

IMPROVING STUDENTS' CRITICAL THINKING SKILLS THROUGH DIGITAL STORYTELLING ON NARRATIVE TEXT

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Abstract: This study investigates whether or not students' critical thinking skills can be improved through the use of digital storytelling. It was a pre-experimental design in which one group was tested twice, once before treatment was given and once after treatment had been administered. The instrument consisted of a test that included both multiple-choice questions and an essay test in order to evaluate the students' capacity for critical thinking after they had been exposed to narrative texts. Twenty students from a language class at one of the Islamic senior high schools in Bali, Indonesia, were the ones who took part in the study. In order to evaluate the growth of the students, the data were put through a paired sample t-test for analysis. The findings demonstrated that using digital storytelling to tell a story can strengthen students' ability to think critically. It was established that the mean score on the pre-test was 63.85, and the mean score on the post-test was 84.85, which indicates that there was an increase in performance. In addition, the significance value was 0.000, which was a number that was lower than 0.05. It meant that students' analytical and deductive reasoning abilities improved. It is strongly recommended, for the purposes of future research, to carry out studies using a significantly larger number of samples.

Keywords: *critical thinking, digital storytelling, narrative text*

INTRODUCTION

Today, critical thinking is required to understand information and determine whether it is reliable or fake news since we live where the internet has become the primary source of information (Cortázar et al., 2021). Therefore, CT is considered one of the most important types of thinking and has an essential key within the educational process to ensure the effective cognitive development of learners. Critical thinking allows individuals to reflect on their thinking and the ideas that inform their decision. Thus, critical thinking becomes one of the main 21st century skills that are essential for

modern learners to succeed in school and the workplace. The term ‘critical thinking’ refers to the capacity which enables people to think clearly and rationally regarding specific scenarios. Critical thinking involves independent thinking and the ability to formulate opinions from different perspectives since critical thinking is a higher-order thinking skill (HOTS) created by Bloom taxonomy (Bloom, 1956) involving problem-solving, decision-making, and creative thinking. Hence, it has recently been one of the fundamental topics that has received attention due to its vital role in shaping the way learners learn and think. The learning process has to be conducted effectively by including all the participants in any event to increase their related skills such as communication, related knowledge, and future competitions (Handayani, 2016). Learners can apply analyzing and solving problems for certain issues in their process of learning (Wei, 2018).

Critical thinking skills development has long been regarded as an essential goal of formal education in Indonesia. However, students’ critical thinking skills in Indonesia are still lacking. According to the results of the 2006 Progress in International Reading Literacy Study (PIRLS), Indonesian students’ reading competence is the lowest in East Asia, with literacy scores below the international average. Indonesia is ranked 45th out of the 50 countries surveyed. Students did not understand the entire reading content; they only understood 30% of the text, making it difficult for them to answer reading comprehension questions and respond to the reasoning prompt. This condition has been caused by the process of teaching and learning. Most EFL teachers are still implementing a traditional learning approach in which teachers play a dominant role in the classroom’s learning process. Students mainly follow the teacher’s directions, which are regarded as the only source of knowledge. As a result, students are highly passive and dependent on teachers. Moreover, some teacher’s questions in the learning activities only require students’ lower order thinking or basic recall which has impacted their ability to process the lesson (Rahmawan, 2021).

Critical thinking can be developed when a teacher can create a learning environment that demands thinking skills. Many scholars and researchers have suggested that there are many strategies, media and technology, methods or approaches to be successful in the teaching of critical thinking skills. Thus, the teacher should find the best strategy to enlarge students’ critical thinking skills. It is known that the teacher

plays an important role in promoting students' critical thinking skills. The role of digital technology for its pedagogical value can initiate progress in students' learning satisfaction, motivation, attentiveness and achievement.

