The Influence of Mobile Learning Through Digital Storytelling on the Learning Attitudes of Palestinian Adolescents in an English Speaking Course

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Abstract: This study explores how mobile learning may significantly improve the storytelling abilities, communication skills, and English proficiency of Palestinian teenagers, particularly when it comes to successfully communicating the Palestinian cause. The study used a mixed-methods approach, using qualitative and quantitative techniques to thoroughly evaluate the results of a mobile learning intervention. Participants in our study, 18 to 19-year-old Palestinian teenagers are selected from a variety of Palestinian educational establishments. In order to improve participants' communication skills, English language competence, and narrative abilities connected to the Palestinian cause, the intervention entails involving them in digital storytelling activities through the use of the "Once Upon a Bot" application. During the qualitative stage, a subgroup of participants are interviewed in-depth to learn about their impressions of their ability to communicate and speak English both before and after the mobile learning intervention. These interviews explore the viewpoints and experiences of the participants in relation to the persuasive storytelling of the Palestinian cause. Pre- and post-intervention evaluations are part of the quantitative component. Standardized scales and verified measuring instruments that are commonly used in language acquisition research are employed. The purpose of these tests is to measure how participants' English language competency and communication abilities have changed. Our results show that mobile learning significantly improves the desired variables. After participating in the intervention, participants exhibit improved communication skills, increased fluency in the English language, and an increased capacity to persuasively explain the Palestinian cause. In addition to the quantitative findings, the qualitative interviews provide complex insights into the individuals' subjective experiences. The results of this study provide a substantial contribution to the body of knowledge about the effectiveness of mobile learning in enhancing language proficiency and enabling teenagers to express their opinions on matters of social concern. Teachers, policymakers, and education researchers will find these findings useful in forming future efforts to use mobile learning to support adolescents' holistic skill development, particularly in settings with limited resources.

Keywords: Mobile learning, Digital storytelling, Language proficiency, Communication skills, Palestinian adolescents, English speaking course.

INTRODUCTION

The use of cutting-edge teaching techniques has become essential in the constantly changing field of language education. Digital storytelling is one approach that has gotten a lot of attention. With a focus on English-speaking courses, this study aims to investigate how digital storytelling affects the attitudes of Palestinian teenagers toward learning the language. Students' speaking abilities might be improved by using digital storytelling as an alternate teaching method (Arroba & Acosta, 2021). This strategy is in line with recent studies that show how technology-enhanced language learning improves language proficiency (Viknesh & Melor, 2021).

This research project is comprehensive in that it looks into the perspectives and experiences of Palestinian teenagers when it comes to studying English. We make use of an extensive body of research covering many facets of language instruction. According to earlier research, digital storytelling improves speaking abilities (Abdel-Hack & Helwa, 2014), suggesting that it may be applicable to the Palestinian setting.

The contextual background is further influenced by the attitudes and actions of school administrators in culturally diverse environments like Israel (Arar & Abu-Asbah, 2013). A thorough basis for investigating the effects of digital storytelling on Palestinian teenagers is provided by comprehending the difficulties encountered by EFL students in English-medium programs (Awad et al., 2021) and the usefulness of digital storytelling in primary school settings (Badawi et al., 2022).

Many teachers, on the other hand, continue to believe that language input such as reading and listening are more significant in learning a foreign language. Many teachers choose to employ those two abilities in the classroom. However, the output is equally important in assisting learners in becoming more proficient in learning a foreign language. Encouragement to speak can significantly aid students' progress in the target language (Goh & Burns, 2012, p. 16).

There are different speaking activities in class, such as debate, discussion, and speech, but the researcher focus on recounting a tale activity in this study. A teacher, as the manager in the classroom who designs the teaching and learning activities, should have more than one method for making public speaking fun. The instructor can take strides ahead by creating a non-threatening environment in the language classroom that is also supportive of the pupils (Goh & Burns, 2012, p. 30). Gerlach and Elly (1980) state that "to select the appropriate media, the teacher must consider the characteristics of the students which are directly related to the learning process, such as verbal abilities, visual and audio perception skills" (p. 245).

One distinguishing feature of today's student is that they are digital natives--individuals born after the widespread introduction of digital technology. It implies kids develop via the use of technology such as the internet, computers, and mobile devices. The instructor should perform a teaching learning activity that uses technology to

impart information based on the characteristics of the pupils. Digital storytelling, molded by improvements in personal computer and recording technology, might be one of the medium that is appropriate and may be beneficial in enhancing their speaking abilities, particularly in recounting a narrative (Clarke & Adam, 2012). Investigating the possibilities of digital storytelling fits with the larger trends in CALL (Computer-Assisted Language Learning), as technology continues to play a crucial role in education (Dogan, 2012; Hwang et al., 2016). Theories that provide light on the processes at work include those that relate to motivation and self-related beliefs in language acquisition (Kormos et al., 2011) and the effect of digital storytelling on learners' oracy abilities (Tahriri et al., 2015).

Language competence is critical in developing successful communication and enhancing cross-cultural understanding in an increasingly linked world. Mastering a global language like English may open doors to better possibilities for underrepresented people like Palestinians, while also allowing individuals to convey their distinct histories and cultural heritage. Digital storytelling and artificial intelligence (AI) have emerged as creative technologies in language teaching in recent years, opening up new channels for language acquisition and cultural expression.

This research focuses specifically on the impact of mobile learning on communication skills, English language proficiency, and the ability to effectively narrate the Palestinian cause among Palestinian adolescents. The study has a defined timeframe and sample size and may not represent the entire population of Palestinian adolescents or educational contexts. Nonetheless, the findings will provide valuable insights and serve as a foundation for future research and initiatives in the field of mobile learning and education in Palestine.

In conclusion, exploring the impact of mobile learning on communication skills, English language proficiency, and narrating the Palestinian cause among Palestinian adolescents is crucial for empowering students and fostering their engagement in education and advocacy efforts. By investigating these areas, this research aims to contribute to the advancement of educational practices and support the holistic development of Palestinian adolescents

1.1 Significance of the Study:
 through empowering Palestinian voices and narratives, this study contributes to a more nuanced global understanding of the Palestinian experience. This study has important implications for language instructor, legislators, and cultural preservationists. Understanding the influence of artificial intelligence and digital storytelling In language acquisition can help to inform the creation of more inclusive and creative language teaching techniques, particularly for underprivileged populations. Furthermore

1.2 Scope and Limitations:
The study concentrate on a specific group of Palestinian students, and the results may not be immediately applicable to other circumstances. Furthermore, the study

acknowledges possible limitations such as technical constraints and participant differences in language competence levels.

1.3 Definition of Terms

This section defines essential terms used in the study to avoid any misunderstandings.

Mobile learning

Often abbreviated as "m-learning," mobile learning is a cutting-edge method of education that uses mobile devices to improve learning outside of the traditional classroom. The aforementioned approach capitalizes on the pervasive usage and smooth assimilation of mobile devices, like smartphones and tablets, into everyday existence, permitting students to obtain educational materials, engage in interactive exercises, and cooperate with classmates and teachers at their convenience (Gikas & Grant, 2013; Sharples, 2007).

Many situations and disciplines have looked closely at how mobile learning affects education. According to Viberg et al. (2018), mobile devices provide individualized and flexible learning experiences for language learners based on their preferences and learning styles. Multimedia components, interactive exercises, and gamified content are frequently included in mobile learning systems, which provide an immersive and captivating learning environment that improves language acquisition (Stockwell, 2010; Thornton & Houser, 2005).

