ANIMATED VIDEOS TO SCAFFOLD READING FOR ELEMENTARY LEARNERS

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ABSTRACT

This study evaluated the reading skills of Grade 4 learners at Sta. Cruz Elementary School in Dinagat Islands using animated videos as a scaffolding tool. It assessed four key competencies: comprehension and noting details, identifying text structure and method of development, recognizing text types and author's purpose, and drawing conclusions. A one-group quasi-experimental design based on the ADDIE model was used, involving 26 learners who took pre- and post-tests. Statistical tools such as frequency, percentage, mean, standard deviation, and paired sample t-test were applied. Results showed significant improvement in overall reading skills after the intervention, particularly in foundational areas like comprehension, identifying details, and understanding text structure. However, gains in higher-order thinking skills, such as drawing conclusions, were less pronounced. The animated videos were found to be highly acceptable in terms of content quality, design, organization, and accuracy. These materials were implemented through a structured four-week, learner-centered lesson plan incorporating interactive strategies. The study concluded that animated videos effectively enhance reading skills, especially foundational competencies, while increasing learner engagement. It recommends that educators, administrators, and parents adopt animated videos as interactive tools to support reading development and align with educational standards.
Keywords: Animated videos, scaffold reading, One-group quasi-experimental, level of reading skill

Introduction

Reading is an essential skill that elementary learners must possess because it builds their foundational skills needed to succeed across academic areas. Learners are believed to acquire effective communication and critical thinking when their reading abilities are strengthened, thus, achieving better academic performance (Balinbin, 2020). Nevertheless, Phil-IRI results revealed that Grade 4 learners demonstrate emerging reading skills, specifically in word recognition and decoding, which can serve as a foundation for further development in their comprehension skills. Given these reading challenges, it becomes necessary to develop reading intervention like integration of multimedia to scaffold reading among learners.

Several studies have explored integrating multimedia tools in reading instruction in the classrooms. Multimedia-based lessons enhance learners' reading engagement by presenting stories through visual and auditory elements that help them connect text to meaning and strengthen vocabulary development (Anantrasirichai & Bull, 2022). One effective approach involves the integration of animated videos, which combine visual motion, narration, and sound to create an interactive and engaging medium that provides meaningful scaffolding for improving learners' reading proficiency (Hendratno et al., 2025).

However, conventional reading approaches are still practiced in the classrooms which may not aligned with the interests of elementary learners who prefer greater scaffolding and exposure to interactive learning experiences. These often limit learner engagement, especially among struggling learners who need targeted scaffolding intervention.

This study addressed this gap by integrating animated video lessons in the reading instruction to scaffold reading among elementary learners. Through a quasi-experimental approach, specifically the one-group pre-test-post-test design anchored with ADDIE model, the study determined the effectiveness of animated videos to scaffold reading skills to foster a more meaningful and engaging learning experiences for elementary learners.

Review of Literature

This part presents varied reviews of related literature and studies culled out from books, journals, articles, and internet data that contributed to the present study which are organized thematically.

Reading for Elementary Learners

Reading competence is an important component of literacy which often covers processing written texts, interpreting and responding with it effectively (Gallagher, 2023). Ruotsalainen et al. (2024) elucidate that competent readers engage with the text actively, stimulate their prior knowledge, and comprehend to understand its meaning and ideas, rather than merely decoding symbols. This implies that developing the reading competence of elementary learners lays the foundation towards improvement of the critical thinking and communication skills for elementary learners (Williams et al., 2023).

As readers move through a text, readers need to be able to decode quickly. Johnson and Smith (2023) support this claim revealing that elementary learners begin with concrete words before progressively acquiring abstract vocabulary. In a real-world reading situation, however, learners often encountered unfamiliar words which pose a problem for word-to-text integration because of having less vocabulary (Wulandari and Pujaningsih, 2025). Limited vocabulary hampers the ability for elementary learners to make connections between learned concepts wi[illegible]g text (Martinez & Brown, 2024). For elementary learners, reading materials must matched with their language proficiency levels as these significantly affect their abilities to comprehend(Brooks et al., 2023).

In the Philippines, elementary learners developed vocabulary knowledge across their mother tongue, Filipino, and English (Thompson & Martinez, 2024). Acedillo and (2023) complement this by revealing the key predictors of vocabulary growth

of learners including frequency of reading activities and diversity of words that learners hear. Further, most elementary learners, Grade 3 and Grade 4, possessed approximately 3,000-4,000-word across all languages they encountered (Santos & Cruz, 2024).

In addition, primary students can successfully learn to make logical connections between text elements and their prior knowledge when facilitated by the teachers (Gonzalez & Chen, 2024). When teachers clearly demonstrate learners on the strategies to approach different types of texts and actively model comprehension strategies, learners become proficient and independent readers (Garcia, 2023).

Reading Skill Problems of Filipino Learners

Reading is a complex process that covers abilities to decode text and to understand text, tied to the academic achievement of learners (Bernardo et al., 2022). In accordance to the problem on the poor reading skills of Filipino learners, the Department of Education issued Memorandum No. 173, s. 2019 to task schools to strengthen every learner's reading proficiency and nurture a culture of (Anderson, 2024).

One of the target skills in Programme for International Student Assessment is reading along Science and Mathematics (OECD, 2023). In the Philippines, the 2022 PISA results showed that reading only has 347 points, each 20-point shortfall means a one-year lag in the learning pace (Fuentes, 2024). Therefore, Filipino learners performed poorly in reading including Mathematics and Science (Zhou, 2024). Along with this problem, World Bank (2022) further revealed that seven (7) out of ten (10) Filipino learners have performed poorly in reading as well as comprehension.

Comprehension and Note taking

Comprehension serves as a groundwork skill that allows learners to understand written texts, grasp the main ideas, and recognize supporting details (Catts, 2022). Noting details complements reading comprehension by enabling learners to identify and retain significant detail and information explicitly specified in the reading text (Salame, Tuba, & Nujhat, (2024). But, learners struggle in distinguishing main ideas because they focus primarily to literal information in a reading text (Lambert et al., 2024).

