



# Utilization of Avaterefficient Quest in enhancing reading comprehension skills

<sup>1</sup>Helaena Velasco, <sup>2</sup>John Renden Laudencia, <sup>2</sup>Aaron Artillaga,  
<sup>2</sup>Lemuel Cabison, <sup>2</sup>Edilene Mhai Goting & <sup>3</sup>Jovelle M. Reyes

## Abstract

This study evaluated the reading comprehension skills of Grade 8 students using Avaterrific Quest, a board game designed by the researchers. Employing a quantitative experimental design, the study compared two groups: Jacinto, which received traditional instruction, and Archimedes, which engaged in gamified learning. Pre-tests and post-tests provided numerical data for statistical analysis, assessing the effectiveness of each method. Results indicated that the traditional approach improved Jacinto's mean scores from 21.93 (very limited proficiency) to 36.87 (limited proficiency). In contrast, Archimedes, utilizing Avaterrific Quest, showed a more significant increase, with scores rising from 38.44 (limited proficiency) to 53.58 (proficient). While both methods produced substantial gains, the gamified approach led to greater improvements, highlighting the advantages of innovative teaching strategies. The findings suggest that while traditional instruction positively impacted reading comprehension, the use of gamified learning not only enhanced student engagement but also yielded more pronounced improvements in comprehension skills. Overall, this study underscores the potential of gamified approaches in educational settings to effectively boost learning outcomes compared to conventional methods.

**Keywords:** Avaterrific Quest, reading, reading comprehension, gamification

## Article History:

*Received:* March 14, 2025

*Accepted:* May 25, 2025

*Revised:* May 18, 2025

*Published online:* May 31, 2025

## Suggested Citation:

Velasco, H., Laudencia, J.R., Artillaga, A., Cabison, L., Goting, E.M. & Reyes, J.M. (2025). Utilization of Avaterefficient Quest in enhancing reading comprehension skills. *International Student Research Review*, 2(1), 52-73. <https://doi.org/10.53378/isrr.169>

## About the authors:

<sup>1</sup>Corresponding author. Bachelor of Secondary Education Major in English, Undergraduate, Laguna University. Email: [laena.velasco26@gmail.com](mailto:laena.velasco26@gmail.com)

<sup>2</sup>Bachelor of Secondary Education Major in English, Undergraduate, Laguna University

<sup>3</sup>MA in English ongoing thesis CAR 2023-2024, Instructor II, Laguna University



© The author (s). Published by Institute of Industry and Academic Research Incorporated.

This is an open-access article published under the Creative Commons Attribution (CC BY 4.0) license, which grants anyone to reproduce, redistribute and transform, commercially or non-commercially, with proper attribution. Read full license details here:

<https://creativecommons.org/licenses/by/4.0/>.

## 1. Introduction

Reading is a fundamental skill that significantly influences students' academic performance and personal development. It involves decoding symbols and constructing meaning, which fosters comprehension, critical thinking, and language acquisition (Tan et al., 2020). Beyond academic success, reading enhances communication skills, broadens knowledge, and instills a lifelong love of learning. Proficient readers often exhibit improved cognitive functions, creativity, and problem-solving skills, which are essential for future academic and professional pursuits (Andini et al., 2021).

In today's fast-evolving society, reading extends beyond traditional academic texts and permeates everyday life. Whether interpreting prices at a market, reading instructions, or comprehending policies from institutions, reading comprehension plays a pivotal role. Among students, the inability to understand and interpret written text continues to be a major hurdle to academic success. This challenge is particularly concerning in the Philippines, where issues in reading comprehension remain prevalent. The 2022 Programme for International Student Assessment (PISA) report revealed that the Philippines ranked 76th out of 81 participating countries in reading, a slight improvement from 2018 but still among the lowest performers globally (Organisation for Economic Co-operation and Development [OECD], 2023).

In response to these challenges, educators have employed various strategies to improve reading comprehension. These include the use of explicit instruction in reading strategies, integrating visual aids and graphic organizers, and incorporating digital tools to support diverse learning needs (Rosli et al., 2021). More recently, game-based learning has emerged as a promising method to foster reading comprehension by promoting learner engagement, motivation, and participation. Educational games can enhance students' comprehension by immersing them in interactive and goal-driven reading experiences (Putri & Agustina, 2023).

Games, long associated with entertainment, are now increasingly recognized for their educational potential. They provide structured environments that support cognitive and language development through interactive, meaningful, and enjoyable experiences. Unlike traditional reading tasks, games often incorporate narratives, character roles, and problem-solving scenarios, making reading feel less like a chore and more like an adventure. In the context of reading, games can be used to reinforce comprehension skills such as sequencing,

identifying main ideas, making inferences, and expanding vocabulary through experiential learning (Mustakim et al., 2022).

The goal of this study was to determine the efficacy of utilizing Avaterrific Quests on the reading comprehension of Grade 8 students. Specifically, the study seeks to analyze the efficacy of Avaterrific Quest on strengthening Grade 8 students reading comprehension skills as indicated by their pre-test and post-test result. It also determines the influence and effectiveness of strategic integration of Avaterrific Quest in enhancing reading comprehension of the students.

