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| RESEARCH ARTICLE

Empowering Palestinian Students: Overcoming English Speaking Barriers throughSamr Model-Inspired Digital Storytelling Based on Gaza Children's Stories during the War

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| ABSTRACT
Nowadays, many educators seem to have overlooked the potential of incorporating media as a valuable instructional tool, as indicated by a study delving into the realm of digital-based learning resources. The main objective of this research is to evaluate the enhancement of students' speaking abilities through the integration of digital storytelling, utilizing a mixed-methods approach that combines quantitative and qualitative elements. The study involves sixteen 10th-grade students from Nabi-Saleh Secondary School, adopting a single group pretest-posttest design. A comprehensive speaking skill rubric, encompassing aspects such as pronunciation, grammar, word selection, speaking fluency, and overall content, was employed to assess students speaking skills throughout the research. In addition to quantitative measures, qualitative data, including student reflections and perceptions, were gathered through interviews and open-ended survey questions. The quantitative analysis revealed a significant value (2-Tailed) of 0.000 in the One Sample Test. The significance of less than 0.05 led to the rejection of the null hypothesis (H0) and acceptance of the alternative hypothesis (Hα), suggesting a notable improvement in students' speaking abilities through the integration of digital storytelling. According to the SAMR approach (Substitution, Augmentation, Modification, Redefinition), digital storytelling has become an essential instrument for encouraging students' unique ideas and creating a lively and stimulating learning environment. This redefines the entire learning process, going beyond simple replacement. The introduction of the SAMR model contributes additional insights into the transformative role of technology in education. This research not only highlights the quantifiable improvements in speaking skills but also delves into the qualitative aspects of students' experiences with digital storytelling. It emphasizes the importance of adapting digital media to cater to students' needs, presenting it as an innovative teaching tool in the classroom. To enhance the study's relevance to current events, a suggestion is made to incorporate narratives that resonate with the lived experiences of Palestinian children facing the challenges of the Gaza-Israel war. Including stories that showcase their resilience and strength in adversity can significantly engage students, connecting the study to impactful narratives emerging from Gaza.

| KEYWORDS

Digital Storytelling; English Speaking Skills; Secondary School; SAMR Model; Mixed-Methods Approach.

|ARTICLE INFORMATION

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1. Introduction

In the field of education, the cultivating of speaking skills emerges as a foundational element for nurturing intellectual, spiritual, and communicative intelligence. The process of language acquisition, beginning in childhood with a focus on listening comprehension, naturally progresses into the development of speaking skills (Sadiku, 2015; Tarigan, 2008). Looking ahead, the overarching goal for national education by 2025 is to establish a school system that produces a highly proficient and intelligent

populace. Speaking, recognized as a powerful mode of communication across diverse audiences, becomes a crucial tool for expressing one's beliefs and thoughts (Rand & Morrow, 2021; L. S. Dewi et al., 2021).

A pragmatic approach for students to refine their speaking prowess involves engaging with fictional stories and presenting events from imaginative novels. Fictional authors intricately weave narratives by blending imagination with real-world experiences, observations, opinions, interpretations, or evaluations of various events, whether factual or fabricated (Chen, 2021; Kurniasih et al., 2020). However, in secondary schools, the traditional reliance on textbooks and conventional teaching methods to deliver fiction stories limits students' exposure to innovative learning opportunities. The overemphasis on books or teacher explanations can hinder children's comprehension and literacy levels.

To address this limitation, educators can introduce creative teaching techniques, providing students with resources, including educational media, both inside and outside the classroom (Maruti, 2022; Winandari et al., 2022). As part of this approach, it is essential to incorporate narratives that resonate with the lived experiences of Palestinian children facing the challenges of the Gaza-Israel conflict. These stories can showcase their resilience and strength in the midst of adversity, offering a more connected and impactful learning experience (Saripudin et al., 2021; Tse et al., 2021).

Any adjustments to the learning process must be tailored to meet the specific needs of the students. Previous studies have explored the influence of digital media on student learning outcomes, particularly observing positive effects on reading levels (Okwara et al., 2017). Despite the necessity for students to cultivate critical thinking skills, especially in relation to the content presented by teachers, secondary school students may face challenges in optimizing their critical thinking and speaking capabilities, impacting overall learning achievements (Astafiria&Bayu, 2021; Made et al., 2022).