Within the hierarchy of comprehension skills, getting the main idea serves as the foundational component allowing learners to note details and get the meaning of a reading text (Chen & Li, 2024). Arends and Fonseca (2024) further explained that learners must be equipped with skills in determining main ideas to effectively synthesize and interpret information of a reading material.

Aligned with this, Stenner (2022)recommended teachers to use scaffolding as instructional approach to develop the essential skills of learners in identifying main ideas and comprehend the meaning of texts in a reading material. This was elaborated by Dermitzaki et al. (2025) showing that learners organize information and elevate their understanding of the reading text when they improved their abilities in summarizing key points.

On a different perspective, Bakri et. al. (2022) accentuates that learner's retention is hampered because of poor comprehension, thereby, struggle in recognizing key ideas and details. These are further influenced by underlying factors including poor vocabulary, and lack of structured reading strategies (Lambert et al., 2024). To overcome these problems, scaffolding techniques can be reinforced to enhance the abilities among elementary to note and comprehend critical details in a reading text (Chen and Li, 2024).

Determining Textual Structure and Method of Development

Learners navigate and interpret reading materials by understanding firsthand its textual structure (DeBruin-Parecki, 2023). By definition, textual structure is referred to as the organization of information involving sequence, cause-and-effect, comparison-and-contrast, problem-solution, and/or cause-and-effect. This allow learners to anticipate the flow of the content of the material and understand the relationships between ideas presented (van Zeijts et al., 2023). This means that understanding the structure of texts helps learners to organize and interpret information (Salame, Tuba, and Nujhat, 2024).

Complementing this, García, García-Serrano, and Rosales (2023) affirmed that there is a significant connection between the ability of learners to comprehend and organize features of text. This resulted to improved retention and understanding as they allocate attention to information an the relationships of its ideas (Astuti et al., 2021).

In this sense, teachers must adapt to facilitate effective strategies for learners to recognize patterns for them to better organize their mental representation of the text, connect new ideas with prior knowledge, and thus, deepen understanding of concepts (Kotiash et al., 2024).

On the other hand, method of development pertains to the elaboration of ideas by the author through description, explanation, argumentation, or illustration (Kooiker-den Boer et al., 2024). When learners are fully aware, they tend to grasp the intended message that the authors want to convey and smoothly follow the reasoning needed (Santos & Cruz, 2024).

This was supported by Bierer et al. (2025) who demonstrates that learners who are proficient with these methods demonstrated deeper comprehension. Elementary learners who are taught to identify whether a text is descriptive, explanatory or narrative manifest improved in higher-order thinking abilities (Calamlam, 2023). This implies that learners become more adept at interpreting examples, and/or recognizing the purpose of the authors in a reading text.

Identifying Text Types and Author's Purpose

One of the known literacy skill that would help learners understand the function, form and context of a reading material is identifying its text type as descriptive, expository, persuasive, argumentative, and/or narrative (Diem & Ramadhia, 2025). As a matter of fact, learners illustrate better comprehension and critical thinking skills when they have deeper abilities to identify text types and author's purpose (Yang et al., 2023). García-Sánchez and García-Martín (2021) support this as they suggest that recognizing text types can assist learners to determine the rhetorical intent, appropriate comprehension strategies, and organization of ideas.

Meanwhile, author's purpose is the intention of the author shown in his writing, either to entertain, persuade, explain, or inform (Sánchez-Vincitore et al., 2022). Distinguishing its purpose help learners to successfully interpret its meaning and message (Mendoza, 2024). More precisely, this affects how learners can mentally shape the information they read, how much information they retrieve, and anticipate how they shape their responses (Bacarro, 2024). This imply that elementary learners must develop their skills and mastery in identifying the purpose, characteristics and types of reading text to allow them to adapt their reading strategies and improve their reading comprehension.

Drawing Conclusion

One of the higher-order reading skills that learners must develop is their abilities to draw conclusion that involves interpreting textual clues, synthesizing information, and/or making inferences (Nguyen & Collins, 2024). This help learners to develop critical thinking, enhance problem-solving abilities, and predict outcomes (Freed and Cain, 2021). This enables learners to construct deeper interpretations, beyond literal meaning of text (Wilson et al., 2024).

Nevertheless, this reading skill remains the most demanding skill for elementary learners. Dixon and Oakhill (2024) expound that elementary learners perform better in listening tasks than in reading tasks because these offer immediate contextual clues. Also, reading texts contain abstract information, making it difficult for learners to draw conclusions (Gamutan, Egbus, & Baluyos, 2025).

Given this fact, targeted scaffolding accelerates the development of inferential skills among learners (Neri et al., 2023). This imply that drawing conclusion is a learned ability when teachers provide instruction strategies that target the abilities of learners to of comprehend and make inferences or judgments (Liu et al., 2024). In the Philippine setting, inferential reading skill among Filipino learners is strongly associated with vocabulary and metacognitive readiness (Tapit, 2025). Filipino learners often struggle with drawing inferences because limited vocabulary makes it hard for them to connect clear details in the text to its implied meaning.

Animated Videos and their Effects on the Primary Learners

Integrating animated videos in reading instruction scaffold and support for developing literacy skills. Mejala (2024) revealed that animated videos, as reading strategy, provide substantial improvements in elementary students' reading performance. This was further accentuated in the study of Macatigue and Liquido (2025 who revealed that electronic animated instruction significantly improved pupils' academic performance in reading comprehension, particularly in understanding narrative structure and sequence of events. The study attributed these benefits to animations' ability to provide contextual clues and visual representations of abstract concepts.

Similarly, Mirasol and Topacio (2021) concluded that animated videos enhance comprehension by creating multiple mental representations of textual information, supporting the dual-coding theory of cognitive processing. Meanwhile, animated videos have shown effectiveness in vocabulary acquisition. Sari (2021) found that students exposed to animated video instruction demonstrated significantly better vocabulary retention compared to those receiving traditional instruction. The combination of visual representations, auditory explanations, and textual reinforcement in animated videos creates optimal conditions for vocabulary learning. Milne and Topping (2025).further emphasized that animations enhance vocabulary acquisition for English language learners by providing meaningful contextual support.