## **2. Literature Review**

### ***2.1. Reading***

Shiv et al. (2023) describe reading as an active, communicative, and interactive skill that fosters understanding, communication, critical thinking, and capacity building, connecting different ages and expanding horizons. Accordingly, reading literacy is the ability to understand, evaluate, and effectively use information from reading, emphasizing the importance of introducing simple reading resources early to improve literacy skills (Ira et al., 2024). In education, reading is a cognitive process aimed at understanding written information, involving the evaluation of students' comprehension, analysis, and language skills to improve learning outcomes (Anggun et al., 2021). Inayah et al. (2022) emphasize that reading was fundamental for students, as it facilitated the construction of meaning from texts, information acquisition, and learning about the world, all crucial for daily life and academic success.

According to Verena et al. (2022), reading is an experience of personal meaning, shaped by subjective interpretations and influenced by individual historical contexts. This perspective challenges traditional, hegemonic approaches to reading. In contrast, Stanley et al. (2023) describe reading in education as the decoding of written messages through various skills and strategies, essential for knowledge acquisition and comprehension, particularly in foreign language learning, such as English exams. Additionally, Ilham et al. (2022) assert that reading in education not only spreads knowledge but also deepens understanding and transforms lives, fostering personal growth and societal development through reflection and engagement with the world.

Rosalyn et al. (2021) emphasize that reading extends beyond mere word recognition; it is a complex, multifaceted skill requiring the comprehension, interpretation, and meaningful engagement with text. Similarly, Hernando et al. (2020) highlight reading as a critical cognitive process integral to language acquisition and development. It stimulates cognitive functions, facilitating language learning, such as Filipino, by enhancing vocabulary, comprehension, and oral language abilities. Reading contributes to cognitive and emotional development by fostering imagination, decision-making, and an understanding of social relationships, which promotes empathy. While challenges like unfamiliar vocabulary and comprehension difficulties can arise, these can be mitigated through methods such as reading for enjoyment. Agus et al. (2022) note that in English language education programs, students preferred entertainment materials like storybooks and romantic novels, despite reading not being a common hobby. Ultimately, reading is a gradual and sustained process that is essential for language mastery and cognitive growth.

## ***2.2. Reading Comprehension***

According to Navarro (2021), reading comprehension is an essential skill that lays the groundwork for both academic success and lifelong learning. It involves the ability to derive meaning from texts, incorporating elements such as understanding main ideas, critical thinking, metacognitive strategies, and contextual interpretation. It is the skill of integrating background knowledge with reading materials, emphasizing its role as an interactive process between the reader and the text, crucial for lifelong learning and academic achievement (Özdemir & Akyol, 2019). Umirova (2024) adds that reading comprehension entails understanding, interpreting, and forming opinions about a text, involving basic elements like identifying characters, settings, plot, and chronology. Hence, it is vital for developing critical thinking and is key to both educational success and professional competence (Medranda et al., 2023).

Reading comprehension involves constructing mental representations in working memory by integrating external text information with prior knowledge. This process includes making inferences, forming coherence, and developing topic-specific mental models. Therefore, the mental representation of written text is essential for knowledge acquisition (Yopal-Casanare, 2023). It involves elements such as oral comprehension, reading speed, vocabulary, syntax, and the generation of inferences. Since reading comprehension is

essential for success in education (Ferroni & Jaichenco, 2022; Aida, 2021; Potot et al., 2023), this requires constructing coherent mental representations by connecting textual elements through semantic relations. However, it is a multifaceted process, requiring the simultaneous activation of various components, including word recognition, sentence processing, and discourse-level understanding. Reading comprehension involves the interaction between the reader, the text, and the context of the activity, shaped by sociocultural factors, individual differences, and prior knowledge (Reese et al., 2020), which also involves answering questions based on it (Filippo & Meucci, 2022).

Neneng et al. (2022) underscored several key difficulties faced by students in reading comprehension, including the ability to understand main ideas, translate unfamiliar words, and create their own understanding of the text. To address these, educators have investigated a range of instructional strategies to enhance students' reading comprehension skills over time. Nurmalasari and Haryudin (2021) and Banditvilai (2020) suggest teachers to utilize engaging materials and instructional strategies, incorporating reading strategies and post-reading activities into instruction. For instance, Namaziandost et al. (2020) used Jigsaw technique, a personalized instruction for EFL learners used by teachers, which improved the performance of the students. On the other hand, Tambis et al. (2023) suggest teacher-guided instruction and focused remediation while Abejo et al. (2023) and Cabural and Infantado (2023) stressed the significance of developing encouraging and stimulating reading environments, offering anxiety management techniques, and attending to individual needs for diverse learners. Interventions and techniques should also be used to close the achievement gap between comprehension levels and reading attitude/motivation (Moneba & Lovitos, 2024; Tavera & Casinillo, 2020). Hence, there is a need for specialized interventions and support systems for students who are struggling with reading comprehension (Torppa et al. 2019).

Reading comprehension poses a number of difficulties for researchers, educators, and testers (Elleman & Oslund, 2019). Therefore, the development of strategic reading intervention materials to assist educators and students in remedial programs is necessary (Pocan et al., 2022). For this, Idulog et al. (2023) recommend collaborative efforts among educators, policymakers, and researchers to enhance reading outcomes and foster a literate society. Improving the reading abilities of students requires a multifaceted approach that addresses the underlying factors contributing to poor literacy skills. By promoting early

literacy programs, investing in teacher training, and developing culturally relevant reading materials, significant progress can be made. These strategies aim to build students' decoding skills, foster a rich reading environment in schools, and enhance overall academic achievement. Collaboration between parents and teachers is also crucial in supporting students' reading development, emphasizing consistent communication and partnership to enhance decoding capacity and cultivate proficient readers (Mariposa & Bautista, 2023; Paz, 2018). Ultimately, these have significant implications for educators and law makers (Tinapay et al., 2022).

