

Enhancing Reading Comprehension: A Comparative Analysis of Storytelling Videos and Picture Books

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ABSTRACT

This study explores the effectiveness of two instructional materials — Storyline Online storytelling videos and picture books — in enhancing the reading comprehension of second-year Bachelor of Secondary Education students majoring in English at the Polytechnic University of the Philippines, Santa Maria Bulacan Campus. Using a quantitative research design, pre-tests and post-tests were administered to assess changes in students' comprehension skills. The study involved 80 participants divided into two groups. Pre-test results showed both groups had low baseline reading comprehension levels. Post-intervention analysis revealed that storytelling videos produced a higher mean improvement (0.73 points, Cohen's $d = 0.199$) compared to picture books (0.25 points, Cohen's $d = 0.062$). Storytelling videos demonstrated greater effectiveness, attributed to their multisensory engagement and audiovisual features, which aligned with multimedia learning theories. While picture books showed limited improvement, they remain valuable for fostering critical thinking and imagination, making them a complementary tool for long-term interventions. The findings suggest that storytelling videos are more effective for immediate comprehension gains, while picture books can support deeper cognitive engagement. This study highlights the potential of interactive multimedia tools in addressing diverse learning needs and provides insights for educators seeking to enhance literacy instruction. The results advocate for integrating these materials into teaching strategies to optimize students' reading comprehension outcomes.

KEYWORDS

picture books, reading comprehension, storytelling videos, education, literature

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Oxuyub-anlama bacarığının təkmilləşdirilməsi: Hekayə videoları və şəkilli kitabların müqayisəli təhlili

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XÜLASƏ

Bu tədqiqat Filippin Politeknik Universiteti Santa Maria Bulacan Kampusunda ingilis dili ixtisası üzrə təhsil alan ikinci kurs bakalavr tələbələrinin oxu qabiliyyətini və oxuyub-anlama bacarıqlarını təkmilləşdirmək məqsədilə iki tədris materialının – “Storyline Online” hekayə videoları və şəkilli kitabların effektivliyini araşdırır. Statistik araşdırma metodundan istifadə edilərək, tələbələrin oxuyub-anlama bacarığundakı inkişafını qiymətləndirmək məqsədilə eksperimentdən əvvəlki və sonrakı testlər müqayisə edilmişdir. Tədqiqatda iki qrupa bölünməklə, ümumilikdə 80 nəfər tələbə iştirak etmişdir. İlk sınaq nəticələri göstərdi ki, hər iki qrupda oxunu anlama səviyyəsi aşağıdır. Təhlillərin nəticələrinə əsasən, hekayə videolarından istifadə edən tələbələrdə orta inkişaf səviyyəsi 0,73 bal təşkil etmişdir (Cohen's $d = 0,199$) ki, bu da şəkilli kitablardan istifadə edən qrupla (0,25 bal, Cohen $d = 0,062$) müqayisədə daha yüksək nəticədir. Hekayə videoları multimedia öyrənmə nəzəriyyələri ilə uyğunluq təşkil edərək multisensor əlaqələr və audiovizual xüsusiyyətlər baxımından daha yüksək effektivlik nümayiş etdirmişdir. Şəkilli kitablar isə daha az effektiv olsa da, tənqidi təfəkkür və təxəyyülün inkişafı baxımından faydalı hesab olunur və uzunmüddətli tədris fəaliyyətində tamamlayıcı vasitə kimi istifadə oluna bilər. Nəticələr göstərir ki, hekayə videoları mətnin tez və asan qavranılması baxımından daha təsirlidir, şəkilli kitablar isə mətn üzərində daha dərin düşünmə bacarıqlarının formalaşmasına şərait yaradır. Bu araşdırma müxtəlif öyrənmə ehtiyaclarının qarşılanmasında interaktiv multimedia vasitələrinin tədrisdə faydalılığını vurğulayır, tələbələrin oxu və yazı bacarıqlarını inkişaf etdirmək istəyən təhsil mütəxəssisləri üçün tövsiyələr təqdim edir. Araşdırmanın nəticələri bu tədris materiallarının tədris prosesinə integrasiyasının tələbələrin oxuyub-anlama səviyyəsinin artırılmasında mühüm əhəmiyyət daşıdığını göstərir.