Digital storytelling is a learning medium that motivates students to learn enjoyably and interestingly. It is also a solution to improve students' critical skills since digital storytelling is accompanied with utilization of digital media or technology to construct the result (Lambert, 2013). It is also the medium to assimilate ideas into the language utilized technology, in the meantime the digital stories from the internet such as in narrative text learning. It acts as the bridge between conventional literacies belonging to reading, listening, speaking, and writing and new technologies called visual literacies that will construct more student's understanding. Besides, digital storytelling is a modern way to retell the story given along with digitalization media in the form of texts, images, sounds, and video (Chan, 2019). It will promote them to develop their thinking ability along with their favorite video characters in order to make a better final product. Originally, digital storytelling was restructured in the 1990s also being improved by the Center for Digital Storytelling in America (Lambert, 2013). As time goes, it can be used as constructivist strategy related to activity related to project-based, utilization of technology, and student learning experiences (Robin, 2016). Its implementation in school depends on the material given. Usually, it is concluded on basic competencies in English. One of them is narrative text learning which contains lots of storytelling material such as legends, fairy tales, and fables. Hence, it is still related to the culture in the form of retelling or making up a new story based on recent time requirements.

Some researchers, actually, have examined the influence of applying digital storytelling on students critical thinking activity for higher education and teenage scholar (Chen & Chuang, 2021) and they were proven that digital storytelling helps in improving their critical thinking skills (Botfield et al., 2018; Chan, 2019; de Jager et al., n.d.). Therefore, this research attempts to fill the gap by investigating student's critical thinking improvement due to the implementation of digital storytelling in learning narrative text material. Digital storytelling can encourage students to engage one another in their collaborative design of digital stories. Its image-based manifestation calls their critical thinking and creativity among students to achieve sophisticated story

plots.

The current study aims to investigate whether digital storytelling can improve students' critical thinking skills. As a result, the alternative hypothesis asserts that students, critical thinking skills improve after learning narrative text through digital storytelling. Furthermore, the study collects the data from pretest and posttest of critical thinking skills. It also used observation sheets to obtain their experience in the process of teaching and learning.

LITERATURE REVIEW

Critical Thinking Skills

Critical thinking is defined as self-regulatory judgment that results in interpretation, analysis, evaluation, and inference in addition to explanations of the evidential, conceptual, methodological, logical, or conceptual considerations upon which that judgment is based on by Facione (2015). When students think critically, they evaluate the outcomes, such as the quality of a decision or the resolution of a problem, because the critical thinking skills rubric is relevant with the interpreting, analyzing, reasoning, evaluating, justifying, and self-regulating, which are used in combination to create an effective critical thinking situation in the teaching and learning process. Critical thinking, in a nutshell, is the process of thinking through something. In the school community, critical thinking enables students to maximize cognitive understanding, which means they will not only study to the best of their abilities but also reflect on the given material. Therefore, the teacher must adhere to its rules, particularly those pertaining to an environment that encourages students to learn responsibly and conveys success and freedom (Wilson, 2016). In addition, critical thinking skills are a component of proficiency, psychophysiological factors, and a sign of the quality of the learning process (Gilmanshina et al., 2021).

Critical thinking is one of the important elements in education, so one of the methods that is used in assessing critical thinking is Socrates method (469-399BC). Socratic questioning associates with questioning others thought in overall thinking (Jensen Jr, 2015). The purpose is to get the perfect conclusion and give them an opportunity to solve their problem constructively. The questions given by the teacher are based on students' need and ability such as "How about...?", "in your opinion, does

your answer make sense?”, and “therefore, do you still have the same answer as the first answer”. Those are included on referential questions which promote the students to have better analysis and give the best answer regarding material. As the purpose of education, especially in English, critical thinking is crucial because it equips students with the tools necessary for an effective learning process. Therefore, the instructor should integrate his instruction with activities that promote critical thinking by asking students simple questions, and then progressing inductively to questions that are more difficult in order to validate students' initial comprehension of the material. The instructor directs the students, putting an emphasis on voicing an opinion and taking actions that develop the students' capacity for critical thinking.