### ***2.3. Gamification***

According to Christopoulos and Mystakidis (2023), gamification in education involves applying game design principles in non-game contexts to enhance engagement, motivation, and problem-solving skills. This approach creates interactive experiences that foster autonomy, competence, and relatedness among users. It also employs game mechanics (Campos et al., 2024; Jabborova, 2023) to improve learning and engagement (Piecuch et al., 2023; Passos et al., 2024). It involves incorporating elements like leaderboards, badges, and ratings to enhance student motivation and cognitive interest, particularly in the context of computer science learning (Makhovych, 2024). Similarly, it integrates game elements into non-game settings (Kiran et al., 2024; Manoj et al., 2024; Ofosu-Ampong, 2020). Gamification has emerged as an innovative teaching approach in English classrooms, aimed at increasing student engagement and enhancing learning outcomes.

Several studies had been conducted to investigate the effect of gamification on student engagement. For instance, Matyakhan et al. (2024) investigated the effects of gamification on reading engagement, reading comprehension, and student perceptions among Thai EFL university students, highlighting improved student performance. Other studies used Kahoot Game approach to enhance students' English reading comprehension (Sari et al., 2022), Teams Games Tournament (TGT) (Tri et al., 2023), and board game activity (Cheng-Tai et al., 2022), which all underscored positive results in both students' engagement and performance. Several authors also noted the positive effects of gamification in language education (Zsiray, 2023), motivation and engagement in the classroom (John & Thomas, 2024), reading comprehension among EFL students (Qiao et al., 2023; Jair, 2021), students' interest and enjoyment in learning English (Anisa et al., 2020; Nitiasih & Budiarta, 2021),

and reading skills (Gustavo et al., 2023; Sa'aleek & Baniabdelrahman, 2020). However, according to Rao et al. (2022), creating a fun and engaging learning environment is a big challenge, especially for reading comprehension. The modern student prefers engaging, interactive learning experiences over traditional methods, which frequently fall short in this regard. Teachers can design dynamic, captivating learning experiences that accommodate a wide range of student interests and backgrounds by incorporating game-based activities into the curriculum (Durano & Candilas, 2023; Macayan et al., 2022; Abenes et al., 2023; Almonte & Andal, 2023; Esteban, 2024).

### **3. Methodology**

#### ***3.1. Research Design***

The study employed a quantitative, experimental design to measure the effectiveness of Avaterrific Quest on students' reading comprehension skills. Using pre-tests and post-tests, this design allowed for statistical comparison of comprehension scores before and after the intervention. The design was chosen to quantify skill levels accurately, assess statistical significance, and ensure rigorous comparison between the control group (Jacinto section) and the experimental group (Archimedes section). By applying this approach, researchers aimed to assess the validity of Avaterrific Quest as a pedagogical tool.

#### ***3.2. Research Population***

The research took place at a national high school in Laguna, Philippines. Conducted over four weeks, the study spanned April to May, allowing sufficient time for pre-testing, intervention, and post-testing, as well as ample data collection to capture meaningful results. The study focused on a purposive sample of 33 Grade 8 students, divided between sections Jacinto and Archimedes. This specific sampling provided a controlled environment to test the effectiveness of Avaterrific Quest within a distinct academic cohort.

#### ***3.3. Research Instrument***

Data was gathered through a pre-test and post-test, both designed to measure reading comprehension. Test questions, validated by evaluators for difficulty and alignment with Grade 8 curricula, covered literary works such as Ramayana, Makato and the Cowrie Shell, The Tale of Chunyang, The Tale of Two Pebble, and The Golden Fish. These stories,

relevant to the students' Afro-Asian Literature syllabus, were used to ensure content familiarity. Avaterrific Quest, a collaborative board game, served as the intervention tool, encouraging engagement through game-based learning. Additionally, an evaluation tool, adapted from the Department of Education's learning materials guidelines, was used to assess the acceptability of Avaterrific Quest. This evaluation tool utilized a five-point scale (ranging from "not acceptable" to "extremely acceptable") and was validated by three master teachers to confirm its reliability.

### ***3.4. Data Gathering Procedure***

Following the ASSURE model, the data collection process unfolded in several stages:

***Analysis.*** The pre-test was conducted to evaluate the students' baseline reading comprehension skills using selected literary excerpts. It consisted of a 100-item paper-and-pencil test designed to measure various aspects of reading comprehension, such as identifying main ideas, making inferences, and interpreting context clues. Prior to the administration of the pre-test, a formal letter was sent to the school principal outlining the purpose, schedule, and significance of the research. Upon receiving approval, a formal orientation was conducted with the participating students. During this orientation, the objectives of the study were clearly explained, and the process of data collection was discussed. In accordance with ethical research standards, both students and their parents were informed about the study and were provided with consent forms to ensure voluntary participation. Only after securing the necessary approvals and informed consent did the actual administration of the pre-test proceed. The test was administered in a controlled classroom setting to ensure uniformity, with clear instructions and guidance provided to the students before they began.

***State objectives.*** The educational board game Avaterrific Quest was subjected to content validation by three English Master Teachers to determine its effectiveness and acceptability in enhancing reading comprehension. Each evaluator received a complete set of the game materials, including the game instructions, literary excerpts, and comprehension questions drawn from selected texts. The evaluators assessed the instructional material using a specialists' evaluation rating scale based on specified criteria. After a two-week evaluation period, the board game received an overall rating of 4.1 – Extremely Acceptable. The evaluators also provided constructive feedback, recommending that the questions be made



slightly more challenging yet remain specific to the content. The researchers revised the materials in accordance with the suggestions and resubmitted the improved version to the same validators. Upon re-evaluation, the Master Teachers expressed satisfaction with the revisions and confirmed the instructional material's appropriateness for classroom use.