AÇAR SÖZLƏR

şəkilli kitablar, oxuyub-anlama, hekayə videoları, təhsil, ədəbiyyat

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Introduction

The 21st century has transformed perspectives on educational practices and expectations. Traditional teaching methods are increasingly being replaced by interactive and collaborative approaches that make learning more engaging and effective. Nevertheless, despite these reforms in the education system, students are showing a declining interest in developing foundational reading skills.

Reading is crucial not only for academic success but also for cognitive development, critical thinking, and lifelong learning. Yet, in an era dominated by multimedia and digital media, many learners struggle to engage with conventional reading materials. As a result, resources like video lessons, picture books, and interactive reading games are being encouraged more than ever to recapture students' attention and make reading more appealing. This shift raises important questions about how to effectively integrate technology and interactive reading materials to support literacy development — ensuring that these new approaches genuinely enhance reading skills and comprehension rather than simply entertaining learners.

Abdul, et al., (2020), have proven the improvement of the learning capabilities of students in having a technology-infused lesson. The results of this study show that integrating multimedia into learning significantly helps improve students' reading comprehension. Furthermore, in the study of Sunah Chung (2024), it was concluded that visual aids, specifically picture books, serve as a supporting tool for learners in deciphering the deeper message in the text. Moreover, a development in language skills for children was evident with the use of interactive book reading in the study compilation of Towson, et al., (2021). The use of diverse reading materials, such as picture books and audio-visual resources, plays an important role in enhancing reading comprehension instruction. This study aims to explore the effectiveness of various reading materials, specifically focusing on two key components: story-telling videos from Storyline Online and picture books, which combine images and text to convey a story. By examining these materials, the study seeks to understand how each contributes to the development of reading skills and comprehension in students.

Several studies show the research findings generally imply that picture books and story-telling videos can be a useful strategy for enhancing secondary school students' reading comprehension. Slashinsky (2022) emphasizes that the qualities of a picture book, such as illustrations, design, and language, allow students to recall, retain, and absorb information better. Learning English as a foreign language can be

challenging for some students, particularly in reading comprehension. Moreover, one potential solution is using engaging materials, such as picture storybooks, to improve students' reading skills. Therefore, this study at MAN 9 Jakarta found that picture storybooks significantly improved the reading comprehension abilities of grade ten students during the 2019/2020 academic year, thanks to their visual appeal, simple vocabulary, and increased interest in reading (Amalia et al., 2021).

In the study of Sari et al. (2019), which utilized animated video captions to raise comprehension achievement of tenth grade pupils. Students from MAM 01 Jember's X IPS 1 class participated in the study. Students could work well, according to cycle 1 and cycle 2 observation results, and their level of active engagement increased from 78% in cycle 1 to 84% in cycle 2. In addition, in action cycle 1, 75% of the 16 students and 81% of the 16 students in cycle 2 reached the desired score of ≥ 70 . It is possible to draw the conclusion that the use of animated video captions could improve the reading comprehension skills and active engagement of first-grade pupils in X IPS in reading classes. It is recommended that the English instructor must incorporate Animated Video Caption as creative learning materials in the teaching learning process.

While many studies have highlighted the use of picture books and video storytelling to enhance students' reading comprehension, a more thorough examination of the effectiveness of these digital educational tools is needed. This study compares the impact of interactive video storytelling and picture books on students' reading comprehension skills, aiming to determine whether these learning materials effectively improve comprehension.

Methods and Methodology

This study adopts a quantitative research design using a pre-test and post-test experimental framework to evaluate the comparative effectiveness of storytelling videos and picture books in enhancing reading comprehension among second-year Bachelor of Secondary Education students majoring in English at the Polytechnic University of the Philippines, Santa Maria Bulacan Campus. The 80 participants were equally divided into two groups, with one group engaging with a printed storybook and the other with a storytelling video of *The Magician's Hat* by Malcolm Mitchell. The procedure consisted of three stages: a pre-intervention phase, where students completed a pre-test to assess their baseline comprehension levels; an inter-

