



Guided Reading Lessons Featuring Digital Stories on Students' Reading Comprehension

Rosalina Alerta¹(✉) and Ma. Vivienne Segumpan²

¹ Department of Education, Salawagan National High School, Quezon, Philippines
rosalina.alerta@deped.gov.ph

² Central Mindanao University, Maramag, Philippines

Abstract. The need to create instructional material to aid the low level of reading comprehension among Filipino students is encouraged by the Department of Education. Hence, this study dealt with developing guided reading lessons featuring digital stories type of instructional material to help enhance the student's poor reading comprehension. The study was carried out through the paradigm of IPO (Input, Process, and Output) and used descriptive statistics to analyze the data. Thirty-eight learners selected through purposive sampling took the Philippine Informal Reading Inventory (PHIL-IRI) to assess their reading comprehension. The results showed that students' reading comprehension belonged to the frustration level. This served as the Input and was the bases for developing an instructional material (IM) called Guided Reading Lessons featuring Digital Stories. This newly developed IM was assessed by experts in the field using the rubrics on digital storytelling by RubiStar and evaluating rating sheets for print resources adopted from the Learning Resource Management and Development System (LRMDS) Department of Education. After the evaluation, it was evident that the developed material possessed the elements of effective digital storytelling and passed all the criteria of print resources in terms of content, format, presentation, and organization. Suggestions are made for further research, especially on the real contributions of digital storytelling to students' reading comprehension, not just in English subjects but also in other subjects. Also, it is highly encouraged that the material is implemented and re-evaluated to test its effectiveness in improving student reading comprehension.

Keywords: Digital Education · Literacy · Philippines

1 Introduction

Over the years, various research studies have been conducted to explain the problems in learners' poor reading comprehension. The comprehension process is the heart of reading, making this a valuable skill that needs to be mastered.

In the Philippines, reading comprehension among learners is problematic. The Programme for International Student Assessment (PISA) on 600,000 15-year-old students in 79 countries showed that Filipino learners ranked the lowest in reading, having an average reading score of 340. The result calls for immediate intervention to help struggling learners.

© The Author(s) 2023

J. Handhika et al. (Eds.): ICETECH 2022, ASSEHR 745, pp. 612–619, 2023.

https://doi.org/10.2991/978-2-38476-056-5_59

Various strategies to improve the reading situation were thought of, one of them being through the blend of traditional and modern ways, like incorporating digital stories. Digital storytelling (DS) integrates various digital multimedia in narrating stories (Robin, 2006). The idea is not new; it was coined by Dana Atchley, who began using multimedia to aid his performances in the 1980s.

This kind of combination is the central feature of the K to 12 Basic Education Program, which emphasizes that teachers must enrich lessons with the use of Information and Communication Technologies (ICT) to develop the 21st-century skills of the students. These various technological tools are believed to benefit both students and teachers as the more senses are involved, the better the education.

The studies by Smeda, Dakich and Sharda 2014; Hamdy 2017; Alkhilili, 2018; Radaideh, Al-jamal, and Sa'di, 2020 revealed that DS had a significant impact on the level of students reading and listening comprehension. Other studies have also been conducted using digital stories in different aspects of teaching and learning processes. These studies focus on motivation, retention, and attitude toward learning, reading, listening, speaking, and writing.

However, there is a dearth of studies and IMs in digital storytelling that should have helped teachers in delivering story lessons, at least in this part of the country. Yuksel, et al. (2011) observed that the use of digital storytelling in education on a global scale had not been deeply investigated. It is in this light that this study was conceived. The need to provide instructional assistance to reading teachers by developing guided reading lessons with digital stories could lessen the reading problems that Filipino learners are facing today.

1.1 Objectives of the Study

This study aimed to produce instructional material that will help teachers enhance the student's reading comprehension. Specifically, it sought to:

1. Determine the level of reading comprehension of the grade 8 students;
2. Develop instructional material to answer the student's reading comprehension needs.
3. Determine the assessment of the English teachers and experts on the developed material for digital storytelling.

2 Methods

Research Design

This study utilized a descriptive research design.

Participants of the study

Thirty-eight (38) students were the participants in the study. Also, three grade 8 teachers, two experts in IM and IT from the Division of Bukidnon, and an English Supervisor, serve as the evaluators of the Guided Reading Lessons featuring Digital Stories.

