

# The Effectiveness of the Digital Story in Developing the English Speaking Skill of the Basic Stage Students

### By

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### للغة الإنجليز Abstract

The study aimed to identify the effectiveness of the digital storytelling in developing the English Speaking skill of the Basic Stage Students. The study adopted the quasiexperimental approach, and the study sample was chosen by the purposive method. The study sample consisted of (53) students from the third grade in Al-Hassad Private School in the Capital Governorate Amman, and the study was applied in the second semester of the academic year 2021/2022. The study sample was randomly distributed into two groups: the experimental group that consisted of (28) students who were taught the story in the digital way, and the control group that consisted of (25) students who were taught the same story but in the usual (printed) way. The study tools were prepared, and ensured their validity and reliability. The results of the study showed that there were statistically significant differences at the level of significance ( $\alpha \le 0.05$ ) between the mean scores of the experimental group and the control group in the post test in favor of the experimental group who studied the story in the digital way. The study revealed the effectiveness of using the digital story in developing the English-speaking skill. According to the results, a number of recommendations and suggestions were presented, including the use of the digital story because of its effectiveness in developing the English-speaking skill in comparison with the usual (printed) method.

**Keywords:** Effectiveness, Digital Story, Speaking Skill.

### Introduction

The current era is witnessing an unprecedented rapid development in all aspects of life, including the educational process, as educational systems seek to employ technological tools in educational situations in varied ways to make educational lessons more enjoyable and efficient, and among the learning strategies in keeping pace, the digital story has emerged as a contemporary tool to develop the skill of conversation and communication in the English language for the different stages.

It is worth mentioning that storytelling is an ancient heritage accustomed to by previous generations and used in the educational process for entertainment and learning at the same time (De Jager, Fogarty, Tewson, Lenette, & Boydell, 2017). In addition to being a means of communication and self-expression, whether oral or written, this novel allows students to learn and remember in a better way, allows them to express their opinions and have their ideas heard by others, as well as its role in strengthening connections to build educational content and engage in real-world experiences (Lisenbee & Ford, 2018) to prepare them for the challenges

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of the labor market (Dyment & Downing, 2018). This mechanism, whether listening or writing, was used to develop several skills of the students such as reading, speaking and writing in an easier and more enjoyable way, and the digital storytelling mechanism is only a modern image of storytelling using technological tools (Elenein, 2019; Lisenbee & Ford, 2018; Reinders, 2011).

Today, digital stories are available to everyone without exception in a world full of electronic and technological tools, starting with videos, CDs, whiteboards and podcasts, and ending with social networking sites such as: Facebook, twitter, LinkedIn YouTube, etc.(Moradi & Chen, 2019; Mirza, 2020).

A digital story is a short story in duration of 2-5 minutes (Priego & Liaw, 2017) produced by using media and technology tools such as images, videos, music, text and recorded narration, and is shared via social media in order to present information and obtain opinions on various topics; in order to enhance speaking skills (Abdelmageed & El-Naggar, 2018)

### **Study Problem**

Although Learning English in schools has become common and among the three basic subjects, it was noted that most of the learning time is spent in implementing skills other than conversation (Muhammadqosimovna, 2020)). It was also noted that most students can answer all paper questions and they have the ability to master written work, but they do not have the ability to express themselves using English language in a fluent way and they also can't express themselves when exposed to different situations in their life outside the classroom (Abdelmageed, El-Naggar, 2018; Bikowski & Casal, 2018; Hwang et al., 2016), and this does not relate to an educational institution per se, but it is a widespread phenomenon in general (Al-Aqeel, 2018) and in Jordanian society as well (Al-Sheikh, 2019).

The problem of the study stems from the researcher's work as an English language supervisor for five years and as an English teacher for a period that extended to 24 years. The researcher noticed that schools' curricula do not focus on speaking skill and that the educational outcomes do not train and qualify the students to practice the language, whether inside or outside the room. In addition to that, it was recommended by a number of previous studies such as (Nair & Yunus, 2021; Abdelmageed, El-Naggar, 2018; James, Yong, & Yunus, 2019; Elenein, 2019;) to conduct more studies on the effectiveness of using digital stories as a tool for developing English speaking skills in schools, and this study aims to identify the effectiveness of the digital story in developing the speaking skill to bridge the gap between the learned language skills and their implementation in the practical life.

## Aim of the Study

This study aims to measure the effectiveness of the digital story in developing the speaking skill of the English language subject among the basic stage students.

## **Study Question**

This study attempts to answer the following question:

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What is the effectiveness of the digital story in developing the English speaking skill for primary stage students?