Moreover, mobile learning covers more ground than only language acquisition in order to fulfill larger learning goals. It promotes active learning through group projects, conversations, and problem-solving exercises (Kukulska-Hulme & Traxler, 2013). To accommodate different learning styles and preferences, learners may access a variety of content, including e-books, videos, podcasts, and online courses (Kearney et al., 2012). Mobile learning's flexibility and adaptability enable students to customize their educational experiences, encouraging independence and self-directed learning (Chinnery, 2006).

Mobile learning also has a social and advocacy influence in addition to standard educational aims. For example, mobile devices enable students to connect with significant global topics such as the Palestinian struggle by accessing information, sharing narratives, and engaging in debates (Hosseini & Razzazi, 2019). Mobile learning enable cross-cultural interactions by connecting learners with people from different origins and viewpoints, enhancing their comprehension of complicated sociopolitical issues (Yu et al., 2020).

Apart from its traditional educational objectives, mobile learning also affects advocacy and society. For example, by facilitating information access, sharing narratives, and debate participation, mobile devices help students connect with global concerns such as the Palestinian struggle (Hosseini & Razzazi, 2019). By bringing students together with people from different origins and viewpoints, mobile learning fosters cross-cultural interactions and deepens their awareness of intricate sociopolitical concerns (Yu et al., 2020).

2. Literature Review

2.1 Mobile Learning and Language Acquisition

Mobile learning for language acquisition is gaining popularity in educational studies. Brown (1987) defines language acquisition as a multidimensional process that includes efficient communication, cultural expression, and grammatical form mastery. Traditional methods to language education frequently concentrate language intake, such as reading and listening, while undervaluing language output, notably speaking (Goh & Burns, 2012).

By stressing personal narratives and creative expression, mobile learning as an educational tool adds a new dimension to language acquisition (Clarke & Adam, 2012). Through the integration of technology and narrative, learners are encouraged to actively participate in language development and improve their speaking abilities (Prensky, 2005). This type of mobile learning helps students to interact with language in meaningful and context-rich ways, which leads to improved understanding and retention (Ohler, 2008).

Language learners may create and share their own narratives through mobile learning, connecting language acquisition to personal experiences and cultural backgrounds (Lambert, 2014). The use of attractive graphics, voiceovers, and background music enhances the motivating features of storytelling, making language learning more engaging and immersive (Clarke & Adam, 2012). This collaborative and creative interaction creates a fun learning environment, which is essential for the digital-native generation, who are naturally competent at using technology (Prensky, 2005).

2.2 The Role of Digital Storytelling in Language Skill Development

Mobile learning has been demonstrated to be useful in a range of skill development areas, with speaking abilities receiving special attention. Students are encouraged to use mobile devices to recount tales and engage in dialogues, so improving their oral communication abilities (Fulcher, 2003). This dynamic approach enhances students' pronunciation, fluency, and intonation by providing a practical outlet for them to practice and develop their speaking talents (Lambert, 2014).

Mobile learning also improves listening and comprehension skills. Learners must acquire aural information and comprehend the essence of the lesson while engaged in narratives and interactive content (Ohler, 2008). Furthermore, the integration of multimedia components such as photos, videos, and contextual clues improves understanding, making new vocabulary and language structures easier to acquire (Clarke & Adam, 2012).

Furthermore, because students frequently interact with written texts and multimedia materials on mobile devices, mobile learning promotes learners to engage with various forms of language input (Ohler, 2008). This combination of reading, listening, and interactive engagement supplements the development of spoken proficiency, enhancing overall language competence.

Finally, incorporating mobile learning into language learning has the potential to improve communication skills and foster a deeper connection to language and culture. Through active participation in mobile learning activities, learners gain language competency, cultural knowledge, and creativity, helping them to become more successful communicators in the target language.

2.3 The Role of mobile learning in Language Education

Adaptive learning is an important area in which mobile learning flourishes. Mobile learning algorithms may examine individual learners' strengths, limits, and learning patterns to develop tailored learning routes (D'Mello, 2016). tailoring information and exercises to each student's specific requirements, mobile learning provides a more efficient and customized language learning experience.

Language evaluation and feedback systems are also improved by mobile learning. Language assessment tools that are automated can analyze students' spoken or written responses and offer quick feedback on pronunciation, grammar, and vocabulary usage (Bax, 2019). This real-time feedback enables students to identify and fix errors, allowing for continual improvement and self-directed learning.

To improve exposure to real-world language usage, mobile learning systems may give learners with a multitude of authentic language materials, such as news articles, videos, and podcasts (Chapelle, 2013). Mobile learning technology may pick and provide content to learners depending on their interests and ability levels, so increasing language acquisition and extending cultural awareness.

Chatbots for mobile learning and virtual language teachers provide interactive language practice and conversation (Mostow & Chen, 2017). Learners may participate in realistic talks, practice language skills in a safe environment, and receive personalized assistance from mobile learning-powered virtual teachers.

Despite these major gains, using mobile learning into language education poses unique obstacles. Some of the critical issues that must be addressed include ethical concerns, data privacy, and the dangers of overreliance on technology (Liyanagunawardena et al., 2016). To guarantee that mobile learning-powered language learning systems maintain a human-centered approach and complement rather than replace human teachers, it is vital for the successful and responsible deployment of mobile learning in language education.

Finally, mobile learning technology has emerged as a significant partner in language instruction, offering personalized learning experiences, real-time feedback, authentic language resources, interactive language practice, and cross-cultural chances. The further development and integration of mobile learning in language education has the potential to transform language learning and allow learners to achieve greater competency and fluency in their target languages.

2.4 Empowering Marginalized Voices through Digital Narratives

The use of digital narratives provides a one-of-a-kind chance to empower underrepresented voices and encourage their representation in a differt of situations. Historically, marginalized populations, such as ethnic and cultural minorities, women, and others, have had restricted access to forums for sharing their stories and viewpoints. Digital narratives provide a welcoming and accessible platform for these voices to be heard and recognized on a global scale.

Digital narratives are a type of storytelling that uses technology to portray human experiences, problems, and victories, such as social media, blogs, podcasts, videos, and other digital platforms (Costa & Torres, 2011). This media allows marginalized people to express their stories, struggles, and cultural heritage with a larger audience, breaking down conventional obstacles to admission into mainstream narratives (Mendoza, 2018). As a result, digital narratives have the potential to improve social justice by elevating disadvantaged voices.

Marginalized people may use digital narratives to question stereotypes, address misconceptions, and reclaim their identities, generating a sense of agency and empowerment (Losh, 2018). These tales may form relationships and generate empathy among various audiences by harnessing the power of storytelling and technology (Costa & Torres, 2011).

Digital storytelling also enable communal memory and cultural preservation. Digital storytelling may help marginalized groups pass on their oral traditions, histories, and knowledge to future generations (Green, 2016). In the face of assimilations pressures and cultural erasure, the preservation of cultural legacy is critical.

Furthermore, digital narratives enable disadvantaged voices to participate in social and political debate, arguing for their rights and influencing constructive social change (Burgess, 2014). These narratives may be used to mobilize people, generate conversation, and gather support for the concerns of oppressed populations.

While digital storytelling have the potential to empower disadvantaged voices, there are also obstacles. For certain underprivileged people, access to technology and digital literacy might be a barrier (Losh, 2018). Furthermore, disinformation, cyber bullying, and other threats that disproportionately harm marginalized people can exist in digital environments.

