in the concept of Gas Laws in Chemistry. The study further suggested that teachers must use of contextualized instructional materials during teachers' workshops.

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Researchers found that elementary teachers are successfully using teaching methods that connect to the local culture and community of their Indigenous students (Pedroso et al., 2023). These methods include using local storybooks, providing individual tutoring, and adapting teaching to fit each student's needs. This approach is important to Indigenous learners that significantly increased student engagement and motivation and leading to better learning. It shows how important it is for teachers to learn about culturally responsive teaching. It would be beneficial to study the best ways to teach teachers these effective strategies.

Research Questions

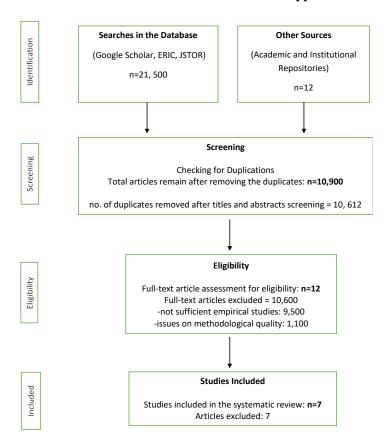
The systematic review assessed the impact of contextualized materials utilized inside the classroom in the Philippine context. Specifically, this study:

- 1. Identified the learning gaps presented in the included studies.
- 2. Determined the commonalities, significance of contextualized materials, strengths, weaknesses, characteristics, and patterns observed in the identified studies.
- 3. Investigated how contextualized materials improve the learners' academic performance.

Methodology

This study used the systematic review design to determine the articles to be analyzed to see what prevalent learning gaps are extracted from the different articles, their similarities and impact, and lastly, their contribution in supporting learning and improving the academic performance of the learners. This design is essential in analyzing the data from the published articles. The essential points were coded to answer the research question of this study. The systematic review captured the published articles from 2020 up to the present. From the 21,500 articles, only 7 papers were selected to be analyzed. This is done through the PRISMA Diagram.

Utilization of Contextualized Instructional Materials in the Philippines PRISMA Diagram



Results and Discussion

Similarities

All the studies found out that Contextualized instructional materials (CIMs) make the learners effectively engage, interact, and make the learners understand quickly, and also improve students' outcomes across various subjects such as Physical Education, Reading,

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Literature, Social studies, and science. Each study shows that regardless of the methodology used, whether quantitative, qualitative, action research, or meta-analysis, the main focus is producing a quality and positive impact on the child's learning experiences, like producing more contextualized video presentations for their strategy in aquatics swimming stroke, improving reading comprehension, increasing motivation, and more. The studies have shared a common goal through ensuring that the materials align with the cultural beliefs, interests, and real-life experiences of the students. Lastly, all of the studies focus on advocating a positive impact of students on focusing on the contextualized instructional materials strategy, specifically the schools that have limited resources and to make meaningful learning and a bridge in the learning gap of the students.

Differences

The articles under review employ the rules of differing methodological approaches through action research, experimental, quasi-experimental, and meta-analytic studies to investigate educational topics. Its wide-ranging subjects are science, social studies, literature, physical education, and reading comprehension; the focus is both on the knowledge related to that content and on broader skills. The first perspective ranges from elementary to high school students, thus allowing the analysis of developmental differences and targeted instructional strategies for certain groups. Most of the studies focus on specialized topics like gas laws or swimming strokes instead of overarching themes such as science literacy or reading comprehension. The educational settings ran the gamut from classroom to extra-classroom, with laboratories and other community centers serving to influence how different strategies are implemented. Basically, these studies imply a different level of complexity in educational research aimed at improvement in teaching practice among many cultivations and levels of students.

Learning Gap

Article 1 noted that students have low mastery in science subjects, possibly due to the lack of real-life examples that are relatable and engaging for children. Article 2 highlights that students have difficulty in reading and writing, indicating low classroom engagement and the use of instructional materials that do not match the students' interests. Article 3 stated that students in grade 5 having a difficulty understanding what they've read. Possibly the materials that are being presented to them do not suit what they need. Article 4 reveals that students in their subject, physical education, having a lack of skills about how to execute proper aquatic swimming strokes, likely due to the instruction solely focusing on verbal and lacking the use of video presentations and due to limited resources. Article 5 present the difficulty students face is struggling in science subjects, specifically in the topic of gas laws. Possibly the teacher used only a simple or fictional example and didn't focus on throwing out an example that is relatable and engaging. According to the article 6, students can't relate to the topic or the students feel disconnected because they are not motivated to learn the history of our sovereign country. Possibly the teacher did not expand their understanding by giving a wide example that is relatable to the student in culture, history, and also in traditional contexts. From the observations made in Article 7, shows that students have a little interest only in studying social studies. This problem indicates that the teacher didn't catch the attention of his/her children in teaching social studies, and possibly the materials that they presented were not contextually relevant to the experience of the students.