On the other hand, several research consistently indicate that animated videos positively impact reading motivation and engagement. Barut Tugtekin and Dursun (2022) demonstrated that animated and interactive video variations significantly enhanced learners' intrinsic motivation and engagement in reading activities, increasing reading persistence and voluntary reading time among learners. Njiiri and Aanstoot (2022) expanded that animations with relatable storyline particularly benefited reluctant readers and students with low reading interest.

While the benefits are substantial, research has identified important design considerations. Piñero and Cañedo (2024) found that overly detailed or fast-paced animations could create cognitive overload, particularly for struggling readers. Their eye-tracking study revealed that optimal animations guide visual attention to relevant text elements rather than drawing attention away from reading. Norman et al. (2023) also emphasized the importance of alignment of animation complexity with students' cognitive abilities and reading levels.

Furthermore, contextualization emerges as another critical factor in designing animated videos. Putra et al. (2024) demonstrated that animations featuring culturally familiar characters and settings significantly enhanced comprehension and engagement for diverse learner populations. This suggests that animation effectiveness depends partly on cultural alignment and representation.

Synthesis. Reading competence is a complex, interrelated construct encompassing contextual recognition, vocabulary development, comprehension, and higher-order skills such as drawing conclusions, all of which are fundamental to learners' academic success. International and Philippine-based literature accentuate the essential role of vocabulary knowledge and comprehension strategies in enabling learners to identify main ideas, recognize text structures, interpret author's purpose, and retain key details through note taking. Similarly, there is strong conjunction on the effectiveness of explicit instruction, scaffolding, and strategic modeling in strengthening comprehension and inferential abilities of elementary learners. However, international research largely centers on advanced instructional strategies, multimedia integration, and cognitive processing, whereas local studies highlight persistent foundational reading difficulties among Filipino learners, as evidenced by PISA, SEA-PLM, and World Bank findings. Furthermore, multimedia and animated videos in provides a potential in enhancing comprehension, vocabulary, and motivation of learners. Further, studies also underscore challenges such as limited vocabulary and low inferential readiness. In conclusion, when multimedia particularly narrated video lesson material is carefully designed and strategically aligned with learners' cognitive levels, it significantly enhances engagement, comprehension, and overall reading performance.

Theoretical Framework

The study was anchored on the Cognitive Theory of Multimedia Learning (CTML) proposed by Richard E. Mayer (20. This theory expound that learners attain meaningful learning when both verbal and visual forms of information are employed. In

addition, the theory explains that learners learn better from words and pictures combined than from words alone. By integrating multimedia elements such as text, narration, and visuals, learners are able to construct meaningful learning and engagement.

This theory is grounded on three key concepts namely dual-channel processing, limited capacity, and active processing. First, dual-channel processing explains that individuals have distinct channels for managing verbal information (e.g. spoken or written words) and visual information (e.g. images, animations, or graphics). On the other hand, limited capacity emphasizes that each channel can handle only a limited amount of information at a given period of time to preclude cognitive overload and assure efficient learning. Meanwhile, active processing highlights the learner's engagement in selecting relevant information, organizing it into meaningful mental structures, and integrating it with existing knowledge to construct understanding.

These principles explicate how multimedia materials, such as animated videos, can scaffold reading among elementary learners. The verbal narration stimulates the auditory channel, while the accompanying visuals engage the visual channel, allowing elementary learners to process information through multiple pathways. When properly designed, these multimedia resources foster active and meaningful learning experiences among learners, particularly to scaffold reading reading skills among elementary learners.

Conceptual Framework

This study assessed the effectiveness of animated videos to scaffold reading for elementary learners.Figure 1 shows the research paradigm of the study.

The first box shows the pretest, which measures the initial level of reading skills among elementary learners in terms of comprehension and noting details, determining textual structure and method of development,identifying text types and author's purpose, and drawing conclusion. This stage establishes the baseline data prior to any intervention. Then, the second box presents the intervention, utilizing the developed animated videos in reading instructions, integrated to scaffold reading among elementary learners. Lastly, the third box shows the post-test, which measures the same reading skills of learners after exposure to the developed animated videos in terms of comprehension and noting details, determining textual structure and method of development, identifying text types and author's purpose, and drawing conclusion. Results provide comparison of the pre-test and post-test to assess the effectiveness of animated videos as an intervention to scaffold reading among learners.

Statement of the Problem

This study assessed the effectiveness of animated videos to scaffold reading for elementary learners in Sta. Cruz Elementary School in Brgy. Sta. Cruz, San Jose, Dinagat Islands.

Specifically, the study sought to answer the following questions:

1. What is the level of reading skills of elementary learners on pre-test and post-test in terms of:
   - 1.1. comprehension and noting details;
   - 1.2. determining textual structure and method of development;
   - 1.3. identifying text types and author's purpose; and
   - 1.4. drawing conclusion?
2. How are the designed and developed animated videos be implemented and utilized in reading instruction for elementary learners?
3. Is there a significant improvement on the reading skills of elementary learners based on the pre-pots-test results?
4. What is the level of acceptability of the developed animated videos to scaffold reading among elementary pupils in terms of:
   - 5.1. content;
   - 5.2. format and technical design;
   - 5.3. presentation and organization; and
   - 5.4. accuracy and recency of information?

Scope and Limitations of the Study

The study was limited along the following aspects:

Focus. This study aimed to develop animated videos to scaffold reading among elementary learners in Sta. Cruz Elementary School in Brgy. Sta. Cruz, San Jose, Dinagat Islands.

Participants. The participants of the study were the 26 Grade 4 learners of Sta. Cruz Elementary School in Brgy. Sta. Cruz, San Jose, Dinagat Islands.

Place and Time. The study was conducted in the Grade 4 classroom of Sta. Cruz Elementary School in Brgy. Sta. Cruz, San Jose, Dinagat Islands during the third and fourth quarters of the Academic Year 2025–2026.

METHODS

This chapter presents the research design, research environment, research participants, research instrument, ethics and data gathering procedure, and data analysis.