vention phase, where each group was exposed to their respective instructional material for a set duration; and a post-intervention phase, where students completed a post-test identical to the pre-test to measure improvement. A validated multiple-choice questionnaire served as the primary research instrument, assessing comprehension across literal understanding, inferential reasoning, and critical thinking. Data analysis involved mean score comparisons to determine average improvements, effect size calculations (Cohen's *d*) to gauge the magnitude of the interventions' impact, and standard deviation assessments to evaluate variability in outcomes. Ethical considerations were upheld, including informed consent, confidentiality, and voluntary participation. While the study acknowledges limitations such as the short duration of the intervention, potential individual differences in learning styles and baseline skills, and the use of a single story, its findings suggest that storytelling videos are more effective for immediate comprehension gains due to their multisensory engagement, as supported by Mayer's multimedia learning theory. However, picture books remain valuable for fostering critical thinking and imagination, particularly over longer-term interventions. The study's methodology offers a rigorous framework for understanding the diverse impacts of instructional materials and provides practical insights for educators seeking to optimize teaching strategies for literacy development. Reading Comprehension

The most common association with reading is 'text', since the traditional way of teaching was prominent not too long ago. Despite this, reading is not all about the written text in books, a new definition for reading has emerged. Body movements, facial expressions, and the world's natural appearance can be read. A person with a smile on his face can be classified as a 'happy person'. According to davincicollaborative.com (2023), reading comprehension is the ability to understand the meaning beyond the present text. It is also stated that there are two main components: (1) word coding; and (2) language comprehension. Thus, the interpretation should not be as literal as it was written, it should be more than the presented information. In the article of readingrocets.org (2024) and Marshall (2023), states that a child reading the text without understanding it is not really reading. The article says that children are reading to comprehend, and if the readers cannot comprehend, then they are not really reading. In simple words, individuals read books to understand and learn about a certain topic, if not, then it would not be reading at all. In the sector of edu-

cation, it is said to be an ability which helps humans fully develop their other skills (Mantra et al., 2020).

Reading is an input skill which gives an individual the knowledge he needs. Reading is a wider form of interpretation of meanings from the objects around us. Recognizing the symbols and words written on a paper yet failing to understand the meaning does not fulfill the main purpose of reading, which is comprehension (Brandon, 2021). This is an essential part for effective communication and for real-life activities which require reading and understanding specific instruction (readabilitytutor.com, 2024).

Problems Encountered in Reading Comprehension

Several studies have shown problems between reading and reading comprehension, pointing out the factors that contribute to the poor reading comprehension of an individual. According to Nanda & Azmy, 2020 and Le, 2021, have observed that motivation and prior knowledge were the factors to the poor reading comprehension. Students in the countries of India and Vietnam have a hard time comprehending written text due to the lack of background knowledge about the subject matter and difficulty in vocabulary. In the paper of Lucas et. al, (2021), the socio-economic factors have been observed to have affected the reading comprehension of students. It is stated that children from higher social class had more background knowledge with reading, specifically in English.

On the contrary, the paper of Agbo et al. (2019) states that teachers are the problem in this matter. They have stated that unqualified teachers have the greatest impact on the reading comprehension of a child as they are the facilitators of knowledge inside the classroom. This includes the prior knowledge of the teacher, ways of teaching, and suitable instructional materials provided in the teaching- learning process. According to Lee (2023), typical instruction about reading focuses on the assessment and outcome rather than the sensible understanding and comprehension of the student. It argues that the influence of traditional teaching impacts the modern way of teaching inside the classroom. The measurement of the test being the main focus of reading rather than students making sense and fully comprehending the text and its importance. It cannot be neglected that the remnants of the past curriculum will still be visible, which was one of the pointed factors in the poor reading comprehension of an individual.

In the article of Oxford Learning (2019), states that learning is not a 'one size-fits all' matter. It has been proved that there are different types of learners, such as auditory and visual ones. The difference of the learners is also one of the factors that should be considered in the reading comprehension, specifically the instructional material used. Despite the statement of the studies, it is still uncertain what factor should be focused on in order to solve this problem in reading comprehension. Understanding these difficulties required a deep comprehension in why and how these things occur in the first place (readabilitytutor.com, 2024).