To enhance reading and writing literacy in grade 10, the researcher integrates digital media in the form of audio boards alongside other digital learning resources. Building on the findings of previous studies, such as Schmier (2021), which demonstrated heightened interest in literacy through the incorporation of digital storytelling, this research employs digital storytelling in the form of an animated tale. The study aims to ascertain whether the utilization of digital storytelling enhances students' learning outcomes in speaking abilities.

Recognizing the current low levels of reading and writing proficiency among Indonesians, instilling critical thinking skills in primary school becomes a crucial starting point for students to develop independent thought. Researchers anticipate Students' critical thinking skills will be enhanced by the usage of digital storytelling. While communicating, developing public speaking skills, and fostering innovation in the emerging digital era (Desyandri et al., 2021; Indrianti et al., 2022). The research on digital storytelling learning and students' speaking abilities aims to explore whether applying digital storytelling in secondary education, particularly through the creation of audiovisuals centred on fiction stories for grade 10., enhances students' learning outcomes in speaking abilities. Digital tales offer versatile approaches to cater to the diverse learning needs of secondary school students, playing a significant role in their academic achievements and overall educational journey (Amrulloh&Galushasti, 2022; Putri Ningrat et al., 2018). Instructors can independently craft fictional story presentations, providing students with a varied and insightful learning experience (Nurhaliza et al., 2022; Staley & Freeman, 2017). Students, influenced by the visually appealing and innovative nature of digital media, may find increased interest in language learning through digital narrative media (Adiyawati&Nuroh, 2016; Karakaita Putri et al., 2019).

Given the pivotal role of communication abilities in today's technologically advanced society, the integration of digital narrative media into education involves a step-by-step process (Fadillah et al., 2021; Wu & Chen, 2020). The study employs the SAMR model (Substitution, Augmentation, Modification, and Redefinition) as a guide for instructors seeking to integrate digital storytelling activities in a manner that enhances the overall learning experience.

In summary, this research introduces digital narrative media in the form of audiovisuals to enhance the speaking abilities of tenth-grade secondary school students. Leveraging various mobile applications, such as Cam Scanner, Flipa Clip, Bg Eraser, and Capcut, researchers aim to create innovative digital storytelling materials tailored to meet the needs of students and transform the learning process.

2. Method

In this comprehensive mixed-methods study, researchers employed the One-Group Pretest-Posttest Design methodology outlined by John W. Creswell (2014). The study encompassed all students in the 10th-grade class at the secondary school, totaling sixteen students, combining both quantitative and qualitative elements to provide a holistic understanding of the impact of digital storytelling on students' speaking abilities.

The research employed the Pre-Experimental Design method, specifically the One-Group Pretest-Posttest design, within the quantitative domain. A sample of sixteen secondary school students in grade 10 from Nabi-Saleh Secondary School/Ramallah was utilized for this investigation, with a focus on assessing the improvement in speaking skills through digital storytelling.

The study process comprises various components, integrating observations, instrument validation, assessment, and validation of digital storytelling media-based learning. The narrative topic selected for the study is rooted in folklore, commonly found in fairy tale books, and embodies the indigenous knowledge of the West Bank region in Palestine. To enhance the study's relevance and cultural sensitivity, narratives reflecting the lived experiences of Palestinian children enduring the challenges of the Gaza-Israel war were incorporated. These stories, depicting resilience and strength amid adversity, significantly engage students, making the study more connected to recent and impactful events in Gaza.

The chosen narrative theme specifically revolves around stories from Gaza, addressing considerations towards children's experiences during the war. Adapted to incorporate lessons from various Palestinian cultures and struggles, the narrative theme ensures alignment with the story's original source. The integration of qualitative elements involves observational data, such as interviews, to capture nuanced insights into students' experiences and perceptions of the digital storytelling approach.

Educational materials for secondary students were enriched with research tools, including speaking skills evaluation rubrics, learning modules, design sheets for learning implementation, and observational data (interviews). Both audiovisual and educational media took the form of digital stories or narratives depicting the experiences of Gaza children. The study employed a speaking skills rubric as an assessment tool for students, quantitatively measuring improvements.

