Exploring Students' Perceptions of Digital Storytelling in Enhancing Writing Skills: A Case Study of First-Year Secondary School Students in Zliten

Arigall, Hana[1] & Mohsen, Al-Hussein[2]

hali3870@gmail.com [1] &h.mohsen@asmarya.edu.ly[2]

MA in English Language[1 & 2]Dept. of English Language, Faculty of Arts, Alasmarya Islamic University

ABSTRACT

This study investigates the impact of digital storytelling on improving students' writing skill. It was conducted at Al-Shaima Secondary School for Girls in Zliten, Libya. The study got insights into students' perceptions towards digital storytelling. The study used a quasi-experimental design and semi-structured interview. The findings revealed that using this strategy had a significant effect on students' vocabulary, coherence and clarity, excluding punctuation and verb form usage. The participants found this method more engaging, motivating, interesting, and effective for improving writing skill. The study recommends integrating targeted grammar activities into digital storytelling and expanding future research to undergraduate settings.

Keywords: Digital storytelling, EFL writing, student perceptions, quasi-experimental study, Libya, educational technology, writing performance

الملخص

تستكشف هذه الدراسة تأثير السرد الرقمي على تحسين مهارات الطلاب في الكتابة. تم تنفيذ هذه الدراسة في مدرسة الشيماء الثانوية للبنات في زليتن، ليبيا. رصدت الدراسة تصورات الطالبات تجاه السرد الرقمي. استخدمت الدراسة تصميما شبه تجريبي ومقابلة شبه منظمة. كشفت النتائج أن استخدام هذه الاستراتيجية كان له تأثير كبير على المفردات لدى الطالبات وتماسكها ووضوحها، باستثناء علامات الترقيم واستخدام صيغة الأفعال. وجدت المشاركات أن هذه الطريقة أكثر جاذبية وتحفيزا وإثارة وفعالية لتحسين مهارات الكتابة. توصي الدراسة بدمج أنشطة القواعد النحوية المستهدفة في السرد الرقمي وتوسيع البحث المستقبلي ليشمل الطلاب الجامعيين في تخصص اللغة الإنجليزية بالمرحلة الجامعية.

الكلمات المفتاحية: السرد الرقمي، تصميم شبه تجريبي، مقابلة شبه منظمة، مهارات الكتابة، تقنيات تعليمية

Introduction

Writing plays a vital role and is considered as one of the most important and challenging issues in the learning process. From early childhood, classroom writing tends to be a critical activity because it supports the integration of important language (important language refers to the language that helps to convey emotions and feelings) and emergent literacy skills that lay the foundation for learners' reading skills. Teaching and learning how to write gained importance because writing is a tool for effectively communicating ideas (Dar & Khan, 2015). According to Abdulwahed (2010), English writing allows students the opportunity to think critically and motivates students to learn certain aspects of writing, like using effective word expressions.

Moreover, Walsh (2010) pointed out that, for a student to communicate well with teachers and peers, he/she should be able to express themselves in writing. However, there are a lot of advantages that can be brought due to learning how to write, which include: helping to express one's personality, fostering communication, developing thinking skills, making logical and persuasive arguments, giving a person a chance to express his/her ideas, provide and receive feedback, and prepare for school and employment (Chappell, 2011).

In recent years, our lives have become more involved with technological tools. Developing technology resulted in new generations being more technology savvy than their parents and, even more so, their grandparents. Consequently, researchers have argued that the impact of digital technologies, especially the internet, in the 21st century postsecondary classroom is unquestionable and dramatic (Tamim et al. 2011). Nowadays, the effectiveness of using technology in teaching environments is proven by many researchers, such as Avici (2019), who found that the teacher increases the quality of education when he/she correctly and effectively uses technology (digital storytelling). However, digital storytelling (which refers to the use of multimedia to bring the narrative to life; individuals may share their digital stories via the internet, on discs, podcasts, or other electronic media) plays a vital role in improving students' language skills. The application of storytelling, such as oral and written in general and specifically digital storytelling, in the classroom, opens a new channel for students to acquire, search for, and create information (Lion, 2017).