Relationship between Narrative Text Learning and Critical Thinking Skills

Storytelling, especially when it takes the form of narrative text, is widely regarded as one of the most productive approaches to the pedagogy of languages. The basic competencies that center on legends in Indonesia and elsewhere in the world include narrative text in both the written and spoken forms. The storytelling event is connected to the activity that is named to finish the unfinished story because this narrative text includes a requirement that emphasizes critical thinking skills as its final component. Additionally, telling a story is an advanced level of telling that requires additional practice. In addition to this, it had a complete understanding of the order in which the events occurred in the narrative. Storytelling, on the other hand, is an activity that has the potential to bring joy, increase student knowledge, and transmit cultural heritage from one generation to the next. The most important idea here is that listening to a story aloud could inculcate in a student the habit of weighing the merits of every action taken in a narrative by analyzing both its positive and negative aspects. As a result, narrative activity has been linked to the telling of a story that places its characters in a particular time and location and involves a problem that needs to be solved. It is a functional form that assists in the incorporation of historical accounts into pertinent learning, the establishment of each other, and the forecasting of the future. The incorporation of time, social concern, a convoluted manner, and conclusions drawing value judgments all contribute to the formation of a narrative's overall significance (McAlpine, 2016). Particularly, the active operator that directs cognitive activity is the protagonist or narrator of the story. As a result of this, accusing the practice and

implementation of narrative speaking can be an alternative to increase students' participation in speaking activity that gradually leads to critical thinking skills. Narrative speaking can also be used to accuse the practice of narrative speaking.

For the purpose of making it simpler for students to put their knowledge into action, practical critical thinking should be taught explicitly through narrative speaking. However, when they were in school, the students were instructed in narrative texts that were associated with the local myths and legends, as well as those that originated from Indonesia in general. Because there are four different types of narrative texts, including linear, non-linear, quest, and viewpoint narratives, students have the opportunity to enjoy learning how to retell a story while simultaneously developing their ability to think critically through the process of narrative learning. In this scenario, the subject matter as well as Higher Order Thinking Skills (HOTS) were included, with a particular emphasis on the capability of critical thinking skills. When it comes to putting the curriculum into practice, the curriculum of based competence requires the student to 1) differentiate each element of the narrative text such as social function, structure of the text, language features, and moral value of spoken and written narrative text; 2) identify the main idea; 3) find the referential questions related to the story; 4) identify detailed information; and 5) evaluate by asking the student's opinion to the story that was given; and 6) identify the moral value of spoken and written narrative text; 7) rearrange the jumbled sentences into a coherent paragraph, summarize the main points of the text; and 8) use the storytelling technique to present the summary in front of the class, capturing the social function, structure of the text, language features, and moral value that are delivered into the storytelling form in order to access the students' ability to think critically. The final product of the narrative activity that requires critical thinking skills as an interpersonal text is the interpretation of the different sides of the story or the main character and the presentation of the summary result through the use of storytelling style. In this context, interpreting the different sides of the story or the main character. Additionally, as the students finish the story, it has an impact on the attitudes, thoughts, and feelings that they bring to the experience (Tanjung & Fitri, 2020). As they gain mastery of the subject matter as well as the medium, they will be able to access the critical thinking skills through continued practice.

Digital Storytelling

Digital storytelling provides students with 21st century literacy requirements such as digital access, information, technology, and visualization picture as video (Wu & Chen, 2020). According to de Castro & Levesque (2018) digital storytelling is related to the point of view of the narrator and is presented in the form of digital photographs, video recordings, and musical compositions. Thus, digital storytelling has audio and visual media that support the students to learn English language. Hence, students commit to learn independently by watching, listening or reading since there are sentences using digital storytelling as the media. Therefore, digital storytelling acts as the upgraded version of traditional storytelling which generates and facilitates students' interest and need based on nowadays situations. It can be seen as the media itself which requires students to utilize technology such as digital media, and social media that is friendly and accessible for both teacher and student. Furthermore, digital storytelling facilitates students' communication skill development, interpersonal relation, technology literacy, learning interest, and love challenging activities (Stork, 2020). As a pedagogical tool that facilitates students to improve motivation to study and arranges an effective learning situation in order to provide collaboration, reflection, and interpersonal communication among them. The integration of learning media; digital storytelling, nowadays stories are being carried in digital tools. A digital story brings the traditional bridge into multimedia development that can be assessed by both teacher and students in engaging meaningful learning. One of the advantages is the students are able to watch their various kinds of interesting stories that are packaged in an acceptable form that suits for all types of student learning characteristics such as auditory, visual, kinesthetic through images and sounds of readable text stories. In addition, the students are trained to practice pronunciation from every word in English based on the content of the medium. This medium will provide reinforcement for their memory since it displays interesting visualizations to be enjoyed. Thus, it is expected that there will be an increase in student learning outcomes in learning English, especially learning outcomes in the cognitive domain of the critical thinking category.