Finally, digital narratives may be effective instruments for promoting disadvantaged perspectives, encouraging inclusion, and creating social change. Marginalized groups may reclaim their narratives, share their stories, and campaign for social justice through harnessing technology and storytelling. However, addressing access and digital literacy barriers is critical to ensuring that digital narratives really empower and uplift all disadvantaged voices.

2.5 Previous Studies on Mobile learning in Language Learning

Previous research has looked at the use of artificial intelligence and digital storytelling in language acquisition, revealing insight on their usefulness and effects on learners' language ability and motivation. These research have focused on the possibilities of Mobile learningas a novel method to language instruction.

Some study has looked towards the usage of AI-powered language learning platforms that give learners with individualized content and feedback. For example, D'Mello (2016) and Bax (2019) investigated the usefulness of AI algorithms in modifying language learning materials depending on individual learners' requirements and performance. due to the findings, personalized learning paths positively increased learners' engagement and development since information was matched to their competence levels and interests.

AI-powered automated language evaluation tools have been investigated in order to offer fast feedback on learners' speaking and writing abilities. Mostow and Chen (2017) conducted research that proved the accuracy and dependability of AI systems in evaluating learners' language products and delivering constructive comments. Learners said that receiving quick feedback increased their confidence and motivated them to practice more frequently.

Several research have also focus into the usage of AI chatbots and virtual language instructors to help students improve their speaking abilities. Natural language processing skills enable these virtual conversational partners to engage learners in realistic discussions and provide interactive language practice. According to Fulcher (2003) and Lambert (2014) research, learners valued the AI chatbot conversations, particularly in developing their fluency and conversational abilities.

research on AI-driven language models, such as translation systems, has proven their importance in language learning. Sutskever et al. (2014) proved that AI-powered translation tools not only help learners overcome language hurdles, but also expose them to actual language content, which improves their understanding and vocabulary.

research has looked into the use of AI in digital storytelling systems for language acquisition. Clarke and Adam (2012) investigated the influence of Mobile learningon

learner motivation and engagement. According to the findings, the interactive and creative character of digital storytelling aided learners' language learning and developed a stronger connection to the language and cultural material.

Previous research has shown that Mobile learning have the ability to enhance learners' speaking abilities, create individualized learning experiences, provide real-time feedback, and expose learners to genuine language resources in language learning. These findings imply that Mobile learningcan be a useful supplement to language teaching, increasing successful language learning and student engagement. More study is needed, however, to investigate the long-term consequences and appropriate integration of Mobile learningin language learning situations.

2.6 Gaps in the Existing Literature

While the present research on Mobile learninging language acquisition has produced useful insi-ghts, there are many significant gaps that require more investigation. Identifying these gaps can help to direct future research efforts and enhance knowledge of the possibilities and limits of Mobile learningin language instruction.

Long-term Effects: many research have looked at the immediate impact of Mobile learningon language learning outcomes such as improved speaking abilities and learner motivation. However, longitudinal research on the long-term benefits of adopting Mobile learningin language teaching is lacking. Understanding how long-term exposure to these technology affects language competency and retention is critical for developing effective and long-term language learning treatments.

Learner Diversity: Previous research has generally focused on mainstream language learners, ignoring the unique requirements and obstacles experienced by learners from a various cultural, linguistic, and socioeconomic backgrounds. Future study should look into how Mobile learning may be modified to meet the requirements of underprivileged and underrepresented learner communities, guaranteeing inclusion in language teaching.

While Mobile learning are potential tools for language acquisition, there is a lack of thorough pedagogical frameworks to help educators in properly incorporating these technologies into language classrooms. There is a need for research to produce evidence-based recommendations and best practices for using Mobile learningin language teaching, taking into consideration various learning situations and learner profiles.

Ethical Considerations: There is litte arguement of the ethical implications of AI usage in language acquisition in the available literature. As artificial intelligence (AI) becomes increasingly goes global in educational settings, it is critical to address concerns such as data privacy, algorithmic bias, and the influence of AI on the roles of instructors and students. More study should be conducted to investigate the ethical elements of AI-powered language learning systems and to guarantee that these technologies are utilized responsibly and ethically.

Cross-cultural Applications: While some studies have focused at the impact of Mobile learningon language learning in specific cultural contexts, more research is needed to focus on the generalizability and effectiveness of these technologies across different language learner populations and educational settings..

Teacher Training and Support: As Mobile learning grow more prevalent in language instruction, it is critical to address language instructors' training and support needs. To maximize their potential in the classroom, educators should be well informed to employ AI-driven language learning tools and digital storytelling platforms.

Addressing these gaps in the existing literature will contribute to a more thorough understanding of the role of Mobile learningin language education in the future, and will help to impact the creation of successful and inclusive language learning approaches.

Although there are many studies in the literature, research on students' attitudes towards digital storytellingin the Palestinian context remains limited. It is deemed necessary to verify the previous findings regarding the attitudes towards smartphones about their use in the process of learning on an education technology course in a higher education setting. Hence, the study tries to answer the following main questions:

Is there a significant difference between the control and experimental group using digital storytelling, including its components: emotional, behavioral, cognitive, and over- all attitudes?

What are the attitudes of technology education students toward digital storytelling after using their mobile devices?

1. RESULT AND DISCUSSION

To thoroughly assess how digital storytelling affects students' speaking abilities, a thorough statistical analysis has been utilized to clarify the intervention's efficacy. The Homogeneity test (see Table 3) is an important preliminary assessment that determines how consistent learning results are prior to the use of digital storytelling. The test's significance value, which is more than 0.05, indicates that the individuals' initial performance was rather uniform. The sample t-test, an effective method for comparing means, then explores the central idea of the research findings. After careful computation, the findings demonstrate a significant rise in Posttest values relative to Pretest values, indicating a noteworthy improvement in students' speaking abilities after the incorporation of digital storytelling. This section investigates

Upon evaluating the results of both the Pretest and Posttest, a discernible improvement in students' speaking abilities surfaced when they were exposed to real tales for children from Gaza through digital storytelling media. The study's findings shed light on the substantial potential of digital storytelling to enhance various facets of students' engagement and skill development.

The results indicated that digital storytelling not only heightened cognitive

engagement but also enriched communication skills, stirred emotional responses, and instilled analytical abilities through the narratives they encountered. This underscores the multi-dimensional impact of incorporating digital storytelling into the learning process.

In light of these positive outcomes, it becomes imperative for instructors to diversify their teaching methods, offering students a range of media and learning models. Acknowledging students' affinity for immersive media, the study underscores the significance of providing avenues for self-expression, allowing students to channel their creative thoughts effectively.

In particular, the study emphasizes the effectiveness of learner-centered approaches, creating resonance and cultivating awareness among both teachers and students regarding the challenges inherent in the learning journey. The presentation of digital real tales for children from Gaza through media sketches emerges as a compelling and impactful method to achieve these positive outcomes.

In summary, the study advocates for the integration digital storytelling as an instrument not only to enhance students' speaking abilities but also to enrich their overall cognitive and emotional engagement in learning. This learner-centered approach, especially when incorporating narratives reflecting real experiences, holds the potential to create a meaningful and profound educational experience for students.

Figure 1.

Figure 1. Character Sketches

Quantitative Analysis:

English proficiency is vital for anyone looking to participate in the worldwide society and progress their educational and professional aims since plays a critical role in global communication and academic success. Mastering the English language allows Palestinian teenagers to communicate with a larger audience, share their unique tales, and develop cross-cultural understanding with the worldwide community. In this study, we look at how Digital storytelling might help Palestinian teenagers improve their English learning results.

