Using Digital Storytelling to Develop University Students' Critical Reading Skills and Self Efficacy

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ABSTRACT

The current research aimed at investigating the effectiveness of Digital Storytelling (DTS) on developing critical reading skills and self-efficacy for university students. The participants were (80) divided into an experimental group (40) and a control group (40). A checklist of EFL critical reading skills , and self –efficacy scale were established and evaluated to determine the most significant and required EFL critical reading skills for university students. A pre- and post-evaluation of EFL critical writing skills as well as a self- efficacy scale were created. Students were pre-tested to determine their EFL critical reading proficiency and efficacy beliefs. Then they were taught how to improve their critical reading skills through digital storytelling which favoured the experimental group. The quasi-experimental research design was used in the current research. The results showed that there were statistically significant differences between the mean scores of the experimental and control groups in their critical reading skills, and self- efficacy scale with the experimental group outperforming the control group.

Keywords: Digital Storytelling, Critical Reading Skills, Self Efficacy , University Students.

Introduction

Teaching and learning materials can now be represented in more intricate, multi-layered ways thanks to new digital technology. It should come as no surprise that there is a growing need for successful technology integration in teacher education and instruction. Institutions of higher learning are meeting the demand. To improve their ability to use technology effectively and efficiently to influence student accomplishment, teachers and students can now access educational technology content from the majority of higher education institutions.

According to Henry & Mohamad (2021), integrating technology into the classroom entails much more than just putting hardware and/or software in place. Realistic learning activities in the curriculum are necessary for meaningful technology integration. Through authentic activities, students can take a more active role in their education and combine a variety of skills and academic areas in a comprehensive way. Digital storytelling is one of the most innovative and promising methods available today for encouraging real-world learning experiences (Gonzales, 2022).

According to Kara and Gulozer (2023), digital storytelling is a subset of storytelling that tells stories through digital media. Art, oral history, creative writing, speaking, images, music, news articles, digital video, the Internet, graphic design, sound engineering, or animation are some of the ways that stories are communicated. This method helps students with different learning styles and promotes higher order cognition through the use of multimedia technologies.

Another educational strategy for fostering critical reading skills is digital storytelling. Thanks to technological advancements, digital storytelling has a wider range of applications than traditional storytelling, which is mostly used for preaching and amusement.

Digital storytelling, or DST for short, is an extension of conventional storytelling that uses digital personal narratives to communicate meanings and emotions to an audience through the multimodality and immediacy of contemporary multimedia (Robin, 2008). DTS is an advancement of long-standing traditional storytelling; it relies on using the benefits of modernity and technology to harness the power of stories to impart knowledge and wisdom (Tenh & Harun, 2012).

Larking (2017) defines critical reading as examining the veracity of claims made in reading passages and offering critique on them. A text's surface meaning, or face-value meaning, can conceal underlying meanings from the reader. This can happen when the author presents the reader with unbalanced facts, biased perspectives, or even intentional factual errors in an attempt to persuade them. The responsibility of a critical reader is to "read between the lines and to undertake an analysis of a text in order to fully understand its meaning." Although the phrase "critical reading" has several definitions, it can be broadly divided into two traditions: reading for social involvement and reading for academic accomplishment. Manarin, et al. (2015: 4) state that critical reading is one of the following essential skills for academic success: 1) recognising patterns in the text's elements; 2) differentiating between the primary and supporting concepts; 3) evaluating the text's reliability; 4) deciding how best to defend a text; and 5) drawing pertinent conclusions from it.

Critical reading abilities are helpful for becoming competent in the technological revolution, according to Alqatanani (2017: 310). Without the capacity to read critically, pupils may face marginalisation, discrimination, or be unable to participate fully in society. This is according to Abdel-Khalek (2018). Because it prepares adults for the workforce, critical reading should be the

main emphasis of higher education courses, according to Thomas (2018, 322).

The belief in one's ability to raise behaviour and learning to a sufficient degree can be used to explain self-efficacy (Azar, 2010). People can learn about their self-efficacy through verbal persuasion studies, experiences, physical and emotional states, and observations. Experiences are those instances where a person's past performance on a certain task or job influences their expectations for future success with related issues. For instance, someone who has previously accomplished easy goals could become timid when they fail (Aydede, 2012). Research shows that self-efficacy and achievement are positively correlated, with self-efficacy rising when achievement does as well. According to this perspective, self-efficacy becomes a crucial component in predicting students' academic success.

Additionally, studies have demonstrated that a variety of elements, including feedback, role models, past experiences, and instructional tactics, can affect a person's self-efficacy views. As a result, it becomes crucial for teachers to take self-efficacy into account while developing and implementing lesson plans, especially when including digital storytelling (DST). Teachers can give students the chance to grow and reinforce their self-efficacy in all areas of English proficiency by implementing DST into the classroom (Gonzales, 2022).

Thus, this study concludes that critical reading abilities are essential for academic performance since they enable students to evaluate data, spot biases, and make their own decisions. A person's self-efficacy, or confidence in their capacity to accomplish goals, is also essential for academic success. With its blend of multimedia and narrative components, digital storytelling presents a potentially interesting and participatory approach to hone these abilities.

Statement of the problem

Despite the value of critical reading and the necessity for students to develop it at all educational levels, particularly in this period marked by the explosion of knowledge and the proliferation of publications that may contain ideas that destroy people and societies, the levels of the students fall short of those that are anticipated. The instructor noticed this while instructing undergraduate students and saw that during their assignment. Based on the results gained from the pilot study, the researcher made sure that there is deficiency in EFL university students' critical reading skills. This deficiency may be due to insufficiency of these skills in the current curriculum, shortcomings in the currently used teaching methods or lack and\or inappropriateness of teaching aids.

So, the current research tries to identify the effectiveness of digital storytelling in developing critical reading skills and self-efficacy for university students.

Questions of the research

The study tries to answer the following main questions:

- What are EFL critical thinking skills university students should have?
- What is the effect of digital storytelling on developing critical reading skills for university students?
- What is the effect of digital storytelling on developing self-efficacy for university students?

Research Aims

The research aims to achieve the following aims:

- Recognize the effectiveness of digital storytelling in developing critical reading skills (deduction-discrimination-evaluation) for university students.

- Recognize the effectiveness of digital storytelling in developing self-efficacy for university students.

Research Significance

It covers two of the most important skills needed to succeed in daily life and science. These include critical reading and self-efficacy because they are vital abilities that students should acquire in order to be prepared to assess and critique reading, especially in this day of exponentially expanding knowledge. Through the use of digital storytelling, the current research can also help introduce applicants to critical reading abilities and self-efficacy.

Research Hypothesis:

The current study verified the following hypotheses:

1. There was a statistically significant difference between the mean scores of the experimental and control groups at ($\alpha \leq 0.01$) level of significance in the post administration of critical reading skills test in favor of the experimental group.
2. There was a statistically significant difference between the mean scores of the pre- and post-administration of the experimental group at ($\alpha \leq 0.01$) level of significance on critical reading skills test in favor of the post-administration.
3. There was a statistically significant difference between the mean scores of the experimental and control groups at ($\alpha \leq 0.01$) level of significance in the post administration of self-efficacy questionnaire in favor of the experimental group.
4. There was a statistically significant difference between the mean scores of the pre- and post-administration of the experimental group at ($\alpha \leq 0.01$) level of significance on

self-efficacy questionnaire in favor of the post-administration.