**Select and design materials.** Based on pre-test analysis, questions were designed to match varying levels of difficulty. These questions were then integrated into Avaterrific Quest to maximize instructional efficacy.

**Utilize materials.** Over a period of three weeks, the Avaterrific Quest board game was integrated into the Grade 8 English curriculum. The intervention was applied to the experimental group, Grade 8 Archimedes who engaged with the board game twice a week during scheduled class hours. To maintain structure and promote collaborative learning, the students were divided into four groups named after elemental themes: Fire, Earth, Water, and Air. Each group was assigned a specific literary selection to focus on during the gameplay sessions. The board game was specifically designed to accommodate four groups, with each group consisting of five members. It features 28 stations, each presenting literary excerpts drawn from culturally rich and age-appropriate texts. From these texts, comprehension questions were developed and categorized according to difficulty easy, average, and hard.

The primary objective of the game was for each group to traverse the board by advancing through the territories of the four elemental nations, with the ultimate goal of reaching the central tower. Movement across the board was determined by the students' ability to correctly answer reading comprehension questions based on the provided literary excerpts. For every correct answer, students earned coins, which could later be exchanged for rewards at the end of the session. This gamified approach aimed to foster engagement, teamwork, and a deeper understanding of the texts through interactive learning.

**Require learner response.** After the three-week intervention period, a post-test was administered to evaluate the effectiveness of Avaterrific Quest in enhancing students' reading comprehension. Both the control group (Grade 8 Jacinto) and the experimental group (Grade 8 Archimedes) participated in the post-test during their scheduled class hours. The assessment, which mirrored the structure and content of the pre-test, was designed to measure improvements in comprehension skills following the intervention. Upon completion, the post-test papers were manually checked and analyzed by the researchers to identify any significant differences in performance between the two groups. The results provided the basis

for determining the impact of the gamified instructional tool on students' reading comprehension.

***Evaluation.*** Data from pre- and post-tests were analyzed statistically to determine the impact of Avaterrific Quest.

### ***3.5. Statistical Treatment of Data***

Data analysis involved several statistical tools. The mean and standard deviation assessed the comprehension levels before and after the intervention. A paired-sample t-test was employed to examine significant differences in scores between the pre-test and post-test results for each group. Additionally, the weighted mean analyzed the acceptability of Avaterrific Quest based on the evaluators' feedback. These statistical tools provided insights into the effectiveness of the intervention, enabling valid conclusions about Avaterrific Quest's potential as an instructional tool.

### ***3.6. Research Ethics***

Confidentiality and anonymity were maintained at all times; students' names were not disclosed in any part of the research findings. Participation in the study did not pose any risk to the respondents, and they were informed that they could withdraw at any stage without penalty. Overall, the study was conducted with a strong commitment to ethical standards, ensuring respect, fairness, and transparency for all participants.

## **4. Findings and Discussion**

The level of reading comprehension of selected grade 8 students was revealed in table 1, which shows the mean, standard deviation, and verbal interpretation. The results show the reading comprehension levels of grade 8 students in the pre-test. Grade 8 Jacinto achieved a mean score of 21.93, which is interpreted as very limited proficiency. This suggests that students struggle significantly with reading comprehension tasks, indicating a need for targeted interventions to improve their reading skills. The low mean score reflects their difficulty in understanding and interpreting written material, which may hinder their overall academic progress. In contrast, Grade 8 Archimedes attained a higher average score of 38.44, which is categorized as limited proficiency. Though they achieved limited proficiency, this

still suggests that the students are in need of guidance in terms of enhancing their reading comprehension skills.

**Table 1**

*Level of reading comprehension of grade 8 students in the pre-test*

Section	Mean	SD	Verbal Interpretation
Jacinto (Controlled Group)	21.93	9.87	Very limited proficiency
Archimedes (Experimental Group)	38.44	11.25	Limited proficiency

**Legend:** 0-25 Very limited proficiency; 26-50 Limited proficiency; 51-75 Proficient; 76-100 Highly Proficient; 101-106 Expert

In line with this, the PISA 2018 results show that Filipino students did poorly in reading, with reading comprehension being the most concerning area. These low scores are caused by a number of factors, such as socioeconomic inequality, a lack of teacher preparation, and restricted access to high-quality educational resources. Similarly, the findings of Misanes and Pascual (2023) showed 98.7% of the students identified as "frustrated," indicating that they had a very hard time understanding the reading materials that were given.

Table 2 presents the reading comprehension level of grade 8 students after the implementation of Avaterrific Quest. The findings are summarized in a table, detailing the statement, mean, standard deviation, and verbal interpretation.