In writing instruction, the use of digital storytelling is investigated by many researchers and found that it increased the motivation of students to write more explicitly, the participation levels and writing self-efficacy. There are many benefits of integrating technology and storytelling through digital storytelling in teaching for both teachers and students. Robin (2008) found that the application of digital storytelling is an effective instructional tool for teachers as it helps them to save time and effort, and the use of digital storytelling by teachers encourages their students to engage in discussion. In addition, it may also be used to provide teachers with a unique way to present new materials without taking a lot of time to help students understand the difficult information. However, it is considered an effective tool for students as it allows them to learn how to create their digital storytelling and encourages them to organize and express their ideas and knowledge in an individual and meaningful way (Ibid.).

Statement of the Problem

Based on different studies, the researcher and other EFL Libyan teachers have observed that the reason behind poor student performance in their writing skills is the outdated teaching methods, as most of the teachers rely on traditional methods. Accordingly, to improve the teaching and learning of writing in English in Libya, teachers need to equip new learning approaches that have proven effective in enhancing students' writing skills. As a result, this study was conducted to explore the effectiveness of digital storytelling in bridging the gap where traditional methods have been insufficient.

Aims and Scope of the Study

This study aims to explore the effect of using digital storytelling on improving first-year secondary school students' writing skills, and to seek students' attitudes towards using digital storytelling in improving writing skills.

This study investigates the impact of digital storytelling in improving writing skills of first-grade secondary level students at Al-Shaima Secondary School in Zliten, Libya. The research was conducted in the second semester of the 2023-2024 year.

Research Questions

The current study seeks to answer the following questions:

1- To what extent does using digital storytelling affect first-year secondary school students' writing skills?

2- What are students' attitudes toward using digital storytelling to improve writing skills?.

Significance of the Study

This study is significant because no such studies concerning this topic have been conducted before in the Libyan context. Accordingly, the researcher tends to bridge the gap by researching to investigate the impact of digital storytelling on improving first-year secondary school students' writing skills. The outcomes of this study will allow both teachers and students to tap into the power of digital storytelling strategies, leading to more engaged teaching and learning. Moreover, it will shed light on students' attitudes towards such a strategy in teaching writing skills.

The study would help teachers adopt the appropriate teaching tools that enhance their writing skills teaching , encourage students to engage in learning writing skill, and transform the learning experience into a more interactive and enjoyable one.. Moreover, this study may help Libyan teachers and students overcome the difficulties they face when teaching and learning writing, and help teachers improve their teaching strategies.

Literature Review

There are different studies focusing on the impact of digital storytelling on improving writing skill.

Castillo and others (2021) conducted a study aiming to assess the impact of digital storytelling on the writing abilities. The study involved 22 pre-service EFL teachers from an Ecuadorian University. The participants were selected to explore how digital storytelling could influence their writing skills. A mixed-methods was employed, combining quantitative and qualitative data collection techniques; pre- and post- tests: participants completed writing assessments before and after the intervention to measure improvements in their writing skills. After the intervention, participants responded to a survey to capture their views on the effectiveness of digital storytelling in enhancing their writing abilities. The quantitative data from the tests were analyzed statistically to identify

significant changes, while qualitative data from the surveys provided insights into participants' experiences and perceptions. The findings revealed a significant improvement in the participants' writing skills, particularly in grammar and vocabulary usage. Additionally, the participants perceived digital storytelling as a valuable strategy for developing their EFL writing skills, noticing increased engagement and motivation during the learning process. The study highlights the multifaceted benefits of digital storytelling in EFL contexts suggesting that its thoughtful implementation can enhance writing skills, motivation, critical thinking, collaboration, and digital literacy among learners.

Lim and Noor (2019) focused on the educational impact of digital storytelling as a pedagogical tool in improving writing skill. The study involved a group of students from a specific educational institution. Data was collected through surveys and interviews, allowing for both quantitative and qualitative analysis. Students were tasked with creating their own digital stories, which included multimedia such as text, images, audio, and video. Students reported higher levels of engagement and motivation when using digital storytelling compared to traditional methods. In addition, the process encouraged creativity, allowing students to express their thoughts and ideas in innovative ways. This study has several key implications include: educational engagement, critical thinking, cultural preservation, skill development, assessment methods and inclusion of diverse perspectives.