Enhanced Engagement and Motivation

Motivation is essential for reading and has a direct impact on reading achievement. According to Aktas (2023), it pointed out the importance of reading motivation for learners, as it improves their reading comprehension. Learners must be able to read and interpret texts without doubt, it results in motivation to continue to learn a certain subject. In the study of Ahmadi (2019), motivation influences learners' reading comprehension activities. The students are more motivated to learn when there is something new or engaging activities they encounter in reading.

On the contrary, several studies have shown problems between reading and reading comprehension, pointing out the factors that contribute to the poor reading comprehension of an individual. In the paper of Septia et al., (2022), lack of interest is one of the factors affecting the reading comprehension of a student. The paper mentioned that factors such as poor reading materials and difficulty in understanding different languages also affect a child's perspective and reading comprehension to the subject matter.

According The University of Kansas (2024), the quality of reading material is also impactful in the reading comprehension. It stated that writers vary from each other, some authors write more comprehensible text than the others. The conciseness and audience connection can be a factor in having a good quality instructional material which will eventually boost the reading comprehension of students utilizing it. The utilization of video lessons has a major impact on students' motivation and engagement in understanding reading comprehension. According to Sari (2021), animated videos with English titles can be effective teaching tools for English educators in class. They could also improve student English skills and boost their willingness to learn. It is proven that animated video lessons with illustrations and audios, students are more likely to stay active in learning.

According to Silvia et al. (2022), the integration of created video lessons in the class results in the positive impact that students can understand lessons when it is in the form of visual animations. It also proves that students become more engaged and motivated to learn. As cited by Munawaroh (2019), using animated videos helps students improve their ability to comprehend the language characteristics of narrative texts. Video animation provides subtitles that can help students understand a story so that they can follow the provided film by observing the language used in the animated videos. Video Lessons consist of audio-visual presentations to further understand its content. Moreover, in the study of Mohammadian et al. (2019), using videos in instructional contexts allows second language learners to access a variety of information while listening to the files. The students will improve their language acquisition and reading comprehension at the same time. According to the article of Victoria State (n. d.), reading engagement and motivation play an important function on reading comprehension. When students are engaged in their reading, they are more likely to properly comprehend what they have read. Teachers need to equip students with interactive educational options of reading materials that can have an impact on their involvement, enjoyment, and achievement in reading.

Comprehensive Video Lessons

English was considered and used by most of the countries worldwide. English must therefore be utilized in verbal and written communications across international borders. English is required to be learned by citizens of nations where it is either a foreign language or even a second language. They can communicate with everyone in this world in this way. The purpose of teaching English as a foreign language in Indonesia is to increase students' ability to pick up the language. The study's results demonstrated that using a variety of media enhances students' comprehension of English texts since they find reading instruction and learning to be enjoyable. It is envisaged that using a variety of creative multiple media will be useful in reading classrooms as well as other English learning areas. The study presents a novel, yet straightforward, method for integrating technology into teaching in times of need. There is no denying YouTube's adaptability as a teaching tool, but achieving its full potential will require resolving internet access disparities (Aprianto and Heriyawati, 2020).

According to (Lin and Yu, 2023) In the information and technology age the instructional video technologies have become more and more popular as teaching tools

and have caused research interest. There are many studies that have looked at various instructional videos and identified factors that affect their effectiveness. The study highlights how developments in information and communication technologies contribute to an increase of interest and usage of instructional videos. This trend is a reflection of the evolving educational setting, as teaching and learning activities increasingly include digital resources. The importance of timing and context in technology for education is shown by the finding that in class video clips increase learning efficacy more than out of class clips and video games. It suggests that integrating videos to live instructions can provide a more dynamic and interesting learning environment.

According to (Ou, Joyner, and Goel, 2019), even though instructional materials are widely used in both formal and informal learning situations, there are still many unresolved issues with the creation and design of video lessons, which are often the primary modality of instruction in online courses. The survey findings and the teacher's experiences with the design and development of the video lessons are presented in this paper. The outcomes for instructional design and future research directions are also discussed and given the increasing reliance on digital learning platforms, this study is relevant. It highlights how important it is to apply instructional design principles in order to enhance learning results. Additionally, the feedback created by student surveys is important for course design adjustments. This research can help teachers develop more engaging and effective learning experiences and guide best practices as online education expands. To find out if using animated videos to teach reading comprehension is helpful, if there is a connection between the teaching medium and students' interest in reading, and if students who are highly motivated to read perform better in reading comprehension than those who are not. The findings of this study provide support for the idea that using animated videos to teach reading comprehension to MTs Negeri Prambanan students is beneficial. Students' reading comprehension skills improve as a result. Additionally, students at MTs Negeri Prambanan who are passionate about reading perform better in reading comprehension than those who are not. It demonstrates how animated videos might help students, especially those who are more motivated to improve their reading comprehension.