Research Design

The research study employed a quasi-experimental approach, specifically the one-group pre-test-post-test design, to scaffold reading among elementary learners. The group was evaluated with a pre-test to ascertain baseline reading competence of learners and a post-test to assess the effectiveness of the animated videos. The one-group pretest–posttest design is a commonly used quasi-experimental approach where the same group is measured before and after an intervention. This allows researcher to observe changes over time (Bierer et al., 2025).

This study also employed ADDIE model. The components of this model allow teachers to integrate a systematic approach in designing interactive and engaging learning experiences for students (Adeoye et al., 2024). ADDIE model includes five (5) components particularly Analysis, Design, Development, Implementation and Evaluation.

In the study, the Analysis phase involved identifying the current reading competence of the learners. This was through the least learned competencies of the learners in the 3rd quarter of Grade 4 as the basis for developing the research instruments. This ensured alignment of the instrument with the targeted competencies where learners demonstrated lower mastery and scaffolding is most required.

Next part is the Design phase focused on designing the structure, content and elements of the instruments developed in the study. First, after identifying the least learned competencies, the researcher outlined the lesson plans. The lesson plans, aligned with the DepEd Matatag lesson exemplars format, focused on the four reading skills- comprehension and noting details, determining textual structure and method of development, identifying text types and author's purpose, and drawing conclusion.

Further, pre-test and post-test with Table of Specification were also drafted aligned with the lesson plans for each reading skill. Then, these materials undergone rigorous validation process from Master Teachers in the Division of Dinagat Islands and members of the panel. After validation, designing the animated videos followed aligned with the validated lesson plans. The researcher sought help from an IT expert as to the flow of the animated video and the elements involved such as music or sound, effects, narration, transitions, graphics, illustrations, or characters.

Next, development phase involved the development of the animated videos using ADOBE software. During this phase, the researcher had an intensive collaboration with the IT expert in the flow and elements of the animated videos to assure its alignment with the standards of DepEd. When the videos were developed, the researcher sought help from the experts especially among the Learning Resource Management and Development System in the Division of Dinagat Islands to validate the developed instruments using DepEd Evaluation Checklist for DepEd-developed Video Lessons focusing on content, format and technical design, presentation and organization, as well as the accuracy and recency of information. The researcher refined the developed animated videos based on the suggestions and validation of experts.

After rigorous validation and upon approval from experts, Implementation phase followed involving the delivery of reading instruction to the respondents. The teacher have four-week instruction among respondents. Each week employed with animated video focused on different reading skill. This means that four animated video lessons focused progressively on comprehension and noting details, determining textual structure and method of development, identifying text types and author's purpose, and drawing conclusion were conducted in the lesson as an intervention. This also involved the procedures on how the teacher introduced and utilized the animated videos among the respondents.

Finally, the Evaluation phase examined the effectiveness of the developed animated videos. Before every lesson, a pre-test was administered to ascertain the baseline reading skill of respondents. After the instructional period utilizing the developed animated videos, a 10-item post-test was administered. A total of 40-item pre-test post-test was conducted in the whole research aligned with the four reading skills assessed in the study. This phase further involved analyzing the results of the performance of learners based on their pre-test and post-test scores with the help of the statistician.

Research Environment

The study was conducted in Sta. Cruz Elementary School located in Brgy. Sta Cruz, Dinagat Islands. As a public elementary school under the Department of Education in the Division of Dinagat Islands, it caters the total population of 425 learners from the community of Barangay Sta. Cruz as well as its nearby barangays.

The school environment is characterized by functional classrooms with televisions and projectors installed for instruction. The school also has a functional ICT laboratory equipped with DepEd laptops significant to enhance the 21st-century digital skills among elementary learners. It also has open spaces that provide learners with a conducive atmosphere for both academic and extracurricular activities.

Then, the teaching staff consists of 15 dedicated teachers integrating diverse contextualized, innovative and learner-centered strategies. The school has its internet connectivity through its Maintenance and Other Operating Expenses (MOOE) funds, ensuring that teachers and students have access to online resources that support instruction and communication. This initiative demonstrates the school's commitment to integrate technology into the learning process. However, the connection remains limited due to budget constraints, which sometimes affect the consistency and speed of internet access.

Participants

The participants of this study were the Grade 4 learners of Sta. Cruz Elementary School located in Brgy. Sta Cruz, San Jose, Dinagat Islands. The respondents involved specifically the 28 learners from Section Diamond.

Research Instrument

The research study involved the animated video as the primary research instrument designed to scaffold reading among Grade 4 learners. These were developed based on the least learned competencies identified from the Phil-IRI results with 50% of learners in Grade 4 Section Diamond were at Frustration level and 50% at Instructional Level.

In the quasi-experimental phase, the researcher employed a comprehensive set of researcher-developed instruments to evaluate the effectiveness of animated video to scaffold reading among elementary learners. These included lesson plans, Table of Specifications (TOS), pre-tests, and post-tests. Lesson plans were aligned with the DepEd Matatag lesson exemplars format which outlined the learning objectives, content coverage, teaching strategies, and assessment method to assure a structured strategy. Four animated video lessons were developed for each lesson exemplars focused on comprehension and noting details, determining textual structure and method of development, identifying text types and author's purpose, and drawing conclusion. These animated

videos were based on DepEd readily available e-books in the DepEd Learning Portal and reading passages available in lesson exemplars.

To evaluate the developed animated videos, the researcher adopted the DepEd Evaluation Checklist for DepEd-developed Video Lessons obtained from the Division of Dinagat Islands. This instrument evaluated the animated video lessons in terms of content, format and technical design, presentation and organization, and accuracy and recency of information. Moreover, this tool also contains a part where the validators specify their comments and suggestions for the improvement of the resource material being assessed.

To assess learning outcomes, pre-test and a post-test were administered to measure the learners' reading competence before and after each lesson. This means that every topic covered was accompanied by its own set of pre-test and post-test assessments to track learning progress.

Validity. A structured and methodical process was administered by the researcher to ensure that the research instruments were valid and aligned with the objectives of the study. Initially, the researcher presented the draft of the instrument including the lesson plans, pre-test and post-test, and the TOS to the panel of experts who critically reviewed the instrument's learning objectives, content coverage, teaching strategies, and assessment methods.

