

The role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary stage in Jordan

1st Sameer Abed Al Salam Al Sous
College of Education,
Arab Open University (AOU)
Jordan
S_alsous@aou.edu.jo

2nd Ziyad Kamel Ellala
College of Education, Humanities and
Social Sciences
Al Ain University
Abu Dhabi, UAE
Ziyad.ellala@aau.ac.ae

3rd Khawlah M. AL-Tkhayneh
College of Education, Humanities and
Social Sciences
Al Ain University
Abu Dhabi, UAE
Khawlah.altkhayneh@aau.ac.ae

4th Samer Abdel Hadi
College of Education, Humanities and
Social Sciences
Al Ain University
Abu Dhabi, UAE
samer.abdelhadi@aau.ac.ae

5th Mahmoud Gharaibeh
College of Education, Humanities and
Social Sciences
Al Ain University
Abu Dhabi, UAE
Mahmoud.Gharaibeh@aau.ac.ae

6th Balkees Abuawad
College of Pharmacy
Al Ain University
Abu Dhabi, UAE
Balkees.abuawad@aau.ac.ae

Abstract—This study aimed to investigate the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in primary schools in Jordan. A descriptive survey method was utilized. The sample consisted of 183 male and female teachers in primary schools, selected randomly. The study employed a questionnaire as a data collection tool, focusing on measuring the level of awareness among teachers regarding the role of digital stories in developing reading comprehension skills. The study found that the responses of the sample regarding the level of awareness among Arabic language teachers in primary schools in Jordan regarding the development of reading comprehension skills through digital stories were high. Additionally, statistically significant differences were found related to the variable of educational qualification (diploma, bachelor's degree, higher diploma, postgraduate studies), with differences in favor of bachelor's degree, higher diploma, and postgraduate studies. The study also found statistically significant differences related to years of experience (1-5, 6-10, 11-15), with differences in favor of experience ranging from 11-15 years. Regarding the variable of school type (public, private), the results showed no statistically significant differences. However, statistically significant differences were found related to gender (male, female), with differences in favor of males. The study concluded with several recommendations.

Keywords— *Digital stories, reading comprehension, primary stage*

I. INTRODUCTION

This Human capital is the primary driver of all forces and other resources; without it, other wealth and potentials become valueless. These resources only transform into immense energy when discovered and utilized by creative individuals. This is not coincidental but a result of organized thinking and purposeful effort.

Creative students are the human capital that states must discover, unleash, and invest in for their advancement in a world where intellect, thought, and the effective use of human and financial resources determine supremacy. The competition among nations is a competition of minds

aiming for scientific breakthroughs and technological advancement, ensuring leadership and dominance. Therefore, the ultimate goal of education in our contemporary era is to foster creativity and diverse thinking. Thus, the role of educational institutions in preparing creative individuals capable of solving problems they face in their lives and having the ability to think of multiple and varied alternatives for continuous renewal becomes paramount [1].

Amid the technological advancements and significant growth of knowledge witnessed in the current era, a scientific and technological revolution has emerged. It has greatly impacted all aspects of life, including educational institutions, which require improvements in practices, methods, and educational technologies to cope with this progress and significant development. Educational assistive technologies are one of the fields encompassed by technological and cognitive advancements. They are considered one of the most important services provided to students with learning difficulties, offering them substantial support. These technologies work on facilitating the obstacles faced by students in their academic journey and overcoming them. They strive to find alternative learning methods based on their diverse needs. Moreover, they excel in addressing individual differences among learners and contribute to improving students' academic and social levels [2].

The contemporary world is witnessing significant transformations in communication technology, which affect cultural and economic relationships and different societal patterns of thinking. Digital social networks have played and continue to play an effective role in providing individuals with a wealth of information, situations, and trends, thereby contributing to shaping their awareness and preparing them to have more influence and appeal. Social media platforms facilitate communication among the public, and these networks are distinguished by features such as interactivity, immediacy, and instantaneity. Despite what is said about digital technology and the skills it demands from recipients to use various devices, the

audience's role has become a significant source of information circulated worldwide [2].

The importance of e-learning in the educational process is evident through conferences and studies that have emphasized the necessity of adopting and employing e-learning. Among these are the recommendations of the first International Conference on E-Learning at the University of Bahrain and the E-Class Seminar at the same university (2002), which called for the transformation of curricula in Arab schools, colleges, and universities into electronic curricula, and the utilization of electronic technologies. Motivation to learn new things through new technologies is the basis for accepting and interacting with the new dynamically. Motivation aims to reduce stress in students and relieve them from a state of imbalance. It is an emotional motivator that directs students' behavior towards achieving a specific and defined goal, thus increasing their success and interaction with new learning skills [3].

The rapid advancement of e-learning technologies has contributed to the emergence of new and diverse forms of educational methods, which excel over traditional methods, especially in describing phenomena, presenting events, and places associated with curriculum content. This is achieved through activities that leverage students' personal experiences to integrate with new ideas, among which digital storytelling has been one of these techniques [4].