The relationship between student motivation and instructional media highlights how important it is to adapt teaching strategies to students' preferences in order to

optimize learning outcomes (Sari, 2021). The effects of including YouTube videos in professional education classes and how students feel about watching videos on YouTube while receiving instruction. It evaluates the usefulness of YouTube's involvement in education using a variety of techniques, such as surveys and interviews. The study emphasizes the need for interesting teaching strategies. Students' curiosity can be increased by YouTube videos, which can improve the efficiency and enjoyment of studying. Using multimedia tools to improve reading comprehension highlights the need for educators to adjust to different learning styles by providing multiple ways to comprehend information. The encouraging findings imply that teachers need to think about integrating technology into their curricula for a variety of subjects, not only in English language instructions (Boholano et al., 2022).

Picture Books

A picture book is a form of storytelling that combines both visual and textual elements to engage young readers. It serves as a tool for teaching children about art and the creative process, using illustrations to complement and enhance the narrative. Additionally, picture books encourage children to explore their own creativity, as they are often invited to interpret the images and become inspired to create their own stories or artwork. The importance of picture books for children's language and literacy development has been well-documented, highlighting their role in providing rich, sophisticated language input (Eng et al., 2020; Montag, 2019). According to Sinta (2022), the lack of interest in reading and the difficulty of students understanding texts require teachers to use media to make it easier and attract students' attention.

The study of Astutik (2021), explored how picture books, a digital media format with the combination of design, illustrations, and language, affects reading comprehension. Picture books effectively used as their medium in their reading class to comprehend a narrative text. Additionally, illustrated books enhance readers in grasping the story through observation of images included that increases the significance of the narrative text. According to Atar, P.Y. (2020), using picture books in narrative texts improves students' comprehension of vocabulary, details, information, and moral values. The researchers plan to use picture books to develop students' interest in reading, especially in English, and introduce new vocabulary. They combine images with stories, such as Ryan Maulana's *The Boy Who Cried Wolf*. The researchers prepared teaching materials, lesson plans, observation checklists, field notes, and test items, and acted as the teacher and English teacher, observing

classroom situations and analyzing data to identify areas for improvement. Moreover, Picture books encourage better understanding of the text, regardless of how simple or challenging the text is. The effects of images on students reading comprehension found that pictures help them to grasp the essence of the passage and improve their understanding.

The study of Guo et al. (2020), states that the combination of illustrations and text can enhance comprehension by providing visual cues that help readers better understand the narrative, making the reading experience more engaging and accessible. Their study explored how technology can enhance picture books, preserving their unique qualities while adapting to digital formats. Specifically, digital picture books with features like controlled camera movements and adjustable pacing can aid children who struggle with narrative understanding, helping bridge gaps between more and less linguistically advanced readers (Bus & Anstadt, 2021).

The Appropriateness of Picture Books to the Adolescents

According to Koeberl (2019) Although they are popular in elementary schools, picture books are also beneficial for students in middle and high school. Any subject can benefit from the usage of picture books, which can help pupils grasp the material more deeply and inspire them to read more about it. The influence of using picture books as a teaching tactic in a history class was investigated in this study using an action research method in comparison to a class that did not use picture books. The findings showed that the picture books inspired the students. Even though the two groups' test scores were comparable, picture books prompted more in-depth conversations among the pupils. Although many students preferred small group discussions with or without picture books, the results showed that students preferred a variety of instructional styles. It was also shown that teachers who want curriculum support may benefit from working with a librarian. This research emphasizes the broader educational value of picture books and the importance of varied teaching strategies. It advocates for a holistic approach that considers different learning preferences and encourages creativity in the classroom.