Instrumentation

The researchers employed the comprehension test adopted from the Philippine Informal Reading Inventory (Phil-IRI) of the Department of Education (DepEd) to determine the quantitative data on the student's reading comprehension level. Employing the

Phil-IRI helped distinguish whether the students belonged to frustration, instructional and independent levels. The questions consisted of literal, inferential, and evaluative comprehension tests.

On the other hand, the digital stories were evaluated following the rubric for digital storytelling from RubiStar. The experts and English teachers evaluated ten categories from 1 (being the lowest) to 4 (being the highest). The categories include point of view (audience, dramatic questions, voice consistency, voice-conversational style, voice-pacing, soundtrack- originality, soundtrack -emotion, images, economy, presentation duration, grammar, and point of view purpose.

Likewise, the reading guide was evaluated using the Learning Resource Management and Development System (LRMDS) of DepEd. The evaluation sheet includes four factors to be examined in the material. These are content, format, presentation/organization, and accuracy/up-to-datedness of Information. Each factor has different criteria to be rated from 1 (not satisfactory) to 4 (very satisfactory). The rating will serve as scores that determine whether a factor passes or fails.

Below is the point system of the evaluation rating sheet.

Factor	Maximum Points	Minimum Point to Pass
Content	28	21
Format	72	54
Presentation and Organization	20	15
Accuracy and Up-to-datedness of Information	24	24

Data Gathering

The researcher realized the utilization of digital stories in this descriptive research to improve the students’ reading comprehension for grade 8 stories. Approval of the School Principal and the respondents’ parents was sought prior to distributing questionnaires. Therefore, the questionnaires served as the main data-gathering tool in this study. To complete the data, the researcher took the following steps:

A comprehension test adapted from the Phil-IRI of DepED was distributed to the students to determine the baseline before developing guided reading lessons featuring digital stories. The privacy and anonymity of respondents were considered during the questionnaires’ distribution and retrieval.

The data was analyzed carefully to determine the student’s level of comprehension—afterward, the designing and development of digital stories with guided reading lessons. The digital stories underwent evaluation by the Schools District Supervisor, School Principal, English Department Head, Curriculum, Head and an ICT expert; other grade eight teachers from the institution also serve as supplementary evaluators to improve the digital stories. The guided reading lessons were also evaluated by different experts from the Division of Bukidnon, specifically the expert, IM expert, and Reading Supervisor. The researcher then incorporated the suggestions, comments, and feedback from different evaluators to improve the material.

3 Discussion

Level of Reading Comprehension of the Grade 8 Students.

As shown in Table 1, out of thirty-eight (38) students, 33 or 87% belong to the frustration level. This means that majority of the students have poor reading comprehension. The Philippine Informal Inventory (PHIL-IRI), an assessment tool in reading used by the Department of Education, categorizes frustration reading level as the lowest level, manifested by refusing and withdrawing to read from any reading situation. University of Utah Reading Clinic (2021), on the other hand, describes readers under a frustration level as not having enough background for a topic. It is, thus, apparent that at this level, students have difficulty understanding all types of comprehension questions like literal, more so for critical and inferential. The results reflect that there is a need for these students to be extensively taught and that they must be provided with full attention and support to enhance their comprehension skills, for they are likely to withdraw from or refuse to read (Brown, K. et al., 2021).

The material that can be designed and developed to answer the comprehension needs

The result of the reading comprehension test implies a need to create an effective tool to help learners enhance their reading comprehension. Smeda, Dakich, and Sharda (2014) found that integrating technology, such as digital storytelling, with learning improved student engagement and achievement. Furthermore, Adiguzel and Kumkale (2018) concluded that there is a positive effect on reading comprehension levels when digital stories are used in English lessons.

With this, the material that could help alleviate the students' reading comprehension is by merging old and new ways to tell stories, like introducing digital stories. The use of pictures, animations, narration, and sound caters to the different senses of students, specifically the audiovisual learners. Morin (2014) emphasized that multisensory techniques can be a great help, especially for those who struggle with reading. This whole brain concept believes that literacy skills will be enhanced when reading materials are equipped with both visual and auditory effects. Furthermore, according to Robin (2008), digital stories augment current lessons to make abstract or conceptual content more understandable.