Reading: It is an interactive process involving the understanding and comprehension of written texts. This process includes interpreting the meanings and ideas conveyed in the words and sentences found in the texts. It requires multiple skills, including focus, concentration, and critical thinking.

Reading has several aspects, including:

- Letter and word recognition: This relate to the reader's ability to distinguish between letters and words in the text.
- Reader's comprehension of words: Once words are recognized; the reader needs to understand their meanings and how they fit into sentences.
- Critical thinking: This involves the ability to evaluate and analyze information and provide opinions on it, expanding understanding beyond just the text.
- Enjoyment and pleasure: Reading is not just a mechanical process but should be enjoyable and engaging. It can open up new worlds and enrich an individual's life.
- Communication: Reading enables individuals to communicate with others, whether through discussing texts with others or writing reactions to them.

Reading is a fundamental skill in life, impacting learning, thinking, and communication. Continuous reading requires training and development to improve reading skills and effectively use them in various aspects of life [5].

Reading Comprehension Skill: Refers to the ability to understand and interpret the meanings and ideas expressed in written texts. This skill relies on several factors such as the ability to focus, critical thinking, inference, prior

knowledge, and linguistic communication. Components of reading comprehension skill include:

- Focus and Attention: The ability to effectively concentrate and pay attention to the text being read in order to understand meanings and details.
- Surface and Deep Understanding: Reading to extract basic information from the text (surface understanding), as well as understanding the deep ideas and meanings that the text may convey (deep understanding).
- Summarization and Analysis: The ability to extract key information from the text and analyze it to understand the relationships between different ideas and concepts.
- Prior Knowledge: Using previous knowledge and experiences to understand the text and anticipate what will come next.
- Inference: The ability to use the information available in the text to draw conclusions or gain a deeper understanding of the subject.
- Linguistic Communication: The ability to understand the relationships between words, sentences, and paragraphs in the text, and how they are structured to build meaning.

Reading comprehension skill is not just about understanding the written words, but it is the ability to understand the underlying idea behind the text and interact with it in a thoughtful and critical manner. Developing this skill requires continuous practice and training in reading various types of texts and thinking deeply about them [6].

Examples of reading comprehension skill include:

- When reading a scientific article about the impact of climate change on the environment, the reader can extract key information about the factors affecting climate change and its impact on wildlife and humans.
- In reading a short story, the reader can understand the characters and the conflicts they face, as well as infer the lessons or values related to life contained in the story.
- When reading a newspaper article about a political issue, the reader can use inference to understand the different perspectives of the parties involved and the analyses presented in the text.

Reading comprehension skill is fundamental in learning and critical thinking, helping individuals effectively comprehend information and understand the relationships between different ideas in written texts [7].

Reading comprehension is the ultimate goal of reading, which entails progressive tracking according to the concept of comprehension. It starts with pronouncing letters and articulating them correctly, thereby expressing the literal meanings of comprehension, and evolves to reach the level of accessing and depositing meaning into the human brain without the need for actual practice of the reading product. It may be referred to as reading meaning and understanding. Then, reading evolves to the concept of discrimination,

criticism, and the ability to make judgments relevant to comprehension of the text, thus advancing to the level of critical reading. Reading reaches its peak by rephrasing the meaning in new words and structures as a result of the interaction of experiences between the reader and the writer, thus being referred to as creative literary reading [8].

Reading comprehension is associated with digital storytelling; it includes the final outcome, namely, the benefit provided by these stories. There is no better evidence of this than the fact that the interaction between digital stories and the learning student creates an impact reflected in understanding skills related to remembering characters, time, place, obtaining and retaining data and information in the human brain, and rephrasing it through storytelling. There is no doubt that the features of digital storytelling, such as sound, image, and motion, align with modern learning principles in delivering an educational message to students through a modern strategy, method, style, or educational source, contributing to raising the educational levels of students [9].

Digital storytelling is an approach that utilizes digital technology and multimedia to enhance the reading and learning experience. This strategy involves creating and using interactive digital stories and multimedia content that combines text, images, audio, video, and other elements to create a rich and engaging reading experience. Among the key features of digital storytelling are:

Interactivity: Digital stories allow readers to interact with the content through activities such as clicking, dragging, scrolling, interactive games, and customization. Digital stories can be customized to meet the individual needs of each reader, allowing for the delivery of suitable content appropriate for each person's reading and comprehension skills level, and comprehensive access, meaning digital stories provide an opportunity to access content more extensively and comprehensively [10].

Digital storytelling is a form of literary or narrative work that is published and distributed through digital media, such as the internet, smart applications, e-books, tablets, and other digital media. Digital stories benefit from modern technology to deliver multi-media and interactive storytelling experiences [11].

Components of digital storytelling include:

Textual elements: Digital stories include textual elements as a central axis, where the story is written and the reader is guided through words and sentences.

Visual elements: These include images, graphics, animations, and video clips used to add visual dimensions to the story and enrich the reader's experience.

Audio elements: These may include audio recordings, sound effects, and music to enhance the overall atmosphere of the story and convey emotions and moods.