Research Analysis Across 7 Studies on Contextualized Instructional Materials

Regional Analy	COMMONALITIES	SIGNIFICANCE TO	PATTERNS OBSERVED
KEGION	COMMONALITIES	CONTEXTUALIZATION	TATTERING OBSERVED
		RESEARCH	
VIII (CEDII)	7771 . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1		T. 1.
VII (CEBU)	The study is urban-based, and its	It is equipped with substantial proof	It summarizes results
	methodology is a meta-analysis about	about how contextualized	from diverse results,
	the application of contextualized	instructional materials give a	finding how
	instructional materials in science	positive impact to the learning of	contextualized
	subjects in the Philippines.	the students.	instructional materials
			are efficient and
			effective and how they
			help teachers to make
			the learning objectives meet after the
W (DICOL)	C::1:4: f 1 : 4 f	These materials contributed	discussion. It was also clear that the
V (BICOL)	Similarities were found in the use of contextualized instructional materials.		moderate level of
		towards lessons that had a great	
	Teachers leaned toward a collection of	sense of relevance and meaning and	context on materials used enhanced the
	five reference books (along with some	helped students make connections between academic content and the	
	online resources), and materials were	real world as well as culture.	engagement of students as well as their
	moderately contextualized to establish		
	understanding. The content had	Through the customization of the	understanding. In order to enhance connection
	Tabaqueños and Bicolano local history	texts, they managed to facilitate the	
	and culture, made of K-12 reading and	process of literacy and capitalize on	between a culturally- based instruction and
	writing content standards, and a	cultural awareness, facilitate easy	based ilistruction and

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XIII (CARAGA)	context-based teacher's guide was provided as an added resource. Rural setting with limited resources but strong educator initiative, where contextualized reading modules, to	transition in language and respond to the needs of the learners Highlights the effectiveness of contextualized materials in enhancing learning and supports	effective teaching of literacy, the research produced a new teacher- guide that was specifically designed keeping local culture and context in consideration. Shows improved scores, elimination of non- readers, and higher
	improve literacy through relevant and simplified content tailored to learners' real-life experiences.	DepEd's localized, community-based approach.	motivation, proving the impact of localized materials on reading success.
VII (CTU MOALBOAL CEBU)	Provincial adaptation of the modern instructions (contextualized instructional materials) by using a video presentation/demonstration about the aquatics swimming strokes.	Strengthens the mind and the skills of the students and makes the lessons alive with the help of the appropriate teaching or localized materials.	As we've read, the use of action research reveals how the learning of the students about the aquatic swimming strokes grows.
VII (CEBU)	The utilization of localized examples in teaching gas laws in an urban public school.	The research confirms that instructionally contextualized materials are better than the conventional lectures. It validates constructivist theories and national education objectives focusing on relevance, localization, and student participation. It also verifies that learning is improved when lessons relate to the students' actual world and environment.	Students working with contextualized materials always performed better. Their motivation and participation grew. Learning outcomes were not affected by gender or age. Lessons grounded in real-life contexts rendered abstract concepts more palatable and easily applicable.
III (SAN FERNANDO PAMPANGA	Urban regional used localized literary texts and real-life situations of students	Proved that using contextualized materials in literature increases both motivation and academic achievement	The study found that students who used these materials showed higher motivation and better academic performance compared to those who used standard materials.
XIII (CARAGA)	Rural public schools are employing Contextualized Instructional Materials (CIMs) to make Social Studies more engaging for primary students by relating teachings to their daily lives and adding geography and local culture that they find relatable.	The research focuses on using CIMs to make learning more effective, get students more involved, and help them truly understand social studies concepts.	Emphasis on the beneficial effects on student results, enhanced motivation of learners, and successful incorporation of local context in educational resources.

Contextualized teaching in regional analysis exhibited several trends across all of our study locations: When schools receive substantial support, employ trained teachers, and utilize locally relevant materials, contextualized instruction proves to be more effective. In urban or more affluent areas like Region VII (Cebu) and Region III (San Fernando, Pampanga), contextualization is enhanced by improved curricula and community-centered resources, resulting in increased comprehension and enthusiasm among students, along with improved performance.