At the same time, a Quality Assurance (QA) evaluation was conducted for the animated video lessons by the experts in the Division of Dinagat Islands who examined the animated video to scaffold reading among learners using the adopted DepEd Evaluation Checklist for DepEd-developed Video Lessons. The researcher integrated all feedback and suggestions from the experts and systematically revised the instruments.

Reliability. When the research instruments were finalized and the approval from the members of the panel was obtained, the researcher conducted a reliability test to ensure internal consistency of the instrument. A pilot administration of the pre-test and post-test was carried out in a group Grade 4 learners in Don Ruben Elementary School, Brgy. Don Ruben, San Jose, Dinagat Islands. This pilot phase simulated actual classroom conditions and allowed the researcher to determine whether the test items consistently measured what it intends to assess specifically on the reading skills among elementary learners. Data gathered from this pilot testing were analyzed using Cronbach's Alpha.

The reliability coefficient obtained in the pre-test and post-test instruments both yielded a Cronbach's alpha coefficient of 0.70, which signifies an acceptable level of internal consistency and reliability (See Appendix X). This ensured that the tools used in the study were both valid and reliable, providing a sound basis for interpreting the learners' reading skill and the effectiveness of the animated videos to scaffold reading for elementary learners.

Ethics and Data Gathering Procedure

To ensure that data collection is ethically sound and methodologically rigorous, the researcher followed a structured set of procedures prior to, during, and after the implementation of the study.

The research process began with the researcher seeking and writing to the Dean of the Graduate School to obtain an endorsement letter, which served as support to conduct the study. Subsequently, the researcher submitted formal request letters to the Schools Division Superintendent of Dinagat Islands, the District Supervisor of San Jose District, and the Principals of Don Ruben Elementary School and Sta. Cruz Elementary School, to also obtain permission to conduct the research study.

In analysis phase, the researcher gathered data as to the least learned competencies of the learners in the 3rd quarter in the academic year 2024-2025. Aligned with the design phase, lesson plans with its pre-test and post-test assessments and TOS were designed and drafted based on the obtained least learned competencies. Instruments were validated by experts along with the panel members and research adviser.

In the development stage, animated videos were developed. The researcher utilized readily-available storybooks in the Deped National Learning Portal as basis for designing animated videos of the study. The researcher sought help from an IT expert for the development of the intervention tools. The researcher consulted experts to conduct a Quality Assurance (QA) review of the animated videos using the adopted evaluation tool rubrics of DepEd Dinagat Islands.

After securing approval and quality assurance clearance, the researcher implemented instruction employing the animated videos. The participants were exposed with four animated video lessons focused progressively on the four reading competencies such as comprehension and noting details, determining textual structure and method of development, identifying text types and author's purpose, and drawing conclusion.

In the evaluation phase, a pre-test was administered to assess their baseline reading skill as well as post-test, to monitor improvement. All data were systematically collected and organized for evaluation. The collected data were compiled, encoded, and analyzed using appropriate statistical tools to determine the effectiveness of the animated video to scaffold reading among elementary learners.

Data Analysis

To analyze the data gathered from the study, the following statistical tools were all applied.

Frequency and Percentages. These were employed to determine the acceptability of the developed animated videos to scaffold reading among elementary learners in terms of content, format and technical design, presentation and organization, and accuracy and recency of information.

Mean and Standard Deviation. These were employed to determine the level of reading skills of elementary learners on pre-test and post-test.

Paired Sample T-Test. This was utilized to determine whether there was a significant improvement on the reading performance of the participants after the implementation of animated videos as evidenced by the pre-test and post test results

RESULTS AND DISCUSSION

Problem 1
Level of Reading Skills of Elementary Learners based on Pre-Test and Post-Test

Table 1
Level of Reading Skills of Elementary Learners on Pre-Test and Post-Test

Reading Skills Indicators	Pre-test Mean	SD	%	Performance Level	Post-test Mean	SD	%	Performance Level
Comprehension and Noting Details	8.12	1.13	81.20	Advanced	9.36	0.95	93.60	Advanced
Textual Structure and Method	7.76	1.69	77.60	Proficient	9.20	0.81	92.00	Advanced
Text Types and Author's Purpose	8.00	1.38	80.00	Advanced	8.52	1.22	85.20	Advanced
Drawing Conclusion	8.48	1.44	84.80	Advanced	8.56	1.82	85.60	Advanced
Overall Mean	**8.09**	**1.41**	**80.90**	**Advanced**	**8.91**	**1.20**	**89.10**	**Advanced**

Mean Range	Percentage (%)	Description
9.0 – 10	80% – 100%	Advanced
8.5 – 8.9	60% – 79%	Proficient
8.0 – 8.4	40% – 59%	Approaching Proficiency
7.0 – 7.9	20% – 39%	Developing
Below 7	0% – 19%	Beginning

The results indicate a general improvement in the reading skills tested- comprehension and noting details, textual structure and method, text types and author's purpose, and drawing conclusion, of elementary learners from pre-test to post-test. Overall performance increased from a mean of 8.09 (80.90%), classified as Advanced, to 8.91 (89.10%), which remained at the Advanced level but reflects stronger mastery of the skills.

Among the indicators, Textual Structure and Method showed the most notable progress, improving from Proficient to Advanced, suggesting that learners significantly enhanced their understanding of how texts are organized. Comprehension and Noting Details also demonstrated a substantial increase, with higher mean scores and more consistent performance. Meanwhile, Text Types and Author's Purpose showed moderate improvement, maintaining an Advanced level. In contrast, Drawing Conclusion exhibited only a slight increase, indicating that this higher-order skill may still require further development.

These findings suggest that higher-level reading competencies particularly in drawing conclusion still entails further targeted intervention. This trend supports the findings of the study conducted by Hidayah et al. (2026) which demonstrated that drawing conclusions continues to be a challenging reading skill among primary learners as they tend to rely more on explicit information and struggle when deeper comprehension is required. Complementing this, Diem and Ramadhia (2025) further emphasized that drawing conclusion remains among one of the difficult reading skills compared to basic skills like noting details or getting the main ideas, underscoring the need for continued development among learners in terms of deeper reading competencies.