According to Clarke and Broders (2022), This study examines the benefits of using picture books in secondary classrooms and involves sixty-seven secondary students from two kindergarten through grade twelve schools. The overwhelming support from students indicates that using picture books in secondary classrooms has a

significant impact on both the teacher and the student. The reasons for this are as follows: picture books engage the disengaged reader, they explore social justice and equity issues, and they provide a gentle starting point for difficult conversations. Teachers can encourage an appreciation of reading, enhance comprehension, start creativity, and help students develop critical thinking abilities by using picture books.

Learning difficulties and those who are not yet able to speak. Curriculum access in English. More experienced readers are able to discern subtleties and interpretations because of the intricacy of their details. A great method to start a new unit of study or provide students a useful comparison after looking at primary materials is to have them explore graphic books. In this article, we propose that picture books aren't just for elementary schools. In addition to being a perfect supplement to frequently dry curriculum textbooks, picture books give secondary schools access to experiences outside of the classroom through what Sims-Bishop refers to as windows, mirrors, and sliding glass doors. A website containing relevant high school lesson plans and useful resources is presented, along with a framework for teachers to use when working with nonfiction picture books with their secondary pupils. Social studies is a vital subject that enables us to investigate and comprehend the world in which we live. Picture books are one tool for increasing learning's interactivity and engagement. High school students can also benefit much from picture books; they are not only for younger readers. In high school, using well-known social studies picture books might help pupils relate to the subject matter more deeply (Pitts et al., n.d).

Results

Table 1
Effectivity of Picture Book

Metric	Value
Mean Improvement	0.25
Standard Deviation of Improvement	4.042495783
Effect Size (Cohen's d)	0.061842984

Table 1 shows the mean improvement of 0.025 points, which suggest that the introduction of picture books as an intervention had a limited impact on students' literary analysis skills. Despite this modest increase, the intervention still provides insights into the potential benefits of alternative teaching materials, particularly for literary comprehension and critical thinking.

The results here suggest modest improvements, they highlight the importance of integrating diverse instructional materials to address varied learning preferences. Further research could examine longer interventions, different literary genres, and their impact across broader student demographics.

According to Chung & Lin (2023), engaging in picture books in teaching can boost students' motivation, improve their reading skills, and help them develop important skills. This method can create a positive impact on students' learning.

The use of picture books in educational settings has been extensively documented. Studies indicate that multimodal texts, such as picture books, enhance student engagement and provide scaffolding for complex literary concepts (Pantaleo, 2015). The visual and textual integration often helps struggling learners bridge gaps in comprehension, as highlighted by Callow (2018), who emphasized that the visual narratives in picture books encourage students to infer, interpret, and synthesize information.

However, the small effect size observed in this study might reflect several factors. For example, the duration of the intervention might have been insufficient for significant skill development. According to Walsh and Simpson (2020), consistent exposure to multimodal texts over extended periods fosters deeper literary engagement, which could result in more pronounced improvements in analysis skills.

Another consideration is the students' baseline skills. If students already possessed moderate skills in literary analysis, the intervention might have yielded only incremental improvements, as noted by Marzano (2017) in discussions about targeted instructional strategies.

Table 2
Effectivity of Story Book Videos

Metric	Value
Mean Improvement	0.725
Standard Deviation of Improvement	3.638663686
Effect Size (Cohen's d)	0.199248972

The analysis of the impact of storytelling videos as an intervention reveals a mean improvement of 0.73 points in post-test scores, with a small effect size (Cohen's $d = 0.199$). While this indicates a positive trend in score improvement, the effect size suggests a modest impact on students' performance.

The modest gains observed in this study indicate room for improvement, storytelling videos remain a promising pedagogical tool for enhancing literary analysis. Their full potential may be realized through longer interventions, interactive components, and content customization, as supported by the literature. Further studies could explore these aspects in depth to optimize their application.

In the study of Cantago, et al. (2024), it was highlighted that digital storytelling videos can help improve reading comprehension, which is a challenge in the Philippines. It also creates a more interesting and motivating classroom atmosphere. Learning must be engaging especially in today's world where technology plays a big role in students' lives, and it's crucial that teaching methods must evolve along with this. According to Kim & Li (2020), using digital storytelling in the classroom is an effective pedagogical tool for engaging students and facilitating their reading comprehension skills.