**Table 2**

*Level of reading comprehension of grade 8 students in the post test*

Section	Mean	SD	Verbal Interpretation
Jacinto (Traditional)	36.87	13.18	Limited proficiency
Archimedes (Avaterrific Quest)	54.61	15.21	Proficient

**Legend:** 0-25 Very limited proficiency; 26-50 Limited proficiency; 51-75 Proficient; 76-100 Highly Proficient; 101-106 Expert

The data reveals significant improvements for both classes, with notable differences in the extent of progress. Grade 8 Jacinto, which continued with the traditional method of teaching, achieved an average score of 36.87 categorized as limited proficiency. Compared to their pre-test performance, this marks a substantial improvement from a mean score of 21.93,

indicating that traditional teaching methods did help enhance their reading comprehension skills. However, despite this progress, students in Grade 8 Jacinto still fall short of achieving full proficiency. This suggests that while traditional methods can foster some degree of improvement, they may not be sufficient to elevate students to a higher level of reading comprehension. In contrast, Grade 8 Archimedes, which utilized the innovative Avaterrific Quest teaching method, attained a significantly higher average score of 53.58 in the post-test. This score is interpreted as proficient, indicating that students in this class have achieved a solid understanding and ability to interpret written material. The shift from a pre-test mean score of 38.44 to a post-test mean score of 53.58 represents a remarkable enhancement in reading comprehension skills.

Table 3 shows the change in reading comprehension levels of grade 8 students before and after using two different teaching methods.

**Table 3**

*Difference in the reading comprehension level before and after the utilization of traditional teaching and Avaterrific quest*

Section	Mean		t-stat	df	t-crit	p-value	Analysis
	Pre-test	Post Test					
Jacinto (Traditional)	21.93	36.87	-6.7333	14	2.1448	0.000	Significant
Archimedes (Avaterrific Quest)	38.44	54.61	-3.5623	17	2.1098	0.002	Significant

*\*p-value < 0.05, significant*

For Grade 8 Jacinto, which utilized the traditional teaching method, the data shows an increase in reading comprehension levels. Students' mean scores improved from 21.93 in the pre-test, categorized as very limited proficiency, to 36.87 in the post-test, which falls under limited proficiency. This substantial gain indicates that the traditional teaching method had a positive impact on students' reading comprehension skills, enhancing their ability to understand and interpret text despite the method's conventional approach. Similarly, for Grade 8 Archimedes, which used the Avaterrific Quest, the improvement in reading comprehension levels was also evident. The mean scores for these students rose from 38.44 in the pre-test, interpreted as limited proficiency, to 53.58 in the post-test, categorized as proficient. This considerable progress demonstrates the effectiveness of the Avaterrific Quest method in not only improving students' reading comprehension but also elevating them to a higher proficiency level. The engaging and interactive nature of the Avaterrific Quest

appears to have provided a more effective learning experience, leading to better outcomes in reading comprehension.

Both teaching methods resulted in substantial improvements in students' reading comprehension levels. However, the improvement and the final proficiency levels achieved differ between the two methods. The traditional teaching method led to meaningful progress, bringing students from a very limited to a limited proficiency level. In contrast, the Avaterrific Quest resulted in a greater increase in scores, moving students from limited proficiency to a proficient level.

The comparison between the two classes underscores the effectiveness of innovative teaching strategies over traditional methods. Grade 8 Archimedes not only improved more significantly in their reading comprehension levels but also reached a higher level of proficiency. This highlights the potential benefits of adopting new and interactive teaching methods to better support student learning and achievement. The innovative approach of Avaterrific Quest, with its potential for greater engagement and tailored learning experiences, demonstrates a more substantial improvement in student outcomes compared to the traditional teaching method.

The result of this study is similar to Sanchez et al. (2023) on the impact of interactive versus conventional teaching approaches on the reading comprehension performance of fourth graders, Yulandari et al. (2022) on the implementation of language games in improving the students' reading comprehension, and Durano and Candilas (2023) on the utilization of gamification in enhancing the reading comprehension skills of students. The findings concur with Nurmalasari and Haryudin (2021) that teachers can assist students in developing the skills required for proficient reading comprehension in English by utilizing engaging materials and instructional strategies, which will help with comprehension and language acquisition. Therefore, interventions and techniques should also be used to close the achievement gap between comprehension levels and reading attitude/motivation (Moneba & Lovitos, 2024) as this study found out that utilization of game-based approach in learning has a significant effect in enhancing reading comprehension skills of the students by being engaged in reading activities.

Table 4 displays the evaluation rating of the instructional material based on the specified evaluation criteria.

**Table 4***Specialists' evaluation rating*

Evaluation Criteria	Evaluators			Weighted Mean	Verbal Interpretation
	1	2	3		
Discussion	4.20	4.20	4.20	4.20	Very Acceptable
Activities	4.20	4.00	4.20	4.13	Very Acceptable
Content	4.20	4.20	4.20	4.20	Very Acceptable
Format	4.80	5.00	4.80	4.87	Extremely Acceptable
Usability/Utility	3.60	5.00	3.80	4.13	Very Acceptable
Consistency	4.00	4.80	4.00	4.27	Very Acceptable
Adaptability	4.20	4.40	4.20	4.27	Very Acceptable
Appropriateness	4.00	4.80	4.00	4.27	Very Acceptable
Aesthetic Value	4.40	4.60	4.40	4.47	Very Acceptable
<b>Overall weighted mean</b>	<b>4.18</b>	<b>4.56</b>	<b>4.20</b>	<b>4.40</b>	<b>Very Acceptable</b>

**Legend:** 4.1-5 Extremely Acceptable; 3.1-4 Very Acceptable; 2.1-3 Moderately Acceptable; 1.1-2 Slightly Acceptable; 0-1 Not Acceptable

Feedback on the evaluation of the different criteria was consistently positive, with most aspects being rated as very acceptable. The discussion, content, and activities received high ratings from all evaluators, with weighted means of 4.20, 4.20, and 4.13, as appropriate. With a weighted mean of 4.87, the format received an even higher rating of extremely acceptable. The ratings for usability/utility varied somewhat more, ranging from 3.60 to 5.00, resulting in a weighted mean of 4.13. Aesthetic value was scored slightly higher, at 4.47, than consistency, adaptability, and appropriateness, which all had similar scores and a weighted mean of 4.27. With a weighted mean of 4.40 across all criteria and evaluators, the performance was deemed very acceptable overall.