### **Study Hypothesis**

"There are no statistically significant differences at the significance level ( $\alpha \le 0.05$ ) between the mean scores of the study sample for the experimental and control groups in the post test in developing the English speaking skill of the basic stage students due to the teaching method (the digital story or the ordinary method)

### **Related Previous Studies (Literature Review)**

(Nair & Yunus, 2021) conducted a systematic review of the effectiveness of the digital story in developing the conversational skill in the English language. This study included 45 articles, and most of these articles highlight the importance of digital stories as a contemporary method for developing education, and the aim of this review is to answer the research question about the role of digital storytelling in improving students' speaking skills. In these articles, descriptive analyzes were used and the study followed the descriptive and comparative research approach. The results of the study showed that the digital story can be used as a useful tool in improving the speaking skill of students of different levels of education starting from primary education to higher learning to help students speak more effectively.

Al-Tuwairqi (2020) conducted a study aimed at measuring the effectiveness of digital storytelling in developing some language communication skills in the English language for second-grade intermediate students in Jeddah. The researcher followed the quasi-experimental method. The study was implemented to a sample of (50) female students from the second intermediate class in Jeddah, and they were randomly divided into a control group of (25) female students, and an experimental group of (25) female students. The results of the studies showed that there were significant differences in favor of the experimental group in the post achievement test for the listening skill and the performance test for the speaking skill, and that there is an effectiveness of the digital storytelling in developing the linguistic communication skill in the English language among female students at this stage.

Mirza (2020) conducted a study aimed at verifying whether EFL students at the Lebanese University can improve their language proficiency by creating digital stories. This study adopted descriptive and analytical research methods and a qualitative approach. The participants were 20 year- old students from the second-year EFL students and teachers, and after completing individual or group digital storytelling projects, videos were shared on YouTube, Facebook and WhatsApp. The study tool was an open-ended questionnaire, in which participants answered open survey questions about their experience in using digital narration The results after answering the questions showed that most of the participants found the activity educational, purposeful and enjoyable at the same time, despite the technical difficulties they faced. Participants also reported that creating their digital stories gained them more self-confidence and improved their pronunciation, as well as technical, research and social skills, as they were able to share their work online with their friends and other global English speakers.

Girmen, Özkanal, & Dayan, (2019) conducted a research aimed at determining the role of digital storytelling in improving writing skills. The study was designed as an action research.

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The researcher followed the experimental method and the study sample consisted of 22 students in the fourth grade of primary school in Eskisehir School in Turkey. The data was collected through full observation of the participants, students' notes, students' digital diaries with researcher's notes, video recordings and documents and then analyzed using content analysis. The results showed that writing a digital story can be very effective in developing writing skills for fourth grade students. Story writing activities also improved students' attitudes and motivation towards reading and writing skills and they felt that they were receiving the skill in a more modern way.

Elenein (2019) conducted a study that aimed to identify the effect of using digital storytelling on developing oral communication skills for fifth grade students in Rafah primary schools. The study adopted the quasi-experimental approach. Two data collection tools were used, which are a checklist for oral communication skills and a pre-test for data analysis. The results of the study were that there is a positive effect of digital storytelling on the development of oral language communication skills.

James et al., (2019) conducted a study that aimed to investigate the role of using digital storytelling in enhancing students' English speaking skills and students' perceptions regarding the use of digital storytelling to improve their speaking skills. The study followed the method of action research where the study was conducted on 20 students studying at a suburban school in Pahang, Malaysia. The main tool used in this study was the pre and post oral assessment. The results showed progress in students' conversational ability after creating Scribe videos and students were positive during the implementation.

Eissa (2019) conducted a study aimed at verifying the effectiveness of using digital storytelling strategy in teaching English as a foreign language. The study was implemented on Northern University as a case study. The study followed the descriptive approach, where data was collected through a questionnaire in addition to a model of an educational program based on the use of digital storytelling strategy, and it was implemented on a group of learners at the selected university in the Kingdom of Saudi Arabia. The results revealed that implementing a digital storytelling strategy helps learners develop their English speaking skills in general. This strategy also helped EFL teachers in Saudi Arabia create an appropriate atmosphere inside and outside their classrooms to practice the language, which motivated learners to speak English fluently.

## **Study Approach**

The researcher followed the quasi-experimental approach to data collection and analysis due to its relevance to the nature of the study (Humel, 2014), which is to measure the effectiveness of the independent variable, which is the digital story, on the dependent variable, which is the speaking skill. Two groups were used, namely, the experimental group that was taught using the digital story, and the control group that was taught The same content using the usual method (the printed story), and to answer the study question and its hypothesis and to achieve its objectives, the oral test was used to evaluate the students' performance.