Storytelling has long been recognized as a powerful pedagogical method. According to Schank (1990), storytelling fosters cognitive engagement by helping learners connect new information to prior knowledge. It also enhances retention and comprehension, especially when combined with multimedia elements such as videos (Robin, 2008).

However, the small effect size observed in this study aligns with findings by Ellis and Brewster (2014), who noted that the effectiveness of storytelling as a teaching strategy depends heavily on the implementation context, including the duration of the intervention, the complexity of the stories, and the learners' initial skill levels.

Table 3
Comparative between Two Intervention

Comparative between Two intervention

Metric	Picture Books	Storytelling Videos	Difference
Mean Improvement	0.25	0.73	0.48
Standard Deviation of Improvement	4.04	3.64	-0.4
Effect Size (Cohen's d)	0.062	0.199	0.137

Mean Improvement

Storytelling videos outperformed picture books by a mean improvement of 0.48 points. This indicates that storytelling videos were more effective in enhancing students' post-test performance.

Effect Size

The effect size for storytelling videos (0.199) is significantly higher than that of picture books (0.062). This shows that storytelling videos have a greater relative impact, even after accounting for variability in the data.

Variability in Scores

Picture books exhibited a slightly higher standard deviation (4.04) compared to storytelling videos (3.64). This suggests that the outcomes of the picture book intervention varied more widely among students, potentially due to differing levels of engagement or baseline skills.

The comparison highlights that storytelling videos were more effective overall, showing higher mean improvement and effect size compared to picture books. However, both interventions have unique strengths and could be utilized in complementary ways to maximize their educational impact. According to Torralba (2022), storytelling videos are excellent for capturing attention quickly, making it easy for children to understand and remember stories, and offering efficient learning experiences.

On the other hand, picture books encourage deeper cognitive engagement, enhancing focus, imagination, and a sense of accomplishment in a more gradual, reflective way.

Engagement and Modality

Storytelling videos leverage multisensory engagement, which aligns with Mayer's (2005) multimedia learning theory. The combination of narrative and visual elements may explain the higher effectiveness of videos compared to static picture books. In contrast, picture books rely more heavily on self-guided interpretation, which might not be as universally impactful.

Context and Implementation

Both interventions' outcomes may have been influenced by the duration and instructional context. For example, Pantaleo (2015) emphasized the importance of scaffolding when using picture books, which might have been underutilized in this case. Storytelling videos, on the other hand, provide more guided structure through audiovisual cues (Robin, 2008).

Conclusion

This study assessed the effectiveness of two instructional materials—picture books and storytelling videos—in enhancing the reading comprehension skills of second-year students in the Bachelor of Secondary Education, Major in English, at the Polytechnic University of the Philippines, Santa Maria Bulacan Campus. Both interventions demonstrated potential benefits, but storytelling videos proved to be more impactful.

Effectiveness of Storytelling Videos

Storytelling videos yielded a mean improvement of 0.73 points in post-test scores, with a small but notable effect size (Cohen's $d = 0.199$). The multisensory engagement provided by audiovisual elements likely contributed to the higher effectiveness, as these features align with multimedia learning theories. This mode of instruction also allowed for guided comprehension through structured narratives and visual cues, which facilitated better retention and understanding.

Effectiveness of Picture Books

Picture books resulted in a mean improvement of 0.25 points with a much smaller effect size (Cohen's $d = 0.062$). While they are valuable for promoting critical thinking and imagination, their reliance on self-guided interpretation may limit their

impact, particularly for learners with lower baseline skills or less intrinsic motivation.

Comparative Outcomes

The comparison revealed that storytelling videos outperformed picture books in terms of both mean improvement and effect size. However, the variability in outcomes suggests that individual student preferences and baseline skills influenced the results. Picture books may still serve as a complementary tool, fostering deeper cognitive engagement over longer-term interventions.

For Teachers

Incorporating storytelling videos in lesson plans can enhance engagement and comprehension, especially for students struggling with traditional reading materials. Picture books should be used to complement these tools, targeting more reflective and imaginative skills.

For Institutions

Investments in multimedia resources, such as storytelling videos, can enrich the teaching-learning process. Training programs for educators on integrating these tools effectively into their curricula are recommended. Further studies should explore longer interventions, diverse content types, and their impacts across different learner demographics to validate and extend these findings.

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