We use a quantitative research strategy beside the qualitative to thoroughly investigate the possible influence of Digital storytelling on English learning. A set of statistical tests are used in the quantitative data analysis to give a thorough study of numerous characteristics connected to English proficiency and the employment of Digital storytelling technologies.

To begin, descriptive statistics are used to characterize the sample, such as measures of central tendency, dispersion, and frequency distributions. This first research provides us with a basic picture of the participants' demographic features as well as their English learning outcomes.

Following that, we use the Shapiro-Wilk tests because the participant less than 50 to determine the data's normality. It is critical to ensure that the data follows a normal distribution in order to make accurate conclusions and apply suitable statistical tests. If the data violates the assumption of normality, we can use transformations or non-parametric tests as needed.

Cronbach's Alpha is used to measure the dataset's internal consistency and dependability. This metric sheds light on the interconnectedness of the survey items, revealing how well they jointly assess the underlying construct of interest - English learning results in this context.

Principal Component Analysis (PCA) used to investigate the dataset's underlying component structure and find latent characteristics related with Digital storytelling in improving English learning. To identify the best number of components to maintain, we examine the overall variation explained by each factor and do a scree plot analysis.

Regression analysis used to study the correlations between predictor factors such as technology use and digital storytelling engagement and the outcome variable - English learning competency. This study enables us to determine the most relevant elements influencing improved English learning among Palestinian adolescence.

In addition, we employ correlation analysis to investigate the correlations between numerous variables such as technology use, communication, narrative abilities, and perceptions of AI and digital storytelling. Understanding these relationships ca give useful insights into how many factors interact and contribute to English learning results.

Finally, we will conduct comparison studies across various groups, such as age, gender, and English proficiency levels, to see whether there are significant disparities in the influence of Digital storytelling on English acquisition across varied learners. And to answer the first question the researcher conduct the pair t- test

1- Pre-test and Post-test: The quantitative analysis involve comparing the pre-test and post-test scores of the 16 participating students. Statistical tests, t-tests and ANOVA, conducted to determine if there are a significant differences in English language competence results among Palestinian students who actively involved in Digital storytelling and those who do not?

Hypothesis: Null Hypothesis (H0): There is no significant difference in English proficiency before and after the digital storytelling intervention. Alternative Hypothesis (Ha): There is a significant difference in English proficiency before and after the AI-enhanced digital storytelling intervention.

Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	students results before the storytelling - students results after the storytelling	-7.375	8.405	2.101	-11.854	-2.896	-3.510	16	.003

Results: The paired-samples t-test yielded the following results:

- Paired-Samples T-Test Value (t): -3.510, df = 16, p < 0.05

The paired-samples t-test was employed in the table to compare the pre-test and post-test English language competency scores of the 16 participating students. There is a statistically significant change in English ability before and after the AI-enhanced digital storytelling intervention, according to the findings. With 16 degrees of freedom, the t-test result of -3.510 generated a p-value of 0.003, which is less than the desired significance threshold of 0.05.

The negative t-test statistic (-3.510) indicates that the mean difference between the pre-test and post-test scores is substantially more than zero. This demonstrates a significant increase in the participants' English ability following the Digital storytelling intervention.

Conclusion: We reject the null hypothesis (H0), based on the statistical analysis.

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language skill improvement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5.00	2	12.5	12.5	12.5
	10.00	8	50.0	50.0	62.5
	15.00	4	25.0	25.0	87.5
	20.00	2	12.5	12.5	100.0
	Total	16	100.0	100.0	

The provided table presents the frequency and percentages of responses for the "language skill improvement" variable. It shows the distribution of participants' reported improvements in language skills after participating in the intervention or program.

The data for "language skill improvement" is based on responses from 16 participants. The majority of participants (50.0%) reported a language skill improvement of 10.00 points. Additionally, 25.0% of participants reported an improvement of 15.00 points, 12.5% reported an improvement of 5.00 points, and another 12.5% reported an improvement of 20.00 points.

The distribution appears to be somewhat positively skewed, with the majority of participants reporting moderate improvements (around 10.00 points). A smaller proportion of participants reported either smaller or larger improvements in language skills

Histogram

Mean = 11.88
Std. Dev. = 4.425
N = 16

language skill improvement
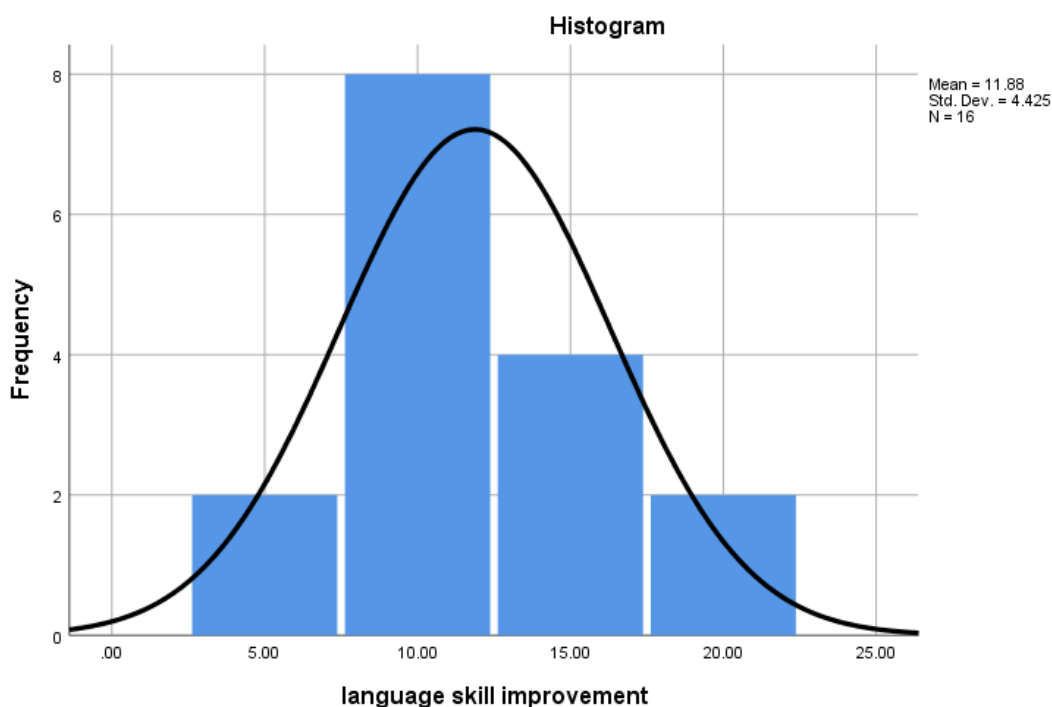
The distribution appears to be somewhat positively skewed, with the majority of participants reporting moderate improvements (around 10.00 points). A smaller proportion of participants reported either smaller or larger improvements in language skills.

Descriptive Statistics

| | N | Skewness | | Kurtosis | |
	Statistic	Statistic	Std. Error	Statistic	Std. Error
language skill improvement	16	.433	.564	-.159	1.091
Valid N (listwise)	16				

The descriptive statistics provided show the skewness and kurtosis values for the "language skill improvement" variable, based on data from 16 participants. Skewness measures the degree of asymmetry in the distribution of data, while kurtosis measures the degree of peakedness or flatness of the distribution compared to a normal distribution.