Interactivity: Digital stories provide interactive elements that allow the reader to participate in the story in various ways, such as choosing the story's path or interacting with the digital elements embedded in the text [12].

Examples of digital stories include:

- **Digital Storytelling Apps:** Such as interactive children's apps containing multimedia stories with animated images and interaction with characters.
- **Interactive Online Stories:** Websites that provide multimedia stories with video, audio, images, and interaction.
- **Multimedia E-books:** E-books containing multimedia elements such as animations and sound. By using digital media, digital stories allow authors to create exciting and interactive storytelling experiences that engage readers and maintain their attention.

Digital stories enable diverse groups of people to access stories regardless of place or time, in addition to promoting collaborative learning and cooperation among readers through features such as online discussions, idea exchange, and comments. They also provide excitement and thrill by offering exciting reading experiences using sound, images, video, and animations. Finally, automatic assessment allows teachers and educators to provide automatic and immediate feedback on the performance of readers and students, helping them identify strengths and weaknesses and provide better support. Furthermore, the use of digital stories enhances learning effectiveness and attracts students more towards reading and learning [13].

Tetri [4], Blocher [14], Abu Maghnam [15], and Al Taban [16] have mentioned benefits and advantages of digital stories including being a strong educational model for integrating e-learning technology into the educational process, developing creative thinking skills, especially fluency and flexibility, enhancing critical thinking skills, promoting the concept of lifelong learning and self-learning, developing communication skills, whether auditory, visual, or written, supporting self-representation and expression of the student's personal identity through participation and expression of opinion, enhancing individual feelings of both the speaker and the listener, encouraging interest in scientific facts contained in the story, and finally providing the reader with selected cultural information and acquiring advanced knowledge at an early stage.

A. Research Problem

Given the need to understand the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan, especially in overcoming their difficulties, and in the absence of resources that meet their needs, there was a necessity for means to add a bit of fun to their school day. Since students particularly struggle with academic delay, disengagement, lack of active participation in class, reading fluency issues, and pronunciation problems [17], it is essential to understand the role of digital stories in developing reading comprehension skills from the perspective of elementary Arabic language teachers in Jordan.

It has been observed that students are highly attracted to technology, and anything presented through it offers more information and lessons than traditional teaching methods. Therefore, it was necessary to search for strategies and mechanisms that take into account the individual

differences among them and align with their preferences and needs.

Consequently, the problem of the current study was defined as identifying the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan.

B. Study Questions

The current study seeks to answer the following questions:

- What is the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan in the field of reading comprehension resulting from digital stories?
- Are there statistically significant differences at the significance level ($\alpha = 0.05$) regarding the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan attributed to variables such as gender, qualification, years of experience, and type of school?

C. Study Objectives

- To identify the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan in the field of reading comprehension resulting from digital stories.
- To determine the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan attributed to variables such as gender, qualification, years of experience, and type of school.

D. Significance of the Study

- Enhancing some reading comprehension skills among elementary school students using digital stories.
- Contributing to the improvement of teaching methods by highlighting and focusing on new educational methods for teaching reading, including the use of digital storytelling.
- Keeping up with modern educational and technological developments in teaching methods that rely on technology, which differ from traditional teaching methods used with students.

E. Study Boundaries

The objective boundaries of the research focused on the research tool used in exploring the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan, as well as the research variables.

The human boundaries were limited to Arabic language teachers working in the Ministry of Education in Jordan, and the temporal boundaries of the current research were limited to the academic year (2023/2024). As for the spatial

boundaries, they were limited to schools under the Ministry of Education in the country of Jordan.

F. Study Terminology

1) *Digital Stories*: Digital stories are narratives composed of images, animations, texts, as well as sounds and music. They consist of a mix of multimedia elements including sound, imagery, text, sound effects, and animated cartoons to produce digital stories in an engaging manner for educational purposes.

2) *Reading*: Reading is defined as a cognitive process that involves perceiving written symbols, pronouncing them, understanding them, and translating them into ideas, ultimately leading to comprehension by ordinary students and those with learning difficulties of the material being read.

3) *Reading Comprehension Skill*: It is the ability to understand and comprehend the meanings and concepts contained in written text. This skill includes several key elements, including reading comprehension, text analysis, self-direction, precise meaning determination, expectations, and text evaluation.

4) *Elementary School Stage*: It is the foundational stage, including the primary level/first cycle. This stage comprises classes from the first grade to the fourth grade, aiming to provide a rich learning environment that encourages students to learn and assists them at the beginning of their academic journey.

5) *Elementary School Teachers*: They are male and female teachers who have been academically prepared to work within regular classrooms in elementary schools to teach students from the first grade to the fourth grade in various subjects such as reading and writing.

6) *Arabic Language Teachers*: They are teachers tasked with teaching the Arabic language (males and females) at the elementary stage and affiliated with the Ministry of Education in Jordan, holding a qualification to teach the Arabic language.