## **Study Community**

The study population consisted of third grade students in private Jordanian schools, whose ages ranged between (8-9) years, and their number reached 22,409 male and female



students, distributed among 1015 private schools, according to the statistics of the Jordanian Ministry of Education for the year (2020-2021).

### **Study Sample**

Due to the difficulty of conducting the study on the whole study community, one school was chosen, which is Al-Hassad Private School in the Capital Governorate, Al-Qweismeh Brigade, in a purposive way.

### **Study Tools**

To achieve the goal of the study, which was to reveal the effectiveness of the digital story in developing the English speaking skill of the students of the basic stage, and due to the nature of the study in terms of its curriculum, society, and goal, the researcher prepared the study tools, which are the digital story and the oral test:

### **First: The Digital Story**

#### The validity of the digital story (the arbitrators' validity):

The validity of the digital story was verified by preparing a list of criteria for evaluating the digital story and presenting the digital story and the list of criteria to a group of arbitrators who have wide experience in the field of technology and education, in addition to some faculty members working in Jordanian universities, colleges and schools, including English language supervisors and teachers ;to express their opinion on the appropriateness of the criteria for designing the digital story and then the modifications suggested by them were taken into consideration .

#### **Second: The Oral Exam**

The oral test was prepared by following several steps until it became applicable for the experimental and control groups, then a table of test specifications was built based on Bloom's cognitive levels, and a list of criteria was prepared for evaluating students' performance and then building an evaluation scale to monitor the oral test scores.

## The Validity of the Oral Test

The validity of the oral test was verified in two ways:

#### First: Verifying the validity of the content (apparent validity):

First: The test was presented to a group of specialized and experienced faculty members in Jordanian universities, colleges and schools who are specialized in educational technology, English language, curricula and teaching methods, English language supervisors and English language teachers.

#### Second: Verifying the Structural Validity of the Test:

The researcher found the correlation coefficient between each of the seven test criteria and the overall test score. This type of validity reflects the value and strength of the criterion relationship (as part of the test) in representing this test so that there is a minimum value of this correlation that can be accepted, which is the value (0.40). Table (1) shows the results of the validity of the seven test criteria.

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**Table (1)** The Structural Validity of the Oral Test Criteria Estimated by the Pilot Sample (n=22)

Oral test criteria	Correlation Value	Sig Level
Comprehension	0.798	*0.000
Fluency	0.851	*0.000
Vocabulary	0.666	*0.001
Structure	0.469	*0.028
Pronunciation	0.803	*0.000
Grammar	0.653	*0.001
Body Language	0.572	*0.005

Table (1) indicates the results of the relationship of each of the test criteria with the total score of the test in what is known as structural validity. The result expresses the degree of correlation of the criterion that is assumed to be a representative part of the test, and it is known that the higher the correlation value, indicates the strength of the representation of the criterion as a part of the test, and by reviewing the values of the correlations shown in the table, it becomes clear that the lowest correlation value was (0.469) which was between the structure criterion and the total score of the test, and since the value of the lowest correlation between the correlation coefficients was greater than the minimum acceptable (0.40 or more) and since the rest of the correlations values were greater, this indicates an acceptable degree of validity between each of the test criteria and the total score of the test, in addition to that all the reliability values were statistically significant, because the significance level values were less than 0.05. which refers to the importance of the reliability values that appeared between each criterion and the total score of the test from a statistical point of view, what helps in deducing the structural validity of the test criteria and the ability of these criteria to express and represent the test.

## **Oral Test Reliability**

The researcher made sure of the reliability of the oral test in two ways:

First: Using Cronbach' Alpha equation for the internal consistency of the seven test criteria. The reliability value in Cronbach's alpha method was: (0.766) as shown in the following table:

**Table (2)** The Results of the Reliability of the Oral Test Criteria Using (Cronbach's Alpha) Method, Estimated from the Pilot Sample (n=22)

Criteria	Number of Criteria	Value of Cronbach alpha		
Comprehension				
Fluency				
Vocabulary	7	0.766		
Structure	,	0.766		
Pronunciation				
Grammar				
Body Language				

Table (2) shows that the criteria for evaluating students' performance in the oral test have a high degree of reliability, as this value reached (0.766) through its estimation from the

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exploratory sample, and this value is appropriate and sufficient for the purposes of such research, as it was greater than (0.70), which is considered the limit Minimum values for high reliability in this method.