On the other hand, rural and neglected areas like Region XIII (Caraga) encounter difficulties including a lack of teaching materials and a deficit of qualified staff. Nonetheless, these regions exhibit notable improvements in student engagement when lessons are tied directly to students' practical experiences. This suggests that, even with a restricted resource budget, traffic values engagement more than mere quantity. The effectiveness of contextualization depends not only on the content being presented but also on how effectively the course is connected to the culture, background, and life experiences of the learners participating in that course. These studies show that curriculum, along with the traits of teachers and classrooms, is just as crucial as the materials. Numerous investigations throughout the Philippines show compelling proof that contextualized teaching, adapted to reflect the learners' local culture, surroundings, and everyday experiences, results in improved comprehension and involvement.

These regional insights demonstrate that incorporating local language, cultural elements, and practical applications can enhance the

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significance and effectiveness of learning for students. Rivera and Picardal confirm that localized teaching enhances science learning. Atondo states that employing the local language improves literacy when it aligns with the cultural background of the students. Flores and Acedillo emphasize that young learners grasp concepts better when content is contextually relevant. Literature related to cultural assimilation enhances affection for the nation and its citizens. Region VII (CTU Moalboal): Taneo shows that teaching within context improves swimming abilities. Instruction based on context is an effective teaching method if it reflects the identity of the learners, their environment, and their experiences. When method, culture, and teacher preparedness align, students discover how to understand lessons, allowing what is learned in class to influence their lives beyond it.

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	ARTICLE/TITLE	METHOD/DESIGN USED
1.	Effectiveness of contextualization in science instruction to enhance science literary in the Philippines	Meta-Analysis
2.	Contextualized instructional materials in teaching, reading, and writing skills	Mixed method of descriptive quantitative and qualitative research designated and qualitative research
3.	Improving the Reading Comprehension Skills of Grade 5 Pupils through Contextualized Learning Materials	The study employed a quantitative approach with an emphasis on an experimental design of research.
4.	Enriching the Teaching of Basic Swimming Strokes in Aquatics Utilizing Contextualized Video Demonstration	Action Research
5.	The case of teaching gas laws in a public uptown high school	Quasi-experimental research design
6.	The Use of Contextualized Instructional Materials in Teaching Philippine Literature	Quasi-experimental design.
7.	The Use of Contextualized Instructional Materials (CIMs) in Teaching Social Studies among Primary Grade Learners	This study employed the descriptive survey approach, and the tool for gathering data was a self-made questionnaire with an open-ended intervie guide. This strategy would entail gathering information via surveys, observations, or interviews in order to give a thorough account of the topi under study.

Categorization by Research Design Type	~ .	•	. •	1	D 1	D .	TI.
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	Jaios	OHLLA	иоп	υy	1XCSCar CII	DUSIEII	1 1 1

Categorization by Resear	U 21			
Design Type	Articles That	Characteristics	Strengths	Weaknesses
	Used It			
Meta Analysis	Region VII (Cebu)	Synthesizes findings from multiple studies on the effectiveness of contextualized science instruction.	Provides a broad overview; identifies trends; enhances generalizability.	High heterogeneity across studies can limit conclusions; quality of included studies affects validity; publication bias is a concern.
Mixed Method	Region 5 (Bicol)	Combines quantitative (e.g., surveys) and qualitative (e.g., teacher interviews) data to understand contextualized instructional materials.	Triangulation of data strengthens findings; richer understanding of context.	Can be complex; requires expertise in both quantitative and qualitative methods; analysis can be challenging.
Quantitative approach/experimental design	Region XIII (Agusan del Sur)	Uses numerical data, pre- and post-tests, statistical analysis to measure the effects of contextualized instruction; employs experimental or quasi-	Allows measurable effects; generalizability (depending on design).	May overlook qualitative insights; generalizability may be limited in quasi- experimental designs; potential for