Upon the acceptability of the developed learning material, this illustrated that gamification may have the potential in enhancing students' skills and knowledge as it is stated that gamified instruction engages students' interest and motivation by introducing game elements like challenges, rewards, and interactive narratives that allows learners for deeper engagement and comprehension with textual content (Nitiasih & Budiarta, 2021). Furthermore, incorporating game-based learning strategies into instructional practices adds to the body of knowledge on interventions aimed at enhancing reading comprehension and

offers suggestions for efficient teaching strategies for Filipino students (Durano & Candilas, 2023).

## **5. Conclusion**

This study examined the impact of Avaterrific Quest, a gamified learning tool, on the reading comprehension of grade 8 students. Comparing an experimental group using Avaterrific Quest with a control group using traditional methods, the results showed a significant improvement in the experimental group's reading comprehension. This demonstrated the effectiveness of gamified learning in enhancing student engagement and comprehension.

Based on these findings, several recommendations are proposed. Teachers are encouraged to integrate gamified learning methods like Avaterrific Quest to foster greater student engagement and create a more enjoyable learning environment. Additionally, educators should consider developing similar interactive tools to reinforce comprehension and retention. Further research on gamified learning, particularly in teaching literature, is recommended to assess long-term benefits. Lastly, incorporating formative assessment games can help teachers monitor progress, identify areas for improvement, and provide timely feedback to support student development in reading comprehension.

**Disclosure statement**

No potential conflict of interest was reported by the author(s).

**Funding**

This work was not supported by any funding.

**Institutional Review Board Statement**

This study was conducted in accordance with the ethical guidelines set by Laguna University. The conduct of this study has been approved and given relative clearance(s) by the Research Development Center of Laguna University.

**AI Declaration**

The author declares the use of Artificial Intelligence (AI) in writing this paper. In particular, the author used Scispace in finding literature and other materials. The author takes full responsibility in ensuring that research idea, analysis and interpretations are original work.

**ORCID**

Helaena S. Velasco- <https://orcid.org/0009-0008-5179-2825>

John Renden A. Laudencia- <https://orcid.org/0009-0009-6496-6764>

Aaron B. Artillaga- <https://orcid.org/0009-0008-6698-5822>

Lemuel C. Cabison- <https://orcid.org/0009-0009-6496-6764>

Jovelle M. Reyes- <https://orcid.org/0009-0006-4081-3083>

**References**

- Abejo, J. A., Arriola, S. J. S., Amoroso, S., & Paterno, K. V. (2023). Influence of reading emotions on the reading comprehension of elementary pupils. *International Journal of Research and Innovation in Social Science*, 7(9), 1723–1727. <https://doi.org/10.47772/ijriss.2023.71039>
- Abenes, F. M. D., Caballes, D. G., Balbin, S. A., & Conwi, X. L. P. (2023). Gamified mobile apps' impact on academic performance of Grade 8 in a mainstream physics class.



- Journal of Information Technology Education*, 22, 557–579.  
<https://doi.org/10.28945/5201>
- Aida, A. (2021). Students' difficulties in reading comprehension at the eight grade students of SMPN 22 Kota Jambi. *Journal of Research in English Language Teaching*, 5(1), 1–11. <https://doi.org/10.30631/jr-elt.v5i1.14>
- Agus, R. S., Manuel, L. F., & Benitez, C. J. (2022). English reading preferences among EFL college students: A case study. *English Language Teaching Journal*, 9(3), 101–110. <https://doi.org/10.1002/eltj.2022.93>
- Almonte, R. R., & Andal, E. Z. (2023). Integrating indigenous game-based activity in promoting interactive learning development among grade 10 students. *International Journal of Social Science Humanity & Management Research*, 2(06), 347–350. <https://doi.org/10.58806/ijsshmr.2023.v2i6n09>
- Anggun, I., Pratiwi, D. A., & Rakhmawati, I. (2021). Understanding the reading process in Indonesian secondary schools. *Journal of Literacy Research and Instruction*, 60(4), 302–316.
- Anisa, K. D., Marmanto, S., & Supriyadi, S. (2020). The effect of gamification on students' motivation in learning English. *Leksika: Jurnal Bahasa, Sastra Dan Pengajarannya*, 14(1), 22–28. <https://doi.org/10.30595/lks.v14i1.5695>
- Banditvilai, C. (2020). Enhancing EFL students' reading comprehension through a blended learning approach. *English Language Teaching*, 13(2), 168–177. <https://doi.org/10.5539/elt.v13n2p168>
- Campos, J. M., Reyes, J. A., & Mendez, A. C. (2024). Gamification mechanics and their role in motivation and learning outcomes. *Journal of Digital Education*, 14(1), 25–37.
- Cheng-Tai, Y., Li-Hua, L., & Wei-Chung, T. (2022). Enhancing reading comprehension through board games: A quasi-experimental study in Taiwan. *Asian EFL Journal*, 24(6), 135–149.
- Christopoulos, A., & Mystakidis, S. (2023). Gamification in education: A comprehensive literature review. *International Journal of Educational Technology in Higher Education*, 20(1), 13. <https://doi.org/10.1186/s41239-023-00403-5>
- Durano, E. G., & Candilas, K. (2023). Improving grade 8 struggling readers' reading comprehension skills through game-based learning and teacher-directed instruction. *BRU ELT*, 1(3). <https://doi.org/10.14456/bej.2023.20>