Loeng and Jafre (2018) conducted their study on digital storytelling in Malaysia. The research focused on how digital storytelling is implemented in an educational context within the country. It typically involves participants such as educators and students. They concluded that digital storytelling significantly enhances student engagement by allowing for personal expression and creativity, encourages critical thinking as students evaluate and synthesize information to create narratives, and improves students' communication skills, both in writing and multimedia presentation, which are crucial for effective storytelling, fosters cultural awareness by enabling students to share diverse perspectives and experiences, and facilitates teamwork and peer learning, enhancing the overall educational experience. This study revealed that digital storytelling enhances learning experiences, develop communication skills, encourage creative thinking, enhance students' technological skills, personal reflection, and collaborative learning.

While many studies have highlighted the positive effects of digital storytelling on writing skills, the following studies suggest that the use of digital storytelling in teaching may not always lead to significant improvements in writing.

Niemi and Multisilta (2016) conducted a study to investigate how digital storytelling affects students' learning, particularly focusing on the development of 21st–century skills such as collaboration, creativity, critical thinking, communication, and digital literacy. It was conducted in Finland. The study used a qualitative approach (classroom observations, interviews with teachers and students, and student projects). The researchers stated that despite the positive impact on engagement and 21st century skills, the study found no significant improvement in students' writing skills. The researchers noted that the multimedia elements such as video and audio, tended to distract students from focusing on traditional writing tasks, such as sentence structure, grammar, and overall coherence. While students were motivated to tell their stories, the quality of their writing did not improve significantly as a result of digital storytelling.

Methodologically, the current study utilized a quasi-experimental design to measure the effect on students' writing skill with semi-structured interviews to explore students' attitudes towards using digital storytelling in teaching writing skills.

Previous research focused on exploring how digital storytelling can enhance specific aspects of the writing skills, such as grammar, punctuation, and clarity and many other different aspects. The present research seeks to explore how digital storytelling impacts students' overall writing skills performance as well as different areas of writing skills, and their attitudes toward this form of storytelling.

This study stands out from others by pointing out the lack of empirical research on digital storytelling in Libya, which emphasizes the importance and relevance of the current study, as mentioned in the literature review. By filling this void, the research could enhance the small amount of information available in this field and guide educational approaches in Libya. In other words, as highlighted in the literature review, the limited number of empirical studies on digital storytelling application within the Libyan context underscores the significance and timelines of the current research. By addressing this gap, the study has the potential to contribute

to the limited body of knowledge in this area and inform educational practices in Libya.

Methodology

Participants

The participants of this research are first-year secondary school students in Zliten. The sampling is comprised of 50 first-year secondary school students at Al-Shaima Secondary School for Girls. They were distributed equally (25 students in each group) to the control and treatment group. The selection of first-year secondary school students for the research sample is due to many reasons according to many teachers and inspector years' of experiences. Many teachers and inspectors stated that students at this level are expected to move from basic sentence construction to more complex and structured writing, making it an ideal period to introduce innovative instructional methods. The control and the intervention group had their writing lessons in two separate classes and in the same semester; the second semester, 2024/2025. Both groups are taught by the same teacher (the researcher). The study lasted for two months.

Data collection and procedures

To answer the research questions, the study used two data collection methods for data collection which were a quasi-experimental and a semi-structured interview. The quasi-experiment investigated the effect of using digital storytelling on improving writing skills. For qualitative data, semi-structured interviews were used to probe students' perceptions of using digital storytelling as a strategy for teaching writing.

The type of quasi-experimental design employed in this study where there is pre-test and post-test for both the control and treatment group is known as the non- equivalent group pre-test and post-test design. In this design, the participants were not randomly assigned to the control and treatment group, and the groups were not equivalent at the beginning of the study. However, both groups were tested before and after the treatment, allowing for a comparison of changes in the dependent variable during the study.

In this study, both groups are taught by the same teacher. The teaching method of the control group was the traditional approach that the teacher previously followed in the last semester "teacher-centered approach". The experimental group used a digital storytelling strategy and the content of the digital storytelling is based mainly on different topics in the curriculum

of first-year secondary school students, the digital storytelling presented by the teacher and the students were asked to try designing similar digital storytelling using PowerPoint. However, the pre- and post- tests were given to the participants in each group after the introductory class. The tests are organized by the researcher to assess certain aspects of writing and the content was based on the curriculum of first-year secondary school student. Moreover, the tests were reviewed by three phD holders. The tests consisted of four different tasks, including multiple-choice to assess students' word choices, sentence punctuation to assess students' ability to use the punctuation correctly, verb forms (verbs form assessment), and a writing essay task that required students to write an essay that focused on organization, punctuation, clarity, and coherence. The pre-test was timed, by giving students two hours to complete the test. The papers were manually scored and the results were subjected to a paired sample t-test to identify two groups with similar level. The researcher carefully selected two classes that were closely matched in terms of pre-test scores.