The chosen narrative, deeply entwined with Palestinian culture, unfolds a distinctive scenario that captures the ideals and customs of the community, resonating with the enduring struggle of the Palestinian people. Using visual storytelling, the goal is to increase students' comprehension and engagement by incorporating audiovisual components into the context of this Palestinian story.

Incorporating this culturally relevant tale guarantees that students will experience an emotionally and culturally important learning process in addition to an academically fascinating one. The story that was selected attempts to provide students with an immersive and culturally relevant experience while showcasing the diversity of Palestinian culture. This will help them gain a deeper knowledge of how digital storytelling affects their speaking skills.

Audiovisual media has shown to be a successful teaching tool in the past, especially when it comes to raising student achievement. Additionally, Students may be able to get over their fear of speaking in English while simultaneously connecting with the human experience of the Gaza children via the creation of digital stories about their agony, which will increase empathy and knowledge of their suffering. This gives the learning process more depth and makes it a more significant and lasting educational experience. A sophisticated investigation of speaking ability gains that are both quantitative and qualitative—that is, insights into the experiences and views of the students—is made possible by the mixed-methods approach.

2.1 Overview of the Narrative Techniques Rubric:

When it comes to storytelling, a storyteller's talent is demonstrated by a skillful fusion of powerful composition and skillful execution. The Storytelling Skills Rubric was created by Heather Forest and is a thorough guide for evaluating the subtle aspects of a storyteller's art. The performer's skill in telling a tale is carefully assessed using these criteria, which cover vocal technique, nonverbal cues, timing, spatial awareness, and the imaginative structuring of the story.

2.2 Performance Skills for Effective Storytelling:

When assessing a storyteller's ability to perform well, careful consideration is given to how well they can captivate an audience through concentration, characterization, voice expression, nonverbal cues, use of space, and tempo. The competency levels covered by the rubric range from Beginner to Accomplished, and it presents observable features for each. A thorough evaluation of the storyteller's proficiency is provided by the meticulous articulation of each dimension, including Voice Mechanics and Characterization.

2.3 Rubric for Performance Skills:

The transition from Beginner to Accomplished in the Performance Skills Rubric shows how the storyteller's skills have developed in areas such as timing/pacing, characterisation, body language, face expression, and voice mechanics. In addition to providing a qualitative assessment, this organized evaluation framework acts as a growth road map for storytellers looking to improve their performance abilities.

2.4 Composition of Effective Storytelling:

Beyond performance, the rubric is used to assess compositional storytelling abilities, with a focus on the structure, word choice, and creative components used by the storyteller. The categories of Words, Story Structure, and Innovation provide a

comprehensive understanding of a storyteller's storytelling abilities by delving into the linguistic richness, story architecture, and creative interpretation of the tale.

2.5 Rubric for Compositional Skills in Storytelling:

The Storytelling Compositional Skills Rubric progresses from Beginner to Accomplished, carefully evaluating the story's structure, the language used, and the storyteller's inventiveness. The integration of performance and composition in this two-dimensional rubric makes it an invaluable resource for educators, students, and aficionados alike, promoting a more profound comprehension and admiration of the craft of storytelling.

Table1. SpeakingSkillsAssessmentRubric

A Storytelling Skills Rubric

Developed by Heather Forest

Effective Storytelling Performance Skills

When telling a story, an effective storyteller demonstrates the following traits observable by others:

Voice Mechanics

Speaks with an appropriate volume for the audience to hear. Employs clear enunciation. Uses non-monotonous, vocal expression to clarify the meaning of the text.

Face/Body/Gesture

Expressively uses non-verbal communication to clarify the meaning of the text.

Focus

Concentration is clear.
Eye contact with audience is engaging.
Maintains a charismatic presence in space (stage presence).

Characterization

If dialogue is employed, characters are believable to listener. Storyteller's natural voice is differentiated from character voices.

Use of Space:

Storyteller seems comfortable, relaxed and confident in front of listeners. Storyteller maintains clear spatial relationships for characters and narrator.

Pacing:

The story is presented efficiently and keeps listeners' interest throughout.