Relationship between Digital Storytelling and Critical Thinking Skills

Students learn to use a variety of software in a number of different configurations as a result of the incorporation of digital storytelling into the language-

learning process (Hung et al., 2012). Not only does using digital storytelling encourage students to participate actively in class activities, but it also assists teachers in developing interactive educational experiences for their students. The end result of combined products such as images, sound, and text help students pursue their goal because digital storytelling increases their learning interest even in difficult skills such as critical thinking (Gaeta et al., 2014) and problem solving. This helps students pursue their goal because digital storytelling increases their learning interest (Yang & Wu, 2012). The use of digital storytelling in education engages students in a transparent process that assists teachers in gaining knowledge through the constructivist method of "learning by doing," with the end goal of encouraging students to participate actively in their own education. When students produce their own product of adapted storytelling, either in written or spoken form, they collect evidence to reinforce the plot, empathize with similar difficulties faced in everyday life, and project those issues onto the characters in the story, all of which promotes the students' capacity for critical thinking. It significantly reinforces students' learning process by allowing them to discuss the story by identifying and evaluating the story's intrinsic elements, making an assumption, gathering the evidence, reasoning, and preparing for future controversies with the assistance of both spoken and written feedback from the teacher (CARVALHO et al., 2015).

METHOD

Research Design

This research used pre-experimental research design with quantitative approach where one group was tested twice in pre-test and post-test to investigate the efficacy of using digital storytelling as it provides a vehicle for assessing analyze, evaluate, compile, synthesize, and interpret processes and as a media in enhancing students' critical thinking skills in narrative text. The students were given the pre-test to determine the score of the students' speaking skills before the treatment, while the post-test was given to figure out the learning outcome after the treatment. The purpose was to provide little or no control of other variables in the form of one-group pretest-posttest design. The differences associated with the implementation of the experimental treatment are then assessed by comparing the scores of pre-test and post-test (Ary et al.,

2018). The aim of this research is to find how successful digital storytelling was in improving students' critical thinking in narrative text.

Participant

The participants were twenty students of the class X Language Class in tenth graders at one of Islamic senior high schools in Bali. The class is consisted of 4 males and 16 females. It was used purposive sampling since researchers took the sample based on the data given by the teacher. The cognitive level of the students in this class has had an average score in their critical thinking level.

Instrument of the Research

The instrument was a test, pre-test and post-test, to know students' improvement in their critical thinking skills. Then, the test was tryout in different subjects in the same grade in order to know whether the items are valid and reliable. It also provides the appropriate test items which were suitable with the level of students and allocating the time needed which is applicable with students in doing the test in the classroom.

Validity of Test Instrument

In this research, it was used content validity that was related to the test's conformity with its objective. The researchers have created several questions of the test based on the components of critical thinking testing matched by syllabus and basic competences so the test was not out of contents. Questions of the tests have covered to local Indonesia legends, such as the Legend of Bali Strait and Situ Bagendit. The questions also included the basic competence as well as indicators, namely; students are able to mention the social function, identify generic structure and language features, differentiate generic structure and language features, identify main idea, find the referential question, identify detailed information, evaluate by asking the students to give their opinion related to the story, compile jumbled sentences, sum up the story, and present the summary by using storytelling technique. Table 1 showed the content validity of the objective of syllabus of tenth grade.