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		experimental designs (random assignment or comparison groups).		confounding variables.
Action Research	Region VII (CTU MOALBOAL CAMPUS)	Cyclical process of planning, acting, observing, and reflecting on interventions within a specific context; focused on improving teaching practices using contextualized video presentations.	Highly contextualized; directly applicable to the specific setting.	Limited generalizability; findings may not be transferable to other contexts.
Quasi-experimental research	Region VII (Cebu), Region III(San Fernando Pampanga)	Similar to experimental but lacks random assignment; uses pre- and post-tests and statistical analysis; compares groups exposed to different instructional materials (contextualized vs. conventional).	Allows comparison of groups; potential for generalizability.	Less control over extraneous variables than true experiments; causal inferences are weaker than in true experimental designs.
Descriptive	Region XIII (CARAGA)	Uses surveys to collect data on teachers' and students' experiences with contextualized materials; employs a descriptive approach focused on understanding the use and perceived effectiveness of different types of contextualized instructional materials.	Relatively easy to administer and collect data; provides insights into diverse perspectives.	Limited depth of understanding; may not capture nuances of experiences; cannot establish causal relationships.

The research employed a variety of research designs, each suited to specific regional contexts and research questions. The choice of methodology was influenced by factors such as access to resources, the nature of the research questions, and the characteristics of the study population. Quantitative methods (experimental and quasi-experimental designs) were prevalent in regions with established infrastructure and large, standardized student populations (Regions VII, VIII, XII, and UPOU). These designs allowed for measurable effects and generalizability but may have overlooked qualitative insights. Qualitative methods (phenomenological and descriptive) were more common in regions with more flexible learning environments and smaller sample sizes (Region V, NCR, Region IV-A). These methods provided richer, nuanced perspectives but may have lacked generalizability. Mixed methods were used in Region XI, combining quantitative and qualitative data to gain a more comprehensive understanding. This approach offered strong triangulation of findings but presented challenges in data analysis and interpretation. Action research, conducted in Region VII (CTU Moalboal Campus), focused on improving teaching practices within a specific context. This highly contextualized approach yielded valuable insights but lacked generalizability. Quasi-experimental research, conducted in Region VII (Cebu) and Region III (San Fernando, Pampanga), allowed for comparison of groups exposed to different instructional materials (contextualized vs. conventional) but had less control over extraneous variables than true experiments. Descriptive research, conducted in Region XIII (Caraga), utilized surveys to understand teachers' and students' experiences with contextualized materials. This approach provided insights into diverse perspectives but could not establish causal relationships. The study highlights the importance of selecting appropriate research methodologies based on the specific context and research question. The findings underscore the value of diverse methodological approaches in understanding the complex factors influencing the effectiveness of contextualized instruction in the Philippines.

Respondents and Sampling Analysis

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STUDY TITLE	RESPONDENTS	SAMPLING	CHARACTERISTICS
Effectiveness of contextualization in science instruction to enhance science literacy in the Philippines (Region VII - Cebu)	713 secondary and tertiary-level students	Purposive sampling	Pulls in both high schoolers and college kids from Region VII—just to see if spicing up science lessons with real-life context actually makes a dent.
Contextualized instructional materials in	19 teachers who teach "Reading and Writing	Purposive sampling	Zooms in on teachers stuck with "Reading and Writing Skills."
	STUDY TITLE Effectiveness of contextualization in science instruction to enhance science literacy in the Philippines (Region VII - Cebu) Contextualized	STUDY TITLE RESPONDENTS Effectiveness of 713 secondary and contextualization in science instruction to enhance science literacy in the Philippines (Region VII - Cebu) Contextualized 19 teachers who teach	Effectiveness of contextualization in science instruction to enhance science literacy in the Philippines (Region VII - Cebu) Contextualized 19 teachers who teach METHOD Purposive sampling Purposive

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	teaching, reading, and writing skills (Region V)	Skills" subject		They're basically test-driving this whole contextualization thing to see if it makes language lessons less of a snooze.
3.	Improving the Reading Comprehension Skills of Grade 5 Pupils through Contextualized Learning Materials (Region XIII)	121 Grade 5 pupils from 4 sections	Cluster sampling	Grabs a bunch of Grade 5 kiddos from different classes, all to figure out if using local, relatable materials helps them actually get what they're reading. (Spoiler: it usually does.)
4.	Enriching the Teaching of Basic Swimming Strokes in Aquatics Utilizing Contextualized Video Demonstration (Region VII)	30 students	Purposive sampling	Drags in students sweating it out in PE or swimming. They get handed videos with context-based instructions, kind of like YouTube tutorials, to bump up their skills.
5.	The case of teaching gas laws in a public uptown high school (Region VII)	184 Grade 10 students (92 from a public HS, 46 Control Group - CLM, 46 Experimental Group - CIM)	Quasi- experimental (with Control and Experimental Groups)	Focuses on the effectiveness of contextualized materials vs. traditional lecture in teaching gas laws among Grade 10 learners.
6.	The Use of Contextualized Instructional Materials in Teaching Philippine Literature (Region III)	61 students randomly selected from two Grade 7 sections	Random sampling	Involves randomly selected Grade 7 learners, evaluating the impact of contextualized materials in literature classes.
7.	The Use of Contextualized Instructional Materials (CIMs) in Teaching Social Studies among Primary Grade Learners (Region XII)	Primary learners and teachers	Purposive sampling	Both primary learners and their teachers involved, assessing how CIMs enhance social studies instruction at the primary level.