The causal relationships explaining how digital stories impact students' reading comprehension can be summarized as follows:

- *Interactive Content*: Digital stories engage students through interaction, such as clicking on words for definitions, enhancing understanding of context and vocabulary.
- *Increased Engagement*: Multimedia elements like animations and sounds make digital stories more engaging, improving focus and comprehension.
- *Personalized Learning*: Content is tailored to the student's level, helping them understand texts better and preventing frustration.
- *Language Skill Enhancement*: Continuous exposure to digital stories helps students build vocabulary and grasp complex sentence structures.
- *Immediate Feedback*: Digital stories provide instant feedback, helping correct mistakes and improve comprehension.
- *Multimedia Integration*: The combination of text with visual and auditory elements clarifies abstract ideas, making texts easier to understand and more engaging.

These factors demonstrate that digital stories significantly enhance reading comprehension by offering an interactive and tailored learning experience [18].

II. PREVIOUS STUDIES

The study conducted by Al-Hamid [19] aimed to uncover the attitudes of primary school teachers towards employing digital stories in developing listening skills. The results showed that the overall score of primary school teachers' attitudes towards employing digital stories in developing listening skills was significantly high. Additionally, there were statistically significant differences at the significance level of (0.05) between the mean scores of primary school teachers' attitudes according to academic qualification in favor of postgraduate studies and according to years of experience in favor of the category of less than (5-1) years.

In the study by Al-Harbi, Khaled [20], the objective was to identify the critical reading skills necessary for Arabic language learners with other native languages and to build a program based on using digital stories to develop them. The results showed statistically significant differences between the mean scores of learners in the two applications: pre and post, in the skills of interpretation, comparison, and evaluation, in favor of the post-application. There were also statistically significant differences between the mean scores of learners in the two applications: pre and post, in the overall test result, in favor of the post-application.

In a study conducted by Al-Omari [21], the aim was to determine the impact of using digital stories on improving the oral reading skills of female students with reading difficulties in discrimination, analysis, and representation. The study tools consisted of three digital stories and a note card for each digital story. The study used a quasi-experimental approach, and the results showed statistically significant differences in favor of the experimental group for oral reading skills and the skills of discrimination and analysis.

In the study by Al-Masoud et al. [22], which aimed to identify an interactive digital story-based program in developing reading comprehension among elementary school students in Kuwait. The study found statistically significant differences between the mean scores of the experimental group before and after the program in favor of post-reading comprehension.

Al-Ghamdi [23] conducted a study aiming to explore the impact of different styles of visual presentation in digital stories on the development of critical and inferential reading skills among elementary school students in Al-Baha region. The results revealed statistically significant differences in favor of the experimental group.

As for the study by Al-Tetri [4], which aimed to investigate the impact of employing digital stories in developing reading comprehension skills among third-grade primary school students, the results showed a positive effect of employing digital stories in developing reading comprehension skills among the study sample.

Al-Harbi [20] aimed to identify the effectiveness of digital stories in developing critical listening skills in the English language course among high school female students in Riyadh. The results indicated that teaching using digital

stories was highly effective in developing critical listening skills among high school female students.

Abu Afifa [24] conducted a study aiming to determine the impact of using digital stories on developing active listening skills and creative thinking for third-grade students in the Arabic language subject. The results revealed statistically significant differences between the mean scores of third-grade students in the listening and creative thinking test in the Arabic language subject in favor of the experimental group.

III. STUDY METHODOLOGY

The descriptive-analytical methodology was employed by administering a questionnaire to the study participants, followed by appropriate statistical analysis to derive the results.

A. Study Population and Sample

The study sample consisted of 183 male and female teachers working in schools affiliated with the Ministry of Education in Jordan. The highest percentage of the sample consisted of female teachers, accounting for 95.6%. This is because the majority of those teaching in the primary education stage in Jordan are women, with a very small percentage of male teachers. Table 1 illustrates the study sample and its variables.

TABLE I. FREQUENCIES AND PERCENTAGES BY STUDY VARIABLES

	Categories	Frequency	Percentage
gender	Male	8	4.4
	Female	175	95.6
Academic qualification	Diploma	20	10.9
	Bachelor's	120	65.6
	High diploma	25	13.7
	Postgraduate	18	9.8
Years of Experience	5-1	20	10.9
	10-6	45	24.6
	15-11	63	34.4
	16years and over	55	30.1
School type	governmental	85	46.4
	private	98	53.6
	Total	183	100.0

B. Study Instrument

The researchers developed a specific tool to measure the role of digital stories in enhancing reading comprehension skills from the perspective of Arabic language teachers in Jordan's elementary stage. This was achieved by reviewing the topic of digital stories in developing reading skills in theoretical literature and previous relevant studies, such as Al-Omari's study [21], Al-Ghamdi's study [23], Al-Tetri's study [4], Al-Harbi's study [20], and Abu Afifa's study [24]. Expertise was also sought from professionals in the field of digital stories, educational technologies, reading instruction, and teaching. The study instrument consisted of a final set of 12 items measuring reading comprehension skills. A Likert five-point scale was adopted to score the study tools, with each item rated on a scale of five points (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree),

corresponding numerically to (5, 4, 3, 2, 1) respectively. The scale was adopted for the purpose of result analysis, as shown in Table 2.