Table 1. Content Validity of the Objective of Syllabus

| | |
|-------------------|---|
| Basic Competences | 3.8 Differentiating social function, structure of the text, and language features in written and spoken Narrative Text related to Indonesia Legends. 4.8 Capturing the meaning contextually related to social function, structure of the text, and language features in written and spoken Narrative Text related to Indonesia Legends. |
| Indicators | 3.8.1 Students are competent to mention the social function 3.8.2 Students are competent to identify generic structure 3.8.3 Students are able to identify language feature 3.8.4 Students are competent to differentiate generic structures and language features 4.8.1 Students are competent to identify main idea of each paragraph. 4.8.2 Students are competent to find referential question according to the story 4.8.3 Students are competent to identify detailed information in the story 4.8.4 Students are competent to evaluate by asking them to give their opinion 4.8.5 Students are competent to compile jumbled sentences into a good paragraph. 4.8.6 Students are competent to sum up the story |
| Instrument | Pre-test and Post-test |

It indicated that the content of the test was accurate because the validator is a lecture from the English Education Program of UNESA. Based on her feedback and evaluation, the test was valid.

Reliability of Test Instrument

The reliability coefficient was calculated using the formula from Kuder Richardson Reliability or KR-20 that was conducted by Microsoft Excel. It resulted that the reliability value of the multiple choices instrument was 0.859, while the essay instrument was 0.878. According to George & Mallery (2018) the interpretation of the reliability test at points greater than 0.60 means that the test could be used as an appropriate instrument to measure students' critical thinking skills.

Data Collection Techniques

In conducting this research, six meetings were organized, including a pre-test, four treatments, and a post-test. Table 2 was a further explanation of how data collection technique was done.

Table 2. Procedure How to Collect Data

| | |
|-----------|--|
| Pre-Test | <ul style="list-style-type: none"> • The researcher gave students storytelling material that is about Indonesian folklores, Bali’s Strait” and “Situ Bagendit”. • The researcher asked the student to do the written task given such as multiple choice, essay, and summary task individually. • At the end of the written task, the researcher gave a spoken task in which they performed their summary product in front of the class. • The researcher gave marks for their written task and spoken performance. |
| 1 | <ul style="list-style-type: none"> • The researcher gave the story entitled “Toba Lake Legend”. • The researcher performed the storytelling video and distributed the related questions of the story such as the social function, generic structure, and language features. In this time, students analyzed and answered the question in written form. • The researcher facilitated them chances to ask questions about the story and helped them while they had any difficulties in order to prepare the material for the second meeting. |
| 2 | <ul style="list-style-type: none"> • In the second treatment, the researcher gave two stories entitled “Malin Kundang” and “The Origin Banyuwangi”. • The researcher performed the storytelling video and distributed related questions of the story such as differentiate generic structures and language features and identify the main idea of each paragraph. In this time, students analyzed and answered the question in written form. • The researcher provided them chances to ask questions about the story and helped them while they had any difficulties in order to prepare the material for the third meeting. |
| 3 | <ul style="list-style-type: none"> • The researcher gave the story entitled “Sangkuriang”. • The researcher performed the storytelling video and distributed related questions of the story such as finding the referential question related to the story, identifying detailed information in the story, and evaluating by asking students to give their opinion related to the story. In this time, students analyzed and answered the question in written form. • The researcher provided them chances to ask questions about the story and helped them while they had any difficulties in order to prepare the material for the last meeting. |
| 4 | <ul style="list-style-type: none"> • The researcher asked the students to review the materials given before. • The students asked to compile the jumbled sentences into a good paragraph. • The students choose one story over 4 stories that were given before in order to produce a summary. • The students perform their summary in front of the class one by one by using storytelling techniques. • The teacher provided a feedback session related to the performance of the storytelling. |
| Post-Test | <ul style="list-style-type: none"> • The same process as the pre-test project, in this step, the researcher gave storytelling material that is about Indonesian folklore, then the researcher asked the participants to read the story carefully related to the topic of “The Legend of Bali’s Strait” and “Situ Bagendit”. • The researcher asked the student to do the written task given such as multiple choice, essay, and summary task individually. |