Variables of the research:

The current study variables are as follows:

The independent variable: Digital Storytelling.

The dependent variable: critical reading skills and self-efficacy.

Research Delimitations:

- Participants were delimited to 80 university students at International Business administration college, Sadat Academy for Management Sciences in Egypt.
- The first semester of the academic year 2024/2025,
- The following were delimited to the following variables: some critical reading skills (Deduction, Discrimination, Evaluation), self-efficacy.

Definition of Terms:

Digital Storytelling

According to Kuan and Harun (2012), digital storytelling is defined as a brief, first-person video tale produced using a combination of recorded speech, still and moving images, music, and other noises.

Operationally, digital storytelling (DST) is the craft of crafting captivating narratives by fusing multimedia resources including pictures, videos, audio files, and animations with conventional storytelling components. It enables engaging and dynamic sharing of knowledge, concepts, and experiences among college students.

Critical Reading Skills:

A reader actively questions the text's underlying assumptions when they read critically. Critical reading abilities include things like sifting facts from opinions, reading between the lines to uncover hidden meanings in a work, and determining the author's underlying motivation (Ousborne, 2014).

Operationally, critical reading skills are those that the research has determined are suitable for Sadat Academy university students. These skills are represented by three main skills: deduction, discrimination, and evaluation. A number of sub skills branch off from these main skills, and they will be assessed through an exam.

Self-efficacy

A person's belief in their own competence to carry out a task or take action is known as perceived self-efficacy (Mullins, 2019).

Operationally, self-efficacy is a psychological term that describes college students' confidence in their ability to finish assignments or reach particular objectives.

Review of Literature and Related Studies:

Background-Digital Storytelling

Since more than 20 years ago, digital storytelling has been utilised in educational contexts (Robin, 2012). Digital storytelling conveys a story in a digital format by fusing together text, video, photos, music, and embedded voice in a seamless whole (DeGannaro, 2008; Robin, 2012). Digital storytelling is distinct from similar-looking multimedia clips because it is a two to three-minute personal narrative that emphasises the seven components of digital storytelling, which include : The storyteller's point of view, the question that will be resolved at the conclusion, the emotional content or issues that will be explored, the personalisation that helps place the story in context, the music or sounds that fit the plot, ensuring that the story is neither too long nor too short, and the

pacing are all important considerations (Ribeiro, 2015). A digital story can be made by combining still and moving images with text and sound in a film or by using photos and digital software to weave them together (DeGannaro, 2008). Digital stories are typically quite emotive and intensely personal, according to DeGannaro (2008). Digital storytelling is not only a useful instructional tool; it also become a pedagogy (Robin, 2008).

Digital Storytelling Technique (DST)

According to Tenh and Harun (2012), digital storytelling is defined as a brief, first-person video tale produced using a combination of recorded speech, still and moving images, music, and other noises. In order to engage students with a range of technological applications to plan, edit, and construct a digital story, DTS combines a classic storytelling approach with multimedia (Normann, 2011). It's a type of narrative technique where a brief, usually three to five minute, story is told using voice, image, and printed text (Robin, 2008). According to Al-Shaye (2021), the digital storytelling strategy involves computers functioning as co-authors and collaborators in the creation of knowledge, sharing the cognitive load of job completion.

DTS is a well-known educational strategy that is praised for being engaging, interactive, and immersive (Coiro & Leu, 2014). It is an expressive medium used in the classroom to integrate knowledge, skills, and subject matter from several curriculum areas. Prioritising collaborative work over technology capabilities and the creation of superior media products, DTS culminates in experiences that arise from people sharing their tales. As a result, using DTS encourages and creates new community connections by having people listen to and consider the stories that are shared online.

Students can also think more thoroughly about their subject and unique experiences, clarify their knowledge, and reflect on their

ideas through the use of technology in the story-making process (Sadik, 2008). Through positive assignments and activities, it helps students not only develop their personalities but also their imaginations (Dupain & Maguire, 2005). Personalised learning experiences from DTS help people become active knowledge providers as opposed to just consumers (Ohler, 2006).

Digital storytelling educates students for learning experiences where they interact with people directly, hone their communication skills, and enhance their performance through peer supervision and reflection. This is based on the ability of digital storytelling to instill self-confidence in better performance (Hungm, Hwangm & Huang, 2012). Furthermore, through resource sharing, digital storytelling offers adaptable learning environments that improve student collaboration, judicial literacy, communication, and technical skills (Smeda, 2014). Smeda (2014) claims that when creating digital stories, students utilise a variety of ICT apps and hone their skills in them. Students increase their comprehension of the material and enrich their learning experience by creating, refining, and sharing their own story on the one hand, and perusing the tales of other students on the other.

Students can participate actively in the learning process through digital storytelling; they are active learners, not merely viewers (Ohler, 2006). Through the constructivist, student-centered approach of DTS, students design their own learning and take responsibility of their education. As a result, students are in charge of their education with little interference from teachers, and their active participation in it is maximised while teachers' controlling role is maintained to a minimum. According to Brame (2016), the fundamental components of active learning include student engagement and action in the process of learning, which are absent from traditional classroom settings where students listen to teachers who are seen as the exclusive sources of knowledge.

Digital storytelling aligns with the tenets of active learning because it facilitates the integration of student-centered approaches and interactive learning in technologically advanced environments, hence supporting students' active participation in the learning process (Smeda, 2014). Students that engage in active learning actively prepare the material to be taught, evaluate the instructional materials, and share the final results. The allocation of the teacher/student role ratio is no longer unfair to teachers. Effectively, learners are in charge of their education; taking charge of the learning process is not a choice, nor is it a privilege for teachers to micromanage the educational process. Instead, it is more of a taking-turn procedure or role-playing exchange between educators and students, similar to an orchestra with a conductor and players. With the help of their teacher, students take the lead in organising their work to meet the predetermined, agreed-upon objectives.

By giving students ICT learning experiences that motivate them to actively participate in resource selection and material creation, to willingly devote a significant amount of time and effort to tasks and activities, and to mentor their own and their peers' learning, the digital storytelling approach encourages student engagement. One significant trend that has shown to be successful in increasing student motivation is the use of ICT-based teaching and learning methodologies. Students are inspired to understand academic topics and to express their ideas, opinions, and thoughts by engaging stories that incorporate technology, both within and outside of the classroom (Dupain & Maguire, 2005).

Critical Reading

Kurland (2000) defines critical reading as a thorough, engaged, introspective, and analytical reading process. According to Shihab (2011: 212), it involves developing the ability to assess, extrapolate, and come to conclusions from the available data. Thus, critical readers do not accept as true all that an author asserts in a book, according to Hong and Zhiyuan (2014: 78). Rather,

readers ascertain the principal grounds of contention, scrutinise the data, instances, and figures provided as proof, deduce the underlying meaning, and assess the suitability and coherence of the argument. Critical reading, according to Haromi (2014: 128) and Wallace (2021: 29), is the capacity to go past the obvious to ascertain the author's position, the text's clever structure, the substance of the writer's argument, and underlying Huijie (2010: 40) adds in the same context that critical reading examines both the content and the style of a text. Furthermore, Dar and Shams, M. (2010:458) assert that in critical reading, the reader's capacity to decipher the author's aim and the text itself interact in a complex way to determine text comprehension.