TABLE II. RESULTS ANALYSIS SCALE

2.33 -1.00	Low
3.67 -2.34	Midterm
5.00 - 3.67	High

Calculation of the Scale was done using the following equation: (Maximum Scale Value (5) - Minimum Scale Value (1)) / Number of Categories Required (3) = (5 - 1) / 3 = 1.33. Then, the result (1.33) was added to the end of each category.

C. Study Tool Validity

To extract the construct validity indications for the scale, correlation coefficients of the item were extracted with the total scale score in a sample survey outside the study sample, consisting of (30) students. The correlation coefficients of the item with the total scale score ranged from (0.62-0.90), as shown in Table 3.

TABLE III. CORRELATION COEFFICIENTS BETWEEN ITEM AND TOTAL SCALE SCORE

Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient
13	.75**	17	.90**	21	.85**
14	.62**	18	.86**	22	.83**
15	.84**	19	.84**	23	.75**
16	.87**	20	.77**	24	.85**

* Statistically significant at the significance level (0.05).

** Statistically significant at the significance level (0.01).

It is worth noting that all correlation coefficients were acceptable and statistically significant, thus none of these items were deleted.

D. Reliability of the Study Tool

To ensure the reliability of the study tool, a test-retest method was used by applying the scale, then reapplying it after two weeks to a group outside the study sample consisting of (30) students. The Pearson correlation coefficient between their estimates on both occasions reached (0.92). Additionally, the reliability coefficient was calculated using the internal consistency method according to the Cronbach's alpha equation, which reached (0.85). These values were considered suitable for the purposes of this study.

IV. RESULTS OF THE STUDY AND THEIR DISCUSSION

First Question: What is the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan?

To answer this question, the arithmetic means and standard deviations for the role of digital stories in developing reading comprehension skills were extracted from the perspective of Arabic language teachers in elementary schools in Jordan. Table 4 illustrates this.

TABLE IV. ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE ROLE OF DIGITAL STORIES IN DEVELOPING READING COMPREHENSION SKILLS FROM THE PERSPECTIVE OF ARABIC

LANGUAGE TEACHERS IN ELEMENTARY SCHOOLS IN JORDAN, RANKED IN DESCENDING ORDER ACCORDING TO THE ARITHMETIC MEANS

Rank	N	Items	Mean	STD	Level
1	14	Digital stories enable students to suggest alternative endings to the story.	3.91	.746	High
2	20	Enables students to express their opinions about the characters of the read story.	3.88	.724	High
3	13	Digital stories help in understanding the general idea and partial ideas of the text.	3.85	.774	High
4	15	Digital stories enable students to understand the writer's intent from the context and infer the moral of the story.	3.80	.830	High
5	17	Digital stories illustrate the beauty in literary texts	3.80	.797	High
6	18	Digital stories help catch reading errors	3.80	.797	High
7	19	Digital stories help show similarities and differences from read texts	3.72	.789	High
8	24	Digital stories help determine the type of emotion contained in the reading.	3.69	.796	High
9	21	Digital stories give the student the opportunity to express his admiration for an idea in a poetic or prose text he has read.	3.66	.767	Midterm
10	16	Digital stories are useful in understanding the meaning of a word in different contexts and its synonyms and antonyms through the general meaning of the text	3.63	.772	Midterm
11	23	Through the digital versions, students are asked to ask questions by reading.	3.63	.772	Midterm
12	22	The student distinguishes fact from opinion and qualitative and quantitative analysis through what he has learned in digital stories	3.58	.780	Midterm
Reading comprehension			3.75	.660	High

Table 4 shows that the arithmetic means ranged between (3.58-3.91). Paragraph number (14), which states: "Digital stories enable students to suggest alternative endings to the story," ranked first, with an arithmetic mean of (3.91), while paragraph number (22), which states: "The student distinguishes between fact and opinion, and qualitative and quantitative analysis through what he learns in digital stories," ranked last, with an arithmetic mean of (3.58). The arithmetic mean for the role of digital stories in developing reading skills from the perspective of Arabic language teachers in elementary schools in Jordan in the field of reading comprehension resulting from digital stories as a whole was (3.75).

This result is consistent with the study of both Al-Omari [21], and Al-Ghamdi [23]. This result can be attributed to the high and continuous training that teachers receive in schools, and their continuous awareness of any strategies and techniques used with students in teaching and learning, especially at the elementary level. Additionally, it can be attributed to the availability of devices and assistive technologies for teaching students, as well as the interest shown by school management in monitoring any strategies and techniques that integrate technology and direct communication between students, as they have significant benefits on student learning and improvement, especially in basic skills such as reading.

Question Two: Are there statistically significant differences ($\alpha = 0.05$) in the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan attributed to variables (gender, educational qualification, years of experience, and type of school)?

To answer this question, arithmetic means and standard deviations were extracted for the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan according to variables of gender, educational qualification, years of experience, and type of school, and the table below illustrates this.