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- At the end of the written task, the researcher gave a spoken task in which they performed their summary product in front of the class.
 - Eventually, the researcher gave marks for their written task and spoken performance.
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Data Analysis Technique

In analyzing the data of this research, it was used paired sample t-tests to perform the significance difference between students' score of pre-test and post-test. The steps were adopted from Pallant (2010); the first step conducted the significance. It was considered significant if the value is not less than or .05. The second step analyzed the mean values, which to measure the difference, and the last step calculates the effect size of paired sample t-test.

FINDINGS AND DISCUSSION

Findings

The result showed that there was an enhancement between the result of pre-test and post-test that is illustrated in table 3.

Table 3. Students' Score Result of Pre-test and Post-test

| Critical Thinking Skills | Measurement | N | Mean |
|---------------------------------|--------------------|----------|-------------|
| Analyze | Pre | 20 | 42.65 |
| | Post | 20 | 52.75 |
| Evaluate | Pre | 20 | 2.85 |
| | Post | 20 | 3.9 |
| Compile | Pre | 20 | 6.25 |
| | Post | 20 | 9.5 |
| Synthesize | Pre | 20 | 5.4 |
| | Post | 20 | 7.8 |
| Interpretation | Pre | 20 | 6.7 |
| | Post | 20 | 10.5 |

The methods used to investigate the influence of using digital storytelling as a learning medium on the performance of students in critical thinking tasks during the pre-test and the post-test are shown in Table 3. Between the pre-test and the post-test, there was a significant development in the students' critical thinking skills in a variety of areas, including evaluating, compiling, synthesizing, and interpreting the data. This was demonstrated. In the process of evaluating the data, it was determined that the mean score on the pre-test was 42.65, whereas the mean score on the post-test was 52.75. The difference between them can be expressed as 10.1. The value of the difference reveals that there has been advancement in the process of analysis, as can be observed. In the

phase of analyzing, it was common knowledge that students may discover the primary idea of the text, detail information that was either implicit or explicit, referential questions, as well as synonyms and antonyms. Students can be motivated to actively engage in the process of studying narrative text by using digital story telling. The end conclusion was that students had better learning outcomes, which indicates that they have made significant progress.

In the process of evaluating, the mean score on the pre-test was 2.85, and the mean score on the post-test was 3.9. The gap between them is therefore 1.05 points. Students are able to voice their thoughts and feelings regarding a narrative that they have viewed thanks to the medium of digital storytelling. They were able to assess the content of the tale by expressing agreement or disagreement with the statements made, as well as their viewpoint in relation to the story. Their difference score, on the other hand, is deemed to be poor due to a lack of experience in effectively communicating their ideas. This problem was brought on by the students' inability to employ a wide variety of words. It was also a result of the routines that the pupils had developed, in which they lacked the willingness to take notes regarding the significant facts.

The average score on the pre-test was 6.25, while on the post-test it was 9.5. This pertains to the compiling process. The gap between them can be expressed as 3.25, and throughout the course of the treatment session, the students were tasked with rearranging jumbled sentences so that they formed a coherent paragraph. Because pupils typically study this kind of question in an earlier grade, all they need to do is think about the question's meaning and reword the sentences so that they correspond to the events that take place in the story. As a result, there was a significant variation in value between the pre-test and the post-test. The situation that the students do not have a good understanding about narrative text was the source of this problem.

When it comes to synthesizing, the pre-test has a mean score of 5.4, whereas the post-test has a mean score of 7.8. The difference between them can be expressed as 2.4. In this portion of the assignment, the students were tasked with synthesizing the significant question based on the provided text. The value of the difference between the students' performance on the pre-test and the post-test indicates that the students made a few capability gains in relation to the story that was presented to them. When it comes to interpretation, the pre-test has a mean score of 6.7, while the post-test has a mean

score of 10.5. The number 3.8 represents the gap that exists between them. The fact that there is a difference between the two values demonstrates that the pupils were able to successfully complete the task known as interpreting, which is a form of presentation. The overall results of the students' pre-test and post-test, as well as the discrepancies between the two, are shown below in table 4, which can be found further down the page.