At the end of the lessons, a post-test was conducted to assess the final achievement of the participants' writing skills. The test consisted of four different tasks designed to assess the different aspects of writing, including vocabulary, verb forms, punctuation, clarity, coherence, organization of essay and ideas, and overall performance.

In addition, a semi-structured interview was carried out to investigate the perceptions towards the use of digital storytelling in teaching writing skills according to the intervention group members' points of view. The questions were designed by the researcher to evaluate students' perceptions towards the effectiveness of using digital storytelling in teaching writing skill. The researcher used both Arabic and English languages to probe students' attitudes and the answers were translated by the researcher and reviewed by a PhD holder.

Ethical consideration

In this study, all ethical issues were taken into account. In the introductory class at Al-Shaima Secondary level School for Girls, the researcher informed the participants that they had the right to withdraw from participating in the course of the study at any time, and their real names were never released in writings or in data discussions for the sake of their privacy and confidentiality.

Furthermore, to enable the researcher to probe for further clarification, elaboration, and explanation, participants were given the freedom to use their first language to express their attitudes and opinions precisely (Welch & Piekkari, 2006).

To avoid bias, the interview was tested with a few participants and revise questions that may seem biased or unclear, the interviewer remain neutral, use the same tone, and do not give verbal or non-verbal cues that may influence responses. In addition, the interviewer use audio recordings and transcribe verbatim to avoid bias, and compare interview findings with other data sources to cross-validate.

Results and Discussion

The researcher conducted an independent sample t-test to compare the post-test scores between the control group and the experimental group.

Table 1: Results of the Mean Marks of the Control and Experimental Groups

		Mean	N	Std. Deviation	T	Df	Sig
Pair 2	Control 2	15.960	25	7.629	0.872	24	0.392
	Experimental 2	13.640	25	6.726			

The above table presents the overall mean marks of both groups: the control and experimental groups. It is clear from the above table that the mean score of the first group after conducting the posttest was 15.960 with a standard deviation of 7.629, while the mean score of the second group after conducting the posttest was 13.640 with a standard deviation of 6.726, as was the result of the T. test at 0.872 with a probability value of 0.392. As the observed level of significance was greater than the significance level of 0.05. Therefore, the null hypothesis that the means of the post-test for the first group and the post-test for the second group are equal is accepted, and it was decided that there are no statistically significant differences at the level of significance (0.05) Hence, these figures signified that there is no obvious improvement in the performance of the control and experimental groups in the posttest.

The discrepancy of findings highlights challenges related to students' limited vocabulary, lack of ideas, and fear of speaking loudly.

Additionally, difficulties may arise from external factors like the language aspect, development aspect, external challenges, and existing knowledge when implementing storytelling in teaching writing skill. Moreover, students often concentrate more on creating multimedia elements rather than the quality of the written context and students with weak writing foundations may struggle to express ideas clearly, even if they are motivated by digital storytelling.

The second research question in this study aimed to shed lights on students' attitudes towards the use of digital storytelling to enhance writing skills. The interview findings suggest that digital storytelling encourages students to engage in writing.

It can be concluded that, regarding to pre- and post- tests results, for both groups, the p-value exceeded 0.05 in some writing areas rather than others, showing that the digital storytelling strategy intervention did not significantly impact the post-test performance of the experimental groups when compared to the control group. The findings revealed that, the use of digital storytelling strategy had a significant effect on students' writing performance in some areas of writing (vocabulary, clarity, and coherence usage in writing) for several well-supported reasons. First, digital storytelling combines text, images, audio, video, and narration, which creates a rich, contextual environment which helps learners to understand words in context, retain vocabulary through visual auditory reinforcement, connect meaning with imagery and voice. Second, digital storytelling requires learners to organize ideas into a clear narrative structure (beginning, middle, end), improving coherence and clarity of thoughts and expression. The use of digital storytelling did not lead to an improvement in punctuation and verb forms. However, the study showed a limited impact on punctuation and verb forms because learners concentrate on narrative flow, creativity and visuals. Most digital tasks lack direct grammar instruction and feedback, and digital storytelling are often spoken or visually guided, reducing the attention paid to writing mechanics such as punctuation usage.