Student	Voice Mechanics	Face/Body/Gesture	Focus	Characterization	Use of Space	Pacing
1	3	2	2	1	3	2
2	3	2	2	1	3	2
3	3	2	2	1	3	2
4	3	2	2	1	3	2
5	2	3	2	2	2	3
6	2	3	2	2	2	3
7	2	3	2	2	2	3
8	2	3	2	2	2	3
9	4	4	3	3	4	4
10	4	4	3	3	4	4
11	4	4	3	3	4	4

Student	Voice Mechanics	Face/Body/Gesture	Focus	Characterization	Use of Space	Pacing
12	4	4	3	3	4	4
13	3	4	4	4	3	4
14	3	4	4	4	3	4
15	3	4	4	4	3	4
16	3	4	4	4	3	4

These scores reflect the students' performance in various aspects of storytelling skills, providing insights into their strengths and areas for improvement.

This table presents the rubric scores of 16 students across four proficiency levels: Beginner, Intermediate, Proficient, and Accomplished, in three categories: Innovation, Words, and Story Structure. Each student's performance is evaluated on a scale of 1 to 4 in these areas, providing insights into their narrative strengths and weaknesses.

Effective Storytelling Composition

Basic Story Structure

Story has a clear and engaging opening.
Story's sequence of events is easy for the listener to follow.
Story's ending has a sense of closure.

Words

Teller's choice of language is descriptive and articulate.
If dialogue is employed, the teller's character text is clearly differentiated from the narrator's text so that the listener understands who is talking.

Innovation

Teller employs a unique or creative use of language, sound, or body language.
Teller creatively presents the sequence of events.
Teller's perception of the meaning of the story is artfully expressed or suggested through the telling.

Storytelling Compositional Skills Rubric:

The table shows the 16 students' rubric scores in three important categories: words, story structure, and innovation. A scale of 1 to 4 is used to evaluate each student's performance and determine their degree of competency in these areas. Student 1 scored 2 on the tale structure, 3 on the words, and 1 on the innovation, indicating that they were able to organize the story with some expertise but were not very creative. On the other hand, student 13 received ratings of 4 for tale Structure, 3 for Words, and 4 for Innovation, demonstrating a mastery of both tale structure and inventive storytelling methods. These results provide insightful information on the narrative strengths and weaknesses of each student, supporting focused efforts for growth.

Student	Story structure	Words	Innovation
1	2	3	1
2	2	3	1
3	2	3	1
4	2	3	1
5	3	2	2
6	3	2	2
7	3	2	2
8	3	2	2
9	2	4	3
10	2	4	3
11	2	4	3

12	2	4	3
13	4	3	4
14	4	3	4
15	4	3	4
16	4	3	4

Overview of the Intervention Program:

2.6 Storytelling Skills Evaluation Criteria:

Developed by Heather Forest, the Storytelling Skills Rubric outlines the key elements of effective storytelling, encompassing vocal, non-verbal, and compositional aspects. From voice mechanics and facial expressions to story composition and innovation, this rubric provides a comprehensive guide for assessing the proficiency of storytellers at different skill levels.

2.7 Intervention Program Overview:

The primary aim of the intervention program implemented in this study was to enhance students' English speaking abilities using the Toontastic digital storytelling application across a carefully structured eight-week period. The program incorporated diverse strategies with the following objectives:

1. **Enhance Speaking Skills:** Focusing on pronunciation, grammar, vocabulary, and overall fluency.
2. **Foster Creativity:** Encouraging innovative language use and storytelling techniques through digital storytelling.
3. **Develop Collaboration Skills:** Engaging students in group projects to foster teamwork and peer interaction during the creation of digital stories.
4. **Integrate Technology:** Familiarizing students with Toontastic to utilize technology as an effective medium for language learning and expression.
5. **Cultivate Multimodal Literacy:** Introducing students to multimodal literacy by incorporating text, image, and sound in their digital stories for a richer narrative experience.

2.8 Program Structure:

1. **Weeks 1-2 (Preparation):**
   - Conducted a pretest of speaking competence (50 pre-test recordings) to establish baseline skills.
   - Students produced a six-minute story using any DST software, focusing on basic story structure.
2. **Weeks 3-4 (Intervention I):**
   - Provided a tutorial on Toontastic and a brief overview of creating a DST project.
   - Conducted a teacher demonstration of Toontastic usage.
   - Facilitated individual hands-on experience using Toontastic.
3. **Weeks 5-7 (Intervention II):**
   - Facilitated group use of Toontastic to create six-minute stories.
   - Emphasized collaboration, with each student contributing a minimum of two plot elements.
   - Maintained learning logs, documenting actions and reflections during project creation.
4. **Week 8 (Post-intervention reflection):**
   - Conducted a post-test using Toontastic to measure changes in students' speaking competence.
   - Administered surveys on reactions to Toontastic, its effects on speaking competence, and the level of engagement.