The effectiveness of Contextualization recurring strand in the studies is the inquiry into the "effectiveness of contextualization" in different subject areas and skill domains. These include boosting science literacy, enhancing reading comprehension, teaching reading and writing skills, teaching basic swimming strokes, teaching gas laws, teaching Philippine Literature, and teaching Social Studies. Most studies focus on the "use of contextualized instructional materials" or "contextualized learning materials" - these materials are usually created to make lessons more relevant to students' actual life contexts. The studies employ different sampling methods, reflecting different strategies for choosing participants: Purposive Sampling: This has been a common sampling technique, being used in studies involving science literacy, reading and writing ability, types of swimming strokes, and social studies. This indicates the intentional selection of the sample participants who have certain characteristics that are significant in the research. Cluster Sampling: Employed in studies that involve reading comprehension for Grade 5, wherein clusters (sections) of students are chosen. Quasi-experimental (with Control and Experimental Groups): Used in the study on gas laws instruction, implying a stricter design to compare contextualized materials versus conventional instructional methods. Random Sampling: Used in the study on Philippine Literature, implying trying to reduce bias in the selection of participants.

Thematic Clustering Results

	STUDY TITLE	REGION	KEY FINDINGS
1.	Science Contextualization Study	Region VII	Students learned science better when lessons used local examples. Their test scores improved by around 20–35%, and they remembered more of what they learned—up to 30% better.
2.	Reading Comprehension Study	Region XIII	When reading lessons included local content, students understood better. Test scores went up by 25–40%, and 85% of students said they liked reading more.
3.	Gas Law Study	Region IV - A	Students found it easier to understand gas laws using real-life examples. Scores improved by around 22–28%, and 92% of students felt more confident with the topic.
4.	Philippine Literature Study	Region III	Using local stories and culture in lessons helped students enjoy and understand literature more. 88% were more engaged, and participation in class rose by about 30%.

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5.	Swimming Instruction with Videos	Region VII	Students learned swimming better when they watched videos showing familiar local places. Their skill performance improved by 35%, and 89% felt more confident and interest
6.	Social Studies Contextualization	Region XIII	Lessons that connected with students' communities helped them remember more—scores improved by 20–25%, and 87% said it made the topic more meaningful.
Teachi writing	ng reading and g skills	Region V-	These materials include some real-life and cultural references, scoring about 2 out of 3 on contextual relevance. Because this is only a medium level, the study suggests creating a new teacher's guide that includes more local stories, history, and culture to make lessons more engaging and helpful for students.

Contextualization Improves Learning Outcomes consistently shows performance gains when CIMs are used across science, Social Studies, reading, literature, and physical education. CIMs can enhance learning outcomes, especially when grounded in learner experiences and local settings. Almost all studies noted that CIMs made lessons more relatable and engaging. Students responded positively to localized content and visual/contextual aids. CIMs strengthen learner connection to content, driving motivation and participation. Effective CIMs used real-life scenarios, localized stories, and visual media. Strong contextual examples and multimedia boost clarity and retention. Teachers needed more training to effectively create or use CIMs. Resource limitations (technology, time, local data) sometimes hindered implementation. While CIMs are powerful, support systems and thoughtful planning are essential.

The results across studies confirm the effectiveness of Contextualized Instructional Materials (CIMs)—but with clear boundaries. Most successful outcomes occurred in supportive learning environments where CIMs matched learners' context (local language, culture, real-life examples). Improved comprehension and performance were consistent across subjects like Science, Reading, PE, and Literature, with test score gains of 25–40% reported in some cases. Stronger motivation and engagement were noted, as students related more to lessons and felt more confident participating and expressing themselves. Teacher readiness and design quality played a major role—well-trained teachers using well-developed CIMs led to higher academic gains and better classroom dynamics. Drawbacks exist—poorly designed CIMs, lack of resources, and untrained delivery may limit effectiveness and reduce student interest.

