

Digital Storytelling: An Intervention in Improving Learners' Reading Comprehension Skills

Randy O. Pedros, James A. Hinautan and Melody D. Bernardez

Abstract

This study aimed to determine the effectiveness of digital storytelling technique in improving the reading comprehension skills of Grade 3 learners of Guio-ang Elementary School, District of Guindulman, S.Y. 2020-2021. It mainly determined the reading comprehension level of the learners before and after using the digital storytelling technique and showed how it is effective in improving the learners' reading comprehension level. Through one-group pretest-posttest experimental research design, 20 grade three learners with reading performance below an independent level were exposed to the digital storytelling technique. The researchers purposively selected these participants to obtain more accurate results. It was revealed that the pretest recorded a mean score of 2.95 ($Sd = 0.96$) and a mean score of 4.90 ($Sd = 0.85$) substantiated the post-test result. Moreover, there was a remarkable increase of 1.95 in the mean post-test score of the participants after utilizing the digital storytelling technique. To conclude, the digital storytelling technique is a potent way of improving the learners' reading comprehension. Thus, it was recommended that teachers are encouraged to employ the digital storytelling technique in teaching reading regardless of what learning modality is adopted; a similar or parallel study may be conducted to explore its effectiveness in understanding concepts in other subject areas.

Keywords: Digital Storytelling Technique, English Language Teaching, Experimental Research, Reading Comprehension

Introduction

Storytelling in the classroom has been used to teach reading skills such as vocabulary and comprehension, among others. Through the years, storytelling has never lost its charm to children. It is an activity that they tend to enjoy.

DepEd (Department of Education) Memorandum No. 338, Series of 2009 states that one way of capturing the lessons is through stories. It is a creative and powerful way to increase the consciousness and understanding of young minds. With the help of an engaging storyteller, children will begin to appreciate the values embedded in stories.

Due to the pandemic, schools were forced to cancel face-to-face classes, and many changes and adaptations were made to continue learners' learning. To improve literacy, teachers may shift traditional storytelling mediums to the digital sphere to continue helping the learners develop 21st-century literacy skills even in the comfort of their homes. Literature about digital storytelling suggests its significant effects in developing learners' reading comprehension.

Isbel, Sobol, Lindauer, and Lowrence (2004) studied the potential impact of storytelling on comprehension and story reading on children's language development between the ages of 3 and 5. The study had two

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groups. The first group listened to the stories while the second read aloud from a book. After the reading tests were conducted, they discovered that children's language development and understanding had increased due to storytelling and story reading.

Sultan, Nafi, Al-abed (2018) investigated the possible influence of listening to short stories on the reading comprehension skills of fifth-grade learners. Eighty-seven fifth-grade learners were purposively selected, which were assigned to control and experimental groups. Between control and experimental groups, the latter did better in the reading comprehension test. As a result, they recommended modern methods of teaching short stories to improve learners reading proficiency.

Using digital storytelling in reading lessons helps learners comprehend the meaning and develop their thinking, linguistic abilities, and study strategies. Moreover, they can learn new vocabulary, ask questions, examine information, form decisions, and create coherent reasoning to support a point of view. Moreover, the traditional storytelling technique is not applicable due to a health crisis.

Stipulated in the Republic Act No. 7836 of Magna Article VIII, Section 9 mandates teachers to take immediate steps that promote learning. They shall provide interventions in resolving the learners' issues and problems to increase learner performance. With the availability of various technological gadgets, teachers may employ other ways of narrating the story. Varying the way one shares a story, especially with technology, adds to the excitement and interest. Teachers can provide varied learning opportunities, especially those that will call their attention, such as digital storytelling.

In DepEd Order No. 173, s. 2019 entitled, "Hamon: Bawat Bata Bumabasa," the department stated the overall results of the national assessment conducted and the results revealed that there are many learners who did not meet the expectations in early language and literacy and low-performance rate in other subject areas was most likely due to learners' low reading comprehension profile. Also, the Filipino learners garnered a score of 340 against the 487-point score during the 2018 Program for International Student Assessment in reading comprehension. This showed that our learners' reading performance was poor (Perez, 2019).

Moreover, the Phil-IRI posttest results in English of Guio-ang Elementary School for S.Y. 2019-2020 showed that out of the 183 pupils, 74 pupils or 39% were frustration readers, 67 pupils or 32% were instructional readers, and 54 pupils or 29% independent readers. Furthermore, for S.Y. 2020-2021, the Phil-IRI pretest results in English of the Grade 3 class of Guio-ang Elementary School revealed that only 20 of 61 learners, or 33% scored 14 and above in the Group Screening Test in English. Thus, they are considered independent readers. There are 14 or 23% instructional readers and 27 or 44% frustration readers. This scenario could be a reality also in other schools, which causes great concern to teachers. Addressing this issue, improving learners' reading proficiency as part of the schools' reading program must be given great attention.