Similarly, Maltepe (2016: 169–171) claims that critical reading is the process by which readers analyse what they have read, consider what they have read, and form their own opinions about what they have read. Thus, the critical reader challenges the author's presumptions, opinions, or goals. This is in line with Abdel-Khalek (2018), who believes that critical reading is inherently dialogic. The critical reader engages in dialogue with both the text and its author. According to Demiroz, each reader approaches the reading assignment with a unique set of goals, cultural identities, and social roles.

According to Hromova & Bloshchynskyi (2022), critical reading is thinking critically about the material, going beyond the conclusion of the original article to consider the author's process and the degree of accuracy of that conclusion. Lestari (2015: 521) offers a more expansive definition of critical reading, stating that critical readers actively seek out concepts and information within the text. To do this, they must analyse, synthesise, make inferences, create interpretations, and assess what they have read.

Rationale for Critical Reading in EFL:

Given the abundance of information and sources that students now have access to, it makes sense to give them the skills necessary to evaluate and distinguish between the veracity, accuracy, applicability, and biases of various sources. Because of this, teaching critical reading is essential to reading instruction for both

academic and life goals. It has this status for a variety of reasons, including the fact that critical reading is necessary for children to succeed academically, according to Mustapha and Paramasivam (2018: 330). According to Tengberg (2016: 635), critical reading is crucial for both making numerous specific decisions in real life and for a deep engagement in contemporary social and cultural life. Furthermore, a crucial element of an education for democratic citizenship is reflected in the development of critical reading skills.

According to Dar and Shams (2010: 471), critical reading can help students become more fluent language users. Thus, Asghar (2014: 181) contends that for ESL and EFL learners, critical reading abilities become both more difficult and important. In a similar vein, Abdel-Khalek (2018) asserts that critical reading aids readers in comprehending the intent or driving force behind the production of a work. This is thus because the intention of the writer influences the text's structure directly.

According to Wallace (2021: 189), students who engage in critical discourse while conducting critical readings gain multiple advantages: they utilise a great deal of language of inquiry and judgement; they offer meta-cognitive commentary on the formation and reflection of their own opinions; and finally, they make direct references to the importance of having opinions and being able to express them effectively. Because of this, Dalail & Sidhu (2016) attest that critical reading abilities are frequently seen as an essential component of postgraduate education. Similar to this, critical reading abilities are helpful for becoming competent in the technological revolution, according to Alqatanani (2017: 310). Anstey and Bull (2006: 37) state that pupils who lack critical reading skills may face marginalisation, discrimination, or be unable to participate fully in society. Because it prepares adults for the workforce, critical reading should be the main emphasis of higher education courses, according to Thomas (2018: 322).

According to Abd Kadir et al. (2014: 209), students who develop critical reading abilities will do well in any subject or course because they will be able to comprehend and evaluate any content that is presented to them. Additionally, this will improve their test and exam scores. Lestari (2015:520) stated that, given the transition of advanced societies from industrial to informational, critical reading is especially crucial in this day and age. Thus, information creation, application, and search all play crucial roles in the growth of the individual as well as the society. Shihab (2011: 213) guarantees that using news media in the classroom is a part of critical reading. Print media such as newspapers, magazines, radio, and television can inspire pupils to acquire critical reading and listening abilities.

Impact of DS on critical reading

Digital storytelling (DS) can have a positive impact on critical reading skills in university students by (Abdel-Khalek, 2018):

1. Active Engagement with Text.
2. Evaluating Multimedia Sources.
3. Interpretation and Inference.
4. Source Integration and Synthesis.
5. Identifying Different Viewpoints.
6. Audience Awareness and Communication.

Self- Efficacy

A person's belief in their own competence to carry out a task or take action is known as perceived self-efficacy (Mullins, 2019). Perceived self-efficacy, according to Bandura (1997), is an individual's personal conviction in their own abilities. Three aspects of perceived self-efficacy in education have been studied by researchers: beliefs about perceived self-efficacy and college and

career choices; beliefs about perceived self-efficacy and teachers' instructional strategies; and beliefs about perceived self-efficacy and students' other areas of motivation, like academic performance and achievement (Gonzales, 2022).

Research has shown that students with higher perceived self-efficacy were better at self-regulating, which allowed them to handle academic challenges. This relationship between perceived self-efficacy and academic achievement has been examined. Students' academic achievement and their judgements of their own self-efficacy have been found to be related by Bandura, Zimmerman, and collaborators (Zimmerman & Bandura, 1994).

Impact of DS on Self-efficacy

Participating in DS can improve students' 21st century skills, but this methodology can also have a good effect on learners' perceived efficacy towards technology abilities, which are closely related to 21st century skills as shown by Robin (2016).

"Beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments" is how Bandura (1997) defines self-efficacy (p. 3). According to Bandura (1986), one of the concepts that has the biggest impact on how someone lives their daily life is self-efficacy (p. 390). Additionally, he identifies four key sources of self-efficacy: emotional and bodily reactions, social persuasion, vicarious experiences, and mastery experiences (Bandura, 1994, pp. 2-3).

According to common sense, even though students nowadays are frequently represented as being self-sufficient in using digital technologies, some have been found to still have poor proficiency with technology (Thompson, 2013). Additionally, those who are classified as "digital natives" are at ease using digital gadgets for personal purposes. However, incorporating these technological skills into daily life may not always guarantee that they will be

successful in using technology for learning (Kennedy & Fox, 2013). In other words, this Net generation may not be distinguished by its pedagogical use of technology in learning environments (Kirschner & Brucykere, 2017).

As a result, by actively engaging in relevant and genuine technology-integrated activities like DS, today's students may also need to gain technological literacy abilities that are specifically appropriate for educational objectives (Sayavaranont & Wannapiroon, 2017). By creating a virtual environment where students can effectively navigate technological tools to make meaning in various modes throughout the digital story making process, including designing, shooting, and evaluating steps, digital story preparation can positively influence students' beliefs about their perceived level of technology proficiency (Robin, 2008).

Accordingly, a limited but increasing body of studies assessed how well DS affected students' perceptions of their own abilities. Using a pre- and posttest survey methodology, Heo (2009) tested the impact of experiencing DS on self-efficacy beliefs and dispositions towards educational technology with 98 pre-service teachers majoring in English language teaching. A Likert scale survey was used both before and after the implementation to evaluate any potential changes in the variables as a result of using a DS-integrated methodology. Following the DS-integrated deployment, the research foci showed good modifications, according to the data.

In a similar vein, Li and Morehead (2006) investigated the impact of a digital storytelling (DS) experience on self-efficacy beliefs related to technology use in 20 students from a mid-western American institution. Following six sessions, each student created a digital tale. Semi-structured interviews and pre- and post-surveys were used to gather the data. The results demonstrated that DS was successful in increasing students' self-efficacy for using technology

in the classroom through teacher education programmes. In a more recent study, Kauppinen and Coiro (2018) used self-evaluation reports given after DS deployment to examine other potential applications of DS in raising self-efficacy levels for technological integration. Thirty-seven pre-service teachers took part in the small-group digital narrative composition process. According to the researchers, DS has a tremendous deal of potential to boost students' self-confidence.