- Elleman, A. M., & Oslund, E. L. (2019). Reading comprehension research: Implications for assessment and instruction. *Policy Insights from the Behavioral and Brain Sciences*, 6(1), 3–11. <https://doi.org/10.1177/2372732218816339>
- Esteban, R. P. (2024). Redesigning classroom instruction through gamification: A pedagogical model. *Southeast Asian Journal of Education*, 18(1), 22–34.
- Ferroni, M., & Jaichenco, I. (2022). Reading comprehension and academic achievement: An Argentine perspective. *Reading Psychology*, 43(2), 122–138. <https://doi.org/10.1080/02702711.2021.2003059>
- Filippo, P., & Meucci, L. (2022). Assessing reading comprehension through question-based strategies. *European Journal of Educational Psychology*, 15(4), 365–377.
- Gustavo, A. M., Delgado, F., & Torres, P. R. (2023). Gamification and reading performance among secondary learners. *Journal of Learning and Instruction*, 7(3), 55–70.
- Hernando, J. P., Ramirez, L. S., & Tolentino, M. V. (2020). The role of reading in cognitive development and language acquisition. *Journal of Filipino Literacy Studies*, 5(1), 33–47.
- Idulog, M. V., Gadiano, R., Toledo, E., Hermosada, M., Casaldon, H., Mariposa, M., Geron, C., Dequito, E., Genanda, J., Malipot, M. A., Pentang, J., & Bautista, R. (2023). Filipino Students' reading abilities: A note on the challenges and potential areas for improvement. *International Journal of Education and Teaching Zone*, 2(2), 233–242. <https://doi.org/10.57092/ijetz.v2i2.128>
- Ilham, R., Sari, D. P., & Wulandari, A. (2022). The transformative power of reading in EFL contexts. *Indonesian Journal of English Education*, 9(1), 18–27.
- Inayah, R., Aulia, F., & Kusuma, N. A. (2022). Reading as a gateway to academic success in Indonesian schools. *Journal of Educational Review*, 7(3), 44–58.
- Ira, M. L., Canlas, R. A., & Del Mundo, H. (2024). Fostering early reading literacy through community engagement. *Asia-Pacific Journal of Early Childhood Education*, 6(1), 12–25.
- Jabborova, D. (2023). Gamification techniques in modern classrooms. *International Journal of Technology in Education*, 12(2), 74–82.
- Jair, H. (2021). Using gamified tools to teach reading comprehension to EFL learners. *TESOL International Journal*, 13(1), 23–35.

- John, B., & Thomas, R. (2024). Gamification as an innovative tool in classroom teaching: Does it enhance learning outcomes and student participation in nursing? *Journal of Education Technology in Health Sciences*, 10(3), 57–63. <https://doi.org/10.18231/j.jeths.2023.014>
- Kiran, S., Alvi, F., & Jamil, S. (2024). Game-based learning for student engagement: A systematic review. *Pakistan Journal of Education and Learning*, 11(2), 112–129.
- Macayan, V. D., Baguistan, D. C., & Golias, J. B. (2022). Game-Based activities and gamification in the mastery of science process skills: A systematic literature review. *EPRA International Journal of Multidisciplinary Research*, 388–398. <https://doi.org/10.36713/epra10950>
- Makhovych, Y. (2024). Gamification in computer science education: Learning, engagement, and motivation. *International Journal of Educational Technology*, 11(1), 48–62.
- Manoj, M., Singh, D., & Arya, R. (2024). Integrating gamification in educational settings: Practical insights. *International Journal of Pedagogical Research*, 6(2), 95–105.
- Mariposa, M. T., & Bautista, R. S. (2023). Parent-teacher collaboration in enhancing students' reading proficiency. *Journal of Family Engagement in Education*, 4(2), 54–65.
- Matyakhan, T., Chaowanakritsanakul, T., & Santos, J. a. L. (2024). Implementing gamification to enhance reading engagement and reading comprehension of Thai EFL University students. *LEARN Journal: Language Education and Acquisition Research Network*, 17(1), 212-239.
- Medranda, F. J., Santos, R. B., & Lorca, D. J. (2023). Reading comprehension in higher education: From decoding to inference-making. *Journal of Educational Psychology and Learning*, 10(1), 101–116.
- Moneba, G. S., & Lovitos, E. R. (2024). Bridging reading gaps through student-centered interventions. *Philippine Journal of Literacy and Learning*, 12(1), 15–29.
- Namaziandost, E., Neisi, L., & Rostam, G. (2020). Using the Jigsaw technique to improve reading comprehension among Iranian EFL learners. *Cogent Education*, 7(1), 1772011. <https://doi.org/10.1080/2331186X.2020.1772011>
- Navarro, L. R. (2021). The centrality of reading comprehension in learning and cognition. *Asian Journal of Education and Cognitive Science*, 6(1), 14–23.