And as such, in this study, the authors created guided reading lessons featuring digital stories to answer the problem. Using an application called TweenCraft, digital stories were designed; It has cartoon characters that can be animated using the slides in the app. The researchers recorded the characters' voices and the stories' narration.

Table 1. Grade 8 Ruby Reading comprehension level results

Reading Level	Number of Students	Percentage
Frustration	33	87
Instructional	4	10
Independent	1	3
Total	38	100

The dialogues and texts are from the stories, while the researchers conceptualized the background music and animations. Further, the digital stories include a storyteller or narrator, but subtitles are provided, so students can both hear and listen to the narration. The stories run from 3 to 8 min.

The generated digital stories are composed of pre-reading activities that include unlocking difficult words to aid students' understanding. The stories were also compiled with supplementary comprehension questions to be answered by the students in the post-reading activities. Each story has corresponding process questions that include literal, inferential, and critical levels. Literal questions are given to improve recall, inferential questions to elicit students' deep understanding of the stories, and critical questions to enhance students' analytical and evaluative ability in responding to the stories they read. These questions are embedded in the guide to create connections and develop students' comprehension before and after their exposure to digital stories. The reading guide also includes suggested strategies for motivation, discussion, evaluation, and assignment. A rubric is also incorporated for grading the activities. According to Fries-Gaither (2008), readers make a personal connection when they read with a purpose in mind, increasing reading comprehension.

Concerning the content, this material focused on Afro-Asian literature, per the Curriculum Guide in English. These stories include *The Hands of the Blacks* An excerpt from "We Killed Mangy-Dog," *The Soul of the Great Bell* by Lafcadio Hearn, *The Story of the Aged Mother* a Japanese Folktale, *Ramayana* by Valmiki, *Shakuntala* by Kalidasa (Act IV), *Tiki-Tiki Tembo* a Chinese Folktale, *Sawatdee.... Hello, Beautiful Bangkok* by Ethel Soliven-Timbol, *Makato and the Cowrie Shell* by Supanee Khanchanathiti, and *The Two Brothers*, an Egyptian Folktale.

The performance standard that needs to be achieved by the students in these guided reading lessons is 85% accuracy at literal, inferential, and critical levels. The developed reading guide featuring digital stories is enough for one grading period or nine weeks.

Evaluation of the Exports

From the Table 2, the average mean of 3.93 shows that the digital stories' instructional materials are excellent in helping students improve their reading comprehension. In addition, eight categories received a rating of 4 (highest rating), which means that the digital stories have the following characteristic: use a consistent conversational style, the pace or rhythm is appropriate with the storyline, the music is original and reinforces the storyline, the images suit the atmosphere the story wants to project, it has an exact amount of details, i.e. not too long, or too short, story length was about 4 min, and the digital story's grammar usage contributed to clarity, style, and character development.

As to the guided reading lessons, below are the results (Table 3).

The developed IM reading guide met the needed points to pass except for accuracy and up-to-datedness. For the content, the highest point for this factor is 28. Therefore, the experts gave a perfect score which means that the content is suitable, contributes to achieving specific objectives, develops higher cognitive skills, is free of prejudices, and enhances desirable values and traits.

For format, the maximum total points should be 72. Instead, the experts gave 68 points, which means it passed. The scores reflected that the material received good scores

Table 2. Summary of Assessment Done by the Experts and SNHS Grade 8 Teachers on Digital Stories

Criteria/Themes	Mean
Point of View- Audience	3.8
Dramatic Question	3.8
Voice-Consistency	3.8
Voice-Conversational Style	4
Voice-Pacing	4
Soundtrack-Originality	4
Soundtrack-Emotion	4
Images	4
Economy	4
Duration Presentation	4
Grammar	4
Point of View-Purpose	3.8
Average Mean	3.93

Table 3. Summary of the Experts Rating in Guided Lesson

Factor	Score	Descriptive Rating
Content	28	Passed
Format	68	Passed
Presentation and Organization	20	Passed
Accuracy and Up-to-datedness	23	Failed

in the following criteria: prints, illustrations, design and layout, paper and binding, and size and weight of resources.