The researchers, comprising the school principal, an English teacher, and the school's ICT Coordinator, bring a diverse range of expertise to this study. Recognizing the limited attention given to digital reading techniques in existing literature, the researchers are motivated by the pressing issue of poor reading comprehension among learners. Despite the provision of conventional instructional materials, observations in reading classes revealed persistent challenges in learners' comprehension abilities. In response, the researchers are resolute in their commitment to investigate the potential impact of digitized storytelling on enhancing reading comprehension skills. Their determination is fueled by a desire to remain at the forefront of educational innovation and ensure their teaching practices remain relevant and captivating to their students.

Research Questions

This study aimed to determine the effectiveness of the digital storytelling technique in improving the reading comprehension of Grade Three Learners of Guio-ang Elementary School, Guindulman District, School Year 2020-2021.

Specifically, it sought to answer these questions:

1. What are the reading comprehension levels of the learners prior to and following the implementation of the intervention?
2. How effective is the treatment implementation in improving the learners' reading comprehension level?

Intervention and Strategy

This action research utilized the digital storytelling technique as an intervention to improve the reading comprehension skills of learners of Guio-ang Elementary School, Guindulman District, enrolled for S.Y. 2020–2021. To realize this, the researchers employed the proposed intervention, and strategy.

The researchers carefully selected three appropriate grade-level stories as the materials to be used in the conduct of the study. The passages, “The Crow and the Pitcher”, “The Little Red Hen” and “Belling the Cat” were selected and used. The selected stories were converted into digital format using the Filmora9 Wondershare. The researchers combined still and motion pictures to show the storyline. Background music, and sound effects were also added to give life to the presentation. Moreover, the proponents used their own voice to narrate the story. Supplementing the voice-over were the subtitles for the learners to read. The outputs in mp4 format were quality assured by the District Learning Resource Coordinator in the district. The implementation of the Digital Storytelling technique in this research work follows three stages. Below is the Intervention Strategy Process Flow of the study.

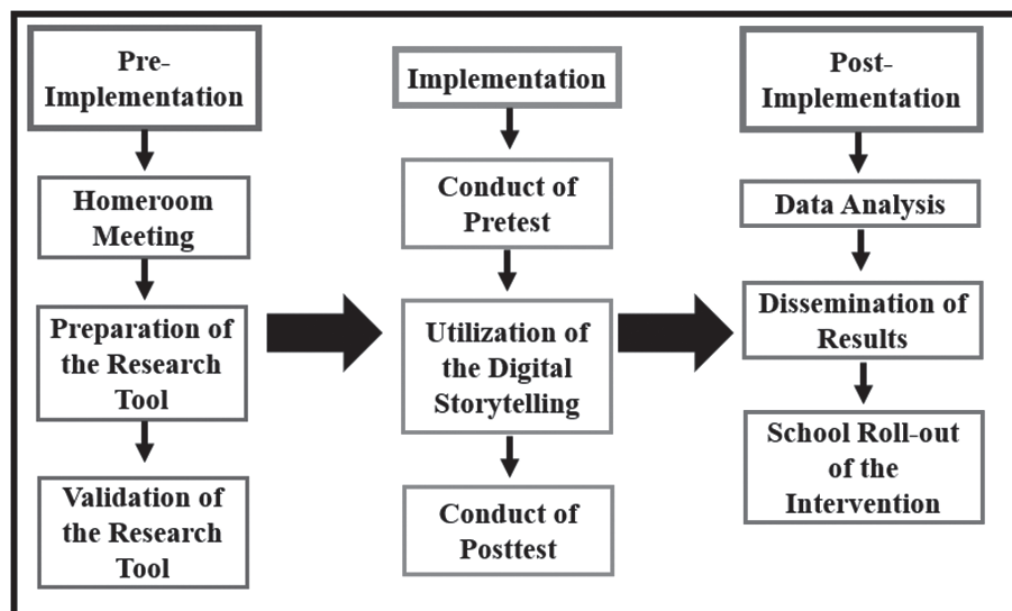


Figure 1: Intervention Strategy Process Flow

Methodology

Research Design

The study employed an action research design, integrating the Digital Storytelling Technique. Action research, tailored for educators to address classroom challenges and refine professional methodologies, served as the framework to assess the enhancement of learners' reading comprehension skills through digital storytelling. Additionally, it outlined the reading comprehension proficiency of learners' post-intervention implementation.

Research Locale

The research study was conducted at Guio-ang Elementary School, which is a public school under the Schools Division of Bohol, within the Department of Education. It is situated in Guio-ang, Guindulman, Bohol, Philippines. Established in 1939, the school currently accommodates 344 learners for the school year 2020-2021. It consists of two sections each for Kindergarten through Grade 6.