On the other hand, findings revealed that elementary learners demonstrate proficiency with the basic reading skills. The study of Piñero and Cañedo (2024) reinforced this claim showing that elementary learners can be competent in core reading skills such as noting details and comprehension. Gamutan, Egbus, and Baluyos (2025) further added that foundational reading skills like noting details are being actively shaped at the elementary level.

Problem 2
Implementing and Utilizing the Designed and Developed Animated Videos in Reading Instruction for Elementary Learners

The developed animated videos were implemented and utilized in the study in a learner-centered and systematic approach aligned with the phases of ADDIE model. The study revealed that animated videos served as a scaffolding tool to scaffold reading for elementary learners.

Aligned with the ADDIE model, animated videos were carefully designed to address the identified least-learned competencies specifically comprehension and noting details, textual structure and method of development, text types and author's purpose, and drawing conclusions. The animated videos served as scaffold providing a systematic support to facilitate reading instruction.

In the Design phase, research instruments such as lesson plans, pre-tests, post-tests with Table of Specifications were validated by the panel and Master Teachers from the Division of Dinagat Islands to ensure the alignment of its content with the

targeted competencies. The researcher also have gathered e-storybooks and reading passages from Deped Learning Portal and lesson exemplar as basis of the creation of the animated videos.

In the Development phase, the researcher sought help from an IT expert to assure technical coherence and pedagogical soundness of the content and flow of the videos. Adobe software was utilized to develop animated videos aligned with the four reading competencies. These developed animated videos were validated by the experts in the Learning Resource Management and Development System (LRMDS) of the Division of Dinagat Islands using the DepEd Evaluation Checklist to ensure that the videos met standards in terms of content accuracy, presentation, organization, and technical design. Recommendations for improvements were incorporated to ascertain that animated videos scaffold reading among elementary learners.

During the Implementation phase, a pre-test was administered to establish the baseline level of reading skills of elementary learners. Then, the developed animated videos were integrated into the reading instruction in class. Each video lesson functioned as an instructional tool that scaffold reading focused on the four reading skills was delivered progressively. For instance, the first week focused on the competency- comprehension and noting details, where the animated video explicitly covered strategies such as identifying main ideas, supporting details, and summarizing text. Along with guided activities embedded within the animated video, elementary learners practice and master the skill to comprehend and note details. On subsequent weeks, videos for textual structure and method of development, text types and author's purpose, and drawing conclusions were also introduced using a similar approach. The progressive sequence of integrating animated videos facilitated learners to build, develop, and master competence of their reading skill before progressing to the next.

In the present study, active interaction was organized and established. The teacher paused the animated videos at critical periods to brainstorm questions, encourage learners to predict, and prompt learners to make connections with their prior knowledge. In addition, elementary learners internalized reading strategies and navigated texts with the help of the narration and graphic illustrations embedded in the animated videos. Then, a post-test was administered following the instructional phase.

In the Evaluation phase, pre-test and post-test comparisons revealed improvements in learners' reading skills in the four competencies. These demonstrate that the developed animated videos can scaffold greatly on the foundational reading skills of learners. However, targeted intervention is also further recommended to improve their inferential reading skills.

Problem 3

Significant Improvement on the Reading Skills of Elementary Learners based on the Pre-post-test Results

The results shown in Table 2 indicate that the implementation of animated videos led to statistically significant improvements in selected aspects of participants' reading performance.

Specifically, significant differences were observed in Comprehension and Noting Details ($t = -4.656$, $p < .001$) and Textual Structure and Method ($t = -3.891$, $p < .001$), leading to the rejection of the null hypothesis for both variables. The effect sizes further support the practical significance of these findings, with a large effect for comprehension and noting details ($d = -0.9312$) and a moderate effect for textual structure and method ($d = -0.7783$). These results suggest that animated videos were particularly effective in enhancing learners' ability to identify key information and understand the organizational features of texts.

This was supported by the finding in the study of Rahmawati and Siswana (2025) who reported that elementary learners perceived the benefits of animated videos in enhancing their understanding about narrative texts specifically on its structural elements- such as plot, character, and setting as well as recalling its organizational features, which are significant for them to successfully note key details and understand text structures. Corroborating this, Setiayani, Raja and Flora (2026) further found that elementary learners who were exposed to animated video lessons improved significantly on their reading skills specially to better process textual information and recognize key text features relevant to its meaning, structure and organization.

In contrast, no statistically significant differences were found in Text Types and Author's Purpose ($t = -1.669$, $p = 0.108$) and Drawing Conclusion ($t = -0.168$, $p = 0.868$), as the null hypothesis was accepted for both areas. The corresponding effect sizes were small ($d = -0.3338$) and negligible ($d = -0.0336$), respectively, indicating minimal practical impact.

These findings imply that while animated videos supported improvements in foundational reading skills, they were less effective in developing higher-order comprehension skills, such as interpreting authorial intent and making inferences or conclusions.

These findings were supported by the findings of Tantowie et al. (2024) who found out that incorporating animated video in guided reading activities significantly strengthen the reading abilities of elementary learners; nevertheless, it did not extend to higher-order outcomes such as drawing conclusion which requires further skill development. Additionally, Delariarte et al. (2024) supports the utilization of animated videos to bolster inferential comprehension, but may require complementary instructional strategies to fully develop higher-order reading skills of elementary learners.

Table 2

Significant Improvement on the Reading Skills of Elementary Learners based on the Pre-post-test Results

Variables Compared (Pre-Post Test)	t-value	df	p-value	Decision	Interpretation	Effect Size (Cohen's d)	Interpretation of Effect Size
Comprehension and Noting Details	−4.656	24	< .001	Reject H_0	Significant	−0.9312	Large Effect
Textual Structure and	−3.891	24	< .001	Reject H_0	Significant	−0.7783	Moderate Effect

Method							
Text Types and Author's Purpose	−1.669	24	0.108	Accept H_0	Not Significant	−0.3338	Small Effect
Drawing Conclusion	−0.168	24	0.868	Accept H_0	Not Significant	−0.0336	Negligible Effect

Problem 4
Level of Acceptability of the Developed Animated Videos to Scaffold Reading among Elementary Learners

This part presents the level of acceptability of the developed animated videos to scaffold reading among elementary learners in terms of content, format and technical design, presentation and organization, and accuracy and recency of information.