TABLE V. ARITHMETIC MEANS AND STANDARD DEVIATIONS FOR THE ROLE OF DIGITAL STORIES IN DEVELOPING READING COMPREHENSION SKILLS FROM THE PERSPECTIVE OF ARABIC LANGUAGE TEACHERS IN ELEMENTARY SCHOOLS IN JORDAN ACCORDING TO GENDER, EDUCATIONAL QUALIFICATION, YEARS OF EXPERIENCE, AND TYPE OF SCHOOL

		Mean	Standard deviation	Number
Gender	Male	5.00	.000	8
	Female	3.69	.616	175
Academic qualification	Diploma	3.02	.493	20
	Bachelor's	3.77	.615	120
	High diploma	3.97	.633	25
	Postgraduate	4.05	.616	18
Years of Experience	5-1	3.50	.472	20
	10-6	3.75	.570	45
	15-11	3.92	.658	63
	16years and over	3.64	.746	55
School type	governmental	3.87	.726	85
	private	3.64	.577	98

Table 5 shows apparent variation in the arithmetic means and standard deviations for the role of digital stories in developing reading comprehension skills from the perspective of Arabic language teachers in elementary schools in Jordan due to differences in the categories of gender, educational qualification, years of experience, and type of school. To determine the statistical significance of the differences between the arithmetic means, a factorial analysis of variance was conducted, as shown in Table 6.

TABLE VI. FACTORIAL ANALYSIS OF VARIANCE FOR THE EFFECT OF GENDER, EDUCATIONAL QUALIFICATION, YEARS OF EXPERIENCE, AND TYPE OF SCHOOL ON THE ROLE OF DIGITAL STORIES IN DEVELOPING READING COMPREHENSION SKILLS FROM THE PERSPECTIVE OF ARABIC LANGUAGE TEACHERS IN ELEMENTARY SCHOOLS IN JORDAN

Source of variance	Sum of squares	Degrees of freedom	Mean squares	F value	Sig
Gender	11.211	1	11.211	39.184	.000
Academic qualification	11.739	3	3.913	13.676	.000
Years of Experience	4.824	3	1.608	5.620	.001
School type	.130	1	.130	.456	.500
ERROR	49.785	174	.286		
Total	79.163	182			

A. Table 6 reveals the following:

- There are statistically significant differences ($\alpha = 0.05$) attributed to gender, with an F value of 39.184 and a significance of 0.000. The differences favor males. This result can be attributed to the fact that male teachers undergo continuous training, education, and monitoring of digital storytelling strategies more than female teachers.
- There are statistically significant differences ($\alpha = 0.05$) attributed to educational qualification, with an F value of 13.676 and a significance of 0.000. To demonstrate pairwise statistically significant differences between the arithmetic means, post-hoc Scheffe comparisons were used, as shown in Table 7.
- There are statistically significant differences ($\alpha = 0.05$) attributed to years of experience, with an F value of 5.620 and a significance of 0.001. To demonstrate pairwise statistically significant differences between the arithmetic means, post-hoc Scheffe comparisons were used, as shown in Table 7.
- There are no statistically significant differences ($\alpha = 0.05$) attributed to the type of school (governmental, private), with an F value of 0.456 and a significance of 0.500. This result can be attributed to the significant and extensive focus of both private and governmental schools on implementing and executing modern strategies in student education, especially since the Ministry of Education prioritizes training and using modern strategies, particularly digital storytelling, for teaching, with the same level of attention given to governmental schools.

TABLE VII. POST-HOC SCHEFFE COMPARISONS FOR THE EFFECT OF EDUCATIONAL QUALIFICATION ON THE ROLE OF DIGITAL STORIES IN DEVELOPING READING COMPREHENSION SKILLS FROM THE PERSPECTIVE OF ARABIC LANGUAGE TEACHERS IN ELEMENTARY SCHOOLS IN JORDAN

	Mean	Diploma	Bachelor's	High diploma	Postgraduate
Diploma	3.02				
Bachelor's	3.77	.75*			
High diploma	3.97	.95*	.19		
Postgraduate	4.05	1.03*	.28	.08	

*Function at the significance level ($\alpha = 0.05$).

Table 7 shows statistically significant differences ($\alpha = 0.05$) between the diploma on one hand and both the bachelor's degree, higher diploma, and postgraduate studies on the other hand, with differences in favor of the bachelor's degree, higher diploma, and postgraduate studies. This result can be attributed to the fact that teachers who pursue a bachelor's, higher diploma, or postgraduate studies undergo longer periods of study, which are four years for the bachelor's degree, six years for the higher diploma, and seven years for postgraduate studies after completing high school. This longer period of study leaves a scientific impact and excellence, especially with a longer period of time that includes various experiences and training, unlike the diploma period, which is only two years after high school.

TABLE VIII. POST-HOC SCHEFFE COMPARISONS FOR THE EFFECT OF YEARS OF EXPERIENCE ON THE ROLE OF DIGITAL STORIES IN DEVELOPING READING COMPREHENSION SKILLS FROM THE PERSPECTIVE OF ARABIC LANGUAGE TEACHERS IN ELEMENTARY SCHOOLS IN JORDAN

	Mean	5-1	-6 10	-11 15	16years and over
5-1	3.50				
10-6	3.75				
15-11	3.92	.42*			
16years and over	3.64	.14	.11	.28	

*Function at the significance level ($\alpha = 0.05$).