For the presentation and organization, 20 points mean a perfect score. This connoted that the presentation of the material is engaging and logical, the vocabulary level is within the group of understanding, the sentence length is fit for the comprehension level of the target reader, and there are variations in the sentence and paragraph structures.

Finally, the 23 points for accuracy and up-to-datedness means it failed. This factor requires 24 points to pass. In addition, it received a low score under the grammar criterion, meaning that the reading material needs a thorough review of the grammatical errors. The material will then be revised and improved before being implemented.

4 Conclusion and Recommendation

The poor reading comprehension level of the students is alarming. But, teachers and the school community can help and support by developing instructional materials tailored to their needs. For example, Digital stories could help alleviate the reading situation of the learners. These materials may be utilized, but the students are encouraged to evaluate them to see their effectiveness in improving their reading comprehension.

Acknowledgments. The authors thank everybody who helped finish the study.

Authors' Contributions. Authors work together to improve the paper.

References

1. Adiguzel, A., & Kumkale, Z., (2018). The effect of digital story preparation program on reading comprehension in English. *Electronic Journal of Education Sciences*, 7 (14), 176–186. <https://dergipark.org.tr/en/download/article-file/585858>
2. Alkhilili, M. (2018). Using digital stories for developing reading skills of EFL. multi-knowledge electronic comprehensive. *Journal For Education And Science Publications (MECSJ)* (4), 21.
3. Brown, K. et al. (2021). Reading levels. <https://uuc.utah.edu/General/ReadLevels.php>
4. Department of Education (2009). Guidelines and processes for an LRMDS assessment & evaluation. chrome-extension://efaidnbmninnbpcajpcglclefindmkaj/<https://lrmds.deped.gov.ph/docs/LRMDSGuidelines.pdf>
5. Advanced Learning Technologies in Education Consortia (2007). *Digital Storytelling: iMovie Project*. RubiStar. http://rubistar.4teachers.org/index.php?screen=PrintRubric&rubric_id=2253877&PHPSESSID=4f05ec2e05206faae96fca7c3dbf9aa
6. Fries-Gaither, J. (2008). Reading horizons. <https://readinghorizons.com/reading-strategies/teaching/comprehension/building-reading-comprehension-through-questioning-techniques>
7. Hamdy, M.F. (2017). The effect of using digital storytelling on students' reading comprehension and listening comprehension. *J.E.A.L.T* 8 (2), 112–123.
8. Morin, A. (2014). Multisensory instruction: What you need to know. <https://www.unders.tood.org/en/school-learning/partnering-with-childs-school/instructional-strategies/multisensory-instruction-what-you-need-to-know>
9. OECD (2018), *PISA 2018 Results*. Retrieved January 20, 2020, from <https://www.oecd.org/pisa/publications/pisa-2018-results.htm>
10. Shin, E. (2016). "Constructivist learning environments in digital storytelling workshops: an interview with Joseph Lambert." *Theses and Dissertations*. 658. <https://digitalcommons.pepperdine.edu/etd/658>
11. Smeda, N., Dakich, E., Sharda N. (2014). The effectiveness of digital storytelling in the classrooms: a comprehensive study. *Smart Learning Environments* 1(1), 6. <https://doi.org/10.1186/s40561-014-0006-3>
12. Radaideh, E., Al-jamal, D., & Sa'di, I. T. (2020). Digital storytelling: time to be considered in reading comprehension. *Universal Journal of Educational Research*, 8(6), 2621-2633. DOI:<https://doi.org/10.13189/ujer.2020.080645>

13. Robin, B. (2006). *Educational uses of digital storytelling*. Research Gate. https://www.researchgate.net/publication/228342171_The_educational_uses_of_digital_storytelling
14. Robin, B. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom, *Theory Into Practice*, 47 (3), 220-228.
15. University of Utah Reading Clinic (2021). Reading levels. Retrieved January 20, 2020 from <https://uurc.utah.edu/General/ReadLevels.php>
16. Yuksel, P. et al. (2011). educational uses of digital storytelling around the world. *Educational, Business And Society: Contemporary Middle Eastern Issues*, 3(3). 201217. <http://digitalstorytelling.coe.uh.edu/listpage.cfm?id=26&cid=26&sublinkid=55&sort=z-a>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