Based on these results, it is reasonable to say that DS is an approach that shows promise for raising the self-efficacy views of aspiring teachers regarding the use of technology in the classroom. However, it may be misleading to extrapolate the findings to other learner populations because these research were primarily carried out in pre-service teacher education programmes. Spicer's (2013) study, which looks at using DS to boost technical skill confidence from the learners' perspective, might add to the body of literature in this way. The study examined how perceived self-efficacy for technical skills, particularly in media production, was affected by DS. Twelve students took part in the study, and semi-structured interviews as well as pre- and posttest surveys were used to gather data. The investigator came to the conclusion that a digital tale experience.

In a one-semester mixed-methods study, Balaman (2020) also made an effort to investigate if DS was beneficial on the construct of self-efficacy towards technology use in education from the views of the learners. Eleven university-level foreign language students took part in the study. Pre- and posttest surveys yielded quantitative data. The researchers came to the conclusion that, in a language learning context, DS supported students' beliefs of their own technological efficacy.

Method of the Research:

Research Design:

This research depended on the quasi-experimental pretest-posttest design. An experimental group and another control one were administered the critical reading skills Test and self-efficacy questionnaire, before and after the implementation of the suggested program.

Participants

Participants were (80) university students. Participants were divided randomly into two equal groups: control (n=40) and experimental (n=40). The t-test for independent samples was used to define differences between the mean scores of the control and experimental groups on the pre-administration of the critical reading skills Test and self-efficacy questionnaire.

Homogeneity of the groups:

First: Homogeneity of the groups Pre-administration of the critical reading skills Test: The aim of the pre administration of the critical reading skills test was to ensure the mastery of the two groups in critical reading skills before treatment. The pre administration of the test was administrated on the students of the experimental and control groups. The results were monitored and statistically processed using the (t) test for two independent samples.

The value of (t) was calculated for two independent groups and their significance for the difference between the mean scores of the experimental and the control group students in the skills and the overall score of the critical reading skills test. As shown in the following table (1):

Table (1)

"t" test value and the level of significance for the difference between experimental and control groups' students mean scores in pre-test of the critical reading skills test.

skills	Groups	N	Mean	Std. Deviation	Df.	t - value	Sig.
Deduction	Experimental	40	7.93	1.526	78	-1.152	(0.253) not significant
	Control	40	8.38	1.944			
Discrimination	Experimental	40	8.55	1.535	78	-1.365	(0.176) not significant
	Control	40	9.03	1.577			
Evaluation	Experimental	40	8.43	1.781	78	-0.439	(0.662) not significant
	Control	40	8.60	1.780			
Overall critical reading skills	Experimental	40	24.90	3.529	78	-1.305	(0.196) not significant
	Control	40	26.00	3.994			

It is shown from the previous table that both groups (experimental & control) were homogenous in their entry level of overall and each of critical reading skills.

Second: Homogeneity of the groups Pre-administration of the self-efficacy questionnaire: The aim of the pre administration of the self-efficacy questionnaire was to ensure the mastery of the two groups in self-efficacy before treatment. The pre administration of the checklist was administered on the students of the experimental and control groups. The results were monitored and

statistically processed using the (t) test for two independent samples.

The value of (t) was calculated for two independent groups and their significance for the difference between the mean scores of the experimental and the control group students in the overall score of the self-efficacy questionnaire. As shown in the following table (2):

Table (2)
"t" test value and the level of significance for the difference between experimental and control groups' students mean scores in pre-test of the self-efficacy test.

Variable	Groups	N	Mean	Std. Deviation	Df.	t - value	Sig.
Overall self-efficacy	Experimental	40	23.13	3.988	78	1.946	(0.055) not significant
	Control	40	21.58	3.079			

It is shown from the previous table that both groups (experimental & control) were homogenous in their entry level of overall self-efficacy.

Instrumentation:

To achieve the aim of this research, the researcher prepared and used the following instruments:

- Critical reading skills Test.
- Self-efficacy questionnaire.
- The Suggested Program Based on Digital Storytelling.

Data collection and Procedures:

A) The critical reading skills Test (Appendix 1)

1) Aim of the Test

The test aimed at collecting data about faculty members (n=60) concerning skills of University Students in critical reading: Deduction, Discrimination, Evaluation.

2) Description of the Test.

The Test included (3) main skills they are: Deduction (5 items), Discrimination (5 items), Evaluation (5 items).

No	Items	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	strongly Disagree (1)
Deduction						
1	Being able to recognize the facts and details that support the author's claims.					
2	Understanding how the author moves from evidence to conclusions.					
3	Making well-supported guesses about what the text implies, even if it is not explicitly stated.					
4	Signing the information in the text to predict what might happen next or what the author's ultimate point is.					
5	Recognizing the underlying					

	beliefs that the author is making.					
Discrimination						
6	Distinguishing between the main and secondary ideas contained in the reading text.					
7	Classifying facts and opinions in the reading text.					
8	Differentiating between related and unrelated ideas in the reading text.					
9	Discriminating reasonable and unreasonable ideas in the reading text.					
10	Identifying strong and weak arguments in the reading text.					
Evaluation						
11	Judging the appropriateness of the title of the reading text to its content.					
12	Evaluating the structure of reading sentences.					
13	Identifying the author's					

	purpose.					
14	Considering the intended audience.					
15	Making Judgments about the Text.					

3) Sources of the Test

The researcher referred to some sources to identify such skills. These sources included: Al-Shaye (2021), Henry & Mohamad (2021), Abdel-Khalek (2018) and Alqatanani (2017).

Test Piloting:

The test was piloted by administering it to (30) students other than those participating in the study with the aim of:

- Checking clarity of test items.
- Checking readability of test items.
- Timing the test.

Test Timing:

Time was determined by taking the average of the time taken by each student taking the test. It was 60 minutes.

Validity of the test

In this research, the researcher relied on the validity of the jury members as well as the internal consistency. The following is an explanation for this:

Validity by the Jury:

The researcher presented the test in its initial form to 7 professors in the field of curriculum and EFL teaching methods to express their opinions on the appropriateness of the test and its suitability for the students' level. Based on the viewpoints of the

jury members the researcher made modifications agreed upon by the jury (1) (80% and more). Cooper's equation was used to calculate the percentage of agreement among the jury members. The rate of agreement among the jurors on validation dimensions of test ranged between (90% - 100%), as the percentage of agreement on the test reached (98 %), which is a high percentage. This indicates the validity of the test, after making the modifications approved by the jury members**.**

Internal consistency of the test:

Internal consistency was calculated through the administration of the test to a group of (60) students as shown in the following table:

A. Calculation of the correlation coefficients among the test items and the overall score of skills and whole test:

Table (3)
Pearson Correlation coefficient between scores on items of critical reading skills test and scores of skills and overall test.