2.9 Intervention Techniques:

1. **Scaffolding:** Incorporated Vygotsky's scaffolding principles, providing guidelines and question prompts to assist students at each storytelling stage.
2. **Progressive Learning:** Started with individual projects, gradually transitioning to group projects to build individual skills and foster collaborative storytelling.
3. **Just-in-Time Support:** Evaluated learning logs to trace students' progress and provided timely support during the creation of digital stories.
4. **Technology Integration:** Leveraged Toontastic as a user-friendly tool, allowing students to create their own stories with 3D drawing tools, customizable resources, and sample stories for inspiration.

This intervention program was meticulously crafted, combining language learning, technology integration, and collaborative storytelling to provide a structured yet creative approach to improving students' English speaking skills.

3. 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 of 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 of 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.

Figure1. CharacterSketches

3.1 Quantitative Analysis:

English proficiency is vital for anyone looking to participate in the worldwide society and progress toward their educational and professional aims since it 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 besides the qualitative, to investigate the possible influence of digital storytelling on English learning thoroughly. 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 used the Shapiro-Wilk tests because the participants were 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) is used to investigate the dataset's underlying component structure and find latent characteristics related to 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 was 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 adolescents.

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 can 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. To answer the first question, the researcher conducted the pair t-test.

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

Hypothesis: Null Hypothesis (H0): There is no significant difference in English proficiency before and after the AI-enhanced 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					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference 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. According to the findings, there is a statistically significant change in English ability before and after the AI-enhanced digital storytelling intervention. 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.

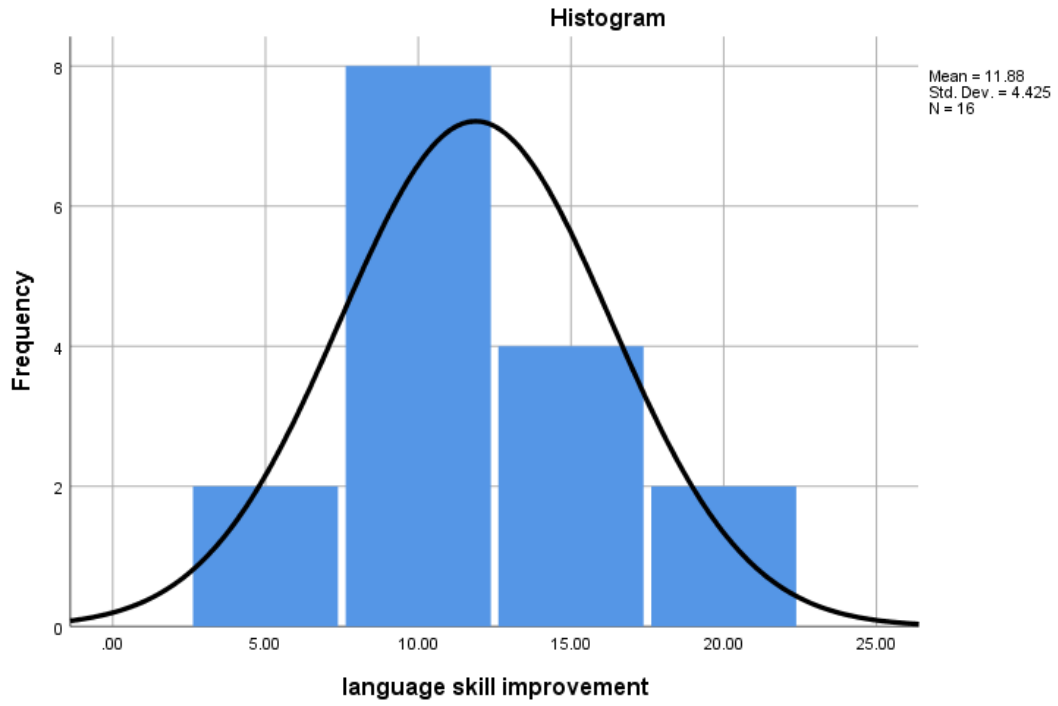
language skill improvement

		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.