Table 8 indicates statistically significant differences ($\alpha = 0.05$) between 1-5 and 11-15, with differences in favor of 11-15. This could be attributed to the extensive continuous training for experienced individuals, in addition to their exposure to high-level administrative and teaching experiences due to changes in supervisors and directors, and their continuous monitoring to enhance their teaching skills, as a result of continuous management supervision.

V. STUDY RECOMMENDATIONS

- School administrations should work on providing digital storytelling technologies to assist in developing reading skills while offering technical support.
- Design and implement specialized training programs and courses in the field of digital storytelling for teachers.
- Collaborate between Arabic language teachers and educational technology experts in preparing and designing digital stories according to educational and scientific standards.
- Implement incentive programs by school management with rewards for teachers who excel in using and employing digital storytelling in teaching.
- To effectively implement digital storytelling in the classroom, educators and policymakers can follow several key strategies:
- Curriculum Integration: Align digital stories with educational goals, ensuring they support core concepts and match students' levels.
- Tool Selection: Use interactive platforms with features like educational games, adaptive content, and animations. Ensure ease of use for both teachers and students.
- Personalized Learning: Offer diverse digital stories that cater to students' interests and abilities. Use

adaptive technologies to tailor content to individual needs.

- Student Engagement: Encourage students to create their own digital stories to enhance creativity and understanding.
- Special Needs Consideration: Ensure digital stories are accessible to all students, including those with disabilities, by offering features like scalable text and audio narration.
- Parental and Community Involvement: Inform parents about the benefits of digital storytelling and provide workshops on how they can support their children's learning.
- Ongoing Research: Continuously evaluate the impact of digital storytelling on student learning to refine implementation strategies.

REFERENCES

- [1] Z. K. Ellala, K. M. AL-Tkhayneh, and N. R. Alsalmi, "The level of creative behavioral characteristics for deaf and hearing students in the College of Education at Al Ain University in the United Arab Emirates," *Dirasat: Human and Social Sciences*, vol. 50, no. 5, suppl. 1, pp. 183-196, 2023, doi: 10.35516/hum.v50i5.923.
- [2] M. Gharaibeh, Z. K. Ellala, and O. Salman, "Primary school teachers' knowledge of assistive technologies for students with dyslexia and dysgraphia in Abu Dhabi," *Reading Psychol.*, vol. NA, no. NA, pp. 1-30, 2024, doi: 10.1080/02702711.2024.2339812.
- [3] S. A. Alwaely, H. A. Al-Qudah, Z. K. Ellala, and N. R. Alsalmi, "Job security and its relationship to motivation to accomplish teaching tasks with Arabic teachers in the third episode in schools in Abu Dhabi," *Dirasat: Human and Social Sciences*, vol. 51, no. 1, pp. 1-13, 2024, doi: 10.35516/hum.v51i1.931.
- [4] H. Tetri, "Assessing the effectiveness of digital storytelling in developing creative writing skills for students of secondary Arabic language schools," M.S. thesis, The Islamic University, 2016. doi: <http://search.shamaa.org/fullrecord?ID=236766>.
- [5] H. D. Sirojiddinova, "The improvement of language skills (speaking, listening, reading, and writing) for self-directed learners," *Новости образования: исследование в XXI веке*, vol. 2, no. 19, pp. 231-236, 2024, doi: <https://nauchniyimpuls.ru/index.php/noiv/article/view/15041/10675>
- [6] P. Capin, S. Vaughn, J. E. Miller, J. Miciak, A. M. Fall, G. Roberts, et al., "Investigating the reading profiles of middle school emergent bilinguals with significant reading comprehension difficulties," *Scientific Studies of Reading*, vol. 28, no. 2, pp. 190-213, 2024, doi: 10.1080/10888438.2023.2254871.
- [7] D. Paige, W. H. Rupley, and L. Zigliari, "Critical thinking in reading comprehension: Fine tuning the simple view of reading," *Education Sciences*, vol. 14, no. 3, p. 225, 2024, doi: 10.3390/educsci14030225.
- [8] A. R. Muhtar, H. Harmin, H. Hajrah, B. Suman, and A. Arwin, "Improving of reading comprehension for student learning through the use of simulation models creative process of approach at class XI MIPA2 of SMAN 28 Bone," *La Ogi: English Language Journal*, vol. 10, no. 1, pp. 38-46, 2024, doi: <https://doi.org/10.55678/loj.v10i1.1330>.
- [9] D. H. N. Sari, S. St Y, and S. Yulisetiani, "Effectiveness of interactive digital crossword media for reading skills comprehension of historical stories," *Journal of Research Administration*, vol. 6, no. 1, 2024.
- [10] M. Teedor, "Digital storytelling: Changing learners' attitudes and self-efficacy beliefs," *Applied Linguistics*, vol. 45, no. 1, pp. 65-87, 2024, doi: 10.1093/applin/amad002.
- [11] N. Kurian and C. Saad, "Where technology meets empathy: Using digital storytelling, gaming, and AI to teach about peace and human rights," in *Communication and Education: Promoting Peace and Democracy in Times of Crisis and Conflict*, pp. 148-163, 2024, doi: 10.1002/9781119985280.ch10.
- [12] B. Dogan and A. Itani, "Teaching and developing digital stories through artificial intelligence in a summer STEM camp designed for