Skill	items	Correlation Coefficient with the skill	Correlation Coefficient with the overall test
Deduction	1	0.747**	0.567**
	2	0.697**	0.605**
	3	0.789**	0.747**
	4	0.706**	0.639**
	5	0.504**	0.440**
Discrimination	6	0.759**	0.689**
	7	0.719**	0.555**
	8	0.687**	0.634**
	9	0.782**	0.711**
	10	0.784**	0.798**
Evaluation	11	0.794**	0.749**
	12	0.816**	0.788**
	13	0.752**	0.637**
	14	0.871**	0.789**
	15	0.604**	0.457**

**** Correlation is significant at the at level (0.01)**

The previous table (3) shows the correlation coefficient between scores of items and the overall scores of skills, and the test has ranged between (0.440**) and (0.871**), all of which are statistically significant at the level of (0.01). This indicates the correlation and coherence of the skills, and the test as a whole, which indicates that the test has internal consistency.

B. Calculation of the correlation coefficients among the whole test and the overall score of skills:

Table (4)
Pearson Correlation coefficient between scores on skills of critical reading skills and overall test.

Test and its skills	Deduction	Discrimination	Evaluation	Total critical reading skills test
Deduction	**1**	**0.723****	**0.652****	**0.872****
Discrimination	**0.723****	**1**	**0.712****	**0.912****
Evaluation	**0.652****	**0.712****	**1**	**0.893****
Total critical reading skills test	**0.872****	**0.912****	**0.893****	**1**

**** Correlation is significant at the at level (0.01)**

The previous table (4) shows the correlation coefficient between the test skills and the overall scores of the test have ranged between (0.652**) and (0.912**), all of which are statistically significant at the level of (0.01). This indicates that the test has internal consistency.

Reliability of the test:

The reliability of the test was calculated using Cronbach's Alpha, Split-Half, and the test-retest methods, as follows:

A. Cronbach's Alpha: The researcher used this method to calculate the reliability of the test by administering it to a group of (60) students. The Cronbach's Alpha coefficient was (0.906). as shown in the following table:

Table (5)
Reliability values of overall as well as each critical reading skills test (by Cronbach's Alpha)

Test and its skills	Items	Cronbach's alpha Coefficient
Deduction	**5**	**0.752**
Discrimination	**5**	**0.802**
Evaluation	**5**	**0.826**
Total critical reading skills test	**15**	**0.906**

These values shown in table (5) indicate that the test has an appropriate degree of reliability, and These values greater than (0.60).

B. Split-Half Method: The researcher used this method to calculate the reliability of the test by administering it to a group of (60) students. The results were shown in the following table:

Table (6)
Reliability values of overall as well as each critical reading skills test (by Split-Half Method)

Test and its skills	Items	Correlation Between Forms	Spearman-Brown Coefficient	Guttman Split-Half Coefficient
Deduction	**5**	**0.655**	**0.797**	**0.774**
Discrimination	**5**	**0.752**	**0.863**	**0.831**
Evaluation	**5**	**0.787**	**0.885**	**0.870**
Total critical reading skills test	**15**	**0.895**	**0.945**	**0.944**

These values shown in table (6) indicate that the test has an appropriate degree of reliability.

C. Test re-test: The reliability of the test was calculated by the method of administration and re-administration of the test using the Pearson correlation coefficient, where the researcher re-administered the test to the same number of students. The value of the reliability coefficient was (0.924**) at the level (0.01) indicating that the test is reliable. The results were shown in the following table:

Table (7)
Reliability values of overall as well as each critical reading skills test (by Test-Retest Method)

Test and its skills	Items	Correlation Between two administrations
Deduction	**5**	**0.791****
Discrimination	**5**	**0.833****
Evaluation	**5**	**0.900****
Total critical reading skills test	**15**	**0.924****

**** Correlation is significant at the at level (0.01)**

These values shown in table (7) indicate that the test has an appropriate degree of reliability, and these values greater than (0.60).

B) The self-efficacy questionnaire (Appendix 2)

1) Aim of the Questionnaire

The Questionnaire aimed at collecting data about faculty members (n=60) concerning self-efficacy of university students.

2) Description of the Questionnaire.

The questionnaire consisted of (12) items to measure university students' self-efficacy before and after the treatment.

No	Items	Strongly Agree (5)	Agree (4)	Undecided (3)	Disagree (2)	strongly Disagree (1)
1	I am confident in my ability to come up with a compelling story idea for a digital project.					
2	I believe I have the necessary skills to find and use multimedia resources (images,					

	videos, music) for my digital story.					
3	I feel comfortable using software or online tools to create and edit my digital story.					
4	I am confident in my ability to clearly communicate my message through a digital story.					
5	I am not afraid to experiment with different formats and techniques in creating my digital story.					
6	I feel confident in presenting my digital story to an audience.					
7	In my subsequent projects, I can comfortably use technology and will have no stress.					
8	I had high confidence for technology use after I prepared my videos.					
9	Now I had a higher confidence for any technology-based projects.					
10	I can learn in English class					
11	I believe that I can pass English subject because I can do so					
12	When faced with a					

	new assignment that I am unfamiliar with, I can succeed in learning how to accomplish it.					

3) Sources of the Questionnaire

The researcher referred to some sources to design the questionnaire. These sources included: Kara & Gulozer (2023), Balaman (2020), Kauppinen & Coiro (2018) and Spicer (2013).

Questionnaire Piloting:

The questionnaire was piloted by administering it to (30) students other than those who participated in the research with the aim of:

- Checking clarity of the questionnaire items.
- Checking readability of the questionnaire items.
- Timing the questionnaire.

Questionnaire Timing:

Time was determined by taking the average of the time taken by each student taking the questionnaire. It was 30 minutes.

Validity of the Questionnaire

In this study, the researcher relied on the validity of the jury members as well as the internal consistency. The following is an explanation for this:

Validity by the Jury:

The researcher presented the Questionnaire in its initial form to 7 professors in the field of curriculum and Methods of teaching EFL to express their opinions on the appropriateness of the Questionnaire and its suitability for the students' level. Based on the viewpoints of

the jury members the researcher made modifications agreed upon by the jury (1) (80% and more). Cooper's equation was used to calculate the percentage of agreement among the jury members. The rate of agreement among the jurors on validation dimensions of Questionnaire ranged between (80% - 100%), as the percentage of agreement on the Questionnaire reached (95 %), which is a high percentage. This indicates the validity of the Questionnaire, after making the modifications approved by the jury members**.**

Internal consistency of the Questionnaire:

Internal consistency was calculated through the administration of the Questionnaire to a group of (60) students as shown in the following table:

A. Calculation of the correlation coefficients among the Questionnaire items and the overall score of Questionnaire:

Table (8)
Pearson Correlation coefficient between scores on items of self-efficacy questionnaire and overall Questionnaire.

items	Correlation Coefficient with the overall Questionnaire	items	Correlation Coefficient with the overall Questionnaire
1	0.817**	7	0.722**
2	0.801**	8	0.482**
3	0.787**	9	0.753**
4	0.782**	10	0.703**
5	0.728**	11	0.557**
6	0.813**	12	0.754**

The previous table (8) shows the correlation coefficient between scores of items and the overall score of Questionnaire has ranged between (0.482**) and (0.817**), all of which are statistically significant at the level of (0.01). This indicates that the Questionnaire has internal consistency.