Second: Using the method of applying the test and reapplying it after an appropriate period of time (test/retest). Data of the pilot sample consisting of (22) students was used in order to verify the reliability of the test. The reliability value of applying the test and retest technique was (0.949), as shown in the following table:

**Table (3)** The Results of the reliability of the Oral Test Criteria using the (Test/Retest) Method Estimated from the Pilot Sample (n=22)

Exam Criteria	Correlation	Sig Level
Comprehension	0.803	*0.000
Fluency	0.782	*0.000
Vocabulary	0.922	*0.000
Structure	0.857	*0.000
Pronunciation	0.805	*0.000
Grammar	0.850	*0.000
Body Language	0.954	*0.000
Total	0.949	*0.000

Table (3) shows that the oral test criteria for evaluating the students of the experimental and control groups by (test / retest) procedure have high reliability values, as these values reached (0.803) from the pilot sample for the comprehension criterion, and the reliability value reached (0.782) for the fluency criterion, (0.922) for the vocabulary criterion, (0.857) for the structure criterion, (0.805) for the pronunciation criterion, and it reached (0.850) for the grammar criterion, and the reliability value between the two tests (pre and post-tests) for the body language criterion was (0.954), and as for the reliability value of the test as a whole between the pre and post-tests, it reached (0.949).

All of these values are appropriate and sufficient for the purposes of such research, as they were all greater than (0.70), which is the minimum for high reliability values, in addition to that all reliability values were statistically significant, because the significance level values were less than 0.05, which indicates the importance of the reliability values that appeared between the two tests (pre and post -tests) statistically.

And both values express a high degree of reliability, which allows the implementation of the test and depends on its results.

### **Results**

Displaying the results of the study in the light of the main question of the study, which was formulated to express the goal of this study, which was to identify the effectiveness of using of the digital story in developing the English speaking skill of the basic stage students, where the text of the question was as follows:

What is the effectiveness of the digital story in developing the English speaking skill of the basic stage students?

This question was formulated by the (zero / neutral) hypothesis as follows:



## **Research Hypothesis**

There are no statistically significant differences at the significance level ( $\alpha \le 0.05$ ) between the mean scores of the students of the experimental and control groups in the post test of English speaking skill among the basic stage students due to the teaching method (digital story or the usual method).

In order to verify the hypothesis, the means and standard deviations of the third grade students' scores for the two groups were calculated in developing English speaking skill. The results came as follows:

**Table (4)** Means and Standard deviations of the Third Grade Students' Scores for the Experimental and control Groups in the English Speaking Skill Test on the Re and Post Test:

T4 C4	•	No of	Statistical		
Test Criteria	Group	<b>Students</b>	<b>Indicator</b>	test	retest
		28	mean	8.14	10.46
Comprehension	experimental	20	sd	2.63	2.06
Comprehension	control	25	mean	8.60	9.56
	Control	23	sd	1.87	1.76
	experimental	28	mean	11.21	13.11
Fluency	experimentar	20	sd	2.08	1.83
Tuency	control	25	mean	10.92	11.92
	control	23	sd	1.78	2.12
	experimental	28	mean	9.50	11.43
Vocabulary	схрениении	20	sd	3.07	2.47
v ocabular y	control	25	mean	8.72	9.88
	control	23	sd	2.28	2.09
	experimental	28	mean	10.14	11.04
Structure	ехрениении	20	sd	3.67	3.69
Structure	control	25	mean	8.92	10.16
	Control		sd	2.61	2.43
Pronunciation	experimental	28	mean	9.43	10.96
	сиренинении	20	sd	1.99	2.01
	control	25	mean	9.12	9.92
	• • • • • • • • • • • • • • • • • • • •		sd	2.07	1.75
	experimental	28	mean	7.71	9.04
Grammar	only or many	_0	sd	2.37	2.05
<u> </u>	control	25	mean	7.60	7.56
			sd	1.78	2.10
Body Language Total	experimental	28	mean	6.68	7.96
	1		sd	1.09	1.35
	control	25	mean	7.16	7.28
			sd	1.49	1.72
	experimental	28	mean	62.82	74.00
	ı		sd	12.00	10.29
	control	25	mean	61.04	66.28
			sd	10.59	9.94

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### Values are expressed as (mean $\pm$ Standard Aviation)

