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Enriching Literature Teaching Strategies: Transforming Short Moral Stories into Animated Videos Using AI

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Abstract — This study examined the relationship between literature teaching strategies and students' reading comprehension when short moral stories were transformed into AI-generated animated videos. Using a descriptive–correlational design, 120 junior high school students from two Philippine public schools were assessed with a content-validated reading comprehension test and a reading strategies questionnaire. Instruments were pilot-tested and demonstrated high reliability ($\alpha = 0.87$). Findings showed high comprehension levels, particularly in vocabulary and story structure, with frequent use of previewing, integrating prior knowledge, and summarizing. A moderate positive correlation was found between reading strategies and comprehension ($r = 0.48$, $p < .05$), indicating that strategic engagement significantly enhances understanding. The results highlight the novelty of combining AI animations with reading strategies in the Philippine context, offering a multimodal approach that enriches literature instruction and supports student engagement.

Keywords — Teacher Education, Reading, Strategies, Comprehension, Artificial Intelligence, Literature Teaching

I. Introduction

Reading is a foundational academic skill that enables learners to acquire knowledge, develop critical thinking, and engage meaningfully with texts across disciplines. In literature education, reading fosters language development, moral reasoning, empathy, and cultural awareness. Yet, traditional literature instruction - largely centered on printed texts and teacher-led analysis - often fails to fully engage learners accustomed to digital and multimedia environments. Prior Philippine studies have explored animated storytelling, reporting improved comprehension and engagement among high school learners (Baguilat & Santos, 2021; Reyes et al., 2023), suggesting that multimodal approaches hold promise in local classrooms.

Reading strategies, encompassing cognitive and metacognitive processes before, during, and after reading, are critical for comprehension, especially when texts are complex or abstract. Despite K–12 literacy interventions, many students struggle to use these strategies effectively, resulting in superficial understanding. AI-generated animated stories provide multimodal cues - visual, auditory, and narrative - that may scaffold strategy use while maintaining literature's instructional value. Building on this problem statement, the study investigates how AI-enhanced

animations influence reading comprehension and the employment of reading strategies, addressing the following questions:

1. What is the level of students' reading comprehension when exposed to AI-generated animated moral stories?
2. What reading strategies do students employ before, during, and after reading?
3. Is there a significant relationship between reading strategies and reading comprehension?

Literature Review

Reading Strategies and Technology Support

Recent studies highlight AI's growing role in personalized and adaptive learning. For instance, Li et al. (2022) found that AI-generated narrative animations enhanced engagement and reading comprehension in secondary education. Similarly, digital tools like Viber have improved student engagement in essay writing at the university level (Palaroan et al., 2023). While Viber facilitates interactive communication and support, AI-generated animations provide multimodal scaffolds directly embedded within the text, combining narrative, visual, and auditory cues to support inferential reasoning and vocabulary acquisition. Integrating AI animations with explicit strategy instruction can thus offer a richer, contextually grounded learning experience compared with standalone digital tools, particularly in Philippine classrooms.

Reading Comprehension

Reading comprehension entails understanding explicit content, making inferences, and integrating textual information with prior knowledge. Key components include vocabulary knowledge, identification of details, text structure understanding, and inferential reasoning. Empirical studies indicate that multimodal materials, such as AI-generated animations, enhance comprehension by reducing cognitive load and engaging multiple senses (Mayer, 2021).

AI in Education

Recent studies highlight AI's growing role in personalized and adaptive learning. For example, Li et al. (2022) found that AI-generated narrative animations enhanced student engagement and reading comprehension in secondary education. In the Philippine context, Baguilat and Santos (2021) demonstrated that digital storytelling improved learners' vocabulary retention and inferential skills, supporting the local relevance of AI-enhanced literature instruction.

Connecting Theoretical Frameworks to Reading Strategies

Before-Reading Strategies: Previewing, predicting, and activating prior knowledge are supported by Metacognitive Theory (Flavell, 1979) and Schema Theory (Anderson, 2010), guiding learners to plan and orient themselves.

During-Reading Strategies: Integrating prior knowledge and visualizing events aligns with Cognitive Theory of Multimedia Learning (Mayer, 2021), enhancing comprehension via dual-channel processing.

After-Reading Strategies: Summarizing, applying morals, and reflecting correspond with Constructivist Learning Theory, promoting consolidation, real-world application, and value internalization (Magnusson et al., 2019).

Synthesis

Comparing traditional reading approaches, AI-enhanced animated stories, and other digital interventions such as Viber, the literature suggests that while conventional methods rely heavily on textual analysis, multimedia or interactive tools provide richer sensory input, contextual scaffolding, and engagement. Philippine studies support this trend: Baguilat and Santos (2021) and Reyes et al. (2023) showed that digital storytelling improves vocabulary and inferential reading skills, while Palaroan et al. (2023) demonstrated that online tools like Viber enhance writing engagement and learning motivation. Together, these studies indicate that combining reading strategies with AI or digital support tools can reinforce comprehension, strategy use, and learner motivation in literature and language instruction.