In addition, the participant's attitudes toward the use of digital storytelling in teaching writing skills, the results revealed that the participants of the study expressed positive attitudes toward the use of digital storytelling, indicating that they found this method more engaging, motivating, interesting, and effective for improving writing skill which correlates.

Conclusion

The study aimed to investigate the effect of using a digital storytelling strategy on first-year secondary school students' writing skill performance and their attitudes toward this strategy.

Concerning the first research question that investigated the effect of using digital storytelling in improving first-year secondary school students writing skills, the research results indicated that there was no statistically significant variation in the average scores of the two groups. For both groups, the p-value exceeded 0.05 in some writing areas rather than others, showing that the digital storytelling strategy intervention did not significantly impact the post-test performance of the experimental groups when compared to the control group. The findings revealed that, while the use of digital storytelling strategy had a significant effect on students' writing performance in some areas of writing (vocabulary, clarity, and coherence usage in writing), the use of digital storytelling did not lead to an improvement in punctuation and verb forms.

Furthermore, the study aimed to seek out the participant's attitudes toward the use of digital storytelling in teaching writing skills, the results revealed that the participants of the study expressed positive attitudes toward the use of digital storytelling, indicating that they found this method more engaging, motivating, interesting, and effective for improving writing skill. To illustrate, the interview findings suggest that digital storytelling encourages students to engage in writing. Moreover, study participants found that utilizing digital storytelling assists them in brainstorming ideas and gaining a deeper understanding of various subjects. In addition, participants of the study stated that digital storytelling helped them to improve vocabulary and grammar usage when they wrote about different topics. As a result, the alternative hypothesis, which stated that there were significant differences in proficiency between groups, was accepted regarding vocabulary, clarity, and coherence. While the null hypothesis, which stated that there were no significant differences in proficiency between the two groups, was accepted, regarding the improvement of grammar namely the choice of correct tense, and punctuation use in writing skills.

REFERENCES

Abdulwahed, S. (2010). Exploring students' perceptions of ESL writing. *Writing English Language Teaching*. Vol 4, 73-80.

Avici, I. (2019). The effect of digital storytelling on visual memory and writing skills. *Computers and Education, 94*, 298-299.

Castillo, L., Quinonez, A., & Gonzalez, P. (2021). Using Digital Storytelling as a Strategy for Enhancing EFL Writing Skills. *International Journal of Emerging Technologies in Learning,* 16 (13). https://doi.org/10.3391/ijet.v16i13.22187

Chappell, V. (2011). What makes writing so important? Retrieved December 2012.

Dar, M. f. & Khan, I. (2015). Writing anxiety among public and private sectors Pakistani undergraduate university students. *Pakistan Journal of Gender Studies, 10* (1), 121-136, http://anxiety amongpublic

Leong, L. M., & Jafre, M. Z. (2018). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *The Turkish Online Journal of Educational Technology*, 17(2),97-105.

Lim, P. R., & Noor, N. M. (2019). Digital storytelling as a creative teaching method in promoting secondary school students' writing skills. International Journal of Interactive Mobile Technologies,

Lion, I.A. (2017). Digital storytelling in an elementary classroom: Going beyond entertainment. *Pro media Social and behavioral Sciences, 69*, 385-395.

Niemi, H., & Multisilta, J. (2016). The use of digital storytelling to support learning and foster creativity in the classroom. *Journal of Educational Technology & Society*, 19(3), 75-88.

Robin, B. (2008). *Digital Storytelling: A Powerful Technology Tool for the 21st Century Classroom.* The College of Education and Human Ecology, The Ohio State University, 47(3), 220-228. Doi:

Tamim, M., Lowerison, G., & schmid, R. (2011). A multi-year investigation of the relationship between pedagogy, computer use and course effectiveness in post-secondary education. 23(1), 1-14.

Walsh, K. (2010). The importance of writing skills: Online tools to encourage success.Emerging EdTech. Retrieved from

Welch, C., & Piekkari, R. (2006). A critical turn in qualitative research: Methodological innovations for research practice. In Handbook of qualitative research methods in marketing (pp. 206-220). Edward Elgar Publishing.