Table (4) presents the values of the means and standard deviations of the digital story test criteria for the students of the basic stage of the experimental and control groups in the test of English speaking skill in the pre and post evaluations. By reviewing the values of these averages in the post evaluation, it turns out that the comprehension criterion reached  $(2.06\pm10.46)$  for the students of the experimental group while it was  $(9.56\pm1.76)$ for the students of the control group, and in the criterion of fluency, the mean value in the post-evaluation was (13.11  $\pm$  1.83) for the students of the experimental group, while it was  $(11.92 \pm 2.12)$  for the students of the control group. As for the vocabulary criterion. It is noted that the arithmetic mean value of this criterion for the students of the experimental group reached (11.43  $\pm$  2.47), while it reached for the students of the control group (9.88  $\pm$ 2.09). With regard to the averages of the structure criterion, it is noted that it reached (11.04)  $\pm$  3.69) for the students of the experimental group, while the value of this criterion for the students of the control group was  $(10.16 \pm 2.43)$ , and with regard to the pronunciation criterion, the table indicates that the value of this criterion for the students of the experimental group reached (10.96  $\pm$  2.01), while the value of this criterion for the students of the control group was  $(9.92 \pm 1.75)$ . When looking at the arithmetic mean value of the grammar criterion for the students of the experimental group, it was found that it amounted to  $(9.04 \pm 2.05)$ , while it amounted to  $(7.56 \pm 2.10)$  for the students of the control group, and with regard to the last test criterion, which is body language, it was found that the value was  $(7.96 \pm 1.35)$  for the students of the experimental group, while it was for the students of the control group  $(7.28 \pm 1.72)$ 

As for the arithmetic mean value of the test as a whole (the sum of the criteria), it is noted that it was  $(74.00 \pm 10.29)$ , while it was  $(66.28 \pm 9.94)$  for the students of the control group.

Through these values and results, it is clear that there is a difference and inequality in the mean values of the two groups in the post-measurement on the seven test criteria and the test as a whole, and to determine whether the difference between the arithmetic means of the scores of the students of the control and experimental groups in the post-test is significant or statistically significant at the level of significance ( $\alpha \le 0.05$ ), One-way (ANCOVA) was used for each of the seven test criteria, and this analysis aims to control (neutralize) the effect of the pre- test as a covariate variable for the two groups, and the following table displays the results of this test:



**Table (5)** The One-Way ANCOVA for the oral test scores of the experimental and control groups in the post-test of English speaking skill:

	Source of Sum of						Impact Size		The
Lact ( ritaria	Variation	Squares Squares	Degrees of Freedom	Mean Squares	f.Value	Sig Level	ETA Square (η²)	The Level	Hypothesis
	pretest	38.14	1	38.14	12.63	.001	.202		
Comprehension	group	15.13	1	15.13	5.01	.030	.091	medium	reject
Comprehension	error	150.99	50	3.02					reject
	total	199.92	52						
	pretest	52.14	1	52.14	17.81	.000	.263		
Fluency	group	14.04	1	14.04	4.79	.033	.088	medium	reject
Fluency	error	146.38	50	2.93					reject
	total	217.13	52						
	pretest	97.16	1	97.16	28.19	.000	.361		
Vacabulawy	group	17.23	1	17.23	5.00	.030	.091	medium	maiaat
Vocabulary	error	172.34	50	3.45					reject
	total	301.17	52						
	pretest	243.31	1	243.31	45.91	.000	.479		
C4	group	0.03	1	0.03	0.00	.945	.001	weak	
Structure	error	265.01	50	5.30					accept
	total	518.45	52						
	pretest	63.86	1	63.86	26.85	.000	.349		
D	group	10.03	1	10.03	4.22	.045	.078	medium	:
Pronunciation	error	118.94	50	2.38					reject
	total	197.21	52						
Grammar	pretest	85.93	1	85.93	32.26	.000	.392		
	group	26.07	1	26.07	9.79	.003	.164	strong	:
	error	133.19	50	2.66				J	reject
	total	247.89	52						
<b>Body language</b>	pretest	14.79	1	14.79	7.03	.011	.123		reject



	group	9.98	1	9.98	4.74	.034	.087	medium	
	error	105.21	50	2.10					
	total	126.19	52						
	pretest	2241.45	1	2241.45	37.79	.000	.430		
The overall Score	group	585.69	1	585.69	9.87	.003	.165	strong	raiaat
for the Test	error	2965.59	50	59.31					reject
	total	5994.19	52						

(The effect size according to Cohen: <0.06 weak, 0.6 - <0.14 medium, 0.14 or more significant)

Table (5) shows the One-Way ANCOVA for the oral test scores of the experimental and control groups in the English speaking skill test in the post-test, and based on the data of the column for the significance level, it becomes clear that the value of the significance level calculated for the comprehension criterion has reached (0.030), and reached (0.033) for the fluency criterion and for the vocabulary criterion it has reached (0.030), and (0.945) for the structure criterion, while it has reached (0.045) for the pronunciation criterion, and as for the grammar criterion, the significant level has reached (0.003) and it has reached (0.034) for the body language criterion, and the table also shows that the value of the significance level calculated for the oral test as a whole reached (0.003).