Reliability of the Questionnaire:

The reliability of the Questionnaire was calculated using Cronbach's Alpha, Split-Half, and the test-retest methods, as follows:

D. Cronbach's Alpha: The researcher used this method to calculate the reliability of the Questionnaire by administering it to a group of (60) students. The Cronbach's Alpha coefficient was (0.918), This value indicates that the Questionnaire has an appropriate degree of reliability, and This value greater than (0.60).

E. Split-Half Method: The researcher used this method to calculate the reliability of the Questionnaire by administering it to a group of (60) students, the reliability coefficients were (0.953) by using the Spearman-Brown correction equation, (0.952) by using the Guttman correction equation., These values indicate that the Questionnaire has an appropriate degree of reliability.

Duration of the experiment:

The experiment lasted for three months, one session per week.

B. The Suggested Program Based on Digital Storytelling.

The Aim: It is aimed at developing targeted critical reading skills and self-efficacy for the university students, Sadat academy for management sciences.

The content: The content consisted of twelve sessions. Each of the three sessions dealt with a specific topic.

The teaching Procedure:

Assessment:

The assessment is summative using two tests to assess students' critical reading skills and self-efficacy and measure the students' development.

Results and discussion

Results were based on hypotheses testing as follows:

Verifying the First Hypothesis

The first hypothesis stated that " There was a statistically significant difference between the mean scores of the experimental and control groups at ($\alpha \leq 0.01$) level of significance in the post administration of critical reading skills test in favor of the experimental group ". To verify this hypothesis, the A (t) test was employed to two independent groups (the experimental and control groups) in post-administration of the overall scores of critical reading skills test. The results are shown in the following table (9):

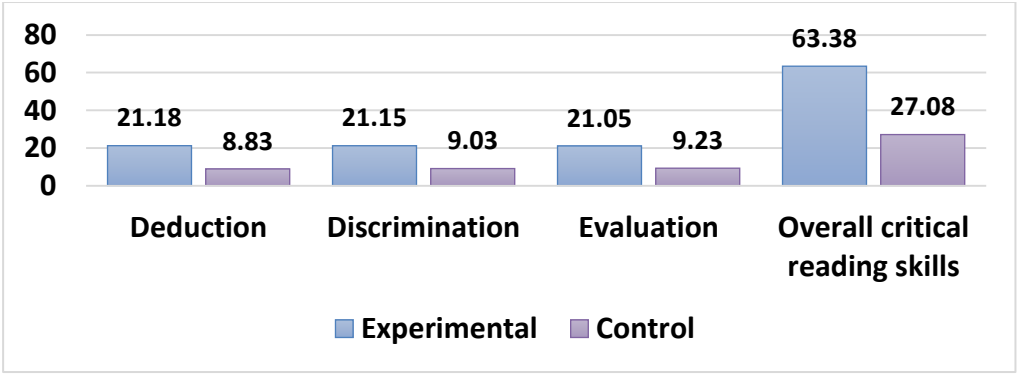
Table (9)
T- Test Results of the Experimental and Control Groups Students' Overall Performance on the post- administration of the critical reading skills Test

skills	Groups	N	Mean	Std. Deviation	Df.	t - value	Sig.
Deduction	Experimental	40	21.18	1.852	78	28.568	Significant at 0.01
	Control	40	8.83	2.011			
Discrimination	Experimental	40	21.15	1.916	78	25.893	Significant at 0.01
	Control	40	9.03	2.259			
Evaluation	Experimental	40	21.05	1.616	78	24.723	Significant at 0.01
	Control	40	9.23	2.557			
Overall critical reading skills	Experimental	40	63.38	3.649	78	32.400	Significant at 0.01
	Control	4	27.0	6.074			

skills	Groups	N	Mean	Std. Deviation	Df.	t - value	Sig.
		0	8				

It is shown from the previous table (9) that there were statistically significant differences at ($\alpha \leq 0.01$) level of significance between the mean scores of the experimental and control groups in the post administration of critical reading skills (Deduction, Discrimination, Evaluation) and overall test in favor of the experimental group, where the calculated values of T-Test (t) were reached (28.568, 25.893, 24.723, and 32.400), and these values was more than the tabulated "t" values (2.359), and the significance level is (0.01) which is lower than the level of significance (0.05). The mean scores of the experimental group was (63.38) with a standard deviation (3.649), While the mean scores of the control group was (27.08) with a standard deviation (6.074). This means that the mean scores of experimental group was higher than the mean scores of control group. These results can be illustrated graphically by the following figure (1):

Figure (1)
Mean scores of experimental and control groups in post-administration of the critical reading skills test.



To calculate the effect size for the Digital Storytelling on the critical reading skills, Eta square (η2) was calculated using t value for the differences between the mean scores as displayed in this table:

Table (10)
The Effect Size for the Digital Storytelling on critical reading skills.

Skills	t-values	T2	Df.	Eta Squared (η2)	The Effect Size
Deduction	**28.568**	**816.1306**	**78**	**0.913**	**(91.3%) large**
Discrimination	**25.893**	**670.4474**	**78**	**0.896**	**(89.6%) large**
Evaluation	**24.723**	**611.2267**	**78**	**0.887**	**(88.7%) large**
Overall critical reading skills	**32.400**	**1049.760**	**78**	**0.931**	**(93.1%) large**

The previous table (10) shows the effect sizes of Using Digital Storytelling on developing each skill of critical reading skills and the overall Test were large. The effect sizes were (0.913, 0.896, 0.887, and 0.931) for (Deduction, Discrimination, Evaluation) and overall test respectively.

This means verifying the first hypothesis of the study, and this indicates that There was a statistically significant difference between the mean scores of the experimental and control groups at ($\alpha \leq 0.01$) level of significance in the post administration of critical reading skills test in favor of the experimental group.

Verifying the second Hypothesis:

The second hypothesis stated that " There was a statistically significant difference between the mean scores of the pre- and post-administration of the experimental group at ($\alpha \leq 0.01$) level of

significance on critical reading skills test in favor of the post-administration ". To verify this hypothesis, one-sample t-test was employed to measure the students' mean scores in the pre and post administrations in the critical reading skills of the experimental group. The results are shown in the following table (11):

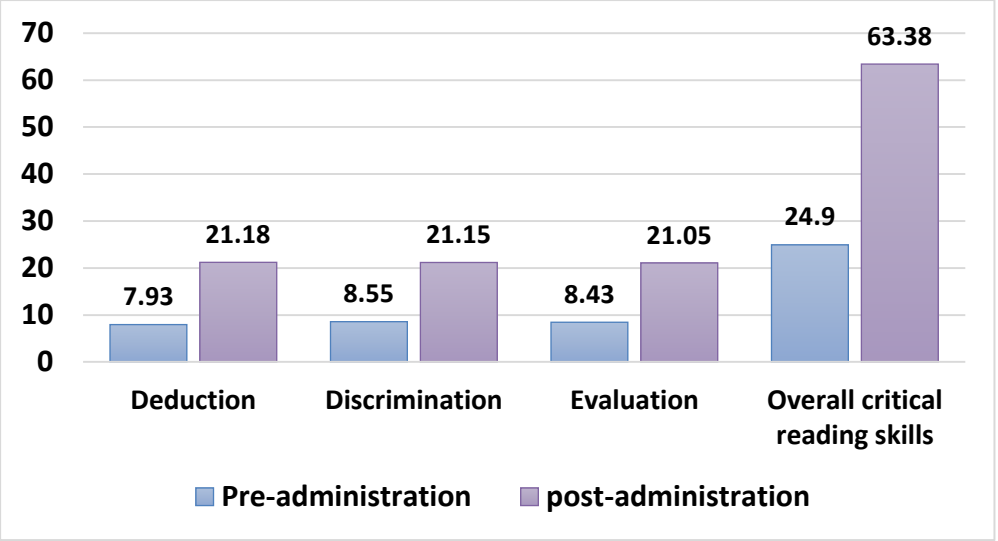
Table (11)
"T- Test Results of the Experimental Group Students' Overall Performance on the Pre and Post administration of the critical reading skills Test.