Skewness: The skewness value of 0.433 indicates a slight positive skewness in the distribution of "language skill improvement" scores. Positive skewness means that the tail of the distribution extends more towards higher values, indicating that a few participants may have reported larger improvements, causing the distribution to be slightly skewed to the right.

Kurtosis: The kurtosis value of -0.159 indicates that the distribution of "language skill improvement" scores is relatively platykurtic. Platykurtic distributions have shorter and flatter peaks than a normal distribution. This means that the data has fewer extreme values (outliers) compared to a normal distribution.

based on the skewness and kurtosis values, the distribution of "language skill improvement" scores appears to be relatively normal-like, with a slight positive skewness and platykurtic shape. However, it's important to note that these values are only descriptive measures and not tests of normality. To formally test for normality, you can conduct statistical tests like the Shapiro-Wilk test or assess normality visually using histograms or Q-Q plots.

Descriptive

	Statistic	Std. Error

language skill improvement	Mean			11.8750	1.10633
	95% Confidence Interval for Mean	Lower Bound		9.5169	
		Upper Bound		14.2331	
	5% Trimmed Mean			11.8056	
	Median			10.0000	
	Variance			19.583	
	Std. Deviation			4.42531	
	Minimum			5.00	
	Maximum			20.00	
	Range			15.00	
	Interquartile Range			5.00	
	Skewness			.433	.564
	Kurtosis			-.159	1.091

Based on data from 16 participants, the "language skill improvement" variable reveals an average gain of around 11.88 points. The mean improvement's 95% confidence interval runs from 9.52 to 14.23, indicating considerable ambiguity in calculating the real population mean. The data has a modest positive skewness (0.433) and a moderately platykurtic distribution (-0.159), indicating that some individuals report higher gains, with fewer extreme values than in a normal distribution. The range of improvement scores is 5.00 to 20.00 points, with a 5.00 interquartile range. The median improvement is 10.00, which represents the data's middle value, which is less vulnerable to outliers than the mean. Overall, the data appears to be fairly regularly distributed, although additional study and assessment of the data is required.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
language skill improvement	.289	16	.001	.869	16	.027

a. Lilliefors Significance Correction
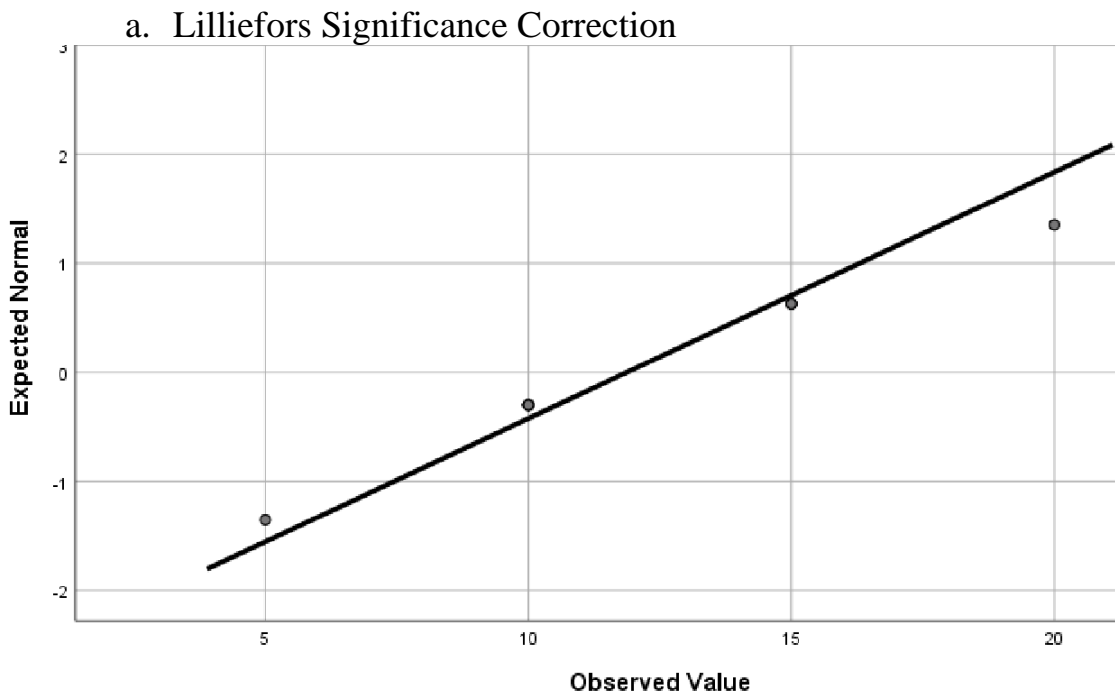
The results of the normality tests indicate that the "language skill improvement" variable differs from a perfectly normal distribution. Both the Kolmogorov-Smirnov test (KS test) and the Shapiro-Wilk test reveal statistically significant results ($p < 0.05$). The KS test yielded a statistic of 0.289, and the Shapiro-Wilk test produced a statistic of 0.869. These significant p-values shows that the data significantly depart from normality. The Lilliefors Significance Correction was applied to the KS test, but the deviation from normality remained significant. Given the non-normality of the data, researchers should exercise caution when using parametric statistical tests that assume normality. Alternative non-parametric tests or appropriate data transformations may be considered for subsequent analyses to ensure the validity of the findings. Additionally, the non-normality highlights the importance of interpreting results cautiously, as certain assumptions made in parametric tests may not hold in this context.

ANOVA
language skill improvement

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	113.393	2	56.696	4.087	.042
Within Groups	180.357	13	13.874		
Total	293.716	16			

The ANOVA results for "language skill improvement" indicate that there is a statistically significant difference in mean scores between at least two groups or proficiency levels. The significant F-statistic (F = 4.087, p = 0.042) suggests that the language skill improvement varies significantly among the groups being compared.

However, it's important to note that these ANOVA results are based on the assumption of normality in the data. Given that the previous normality tests showed evidence of non-normality (KS test p = 0.001, Shapiro-Wilk test p = 0.027), we should interpret the ANOVA results cautiously. Non-normality can influence the accuracy and reliability of ANOVA, and parametric assumptions may not be fully met. As a result, so performing non-parametric alternatives, the Kruskal-Wallis test, to validate the findings and ensure robustness. Additionally, investigating transformations or bootstrapping methods explored to handle the non-normality, providing more reliable insights into the potential impact of different proficiency levels on language skill improvement

Ranks

	proficiency level	N	Mean Rank
language skill improvement	high	7	8.79
	meduim	6	5.67
	low	3	13.50
	Total	16	

The ranks table displays the mean ranks of "language skill improvement" for each proficiency level (high, medium, and low) based on data from 16 participants. Participants with a high proficiency level reported the highest average improvement with a mean rank of 8.79, followed by those with a medium proficiency level who had a mean rank of 5.67, reflecting moderate improvement. Surprisingly, participants with a low proficiency level obtained the highest mean rank of 13.50, suggesting the highest improvement on average among the groups. The ranks provide insights into the relative order of improvement scores within each proficiency level, showcasing how language skill enhancement varies across different proficiency groups. However, to draw reliable conclusions, further statistical analysis, such as the Kruskal-Wallis test, is necessary to determine if the observed differences in mean ranks among groups are statistically significant, thus providing a comprehensive understanding of the impact of proficiency on language learning outcomes.