Table 4. Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|-----------|---------|----|----------------|-----------------|
| Pair 1 | PRE TEST | 63.8500 | 20 | 7.50631 | 1.67846 |
| | POST TEST | 84.8500 | 20 | 6.10673 | 1.36551 |

From table 4, we can see that the mean of the pre-test is 63.85 while the mean of the post-test is 84.85. The subject of the research is 20 students. The standard deviation is 7.506 in the pre-test and 6.106 in the post-test. The value of mean's standard error in the pre-test is 1.678, while in the post-test is 1.365. The mean score of the pre-test 63.85 < post-test 84.85. Implied that there is a difference between pre-test and post-test result, i.e. the result is increased.

Table 5. Paired Samples Test

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|-----------------------------|--------------------|----------------|-----------------|---|-----------|---------|----|-----------------|
| | Mean | Std. Deviation | Std. Error Mean | 95% confidence interval of the difference | | | | |
| | | | | Lower | Upper | | | |
| Pair 1 PRE TEST – POST TEST | -21.00000 | 6.28281 | 1.40488 | -23.94044 | -18.05956 | -14.502 | 19 | 0.000 |

Based on Table 5, the mean of pre-test and post-test was -21.00000, the standard deviation was 6.28281, and the mean standard error was 1.408488. The lower difference was -23.94044, while the upper difference was -18.05956. The t value = -14.502 with df = 19 and Sig. (2-tailed) < 0.05. Based on the result of this research, the value of Sig. (2-tailed) was 0.000, which was less than 0.05. Thus, the alternative hypothesis, which was stated before that digital storytelling can improve students' critical thinking skills in learning narrative text was accepted.

Discussion

Recent evidence has indicated that the use of digital storytelling to teach English can improve students' critical thinking skills, particularly in relation to narrative texts. The pre-test score was 63.85, whereas the post-test score was 84.85, indicating that the

deployment of digital storytelling improved students' critical thinking. In general, digital storytelling as a learning medium enables students to engage in self-centered activities that inform them of their exam performance. Reviewing issues in novel ways and distributing learning across subjects and disciplines (Komalasari, 2021), including for various learning markers, helps foster critical thinking capacity. According to McAlpine (2016), conducting a narrative text learning specifically for critical thinking helps students generate the temporality of the story, consider social issues, familiarize themselves with complex ways of thinking, and evaluate conclusions, all of which contribute to the construction of a meaningful story. To meet the intended critical judgment, however, the indicators must comprise skills that represent students' ability to analyze, evaluate, assemble, synthesize, and interpret across the supplied tasks, as derived from Facione (2015).

In the analyzing process, the students were introduced to identify, mention, and find the main idea in the given story, which includes mentioning and identifying that help to roll students (Anderson & Krathwohl, 2001; Bloom, 1956), which purposely perform their memories related to the given story and discover the main idea that is intended to drive their ability in summarizing a text by examining the introductory sentence track. Digital storytelling enhances students' story-related memories. As media literacy, it supports them in reviewing the story's constant reiteration of crucial details (Chen & Chuang, 2021). As revealed, the substantial difference between the pre- and post-test scores demonstrated that students were familiar with the analysis of processes. Throughout the implementation, students were given a challenge based on the story that must be solved by examining procedures. Students demonstrated considerable improvement on the post-test. It indicates that students were pleased with their abilities.

Then, during evaluation, the students were required to evaluate the story by providing their perspective. Evaluating technique addresses students' abilities to analyze and interpret their opinions, such as agreeing or disagreeing if they were the first person in the tale, and encourages students to think on the relevance of the storylines to their own lives. Digital storytelling necessitates test-taking strategies because during the evaluation process, students must examine the story's clues and justifications before selecting an appropriate response (Chen & Chuang, 2021). In reality, appraising has the smallest value gap because it comprises questions that guide students' supposition as if

they were the story's protagonist. The majority of the challenges required students to mix their opinions with reality checks in order to provide a satisfactory response. In addition, the students must provide a clear explanation of the rationale. As a result of underestimating how to write an opinion during the examination, they received the lowest score and must improve in this area.