Research Participants

The participants of this research were twenty Grade 3 learners, comprising 12 boys and 8 girls from Guio-ang Elementary School. They were purposively selected using a purposive sampling technique. Specifically, learners under the frustration level were intentionally chosen by the researchers to ensure the accuracy and relevance of the results.

Research Instrument

The primary research instrument used in this research work was three sets of researcher-made test questions. These researcher-made test questions were administered on separate occasions. The said tool measured the reading comprehension skills of the learners. The reading comprehension questions were derived from the stories provided to the learners. These items were categorized as literal, inferential, and evaluative. The tools were validated through face validity.

Data Gathering Procedure

During the conduct of this research study, strict adherence and compliance with public minimum health standards and protocols were observed due to the pandemic.

With approval from the researcher's immediate supervisor, along with consent from the parents of participants and permission from the school head to conduct the study, the implementation of the proposed intervention and strategy followed.

In the implementation of the intervention, each learner was provided with a hardcopy of the passage and a reading comprehension pretest during the distribution of the self-learning modules (first day of the week). Parents, following instructions provided by the class adviser, facilitated their child's reading of the story and completion of the pretest at home. The answered pretests were returned during the retrieval of the self-learning modules (last day of the week), and in turn, participants were given a copy of the digital story shared via Bluetooth and a reading comprehension posttest. Learners viewed the digital story and answered the posttest thereafter. The intervention ran for three weeks.

The researchers checked and recorded the learners' results from their posttests, compared and treated the data with appropriate statistical tools. Then, the researchers stored all answered questionnaires in a secure location accessible only to the researchers. The study's reflections, conclusions, and recommendations were formulated based on the gathered data and were communicated to other teachers through the School Learning Action Cell (SLAC). Moreover, the researchers conducted capacity building for all reading coordinators of schools in the district to help them find ways to integrate this technique into their respective schools' reading programs.

Data Analysis

The statistical tools utilized in this study were mean scores and mean difference. Mean scores were employed to characterize the level of learners' reading comprehension, whereas mean difference was utilized to assess the effect of implementing the intervention on the reading comprehension of grade three learners.

Results and Discussion

Learners' Comprehension Level Pre and Post Intervention

Table 1 shows the mean score of the 20 participants in a 6-item reading comprehension pretest and posttest administered by the researchers throughout three series.

Table 1	Learners' Comprehension Level before and after the Utilization of the Digital Storytelling Technique					
Week	No. of Items	No. of Pupils	Pre-test Mean Score	Interpretation	Posttest Mean Score	Interpretation
1	6	20	2.80	Poor	4.80	Excellent
2	6	20	2.95	Poor	4.90	Excellent
3	6	20	3.10	Poor	5.00	Excellent
Overall	6	20	2.95	Poor	4.90	Excellent

Legend: 0.00 – 1.50 Very Poor 1.51 – 3.00 Poor 3.01 – 4.50 Good 4.51 – 6.00 Excellent

It revealed that the pretest recorded a mean score of 2.95, and a mean score of 4.90, substantiate the post-test result. It means that the learners' reading comprehension was poor; however, they progressed to excellent after the digital storytelling technique was employed. Such result is in consonance with the observations of Hamdy (2017), where the post-test standard deviation of the control group was higher than that of the post-test of the experimental group.

Impact of the Intervention

Table 2 shows the significant increase in the mean scores of the grade three learners after implementing the Digital Storytelling technique. A significant increase of 1.95 in the mean post-test score of the participants was evident. This increase is the effect of the treatment implementation. Hence, it is safe to say that said intervention can be a powerful instructional technique in improving learners' reading comprehension.

Table 2 Significant Improvement in Mean Scores of the Grade Three Learners after using the Digital Storytelling Technique						
Grade level	No. of Items	No. of Pupils	Pretest Mean	Posttest Mean	Increase	Interpretation
3	6	20	2.95	4.90	1.95	Significant

The present study's results are consistent with Radaideh, Al-jamal, and Sa'di (2020), whose research demonstrated that implementing Digital Storytelling during reading activities led to gains in reading comprehension among students.

Conclusions

The fact that the participants could read the story or passage but failed in the reading comprehension pre-test, as evidenced by low scores, proved that they need further reading intervention. Using Digital stories help the learners visualize the context and understand the text because of the images (still and motion) used. These pictures and animations enhanced readers' attention as they no longer concentrate on word recognition, allowing them more time to understand the word's meaning, resulting in their comprehension. Also, the visual elements helped them understand abstract ideas present in the story as they could see what was happening in the story. Moreover, light, color, sound, and voice-over add color to the presentation, which in a way help enhance their engagement and understanding. Also, the text or subtitle helps learners increase their reading speed. Thus, digital stories are effective tools that teachers can use to develop their learners' reading comprehension skills.

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