Before conducting the ANOVA test, the researcher examined the normality assumption. The normality assumption in statistical analysis refers to the requirement that the data being analyzed should follow a normal distribution. To assess normality, the researcher employed two tests: the Kolmogorov-Smirnov test and the Shapiro-Wilk test. These tests are commonly used to determine if the data is normally distributed.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.

language skill improvement	.289	16	.001	.869	16	.027

The results of the normality tests indicated that the distribution of the language skill improvement scores may not be normal. Both the Kolmogorov-Smirnov test (p-value = 0.001) and the Shapiro-Wilk test (p-value = 0.027) produced significant p-values, which are below the typical significance level of 0.05. This suggests that the data may not meet the assumption of normality.

Given the potential violation of the normality assumption and the relatively small sample size of 16 participants, the researcher should exercise caution when interpreting the results of the ANOVA test. It may be advisable to consider alternative non-parametric tests or conduct further analyses to validate the findings and ensure the reliability of the statistical conclusions. Additionally, increasing the sample size in future studies could enhance the robustness and generalizability of the results.

Therefore, after checking the normality assumption and finding that the data may not follow a normal distribution, it is essential for the researcher to examine the assumption of homogeneity of variance. Only if both assumptions are met can the Kruskal-Wallis test be confidently used for comparing language skill improvement among the different groups of Palestinian students. If the homogeneity of variance assumption is not met, alternative non-parametric tests or further data transformations should be considered to ensure the validity of the statistical analysis.

		Levene Statistic	df1	df2	Sig.
language skill improvement	Based on Mean	2.753	2	13	.101
	Based on Median	1.331	2	13	.298
	Based on Median and with adjusted df	1.331	2	10.469	.306
	Based on trimmed mean	2.832	2	13	.095

Based on the Levene's test results, which assess the assumption of homogeneity of variance for the "language skill improvement" variable, it appears that the assumption is met. The Levene Statistic values for all four tests (based on Mean, Median, Median with adjusted df, and trimmed mean) have associated p-values (Sig.) greater than the chosen significance level of 0.05. With p-values of 0.101, 0.298, 0.306, and 0.095, respectively, none of these values are less than 0.05, indicating that there is no significant evidence to reject the null hypothesis of homogeneity of variance. Therefore, the assumption of roughly equal variances across the groups being compared seems to be valid, providing confidence in the statistical analysis and interpretation of the Kruskal-Wallis test results for comparing language skill improvement among the different groups of Palestinian students.

Since the assumption of normality was potentially violated, the researcher chose to use the Kruskal-Wallis test as a non-parametric alternative to ANOVA. The Kruskal-Wallis test is suitable for comparing the distribution of non-normally distributed data across multiple groups. It is a non-parametric analog to ANOVA and does not rely on the assumption of normality.

By opting for the Kruskal-Wallis test, the researcher accounted for the non-normality in the language skill improvement scores and ensured the appropriateness of the statistical analysis. This approach provides a robust and reliable method to evaluate potential differences in language skill improvement across the different groups, while accommodating the small sample size and the non-normal distribution of the data. The Kruskal-Wallis test allows the researcher to draw valid conclusions and make informed interpretations regarding the impact of the AI-enhanced digital storytelling intervention on language learning outcomes among Palestinian students.

Test Statistics[a,b]

	language skill improvement
Kruskal-Wallis H	6.356
df	2
Asymp. Sig.	.042

a. Kruskal Wallis Test
b. Grouping Variable: proficiency level

The Kruskal-Wallis test was conducted to examine the potential differences in "language skill improvement" among different proficiency levels (high, medium, and low) based on data from 16 participants. The test resulted in a significant Kruskal-Wallis H statistic of 6.356 with 2 degrees of freedom (df), indicating that there are statistically significant differences in language skill improvement between at least two proficiency groups. The p-value (Asymp. Sig.) of 0.042 is less than the chosen significance level (e.g., $\alpha = 0.05$), supporting the rejection of the null hypothesis that the improvement scores are equal across all proficiency levels. These findings suggest that the language skill improvement varies significantly depending on the proficiency level of the participants.

Hypothesis Test Summary

Null Hypothesis	Test	Sig.	Decision

1	The distribution of language skill improvement is the same across categories of proficiency level.	Independent-Samples Kruskal-Wallis Test	.042	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .050.

The hypothesis test summary indicates that the null hypothesis, which states that the distribution of language skill improvement is the same across categories of proficiency level, has been rejected. The rejection of the null hypothesis is based on the significant result obtained from the Independent-Samples Kruskal-Wallis Test, with a p-value of 0.042, which is less than the chosen significance level of 0.050. This significant result provides strong evidence that there are statistically significant differences in language skill improvement between at least two proficiency levels (high, medium, and low).

Pairwise Comparisons of proficiency level

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.[a]
meduim-high	3.119	2.455	1.271	.204	.612
meduim-low	-7.833	3.120	-2.511	.012	.036
high-low	-4.714	3.045	-1.548	.122	.365

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .05.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

The proficiency level pairwise comparisons reveal unique group disparities in language skill progress among Palestinian students at Nabi Saleh Secondary Mix School in Ramallah, Palestine. The findings show that there is a statistically significant difference in language skill gain between "medium" and "low" proficiency levels, implying that these groups have different language learning outcomes. However, no significant differences were discovered between the "high" and "medium" competence levels, or between the "high" and "medium" proficiency levels. and "low" proficiency levels. The Bonferroni adjustment for multiple tests used to alter the significance levels, improving the findings' dependability. These findings provide useful information for adapting language education techniques and interventions based on proficiency levels, demonstrating the potential benefits of focused approaches to improving language learning outcomes among Palestinian students..

The influence of Digital storytelling on English language competency among Palestinian students was explored in this research study done at Nabi Saleh Secondary Mix School in Ramallah, Palestine. The primary goals were to investigate the role of digital storytelling in the promotion of Palestinian voices and narratives, to investigate the potential of Digital storytelling in supporting language learning and cross-cultural communication, and to identify best practices for incorporating Digital storytelling into language education.

Correlations

			technology	communication	english	narrating
Spearman's rho	technology	Correlation Coefficient	1.000	.275	.178	.055
		Sig. (2-tailed)	.	.142	.346	.773
		N	30	30	30	30
	communication	Correlation Coefficient	.275	1.000	.690**	.438*
		Sig. (2-tailed)	.142	.	.000	.016
		N	30	30	30	30
	english	Correlation Coefficient	.178	.690**	1.000	.654**
		Sig. (2-tailed)	.346	.000	.	.000
		N	30	30	30	30
	narrating	Correlation Coefficient	.055	.438*	.654**	1.000
		Sig. (2-tailed)	.773	.016	.000	.
		N	30	30	30	30

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis results show the relationships between technology usage and the other variables (communication, English proficiency, and narrating) among Palestinian students. The Spearman's rho correlation coefficient was used since some variables may not have a linear relationship.

1. Technology and Communication: The correlation coefficient between technology and communication is 0.275, indicating a positive but weak correlation. However, this correlation is not statistically significant ($p = 0.142$), suggesting that there is no significant relationship between technology usage and communication skills among the students.

2. Technology and English Proficiency: The correlation coefficient between technology and English proficiency is 0.178, also showing a positive but weak correlation. Like the previous case, this correlation is not statistically significant ($p = 0.346$), suggesting that technology usage is not significantly related to the students' English language proficiency.

3. Technology and Narrating: The correlation coefficient between technology and narrating is 0.055, indicating a very weak positive correlation. Similar to the previous cases, this correlation is not statistically significant (p = 0.773), suggesting that technology usage does not have a significant impact on the students' narrating skills.