The students were then instructed to compile garbled sentences during compilation. In order to construct a decent paragraph, they anticipate the subsequent sentences. According to Hughes (2014), students' ability to foresee is contingent on their past knowledge of the story and their imaginative engagement with the text. Digital storytelling assists students with recalling and describing their story-related prompt.

Then, in synthesis, students were expected to be able to distinguish between generic structure and linguistic characteristics, identify referential queries, and summarize the provided narrative. Digital storytelling with these kind of thinking questions (Jensen Jr., 2015) promotes students' comprehension inductively through the simplest steps, such as “why do you believe your response is correct?”, “What is the basis for your answer?” and “in your opinion, does your answer make sense?” are useful questions for determining how pupils relate to their information. It encourages pupils to consider alternative perspectives and interpret its answer. However, in order to conduct a self-produced summary, the researcher utilized an outline prior to composing the summary. Outlining acknowledges the fundamental structure of the text, whereas summarizing compiles the text's core point. As the judgment occurs in a specific circumstance, digital storytelling serves as a problem-solving tool that informs students about the relevant evidence provided in the narrative. Thus, students can easily produce their writing products (Chen & Chuang, 2021).

In interpretation, students are required to apply and practice their final knowledge as a learning product by presenting their summary utilizing storytelling approaches. Students are required to improve their communication skills. Digital storytelling not only improves students' communication abilities, particularly the way they tell a tale in real-world circumstances, but it also helps them to persuade others of their point of view.

Along with the implementation of digital storytelling as a learning medium, students learn narrative text in a playful manner, which is consistent with Yang & Wu's (2012) assertion that digital storytelling is the tool that motivates students during the learning process in order to construct personal narratives. Students' prior knowledge and new learning outcomes were integrated into the digital storytelling in order for them to have a deeper comprehension of the subject matter. Therefore, the inclusion of digital storytelling during the treatment process increased the effectiveness of students' learning of critical thinking skills, particularly in regards to studying narrative text. The outcome of the post-test demonstrates that the usage of digital storytelling as a medium enhances students' critical thinking skills, particularly when learning narrative literature. These findings were consistent with those of a previous study conducted by Chen and Chuang (2021), which indicated that the implementation of digital storytelling assisted students in achieving a higher level of motivation as "a temporary escape" from crowded lessons and examinations. As a result, they were pleased to learn with the aid of digital storytelling, exhibiting positive emotions since they had produced their own essay and summary.

CONCLUSIONS AND SUGGESTIONS

Conclusions

This study found that incorporating digital storytelling into the studying of narrative text could improve students' critical thinking in tenth grade. Digital storytelling aids students in predicting the plot and delivering their views and thoughts. This material can assist students in shaping their cognitive processes, including analysis, synthesis, compilation, evaluation, and interpretation. Digital storytelling also encourages students to actively participate in the teaching and learning session in order to examine, evaluate, and make decisions regarding a certain subject. The combination of digital storytelling and narrative text looks ideal for teaching critical thinking skills, as students are able to observe the real-world application of narrative text learning, which will affect their performance. Therefore, digital storytelling would be the most effective method for enhancing students' critical thinking. However, pupils have difficulty summarizing the story due to their limited vocabulary and lack of summary experience.

Suggestions

It is suggested that fostering pupils' critical thinking abilities should be done in stages. The instructor must employ a variety of tactics and media to assist students in developing critical thinking. Multimedia applications improve students' performance in all learning topics and make the teaching and learning process more engaging. This research can be cited by other scholars who have an interest in undertaking critical thinking and digital storytelling. Since it focuses solely on narrative text material, it is hoped that more English materials may be studied in the future.

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