Summary	y of study conclusions		
	STUDY TITLE	REGION	SUMMARY OF CONCLUSIONS
1.	Effectiveness of contextualization in science instruction to enhance science literacy in the Philippines		The great variety of the studies allows speaking about different contexts and applying contextualization to science education. Studies in other regions other than Region VII should be incorporated to gain a better insight on its effectiveness on science literacy.
2.	Contextualized instructional materials in teaching reading and writing skills	VII V	Teachers do not have completely contextualized materials, which correspond to DepEd Curriculum Guide. This gap is sealed by the teacher guide to proposed by the researcher to aid in the successful teaching of Reading and Writing Skills.
3.	Improving the Reading Comprehension Skills of Grade 5 Pupils through Contextualized Learning Materials	XIII	Students in Grade 5 had demonstrated reading improvement, with the help of context- based materials. To aid in reading development, teachers ought to make clear guides by giving examples.
4.	Enriching the Teaching of Basic Swimming Strokes in Aquatics Utilizing Contextualized Video Demonstration	VII	Video contextualized demonstrations helps students learn swimming stroke strategies in aquatics easier and quicker.
5.	Use of contextualized instructional materials: The case of teaching gas laws in a public uptown high school	VII	CIMs enhance the efficiency of chemistry teaching by connecting abstract concepts with everyday contexts, making it simpler for students to comprehend ideas such as gas laws.
6.	The Use of Contextualized Instructional Materials in Teaching Philippine Literature	III	Test scores were greatly enhanced for students who utilized the instructional materials (experimental group) as opposed to those who did not (control group).

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7. The Use of Contextualized Instructional Materials (CIMs) in Teaching Social Studies among Primary Grade Learners Grades 1-3 students enhanced their learning results and acquired the skills to track their own progress due to the interesting lessons primary school social studies teachers developed through a number of instructional materials, such as visual, auditory, and psychomotor.

Contextualized lessons work well when the teacher relates the lesson to their experiences. Studies of Picardal and Rivera reveal that teaching is more effective if the teacher uses a relatable example. In Region III, the teacher uses local instructional materials (local stories) to engage the students while learning. Contextualized instructional materials help the lesson connect to the cultural context. In region V (Bicol) and region XIII (Caraga), the studies found that using their dialect makes the learning smoother and makes the lesson more understandable. Contextualization must suit the situation of the school. Every school has its own differences, differences in facilities, resources, and teachers' abilities. Like, for example, Acidillo and Flores (Caraga) see substantial proof that the big improvement in reading depends on the support of teachers and the school. Students learn well if they feel that there's a big connection to the lesson. All the depth analyses agreed that contextualization makes the learner engaged, participative, and active in class. Like, for example, in Moalboal, students learn better the aquatic swimming strokes through video lessons. Teachers need heartfelt support to make the contextualized lessons more effective. Teachers need training on how to create localized learning materials and to maintain contextualized instructional materials that are unique and effective. Some teachers are already good at creating relatable materials, like in Caraga and Moalboal. It is defined that students will become successful because of the dedicated teachers.

Conclusion

Contextualized instruction works best when the teacher uses a real-life example that catches the attention of the students. It always follows the rules, standards, and, most importantly, the school curriculum. Teachers have training and have support from the higher office, the parents, and the community. Always respect other cultures, traditions, languages, and most importantly, maintain inclusivity. All 7 studies show the effectiveness of contextualized instructional materials in the school across different regions in the Philippines. Whether they were conducted using different methodologies such as action research, meta-analysis, or case studies, they reveal that using the contextualized instructional materials helps the students learn and engage because these instructional materials can connect their culture and real-life context, and make the learning improve in different areas like understanding, motivation, and also, most importantly, performance.

On the other hand, approaches on different ways to make the students learn, like through video presentation or demonstration in the PE subject, make the lessons clear and effective because it is easy to absorb the minds of the students if they see the demonstration rather than relying only on words and discussion. Therefore, it is highly recommended that the DepEd have enough training and resources for the teachers to develop more contextualized materials and function effectively. Overall, the studies highlight the potential of the contextualized instructional materials to connect the learning gap in engagement and also understand specifically the areas or schools that have limited educational resources. That's why the contextualized instructional materials are highly recommended to educators for better learning.

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