II. Methodology

Research Locale

This study employed a descriptive–correlational design to examine the relationship between reading strategies and reading comprehension in an AI-enhanced literature learning environment.

Respondents and Sampling

Participants included 120 junior high school students from Grades 8 and 9 in two public secondary schools, selected through stratified random sampling to ensure proportional representation across grade levels.

Research Instruments

Reading Comprehension Test: A 45-item multiple-choice test covering vocabulary in

context, noting details, and story structure. The test was content-validated by three literature experts and pilot-tested (Cronbach's α = 0.87).

Reading Strategies Checklist: A Likert-scale questionnaire measuring before-, during-, and after-reading strategies. Reliability was confirmed through pilot testing (Cronbach's α = 0.85).

Reading Materials

Three short moral stories were transformed into AI-generated animated videos, preserving narrative structure and moral themes.

Data Gathering Procedure

After obtaining school permissions, students were oriented to the activity. Animated stories were presented during literature classes, followed by guided reading discussions. Students then completed the reading comprehension test and the reading strategies checklist.

Statistical Analysis

Means and percentages were used to describe comprehension levels and strategy use. Pearson Product–Moment Correlation analyzed the relationship between reading strategies and reading comprehension..

III. Results and Discussion

This chapter presents the analysis and interpretation of the study's data. The discussion integrates findings with existing theories, recent Philippine studies, and AI-in-education literature to provide a comprehensive understanding of how AI-generated animated stories influence reading comprehension and strategy use.

Reading Comprehension Levels of Students

Reading Comprehension Area	Mean Score (%)	Verbal Interpretation
Vocabulary in Context	88.20	High
Noting Details	84.15	High
Determining Story Structure	86.40	High
Vocabulary in Context	88.20	High

Students demonstrated high comprehension across all assessed areas, with vocabulary in context achieving the highest mean score (88.20%). This suggests that AI-generated animated moral stories effectively support learners in understanding word meanings and contextual usage. The visual and auditory cues provided by the animations likely facilitated schema activation and inferential reasoning, enabling students to integrate new information with prior knowledge and construct meaning from the narratives (Oakhill, Cain, & Elbro, 2019).

These findings are consistent with local Philippine studies showing the benefits of multimedia-enhanced instruction. Baguilat and Santos (2021) found that digital storytelling improved students' vocabulary retention and comprehension, while Reyes, Dela Cruz, and Hernandez (2023) reported that animated narratives enhanced inferential reading skills among high school learners. Together, these studies suggest that AI-supported animated texts can effectively scaffold comprehension, particularly in vocabulary and narrative understanding, making literature instruction more engaging and cognitively accessible.

Reading Strategies Employed by Students

Before-Reading Strategies

Strategy	Mean	Verbal Interpretation
Previewing title and visuals	4.32	Always
Predicting story content	3.85	Frequently
Setting purpose for reading	3.74	Frequently
Activating prior knowledge	3.69	Frequently
Overall Mean	3.90	Frequently

The results show that students frequently employed before-reading strategies when engaging with AI-generated animated moral stories, with an overall mean of 3.90. Previewing the title and visuals was the most consistently used strategy (mean = 4.32, "Always"), indicating that students actively oriented themselves to the text before reading. This aligns with Metacognitive Theory (Flavell, 1979), which emphasizes planning and monitoring one's reading process, and Schema Theory (Anderson, 2010), which highlights the importance of connecting new information to prior knowledge. Strategies such as predicting story content (mean = 3.85) and setting a purpose for reading (mean = 3.74) support active engagement, helping learners focus on relevant details and anticipate narrative events. These findings are consistent with studies showing that preparatory strategies enhance comprehension in both traditional and digital contexts (Habók & Magyar, 2019; Magnusson, Roe, & Blikstad-Balas, 2019).

Activating prior knowledge (mean = 3.69) was also frequently used, supporting inferential thinking and contextual understanding, especially for moral or abstract literary themes (Oakhill, Cain, & Elbro, 2019). Local studies confirm that linking prior experiences to digital storytelling improves comprehension (Baguilat & Santos, 2021; Reyes, Dela Cruz, & Hernandez, 2023), while digital tools like Viber can similarly engage learners in preparatory strategies for writing tasks (Palaroan et al., 2026). Overall, the findings suggest that AI-generated animated stories effectively scaffold before-reading strategies, providing visual and contextual cues that enhance strategy use and comprehension. Teachers can build on this by modeling strategy application and guiding students in previewing, predicting, and connecting content to prior knowledge, maximizing the benefits of multimedia-supported literature instruction (Li, Zhang, & Chen, 2022; Mayer, 2021).