When comparing the values of the significance level shown in the table with the value 0.05, it turns out that the values of the significance level for six criteria of the oral test in addition to the total score of the oral test except for the criterion of structure were less than 0.05, which means rejecting the null hypothesis which states that "There are no statistically significant differences at the significance level ( $\alpha \le 0.05$ ) between the mean scores of the study sample for the experimental and control groups in the post test for developing the English speaking skill of the basic stage students due to the teaching method (the digital story or the ordinary method) in these criteria and the total score, as it was found that there was an effect because the significance level values were less than 0.05.

While the hypothesis of the study was accepted in the criterion of structure, where the value of the significance level (0.945) was greater than 0.05, which means that the null hypothesis of the study was accepted in this criterion ,and This result indicates the fulfillment of the null hypothesis which states that "There are no statistically significant differences at the significance level ( $\alpha \le 0.05$ ) between the mean scores of the study sample for the experimental and control groups in the post test in developing English speaking skill among the students of the basic stage due to the teaching method (the digital story or ordinary method) and to determine the direction of the differences in the test criteria that were statistically significant, it was relied on the values of the adjusted means shown in the following table:



**Table (6)** Adjusted means and standard errors of the oral test scores for the experimental and control groups in the English Speaking Skill Test:

Test Criteria	Group	Mean	SE
Communica	experimental	10.55	.3290
Comprehension	control	9.47	.3480
Eluanav	experimental	13.04	.3240
Fluency	control	12.00	.3430
Vocabulani	experimental	11.24	.3530
Vocabulary	control	10.09	.3730
Structure	experimental	10.64	.4390
Structure	control	10.60	.4650
Pronunciations	experimental	10.88	.2920
Fionunciations	control	10.01	.3090
Grammar	experimental	9.00	.3080
Graninai	control	7.60	.3260
Body language	experimental	8.06	0.276
Body language	control	7.17	0.293
The overall Score of the Test	experimental	73.51	1.458
	control	66.83	1.543

Table (6) shows the values of the adjusted means and the standard errors of the criteria of the digital story test for the students of the basic stage of the experimental and control groups in the English speaking skill test in the post-test, and by reviewing the values of these averages in the post-test, it is found that they reached (10.55) for the students of the experimental group in the comprehension criterion, while they reached (9.47) for the students of the control group, and in the criterion of fluency, the value of the modified mean in the post- test for the students of the experimental group reached (13.04), While for the students of the control group it reached (12.00), and with regard to the vocabulary criterion, it is noted that the average value of the adjusted means for this criterion for the students of the experimental group amounted to (11.24), while it was (10.09) for the students of the control group, and with regard to the averages of the structure criterion, it is noted that they reached (10.64) for the students of the experimental group reached, while the value of this criterion for the students of the control group reached (10.60), and with regard to the pronunciation criterion, the table indicates that the value of this criterion for the students of the experimental group reached (10.88), while the value of this criterion for the students of the control group reached (10.01). When looking at the mean value of the grammar criterion for the students of the experimental group, it turns out that it reached (9.00) while it reached (7.60) for the students of the control group, and as for the last test criterion, which is the body language, it was found that it reached (8.06) for the students of the experimental group, while it amounted to (7.17) for the students of the control group.

As for the mean value of the test as a whole (the sum of the criteria), it is noted that it reached (73.51) for the students of the experimental group, while it reached (66.83) for the students of the control group.

In order to find out the size of the effect resulting from the use of the digital story in teaching, it was relied on the effect size indicator: ETA square ( $\eta 2$ ) and by reviewing the levels of the effect size, we found that the effect size was strong in the grammar criterion (0.164) and the total score for the oral test (0.165), and it was noted that the use of the digital story had a weak effect on the structure criterion, as the effect value was (0.001). As for the level of



influence in the rest of the criteria, it came to a medium degree, as shown in the table of One-Way ANCOVA table No. (5).

### Discussing results and recommendations

#### First, discuss the results

This study sought to answer the following main question:

What is the effectiveness of the digital story in developing the English speaking skill of the basic stage students?

This question has been answered by testing the null or neutral hypothesis, which is:

There are no statistically significant differences at the significance level ( $\alpha \le 0.05$ ) between the mean scores of the study sample for the experimental and control groups in the post test in developing the English speaking skill of the basic stage students due to the teaching method (using the digital story - the usual method).