Table 3
Level of Acceptability as to Content

No.	Indicator	YES	%	NO	%	N/A	%
1	Content is age and development appropriate	3	100%	0	0%	0	0%
2	SLR contributes to the achievement of specific learning competencies of the learning area and grade level for which it is intended.	3	100%	0	0%	0	0%
3	SLR provides for the development of higher cognitive skills in the learning area and grade level for which it is intended.	3	100%	0	0%	0	0%
4	The SLR is consistent with the DepEd social content guidelines.	3	100%	0	0%	0	0%
5	SLR enhances the development of desirable values and traits.	3	100%	0	0%	0	0%
6	SLR sustains interest of target reader.	3	100%	0	0%	0	0%
7	Adequate warning/cautionary notes are provided in topics and activities where safety and health are of concern.	3	100%	0	0%	0	0%

Table 3 shows that the developed animated videos were rated 100% acceptable in terms of content. All sevn (7) indicators received three YES responses, with 0 NO and 0 N/A, resulting in a perfect percentage across all criteria. This means that the evaluators unanimously agreed that the content of the animated videos is appropriate for elementary learners.

Specifically, the videos were found to be age- and development-appropriate, aligned with the intended learning competencies, supportive of the development of higher-order thinking skills, and consistent with DepEd social content guidelines. The evaluators also agreed that the videos help develop desirable values and traits, sustain the interest of target readers, and provide necessary warning or cautionary notes where health and safety are concerned.

This implies that the animated videos are highly suitable as reading scaffolds because their content is relevant, learner-centered, educationally sound, and safe for use among elementary pupils. Therefore, in terms of content, the developed animated videos are highly acceptable. To support this finding, the study conducted by Putri et al. (2024) exemplifies that animated videos which are learner-centered and developmentally appropriate aid elementary learners to better understand complex concepts. This was supplemented by Kleftodimos (2024) who expound that animated videos strengthen student learning when its content is educationally relevant and aligned with the intended lesson objectives. These digital learning resources, when carefully designed and developed, empower student engagement, motivation, and reading competence.

Table 4
Level of Acceptability as to Format and Technical Design

No.	Indicator	YES	%	NO	%	N/A	%
1	Volume and quality of sound is appropriate	3	100%	0	0%	0	0%
2	Pacing is effective and appropriate to instructional purposes	3	100%	0	0%	0	0%
3	Audio-visual effects are appropriate and effective	3	100%	0	0%	0	0%

Table 4 indicates that the developed animated videos were 100% acceptable in terms of format and technical design. All 3 indicators obtained 3 YES responses, with no negative or non-applicable responses, and an overall result of Passed.
This means the evaluators found that the volume and quality of sound were appropriate, the pacing of the videos was effective for instructional purposes, and the audio-visual effects were appropriate and effective. These findings suggest that the technical features of the videos were well-designed and supported the learning process rather than distracting from it.

The result implies that the animated videos possess technical qualities necessary for effective classroom or instructional use. Since young learners are highly responsive to sound, pacing, and visuals, the perfect rating shows that the videos were able to

maintain clarity, engagement, and instructional effectiveness. Thus, in terms of format and technical design, the developed animated videos are highly acceptable.

This finding was aligned with the study conducted by Kartika, Apriza and Darwanto (2025) who exemplified that technical quality of animated videos such as its appropriate visuals, organized presentation, and clear audio-visual structure contributes to its effectiveness as an educational tool in reading instruction. This was supported by Regondola and Astorga (2025) emphasizing that that learners respond positively to animated video materials that are visually appealing and with clear audio and narration qualities, thereby, highlighting the need for animated videos to be effective in terms of its technical characteristics.

Table 5
Level of Acceptability as to Presentation and Organization

No.	Indicator	YES	%	NO	%	N/A	%
1	Presentation is engaging, interesting, and understandable	3	100%	0	0%	0	0%
2	There is logical and smooth flow of ideas	3	100%	0	0%	0	0%
3	Vocabulary level is adapted to the target learner's experience and understanding	3	100%	0	0%	0	0%
4	Length of the video/audio recording is appropriate to the attention span of the target learner.	3	100%	0	0%	0	0%

The table reveals that the developed animated videos were 100% acceptable in terms of presentation and organization. All 4 indicators received 3 YES responses, with 0 NO and 0 N/A, giving an overall interpretation of Acceptable and a decision of Passed. This means that the evaluators agreed that the videos were engaging, interesting, and understandable, with a logical and smooth flow of ideas. They also found that the vocabulary level was suited to the learners' experiences and level of understanding, while the length of the video/audio recording was appropriate for the attention span of elementary pupils.

These results imply that the animated videos were organized in a way that supports comprehension and keeps learners attentive. Since elementary pupils need materials that are easy to follow and suited to their developmental level, the findings confirm that the videos were properly structured for effective reading support. Therefore, in terms of presentation and organization, the developed animated videos are highly acceptable.

These findings are corroborated by the study of Adler et al. (2025) who emphasized that instructional materials like animated videos are most effective as reading intervention when they are engaging, logically sequenced, and clearly structured, as these features enhance learner attention and comprehension. In addition, utilizing age-appropriate vocabulary, familiar and simplified language in animated videos in reading instruction could significantly elevate comprehension and provide meaningful learning outcomes among elementary learners (Matthew & De Villiers, 2023).

Table 6 shows that the developed animated videos were 100% acceptable in terms of accuracy and recency of information. All 6 indicators obtained 3 YES responses, with no negative or non-applicable responses, and an overall result of Passed. The evaluators unanimously agreed that the videos were free from conceptual, factual, grammatical, computational, and substantial mechanical errors, and were also free from obsolete information. This indicates that the content presented in the animated videos is correct, current, and reliable for instructional use.

This result is important because accuracy and updated information are essential in educational materials, especially for young learners who depend on correct and clear input in developing reading skills. The findings suggest that the animated videos can be confidently used as scaffolding materials because they provide valid and dependable information. Hence, in terms of accuracy and recency of information, the developed animated videos are highly acceptable.