- elementary-aged students," in *Proc. Society for Information Technology & Teacher Education International Conference*, pp. 411-416, Mar. 2024. Association for the Advancement of Computing in Education (AACE). doi: <https://www.learntechlib.org/p/223966/>.
- [13] A. Batur and Ü. Çakıroğlu, "Implementing digital storytelling in statistics classrooms: Influences on aggregate reasoning," *Computers & Education*, vol. 200, p. 104810, 2023, doi: 10.1016/j.compedu.2023.104810.
- [14] M. Blocher, "Digital storytelling and reflective assessment," in *Proc. Society for Information Technology & Teacher Education International Conference*, vol. 2, pp. 892-901, Las Vegas, USA, Mar. 3, 2008. Association for the Advancement of Computing in Education. doi: <https://www.learntechlib.org/primary/p/27286/>.
- [15] K. Abu Maghnam, "Educational effects of some variables on the narrative writing skills among students of educational colleges in light of educational technology and cognitive abilities," *Educational Sciences Journal*, no. 75, pp. 93-180, 2013. doi: <https://search.mandumah.com/Record/521958>.
- [16] M. Al-Taban, *The effectiveness of a proposed program to deal with some psychological problems among high school students in the northern region and its impact on academic achievement*, Riyadh: King Saud University Press, 2013. doi: <https://search.mandumah.com/Record/714900>.
- [17] H. Khasawneh, H. Al-Hawaldah, Q. Al-Assaf, and J. Al-Harash, *A study on educational counseling interventions*, 1st ed. Amman: Dar Alfikr, 2016. [Online]. Available: <https://www.daralfiker.com/node/7567>.
- [18] M. A. M. Tamimi, "Effects of digital storytelling on motivation, critical thinking, and academic achievement in secondary school English learners," *Res. Soc. Sci. Technol.*, vol. 9, no. 1, pp. 305-328, 2024. [Online]. Available: <https://doi.org/10.46303/ressat.2024.18>. [Accessed: 17-Aug-2024].
- [19] A. Al-Hamid, "Primary school teachers' attitudes towards using digital stories in developing listening skills," *The Arab Journal of Child Media and Culture*, vol. 6, no. 24, pp. 279-300, 2023. [Online]. Available: https://jacc.journals.ekb.eg/article_292457.html. [Accessed: 17-Aug-2024]. DOI: 10.21608/JACC.2023.292457.
- [20] K. Al-Harbi, "The effectiveness of using digital stories in developing critical reading skills among Arabic language learners of other languages," *Journal of Education, Al-Azhar University*, vol. 39, no. 1, pp. 194-221, 2020. [Online]. Available: https://jsrep.journals.ekb.eg/article_122531.html. [Accessed: 17-Aug-2024]. DOI: 10.21608/JSREP.2020.122531.
- [21] A. Al-Omari, "Assessing the effectiveness of digital storytelling on language skills development (listening/grammar/vocabulary improvement) in improving Arabic language skills," *Journal of Literature and Human Sciences, The Tunisian Journal*, no. 21, 2020. [Online]. Available: <https://search.mandumah.com/Record/1069594>. [Accessed: 17-Aug-2024].
- [22] T. Al-Masoud, A. Al-Hudairis, F. Al-Masoud, and N. Al-Otaibi, "The effectiveness of an interactive digital story-based program in developing reading comprehension among elementary stage students in Kuwait," *Faculty of Education Journal, Assiut University*, vol. 34, no. 5, pp. 558-592, 2018. [Online]. Available: https://mfes.journals.ekb.eg/article_105335.html. [Accessed: 17-Aug-2024].
- [23] R. Al-Ghamdi, "The innovation of a digital story-based program to develop thinking skills in the Arabic language subject for the benefit of high school students in the Gulf Cooperation Council countries and its impact on developing creative writing skills," *The Jordanian Journal of Educational Sciences and Humanities*, vol. 11, pp. 178-218, 2018. [Online]. Available: http://search.shamaa.org/PDF/Articles/EGJfeau/JfeauVol34No8Y2018/jfeau_2018-v34-n8_321-349.pdf. [Accessed: 17-Aug-2024].
- [24] H. Afifa, "The effectiveness of a program for developing the creative thinking of secondary school students through the application of digital storytelling in the Arabic language subject," Master's thesis, The Islamic University of Gaza, Gaza, Palestine, 2016. [Online]. Available: <http://thesis.mandumah.com/Record/232273>. [Accessed: 17-Aug-2024].