Skills	Test	N	Mean	Std. Deviation	Mean paired differences	Std. Deviation paired differences	Df.	t - value	Sig.
Deduction	Pre	40	7.930	1.526	-13.250	2.457	39	-34.102	Significant at 0.01
	Post	40	21.18	1.852					
Discrimination	Pre	40	8.550	1.535	-12.600	2.193	39	-36.334	Significant at 0.01
	Post	40	21.15	1.916					
Evaluation	Pre	40	8.430	1.781	-12.625	2.393	39	-33.364	Significant at 0.01
	Post	40	21.05	1.616					
Overall critical reading skills	Pre	40	24.90	3.529	-38.475	4.761	39	-51.112	Significant at 0.01
	Post	40	63.38	3.649					

It is shown from the previous table (11) that there were statistically significant differences at ($\alpha \leq 0.01$) level of significance between the mean scores of the experimental group's pre-post

administration of critical reading skills (Deduction, Discrimination, Evaluation) and overall test in favor of the post- administration, where the calculated values of T-Test (t) were reached (-34.102, -36.334, -33.364, and-51.112), and these values was more than the tabulated "t" values (2.423), and the significance level is (0.01) which is lower than the level of significance (0.05). The mean scores of the experimental group's post administration was (63.38) with a standard deviation (3.649), While the mean scores of the experimental group's pre administration was (24.90) with a standard deviation (3.529). This means that the mean scores of experimental group's post administration was higher than the mean scores of experimental group's pre administration. These results can be illustrated graphically by the following figure (2):

Figure (2)
Mean scores for pre and post administrations in the critical reading skills test for experimental group.



To calculate the effect size for the Digital Storytelling on the critical reading skills, Cohen's (d) was calculated using t-value for the differences between the mean scores as displayed in this table:

Table (12)
The Effect Size for the Digital Storytelling on critical reading skills.

skills	t-values	Mean paired differences	Std. Deviation paired differences	Cohen's d	The Effect Size
Deduction	**-34.102**	**-13.250**	**2.457**	**5.393**	**large**
Discrimination	**-36.334**	**-12.600**	**2.193**	**5.746**	**large**
Evaluation	**-33.364**	**-12.625**	**2.393**	**5.276**	**large**
Overall critical reading skills	**-51.112**	**-38.475**	**4.761**	**8.081**	**large**

The previous table (12) shows the effect sizes of Using Digital Storytelling on developing each skill of critical reading skills and the overall Test were large. The effect sizes were (5.393, 5.746, 5.276, and 8.081) for (Deduction, Discrimination, Evaluation) and overall test respectively.

This means verifying the second hypothesis of the study, and this indicates that There was a statistically significant difference between the mean scores of the pre- and post-administration of the experimental group at ($\alpha \leq 0.01$) level of significance on critical reading skills test in favor of the post- administration.

The effectiveness of the suggested program based on the Digital Storytelling was calculated by applying the modified Blake's gain ratio on the pre-post test means of the experimental group scores as presented in the following table:

Table (13)
Effectiveness of the Digital Storytelling in Developing critical reading skills

Skills	Pre-Mean	Post-Mean	Max-Score	Blake's M G R	Effectiveness
Deduction	**7.930**	**21.18**	**25**	**1.31**	**achieved**

Discrimination	**8.550**	**21.15**	**25**	**1.27**	**achieved**
Evaluation	**8.430**	**21.05**	**25**	**1.27**	**achieved**
Overall critical reading skills	**24.90**	**63.38**	**75**	**1.28**	**achieved**

As shown in the previous table, there was low effectiveness of Digital Storytelling in developing critical reading skills. The value of Blake's modified gain ratio for the suggested program showed its effectiveness as it was (1.28) and existed in Blake's range of effectiveness (≥1,2). The suggested program based on Digital Storytelling was effective in developing university students' critical reading skills.

Verifying the third Hypothesis

The third hypothesis stated that " There was a statistically significant difference between the mean scores of the experimental and control groups at ($\alpha \leq 0.01$) level of significance in the post administration of self-efficacy questionnaire in favor of the experimental group ". To verify this hypothesis, A (t) test was employed to two independent groups (the experimental and control groups) in post-administration of the overall scores of self-efficacy questionnaire. The results are shown in the following table (14):

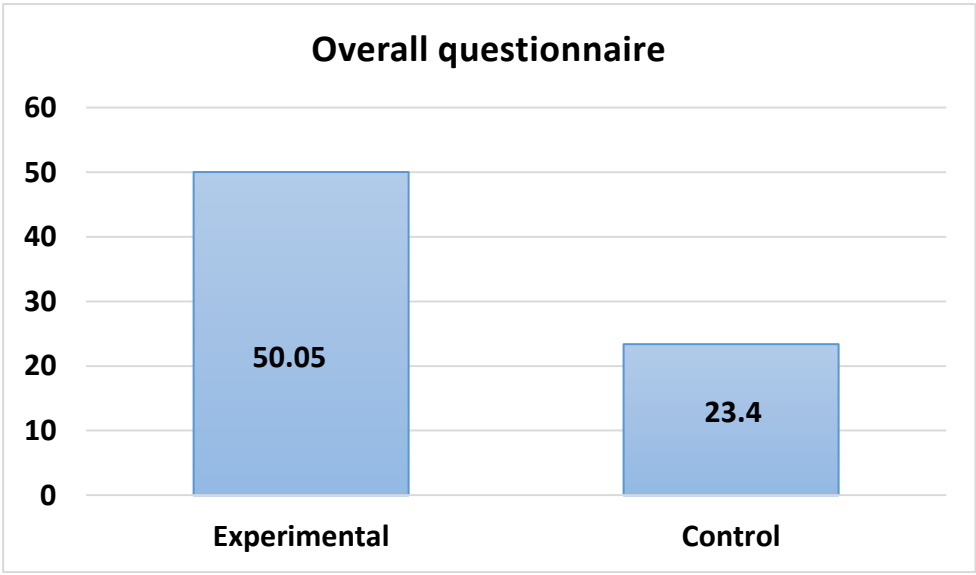
Table (14)
T- Test Results of the Experimental and Control Groups Students' Overall Performance on the post- administration of the self-efficacy questionnaire

variable	Groups	N	Mean	Std. Deviation	Df.	t - value	Sig.
Overall questionnaire	**Experimental**	**40**	**50.05**	**4.909**	**78**	**25.746**	**Significant at 0.01**
	Control	**40**	**23.40**	**4.331**			

It is shown from the previous table (14) that there were statistically significant differences at ($\alpha \leq 0.01$) level of significance

between the mean scores of the experimental and control groups in the post administration of the overall self-efficacy questionnaire in favor of the experimental group, where the calculated value of T-Test (t) was reached (25.746), and this value was more than the tabulated "t" values (2.359), and the significance level is (0.01) which is lower than the level of significance (0.05). The mean scores of the experimental group were (50.05) with a standard deviation (4.909), While the mean scores of the control group was (23.40) with a standard deviation (4.331). This means that the mean scores of experimental group was higher than the mean scores of control group. These results can be illustrated graphically by the following figure (3):

Figure (3)
Mean scores of experimental and control groups in post-administration of the self-efficacy questionnaire.