This finding is aligned with the study of Alcala and Tamban (2022) who elaborate that animated videos, as supplementary reading tools, must be free from any factual and conceptual errors in order to support meaningful learning and prevent misconception specifically among elementary learners. When these instructional materials contain even minor errors, learners may develop incorrect understanding that becomes difficult to rectify at a later stage.

Moreover, Sweller (2024) further underscore that instructional materials such as animated videos must avoid misleading information because this will increase cognitive load and reduces comprehension among learners. This means that these must be structured, and free from inconsistent content, and accurate to promote support long-term understanding of learners.

Table 6
Level of Acceptability as to Accuracy and Recency of Information

No.	Indicator	YES	%	NO	%	N/A	%
1	Free from conceptual errors	3	100%	0	0%	0	0%
2	Free from factual errors	3	100%	0	0%	0	0%
3	Free from grammatical errors	3	100%	0	0%	0	0%
4	Free from computational errors	3	100%	0	0%	0	0%
5	Free from obsolete information	3	100%	0	0%	0	0%
6	Free from substantial mechanical errors	3	100%	0	0%	0	0%

The summary shown in table 7 indicates that all four criteria obtained a 100% rating, interpreted as Acceptable, with a decision of Passed. Content had seven (7) indicators with a total of 21 yes responses; Format and Technical Design had three (3)

indicators with nine (9) yes responses; Presentation and Organization had four (4) indicators with 12 yes responses; and Accuracy and Recency of Information had six (6) indicators with 18 yes responses. Overall, the evaluation covered 20 indicators and yielded 60 total yes responses, equivalent to 100%.

This means that the developed animated videos were unanimously rated positively by the evaluators across all dimensions. The overall findings indicate that the videos meet the required standards for educational material and are suitable for use in scaffolding reading among elementary learners. Since all aspects were rated acceptable and passed, the developed animated videos may be considered highly acceptable instructional materials.

This was aligned with the study of Caella and Yulianto (2024) who elucidate that animated videos are effective instructional tools only when they meet set educational standards in terms of its relevance, clarity, and learner-centered design. This was supported by the study of Kartika, Apriza, and Darwanto (2025) revealed that the reading skills of elementary learners have improved when lesson was integrated with animated videos presented content in a structured engaging manner and aligned with learning objectives. This indicates that the instructional qualities of a developed videos particularly the appropriateness of content and clarity of presentation are vital to achieve positive learning outcomes among learners.

In a similar perspective, Utaminingsih et al. (2024) demystify that when academic videos are pedagogically sound, well-organized and appropriate to the cognitive levels of learners, these can boost their reading skills and even learning outcomes, as a whole. In this sense, multimedia resources such as animated videos are effective supplementary tool to scaffold reading when its content is meaningful and carefully designed to reduce cognitive overload and sustain engagement specifically among elementary learners who need structured reading support.

Table 7
Summary of Results

Criteria	No. of Indicators	Total Yes Responses	Percentage	Interpretation	Decision
Content	7	21	100%	Acceptable	Passed
Format and Technical Design	3	9	100%	Acceptable	Passed
Presentation and Organization	4	12	100%	Acceptable	Passed
Accuracy and Recency of Information	6	18	100%	Acceptable	Passed

Summary

This study evaluated the reading skills of elementary learners at Sta. Cruz Elementary School, Brgy. Sta. Cruz, San Jose, Dinagat Islands, by utilizing animated videos to scaffold reading. Specifically, it sought to assess the learners' reading skill across four competencies- comprehension and noting details, determining textual structure and method of development, identifying text types and author's purpose, and drawing conclusion—through both pre-test and post-test evaluations. The study further explored how the animated videos used to scaffold reading for elementary learners and examined how these were introduced and utilized in reading instruction. Also, the study measured the level of acceptability of the developed animated videos to scaffold reading among elementary learners in terms of content, format and technical design, presentation and organization, and accuracy and recency of information.

A one-group quasi-experimental research design, aligned with ADDIE model, was employed among 26 Grade 4 learners. The group was taught using Quality-Assured animated videos to scaffold reading. Frequency and percentages, Mean, standard deviation, and paired sample t-test were among the statistical methods used to assess the data collected.

Findings

The findings of the study were revealed as follows:

1. Elementary learners demonstrated advanced reading skills overall, with significant improvement after the animated video intervention, especially in comprehension, details, and text structure, while gains in higher order skills remained limited.

2. The developed animated videos were implemented utilized through a structured four-week learner-centered lesson plan integrating interactive strategies and post-tests to assess reading skill improvement per competency.

3. There was a significant improvement in comprehension and noting details and textual structure and method after the implementation of animated videos. However, no significant improvement was observed in text types and author's purpose and drawing conclusion.

4. The developed animated videos were at the standard level of acceptability in terms of content, format and technical design, presentation and organization, and accuracy and recency of information.

Conclusions

Based on the findings, the following conclusions were drawn:

1. Elementary learner's reading skills improved after the intervention, showing stronger mastery, particularly in foundational reading skills.

2. Animated videos developed from least-learned competencies effectively scaffolded reading instruction, enhanced learner engagement, and aligned with DepEd standards.

3. Animated videos significantly enhanced elementary learners' foundational reading skills but showed limited improvement in inferential reading skills.

4. The developed animated videos met educational standards and were suitable to use in scaffolding elementary reading.

Recommendations

In the light of the foregoing findings and conclusions drawn from the study, the following recommendations are suggested:

Administrators. Administrators are encouraged to integrate animated videos into classroom instruction to scaffold reading and provide an interactive learning.

English Teachers. English teachers are encouraged to adopt and integrate the developed animated videos as a complementary strategy to enhance learner engagement and scaffold elementary reading competence.

Learners. They are encouraged to use animated video lessons as an engaging and interactive tools to strengthen their reading skills.

Parents. They are encouraged to support innovative teaching methods such as animated video lessons at home to reinforce their children's motivation, engagement and reading skills.

Future researchers. They are encouraged to conduct further studies on the effectiveness of the animated video lessons in scaffolding and improving the learner's inferential reading skills.

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