Where this hypothesis was tested using the One-Way Analysis of Covariance available within the software package (SPSS) version 23, where the results of the Covariance Analysis showed the presence of the effect in all test criteria (except for only one criterion, which is the structure), in addition to the presence of differences and impact in the total score of the oral test.

The reason for this effect is due to several factors, including: The use of the digital story helps to increase the ability to understand and comprehend, and if we take into account the different learning styles (Hung, Hwang & Huang, 2012) and that some students' focus is described as auditory, while others are described as visual, or that some students have weakness in one of the senses, the digital story has helped all students with different learning styles and different sensory abilities to understand and focus. (Abu Talib, Nikolic, Sunar & Prada, 2020) Also the digital story helps to employ the information that the students possess so that they express it in a certain way in which they try to use what they saw to embody ideas and put them forward in a similar way or perhaps in a more attractive and interesting way. Hence, the digital story helps in developing the social aspects of students, and in this context (Smeda et al., 2014) brought to light that digital storytelling is a powerful tool for creating more participation in exciting learning environments, and that a digital story contains attractive color animation, multiple characters, as well as sounds and sound effects that accompany the events and these are the most important things that distinguish the digital story from other methods of storytelling according to the researcher, as it contributes to increasing the students' ability to deeply memorize the images that their eyes see as well as the sounds they hear, especially if the frequencies of those sounds are different and related to the characters and events of the digital story, and this memorization helps later on the ease of the retrieval of these images and sounds, and the information they include (Hung, 2019; Arroba & Acosta, 2021), in addition to the fact that the students at this age are quick to be affected by different situations and influences. So the digital story increases their ability to remember words, sentences, events and characters of the story and restore them alone, thus repeat and narrate more freely (James, et al., 2019), , which makes their brain always alert and attentive to the details of the digital story that they have seen and heard, and from here they become ready to talk about it fluently and with confidence.(Hafford-Letchfield, et al., 2018; Arroba & Acosta, 2021), and (Al Nakhalah, 2016) has indicated that the barriers to speaking arise from the fear and the lack of confidence in the ability to express themselves, and that telling stories digitally make students

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more connected with the technological world (Girmen, et al., 2019; Nair & Yunus, 2021;). Also (Abdelmageed & El- Naggar, 2018) indicated that using a digital story makes the students' learning experience more modern, engaging and stimulating and they can freely express their ideas and experiences (Elenein, 2019)), in addition to that group-working when the students build own digital stories as well as the discussion during the presenting of the students' own stories with the teachers' guidance add an element of enjoyment during the narration Thus, it provides an ideal learning environment for the students. (Arroba & Acosta, 2021; Hafford-Letchfield et al., 2018; Hung, 2019)

#### Second: Recommendations

In light of the findings of this study, the researcher recommends the following:

- 1- Giving special importance to the skill of speaking English (in general) in view of the severe weakness of this skill.
- 2- Integrating the digital story method as an important part in English language classes to teach the speaking skill.
- 3- Highlighting the role and importance of the digital story for English language teachers and clarifying its importance and effectiveness in developing the skill of speaking English, especially since there is a difficult environment to speak this language outside class times in general.
- 4- Working to constantly update the digital story to make it more interesting and exciting so that this will reflect on increasing the students' focus and acceptance of this method, and thus increasing their efficiency in the speaking skill.
- 5- Emphasizing on the need to integrate the use of the digital story method in private schools.
- 6- Finding strategies to develop and enhance the sentence structure skill.

#### Third: Suggestions

As a result of reviewing previous studies, the researcher suggests:

- 1- Generalizing to all Jordanian schools to encourage students to create their own stories as a kind of a systematic activity followed in schools.
- 2- Using the digital story to develop all language learning skills, including listening, reading and writing, in addition to speaking.
- 3- Using the digital story as a flipped classroom activity to develop students' academic abilities and skills in dealing with technology, creating content and expressing themselves.

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### References

Abdelmageed, M., & El-Naggar, Z. (2018, March). Digital storytelling enhances students' speaking skills at Zewail University of science and technology in Egypt. In Society for Information Technology & Teacher Education International Conference (pp. 278-287). Association for the Advancement of Computing in Education (AACE).