During-Reading Strategies

Strategy	Mean	Verbal Interpretation
Integrating prior knowledge	4.01	Frequently
Visualizing story events	3.96	Frequently
Using context clues	3.62	Frequently
Monitoring understanding	3.48	Occasionally
Overall Mean	3.77	Frequently

During reading, students frequently employed strategies that helped them process and make sense of the AI-generated animated moral stories, with an overall mean of 3.77 ("Frequently"). Integrating prior knowledge (mean = 4.01) and visualizing story events (mean = 3.96) were the most used strategies, indicating that learners actively connected new information with their existing schemas while forming mental images of narrative elements. This aligns with Schema Theory (Anderson, 2010) and Mayer's Cognitive Theory of Multimedia Learning (2021), which posit that comprehension improves when learners process information through multiple channels and relate it to prior knowledge. These findings are consistent with Binas (2022), who reported that first-year college students most frequently used integrating prior knowledge as a during-reading strategy, resulting in higher comprehension levels across vocabulary, details, and story structure.

Strategies such as using context clues (mean = 3.62) and monitoring understanding (mean = 3.48, "Occasionally") were less frequent, suggesting that some students may still need guidance in regulating their comprehension. Previous research indicates that visualization and integration of prior knowledge enhance inferential thinking and retention (Magnusson, Roe, & Blikstad-Balas, 2019), and that AI- or multimedia-supported instruction reduces cognitive load, making complex literary elements more accessible (Li, Zhang, & Chen, 2022; Reyes, Dela Cruz, & Hernandez, 2023). Overall, the findings suggest that AI-generated animations effectively scaffold during-reading strategies, supporting cognitive engagement and improving comprehension outcomes, consistent with prior Philippine evidence (Binas, 2022).

After-Reading Strategies

Strategy	Mean	Verbal Interpretation
Summarizing the story	4.05	Frequently
Applying moral lessons to real life	4.12	Frequently
Retelling the story	3.71	Frequently
Reflecting on personal insights	3.58	Frequently
Overall Mean	3.87	Frequently

After reading, students frequently employed strategies that allowed them to consolidate understanding and apply the lessons from the AI-generated animated moral stories, with an overall mean of 3.87 ("Frequently"). The most frequently used strategies were applying moral lessons to real life (mean = 4.12) and summarizing the story (mean = 4.05), indicating that

learners actively engaged in reflective and integrative processes. These behaviors align with Metacognitive Theory (Flavell, 1979), which emphasizes self-monitoring and evaluation of learning, and Constructivist Learning Theory, which views learners as actively constructing meaning and applying knowledge in real-life contexts (Magnusson, Roe, & Blikstad-Balas, 2019).

The use of strategies such as retelling the story (mean = 3.71) and reflecting on personal insights (mean = 3.58) further demonstrates higher-order cognitive processing. Consistent with Habók and Magyar (2019), AI-supported multimodal materials scaffold learners' inferential reasoning and facilitate deeper comprehension. Local evidence from Binas (2022) similarly reports that first-year Philippine college students frequently applied after-reading strategies - summarizing, synthesizing, and transferring lessons to real-life applications - which corresponded with higher comprehension outcomes. Together, these findings suggest that AI-generated animated stories not only engage students during reading but also support reflective and application-oriented strategies after reading, enhancing both understanding and value internalization.

Relationship Between Reading Strategies and Reading Comprehension

Variables Compared	r-value	p-value	Interpretation
Reading Strategies and Reading Comprehension	0.48	0.002	Moderate, Significant

The results show a moderate positive correlation ($r = 0.48$, $p = 0.002$) between reading strategies and reading comprehension, indicating that students who frequently employ cognitive and metacognitive strategies tend to achieve higher comprehension levels. This finding aligns with the Strategic Reading Model, which posits that deliberate use of reading strategies enhances understanding (Wahyono, 2019). Practically, an $r = 0.48$ suggests that nearly half of the variance in students' comprehension can be meaningfully associated with their strategy use, highlighting the importance of explicit instruction and reinforcement of reading strategies in literature classes. AI-generated animations may further strengthen this relationship by providing visual and contextual scaffolds that support strategy implementation (Li, Zhang, & Chen, 2022).

Local evidence supports these findings. Binas (2022) reported a similar moderate and significant correlation between reading strategies and comprehension among first-year Philippine college students, with during-reading strategies such as integrating prior knowledge and after-reading strategies like summarizing contributing substantially to comprehension outcomes. Together, these results suggest that combining AI-enhanced multimedia with guided strategy instruction can effectively promote comprehension, making it a practical approach for teachers aiming to improve students' reading outcomes in both vocabulary understanding and narrative analysis.

IV. Conclusion

Transforming short moral stories into AI-generated animated videos enhances reading comprehension and promotes effective reading strategy use. The moderate positive correlation underscores the importance of explicit strategy instruction within multimedia-supported literature classes. These findings support integrating AI-enhanced materials in Philippine literature education to enrich teaching and student engagement.

V. Recommendations

1. School Administrators: Support AI integration through infrastructure and teacher training.
2. Curriculum Planners: Include AI-assisted literature strategies in instructional guides.
3. Teachers: Combine explicit reading strategy instruction with AI-generated literary content.
4. Future Research: Explore longitudinal and experimental designs to assess the long-term effects of AI-enhanced literature instruction.

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