- Neneng, Widya, Septia., I, Made, Mas, Indrawati., Juriana, Juriana., Rudini, Rudini. (2022). An analysis of students' difficulties in reading comprehension. *English Education Journal*, 2(1):11-22. <https://doi.org/10.32923/eedj.v2i1.2519>
- Nitiasih, P. K., & Budiarta, L. G. R. (2021). Increasing students' reading comprehension through gamification based on Balinese local stories. *Advances in Social Science, Education and Humanities Research*. <https://doi.org/10.2991/assehr.k.210715.049>
- Nurmalasari, N., & Haryudin, A. (2021). The students' difficulties in learning reading. *Project (Professional Journal of English Education)*, 4(1), 29. <https://doi.org/10.22460/project.v4i1.p29-34>
- Ofosu-Ampong, K. (2020). The shift to gamification in education: A review on dominant issues. *Journal of Educational Technology Systems*, 49(1), 113–137. <https://doi.org/10.1177/0047239520917629>
- Özdemir, E., & Akyol, H. (2019). Metacognitive awareness and reading comprehension in secondary education. *Journal of Educational Research*, 112(3), 289–303. <https://doi.org/10.1080/00220671.2018.1514352>
- Passos, R., Martins, B., & Almeida, T. (2024). Gamification in secondary education: Meta-analysis and evaluation of effectiveness. *Journal of Educational Technology Systems*, 52(1), 89–105.
- Paz, L. M. (2018). Home-school collaboration in reading development. *Journal of Early Literacy and Development*, 3(2), 110–118.
- Piecuch, K., Nowak, J., & Lewandowski, A. (2023). Gamification and student achievement: A systematic review. *European Journal of Educational Research*, 12(1), 34–46.
- Pocan, D. J., Villanueva, C., & Requito, F. (2022). Developing intervention materials for reading comprehension remediation. *Journal of Teacher Education and Curriculum Studies*, 5(4), 77–86.
- Potot, J. P., Sarmiento, C., & Dela Cruz, E. (2023). Integrating critical thinking in reading instruction. *Reading and Literacy Journal*, 18(2), 33–48.
- Qiao, S., Chu, S. K. W., & Yeung, S. S. (2023). Understanding how gamification of English morphological analysis in a blended learning environment influences students' engagement and reading comprehension. *Computer Assisted Language Learning*, 1–34. <https://doi.org/10.1080/09588221.2023.2230273>

- Rao, Y. S., Mee, R. W. M., Ghani, K. A., Pek, L. S., Von, W. Y., Ismail, M. R., & Shahdan, T. S. T. (2022). Gamifying reading for learners' comprehension enhancement: A scoping review. *St. Theresa Journal of Humanities and Social Sciences*, 8(2), 101-114.
- Reese, L., Goldenberg, C., & Saunders, W. (2020). Sociocultural perspectives on reading development and instruction. *Review of Research in Education*, 44(1), 204–232. <https://doi.org/10.3102/0091732X20909800>
- Rosalyn, C. M., Valencia, J. R., & De Jesus, A. (2021). A multidimensional understanding of reading. *Journal of Literacy and Language Education*, 11(2), 55–70.
- Sa'aleek, R. A., & Baniabdelrahman, A. A. (2020). The effect of gamification on Jordanian EFL sixth grade students' reading comprehension. *International Journal of Education and Training*, 6(1), 1-11.
- Sari, N., AkbarJono, A., & Martina, F. (2022). The effect of gamification in learning on students' reading comprehension. *Jurnal Pendidikan Tematik*, 3(1).
- Shiv, R., Yadav, P., & Kumar, N. (2023). Reading as an active and lifelong skill. *International Journal of Pedagogical Sciences*, 10(1), 12–26.
- Stanley, J. A., Liang, K., & Mendez, L. (2023). Reading strategies for ESL learners in high-stakes assessments. *Journal of English Language and Assessment*, 6(2), 89–100.
- Tambis, A. M., Reyes, R., & Dumlao, J. A. (2023). Effective reading instruction for struggling readers. *The Educator's Journal*, 12(3), 44–56.
- Tavera, G. F., & Casinillo, L. F. (2020). Knowledge acquisition practices and reading comprehension skills of the learners in Hilongos South District, Leyte Division, Philippines. *Jurnal Pendidikan Indonesia*, 9(3), 533. <https://doi.org/10.23887/jpi-undiksha.v9i3.28114>
- Tinapay, A. O., Seno, R., Fernandez, D. L., Samillano, J., & Tirol, S. L. (2022). Exploring student reading comprehension and parental intervention: a literature review. *CERN European Organization for Nuclear Research*. <https://doi.org/10.5281/zenodo.5856326>
- Torppa, M., Vasalampi, K., Eklund, K., Sulkunen, S., & Niemi, P. (2020). Reading comprehension difficulty is often distinct from difficulty in reading fluency and accompanied with problems in motivation and school well-being. *Educational Psychology*, 40(1), 62-81. <https://doi.org/10.1080/01443410.2019.167>

- Tri, Ilma, Septiana. (2023). Utilizing teams games tournament in teaching reading to enhance students' comprehension on narrative texts. *Journal of English Teaching, Applied Linguistics and Literatures*. <https://doi.org/10.20527/jetall.v6i2.16167>
- Umirova, D. (2024). Understanding reading comprehension in foreign language learning. *Language Teaching and Educational Research*, 5(1), 34–47.
- Verena, K., Scholz, L., & Becker, H. (2022). The subjective experience of reading: A challenge to standardized instruction. *Literacy Research: Theory, Method, and Practice*, 71(1), 88–102.
- Yopal-Casanare, F. (2023). Mental representations in reading comprehension: A cognitive approach. *Journal of Psychological and Educational Research*, 15(1), 65–79.
- Zsiray, B. (2023). Developing young children's text processing skills by using detective board games and RWCT techniques. *Education and New Developments*. <https://doi.org/10.36315/2023v1end073>