# **Social Science Journal**

- Abu Talib, R. I., Nikolic, P. K., Sunar, M. S., & Prada, R. (2020). In-visible Island: inclusive storytelling platform for visually impaired children. Mobile Networks and Applications, 25(3), 913-924.
- Al-Aquel Aisha. (2019). The effectiveness of an educational program based on interactive digital stories in improving the speaking skills of third grade female students in the State of Kuwait. Journal of the Islamic University of Educational and Psychological Studies, 27(2).
- Al Nakhalah, A. M. M. (2016). Problems and difficulties of speaking that encounter English language students at Al Quds Open University. International Journal of Humanities and Social Science Invention, 5(12), 96-101
- Al-Sheikh, May. (2019). The effect of using animated clips on developing oral expression skill in English language among fourth grade students in private schools in the governorate of the capital Amman [Master's Thesis]. Middle East University.
- Al-Tuwairqi, Ghada. (2020). The effectiveness of digital storytelling in developing some linguistic communication skills in the English language among second-grade students in the intermediate school in the city of Jeddah. Journal of Educational and Psychological Sciences, 4 (12), 51-23.
- Arroba, J., & Acosta, H. (2021). Authentic Digital Storytelling as Alternative Teaching Strategy to Develop Speaking Skills in EFL Classes. LEARN Journal: Language Education and Acquisition Research Network, 14(1), 317-343.
- Bikowski, D., & Casal, E. (2018). Interactive digital textbooks and engagement: A learning strategies framework. Language Learning & Technology, 22(1), 119-136.
- De Jager, A., Fogarty, A., Tewson, A., Lenette, C., & Boydell, K. M. (2017). Digital storytelling in research: A systematic review. The Qualitative Report, 22(10), 2548-2582.
- Dyment, J. E., & Downing, J. (2018). Online initial teacher education students' perceptions of using web conferences to support professional conversations. Australian Journal of Teacher Education (Online), 43(4), 68-91.
- Eissa, H (2019). Pedagogic effectiveness of digital storytelling in improving speaking skills of Saudi EFL learners. Arab World English Journal (AWEJ), 10(2), 236 246.
- Elenein, A. H. A. (2019). The Effect of Utilizing Digital Storytelling on Developing Oral Communication Skills for 5th Grade Students at Rafah Primary Schools. International Journal of Language and Literary Studies, 1(1), 369-381.
- Girmen, P., Özkanal, Ü, & Dayan, G. (2019). Digital storytelling in the language arts classroom. Universal Journal of Educational Research, 7(1), 55-65.
- Hafford-Letchfield, T., Dayananda, A., & Collins, D. (2018). Digital storytelling for interprofessional collaborative practice to develop quality and service
- Humel, Ibtisam. (2014). The experimental method "introductory, ideal, semi-experimental". (Master's thesis published), Imam Muhammad bin Saud Islamic University, Riyadh, Saudi Arabia.
- Hung, C. M., Hwang, G. J., & Huang, I. (2012). A project-based digital storytelling approach for improving students' learning motivation, problem-solving competence and learning achievement. Journal of Educational Technology & Society, 15(4), 368-379.
- Hung, S. T. A. (2019). Creating digital stories. Journal of Educational Technology & Society, 22(2), 26-37.
- Hwang, W. Y., Shadiev, R., Hsu, J. L., Huang, Y. M., Hsu, G. L., & Lin, Y. C. (2016). Effects of storytelling to facilitate EFL speaking using Web-based multimedia system. Computer Assisted Language Learning, 29(2), 215-241.



- James, P. R. A. P., Yong, K. L., & Yunus, M. M. (2019). Hear Me Out! Digital Storytelling to Enhance Speaking Skills. International Journal of Academic Research in Business and Social Sciences, 9(2), 190–202.
- Lisenbee, P. S., & Ford, C. M. (2018). Engaging students in traditional and digital storytelling to make connections between pedagogy and children's experiences. Early Childhood Education Journal, 46(1), 129-139.
- Mirza, H. S. (2020). Improving University Students' English Proficiency with Digital Storytelling. International Online Journal of Education and Teaching, 7(1), 84-94.
- Moradi, H., & Chen, H. (2019). Digital storytelling in language education. Behavioral Sciences, 9(12), 147.
- Muhammadqosimovna, P. N. (2021). Teaching speaking skills-overcoming classroom problems. Research Jet Journal of Analysis and Inventions, 2(5), 236-239.
- Nair, V., & Yunus, M. M, (2021). A Systematic Review of Digital Storytelling in Improving Speaking Skills. Sustainability, 13(17), 9829.
- Priego, S., & Liaw, M. L. (2017). Understanding different levels of group functionality: Activity systems analysis of an intercultural telecollaborative multilingual digital storytelling project. Computer Assisted Language Learning, 30(5), 368-389.
- Reinders, Hayo. (2011). Digital Storytelling in the Foreign Language Classroom. ELTWO Journal, 3, 36 49.
- Smeda, N., Dakich, E., & Sharda, N. (2014). The effectiveness of digital storytelling in the classrooms: a comprehensive study. Smart Learning Environments, 1(1), 1-21.