To calculate the effect size for the Digital Storytelling on the self-efficacy, Eta square (η2) was calculated using t value for the differences between the mean scores as displayed in this table:

Table (15)
The Effect Size for Digital Storytelling on self-efficacy.

variable	t-values	T2	Df.	Eta Squared (η2)	The Effect Size
Overall questionnaire	**25.746**	**662.8565**	**78**	**0.895**	**(89.5%) large**

The previous table (15) shows the effect sizes of Using Digital Storytelling on developing self-efficacy was large. The effect size was (0.895) for the overall questionnaire.

This means verifying the first hypothesis of the study, and this indicates that There was a statistically significant difference between the mean scores of the experimental and control groups at ($\alpha \leq 0.01$) level of significance in the post administration of self-efficacy questionnaire in favor of the experimental group.

Verifying the fourth Hypothesis:

The fourth hypothesis stated that " There was a statistically significant difference between the mean scores of the pre- and post-administration of the experimental group at ($\alpha \leq 0.01$) level of significance on self-efficacy questionnaire in favor of the post-administration ". To verify this hypothesis, one-sample t-test was employed to measure the students' mean scores in the pre and post administrations in the self-efficacy of the experimental group. The results are shown in the following table (16):

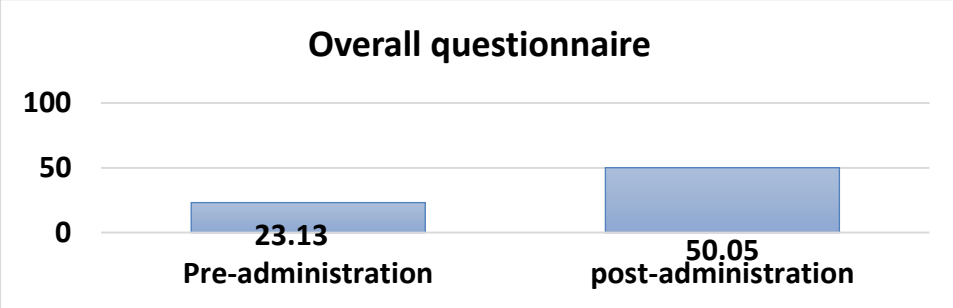
Table (16)
"T- Test Results of the Experimental Group Students' Overall Performance on the Pre and Post administration of the self-efficacy questionnaire.

Variable	Test	N	Mean	Std. Deviation	Mean paired differences	Std. Deviation paired differences	Df.	t - value	Sig.
Overall questionnaire	Pre	40	23.13	3.988	-26.925	6.014	39	-28.313	Significant at 0.01
	Post	40	50.05	4.909					

It is shown from the previous table (16) that there were

statistically significant differences at ($\alpha \leq 0.01$) level of significance between the mean scores of the experimental group's pre-post administration of self-efficacy questionnaire in favor of the post- administration, where the calculated values of T-Test (t) was reached (-28.313), and these values was more than the tabulated "t" values (2.423), and the significance level is (0.01) which is lower than the level of significance (0.05). The mean scores of the experimental group's post administration were (50.05) with a standard deviation (4.909), While the mean scores of the experimental group's pre administration was (23.13) with a standard deviation (3.988). This means that the mean scores of experimental group's post administration was higher than the mean scores of experimental group's pre administration. These results can be illustrated graphically by the following figure (4):

Figure (4)
Mean scores for pre and post administrations in the self-efficacy questionnaire for experimental group.



To calculate the effect size for the Digital Storytelling on the self-efficacy, Cohen's (d) were calculated using t value for the differences between the mean scores as displayed in this table:

Table (17)
The Effect Size for Digital Storytelling on self-efficacy.

Variable	t-value	Mean paired differences	Std. Deviation paired differences	Cohen's d	The Effect Size
Overall self-efficacy	-28.313	-26.925	6.014	4.477	large

The previous table (17) shows the effect size of Using Digital Storytelling on developing self-efficacy was large. The effect size was (4.477) for the overall questionnaire.

This means verifying the second hypothesis of the study, and this indicates that There was a statistically significant difference between the mean scores of the pre- and post-administration of the experimental group at ($\alpha \leq 0.01$) level of significance on self-efficacy questionnaire in favor of the post- administration.

The effectiveness of the suggested program based on the Digital Storytelling was calculated by applying the modified Blake's gain

ratio on the pre-post test means of the experimental group scores as presented in the following table:

Table (18)
Effectiveness of Digital Storytelling in Developing self-efficacy.

Skills	Pre-Mean	Post-Mean	Max-Score	Blake's M G R	Effectiveness
Overall self-efficacy	**23.13**	**50.05**	**60**	**1.2**	**achieved**

As shown in the previous table, there was effectiveness of Digital Storytelling in developing self-efficacy. The value of Blake's modified gain ratio for the suggested program showed its effectiveness as it was (1.2) and existed in Blake's range of effectiveness ($\geq$1,2). The suggested program based on Digital Storytelling was effective in developing university students' self-efficacy.

Conclusions

Recommendations

1. Teachers ought to provide assignments that require students to use their critical reading abilities in order to read more frequently.

2. Teachers must push their students to collaborate as much as they can, both in groups and in pairs, because it's critical to exchange ideas.

3-Training courses on DST and other contemporary technology applications should be organized to assist instructors in incorporating these technologies into their lessons.

4 - Instructors ought to choose assignments that draw on their students' prior knowledge and experiences—the same thing that DST offers.

1. Teachers should use contemporary technology, especially DSTs, to make reading assignments more enjoyable and risk-free.

Suggestions for further research

- Investigate the long-term effects of DS on critical reading skills and self-efficacy.
- Explore how collaborative DS projects impact critical reading skills and self-efficacy.
- Examine how DS can be adapted for students with different learning styles (visual, auditory, kinesthetic).
- Investigate whether the critical reading skills and self-efficacy developed through DS transfer to other areas of students' academic life (e.g., research paper writing, critical analysis of arguments).
- Explore how different digital storytelling tools and platforms influence the development of critical reading skills and self-efficacy.
- Refine and develop assessment methods to accurately measure the impact of DS on critical reading skills and self-efficacy.
- Investigate the role of student motivation and engagement in the effectiveness of DS.

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