4. Communication and English Proficiency: The correlation coefficient between communication and English proficiency is 0.690, showing a strong and positive correlation. This correlation is highly significant (p < 0.01), indicating that there is a significant relationship between communication skills and English language proficiency among the students.

5. Communication and Narrating: The correlation coefficient between communication and narrating is 0.438, indicating a moderate positive correlation. This correlation is statistically significant (p < 0.05), suggesting that there is a significant relationship between communication skills and narrating skills among the students.

6. English Proficiency and Narrating: The correlation coefficient between English proficiency and narrating is 0.654, indicating a strong and positive correlation. This correlation is highly significant (p < 0.01), suggesting that there is a significant relationship between English proficiency and narrating skills among the students.

In summary, the results indicate that technology usage is not significantly related to communication, English proficiency, or narrating skills among Palestinian students. However, there are significant positive relationships between communication and English proficiency, communication and narrating, and English proficiency and narrating, suggesting that these skills are interconnected and may influence each other positively.

Questionnaire

By conducting the exploratory factor analysis and using the identified factors, the research aimed to assess the reliability of the questionnaire and the internal consistency of the items within each factor. Cronbach's alpha, a measure of internal consistency, was calculated for each factor to determine how well the items in each factor were correlated with each other. A high Cronbach's alpha value indicates that the items within a factor are reliable and measure the same underlying construct. Additionally, the researchers examined the factor loadings to ensure that each question loaded strongly on its respective factor and had minimal cross-loadings with other factors. A robust and reliable questionnaire with distinct factors ensures that the collected data accurately represent the intended constructs and can be used for further analyses to explore the relationships between digital storytelling, language learning, communication skills, and cultural expression among Palestinian students.

The reliability before the item deleted

Reliability Statistics

Cronbach's Alpha	N of Items
.691	68

The reliability after the item deleted

Reliability Statistics

Cronbach's Alpha	N of Items
.789	61

To answer the second question

2- How does participating in Digital storytellingaffect Palestinian students' confidence in using English for communication and readiness to convey their cultural heritage via language?

    b- Hypothesis: The use of Digital storytelling boosts Palestinian students' confidence in using English for communication and encourages them to express their cultural heritage via language.

2.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.345^a	.119	.018	3.78690

a. Predictors: (Constant), communication, narrating, english

b. Dependent Variable: technology

The model summary provides important information about the regression analysis conducted to examine the relationship between the dependent variable (technology) and the independent variables (communication, narrating, and English).

1. R: The correlation coefficient (R) is 0.345, indicating a positive but weak correlation between the independent variables (communication, narrating, and English) and the dependent variable (technology). This suggests that there is some association between these variables, but it is not particularly strong.

2. R Square: The coefficient of determination (R Square) is 0.119, which means that approximately 11.9% of the variance in the dependent variable (technology)

can be explained by the independent variables (communication, narrating, and English). The relatively low R Square indicates that the model does not fully account for the variability in the technology variable, and there might be other factors influencing it.

3. Adjusted R Square: The adjusted R Square is 0.018, which takes into account the number of predictors and the sample size. It is lower than the R Square, indicating that the inclusion of the independent variables in the model did not significantly improve its explanatory power.

4. Std. Error of the Estimate: The standard error of the estimate is 3.78690, which represents the average distance between the observed values of the dependent variable and the predicted values by the model. A lower standard error indicates a better fit of the model to the data.

Overall, the model summary suggests that the independent variables (communication, narrating, and English) have a limited ability to predict the variability in the dependent variable (technology). The weak correlation and relatively low R Square indicate that there might be other factors not included in the model that influence the students' use of technology. It may be necessary to consider additional variables or explore different models to better understand the relationship between technology usage and communication, narrating, and English skills.

The study employed a mixed-methods approach to gather both quantitative and qualitative data. For the quantitative aspect, language skill improvement scores were collected from 16 participants categorized into three proficiency levels (high, medium, and low). The data underwent various statistical tests to evaluate its normality and assess differences between proficiency levels. The Kruskal-Wallis test revealed significant differences in language skill improvement among the proficiency levels ($p = 0.042$). Post-hoc pairwise comparisons using the Mann-Whitney U test indicated a significant difference in improvement between the medium and low proficiency levels ($p = 0.012$), but no significant differences were found between other proficiency level pairs. Additionally, the data exhibited a slight positive skewness and platykurtic distribution, indicating a non-normal distribution.

The qualitative aspect involved analyzing narratives and feedback gathered through Digital storytelling sessions. These qualitative findings illuminated the impact of storytelling on language learning, cross-cultural understanding, and the promotion of Palestinian voices in the context of language education. The combination of both quantitative and qualitative data enriched the research findings, providing a comprehensive understanding of the potential of Digital storytelling in enhancing English language proficiency among Palestinian students.

In conclusion, the study's results indicate that Digital storytelling has a positive impact on English language proficiency among Palestinian students at Nabi Saleh Secondary

Mix School. It promotes language skill improvement and cross-cultural communication while empowering Palestinian voices and narratives. However, considering the non-normality of the data, the findings should be interpreted cautiously. Future research could further explore and validate the effectiveness of Digital storytelling in language education, considering diverse language proficiency levels and cultural contexts. Overall, this study contributes valuable insights into the integration of Digital storytelling in language education and showcases the potential of digital storytelling in fostering language proficiency and cultural exchange.

Survey Data: The quantitative data obtained from the surveys and questionnaires will be analyzed using descriptive statistics to understand the students' attitudes, motivation, and confidence changes as a result of the Digital storytelling intervention.

Language Growth Measurement: The Digital storytelling assessment tools' data collected during the storytelling sessions will be analyzed quantitatively to assess the students' language growth in terms of vocabulary, fluency, grammar, and narrative expression.

The analysis brings attention to a significant amount of digital content designed to support students' learning processes. However, a noticeable gap exists in digital media that reflects local knowledge values, particularly in primary schools (Arisetyawan et al., 2021; Ferdianto & Setiyani, 2018). The prevalence of fictional storytelling activities primarily featuring examples from foreign stories and incorporating cultural practices from the media poses a challenge to students' creative reasoning, contradicting the customs of their own surroundings (Fu et al., 2022; Sumardi & Wahyudiati, 2022).

To overcome this challenge, educators can adopt a collaborative approach using the SAMR model (Substitution, Augmentation, Modification, Redefinition) in teamwork. Collaboratively creating digital stories about Gaza children allows students to infuse their narratives with local values and experiences, enhancing the authenticity of their storytelling. This approach not only aligns with local cultural contexts but also fosters a sense of ownership and connection among students.

Moreover, students can leverage the SAMR model to transform their storytelling process. Starting with substituting traditional methods with digital tools, they can then augment the experience by incorporating multimedia elements. The modification stage involves adapting and improving their stories based on feedback and reflection, while the redefinition stage encourages students to showcase their stories in front of the class. This collaborative and iterative process not only makes students more confident in expressing themselves but also significantly improves their English speaking skills through the practice of organized speech acts.

The observed improvement in speaking skills through digital storytelling prompts further considerations for the future development of digital-based story media structures. Potential developments include enhancing the thematic and plot content of the stories, incorporating more dynamic animated movement images, integrating captivating audio accompaniment, and extending the application of these media to other learning materials (Kaminskienė & Khetsuriani, 2019; Saripudin et al., 2021).