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

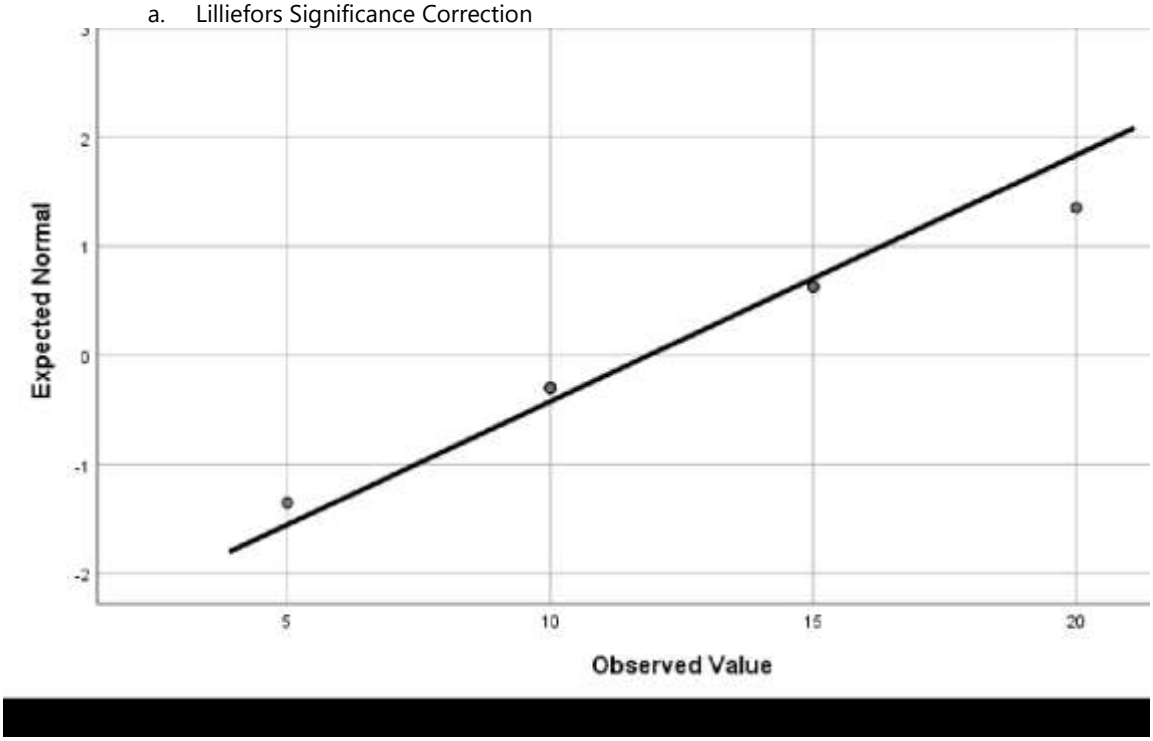
			Statistic	Std. Error
language skill improvement	Mean		11.8750	1.10633
	95% Confidence Interval for Mean	Lower Bound	9.5169	
		Upper Bound	14.2331	
	5% Trimmed Mean		11.8056	
	Median		10.0000	
	Variance		19.583	
	Std. Deviation		4.42531	
	Minimum		5.00	
	Maximum		20.00	
	Range		15.00	
	Interquartile Range		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 show 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 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, non-parametric alternatives, such as the Kruskal-Wallis test, were performed to validate the findings and ensure robustness. Additionally, investigating transformations or bootstrapping methods explored to handle the non-normality provides 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 might 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.

Test of Homogeneity of Variances

		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 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 is 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 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 was 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.

3.2 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 is deleted

Reliability Statistics

Cronbach's Alpha	N of Items
.691	68

The reliability after the item is deleted

Reliability Statistics

Cronbach's Alpha	N of Items
.789	61

To answer the second question

2- How does participating in AI-powered digital storytelling affect 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.

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 data collected by the digital storytelling assessment tools 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.

3.3 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.

4. 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.

5.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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