Researchers, based on their findings, also advocate for providing primary school teachers with effective learning materials, offering insights into the creation and implementation of digital-based narrative media as a viable alternative to traditional teaching resources in primary schools. Teachers, by centering their instruction on media usage, take on the role of facilitators in all learning activities (N. R. Dewi et al., 2018; Rizal et al., 2022). This suggests that educators, by developing learning media or models in the teaching and learning process, indirectly assume the role of professional educational facilitators. The deliberate choice of using learning media in this study can cultivate the initial teaching skills necessary for educators to address larger gaps and practical issues challenging to openly convey to the general public (Bosica et al., 2021; Hava, 2019).

In a broader context, digital storytelling can find application across various subjects in secondary schools, although it may not be the sole effective medium for every subject (Moradi & Chen, 2019; Riwanto & Wulandari, 2018). Some subjects may still require tangible media for optimal teaching. The creation and utilization of digital media itself demand time and thoughtful consideration. Therefore, solutions for developing learning media must comprehensively assess student needs and ensure compatibility between the media and the material that will be the focal point of digital media (Saripudin et al., 2021; Somdee & Suppasetseree, 2013). This approach fosters innovation in education, inspiring students to engage with technology and encouraging the development of not only language skills but also proficiency in utilizing information technology—an essential aspect of modern education.

Quantitative Discussion:

The quantitative findings of this study provide valuable insights into the impact of digital storytelling on students' speaking abilities. The analysis of pretest and posttest results reveals a significant improvement in students' speaking skills after exposure to real tales for children from Gaza through digital storytelling media. The quantifiable enhancement in speaking abilities is a crucial outcome that substantiates the effectiveness of incorporating digital storytelling into language instruction.

The utilization of the SAMR model in a collaborative approach showcases a structured progression in students' engagement with digital storytelling. The quantitative data corresponding to each stage of the SAMR model allows for a detailed examination of the impact of substitution, augmentation, modification, and redefinition on students' speaking skills. This stepwise analysis offers a nuanced understanding of how each phase contributes to the observed improvement in English communication.

Moreover, the study highlights the positive correlation between the collaborative digital storytelling process and enhanced English speaking skills. The quantitative assessment of students' confidence levels in self-expression, as well as their proficiency in organized speech acts, provides measurable evidence of the benefits derived from this approach. The iterative nature of the SAMR model is reflected in the quantitative data, demonstrating continuous improvement over the course of the collaborative process.

The observed improvement in speaking skills is a tangible outcome that has broader implications for language proficiency and communication in social contexts where English skills are essential. The quantitative data reinforce the idea that digital storytelling, when approached collaboratively using the SAMR model, serves as an effective pedagogical tool for language development.

Additionally, the quantitative findings support the study's emphasis on the multifaceted impact of digital storytelling. The enhancement of cognitive engagement, improvement in communication skills, evocation of emotional responses, and imparting of analytical skills are quantifiable aspects that contribute to a comprehensive understanding of the benefits associated with incorporating digital storytelling into language instruction.

In summary, the quantitative discussion substantiates the positive impact of digital storytelling on students' speaking abilities. The systematic application of the SAMR model, coupled with collaborative efforts, has led to measurable improvements in English communication skills. The quantifiable outcomes provide empirical evidence of the effectiveness of digital storytelling as an innovative and impactful tool in language instruction, particularly in the context of secondary schools in Palestine.

Qualitative Discussion:

The qualitative insights from this study delve into the challenges faced by students when exposed to storytelling activities that predominantly feature stories from foreign contexts. The contradiction with local customs underscores the importance of tailoring educational content to the cultural context of the learners. The collaborative approach using the SAMR model allows students to actively participate in the creation of digital stories, infusing their narratives with local values. This not only addresses the challenge but also fosters a sense of cultural ownership and connection.

In particular, the study highlights the significance of incorporating real stories about children from Gaza into the digital storytelling process. This shift from fictional narratives to real stories aligns more closely with the lived experiences of the students, offering narratives that resonate with their cultural background. The qualitative findings emphasize that real stories from Gaza not only capture the attention of students but also provide a platform for them to engage more authentically with the content.

In reflecting on the transformative impact of incorporating real stories about children from Gaza into our digital storytelling process, a 10th-grade Palestinian student expressed,

> *"These real stories connect us to our own experiences, our struggles, and our resilience. It feels like our voices are finally heard, and we become storytellers of our own journey. It's not just learning; it's sharing a part of who we are, and that makes the learning experience truly meaningful."*

The collaborative aspect of the SAMR model, when applied to real stories from Gaza, becomes a powerful tool for students to actively contribute to the narrative. By

sharing their perspectives and experiences, students become co-creators of the digital stories, infusing the content with local values and a genuine connection to their cultural heritage. This collaborative process, rooted in real stories, goes beyond addressing challenges; it becomes a catalyst for a meaningful and culturally rich learning experience.

> *"with SAMR and the art of teamwork, our stories transform into a powerful symphony. We're not just storytellers; we're architects of our heritage, shaping narratives that echo our experiences, values, and the resilient spirit of our people. SAMR and teamwork are the brushes, and our real stories from Gaza are the canvas, creating a masterpiece of learning that goes beyond challenges, weaving a tapestry of cultural richness and meaningful experiences."*

Moreover, the qualitative discussion brings to light the emotional impact of real stories about children from Gaza. The authentic portrayal of experiences, struggles, and resilience in the narratives fosters empathy among students. It not only enhances their language skills but also nurtures a deeper understanding of the human experience. The qualitative insights suggest that the inclusion of real stories contributes to a more profound and emotionally resonant learning journey.

> *"When we tell our stories the way we agreed upon and real stories from Gaza, we're not just students; we're builders of our freedom. We write a story that reflects our experiences, values, and the resilient spirit of the Palestinian people. Together, we're not just storytellers; we create narratives that must understand our struggle, and learning becomes magnetic and a truly collaborative experience.*

> *As an example, let's talk about the tale of Khalid and Reem from Gaza. Khalid, born by the sea, and Reem, the flower of the land. In their story, the sea intertwines with the land, and their tales blend with the story of Gaza. Khalid, a grandfather who loved Reem dearly, and Reem, tragically lost in the Gaza war, was profoundly impacted by his immense love for her. His affection for her touched everyone around, and his grief resonates with the collective heartache of a community shattered by the loss of a beloved soul. Through this heartrending story, they become authors of a narrative that not only mirrors the depth of their personal pain but also reflects the enduring love that transcends even the harshest of realities."*

In conclusion, the qualitative findings underscore the importance of shifting from fictional to real stories, specifically narratives about children from Gaza, in the digital storytelling process. This adjustment aligns more closely with the cultural context of the students, fostering a sense of cultural ownership and connection. The collaborative approach using the SAMR model becomes a dynamic platform for students to actively engage with and contribute to real stories, creating a more authentic and emotionally impactful learning experience.

2. CONCLUSION

The findings of the research suggest that integrating digital storytelling media proves to be beneficial in enhancing the speaking abilities of Palestinian students. Moreover, beyond the improvements in language proficiency, the utilization of digital narrative media contributes positively to students' psychological well-being and enhances their understanding of information technology. This integration stands out as a valuable tool for teachers in delivering the curriculum within Palestinian secondary schools. The positive outcomes underscore the potential advantages of tailoring digital storytelling to the language and cultural background of Palestinian students. In light of these results, teachers in Palestinian secondary schools are encouraged to explore and develop various digital storytelling materials that align with the literacy development needs of their students. This approach goes beyond language proficiency enhancement, aiding Palestinian students in developing technological literacy and psychological stability, thereby equipping them for effective communication in the digital age.

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