
Application of Multimedia Digital Story Telling in Speaking Learning at Information Technology Study Program

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Abstract

This article explains how project-based learning is being implemented (digital storytelling) to help students in the First Semester in Bumigora University in Mataram at become more proficient speakers. The aims of this research are to find out whether Project-Based Learning (digital storytelling) can improve students' speaking skill and to analyze the students' learning motivation when is implemented. A test, questionnaire, interview, and observation were used to gather the data. The researchers used action research and random sampling technique. The method used mix method, quantitative and qualitative. The steps in this design are Planning, acting, observing, and reflecting. The study's conclusions showed that students' speaking abilities had improved in a number of areas, including confidence, fluency, pronunciation, grammar, and vocabulary. A range of speaking exercises, such as oral presentations, voice recordings, group discussions, and interviews, helped to strengthen those areas. The study's conclusions showed that pupils' speaking abilities had improved in a number of areas, including confidence, fluency, pronunciation, grammar, and vocabulary. A range of speaking exercises, such as oral presentations, voice recordings, group discussions, and interviews, helped to strengthen those areas. Moreover, the mean gain of the students' post-test was higher than the mean gain of the students' pre-test. In the pre-test, the mean gain was 56.37; however, the students could achieve 74.05 in the post-test. In addition, students' learning motivation increased in terms of: students involve in learning process, students solve the problem and search the issue, students try to work harder to avoid the failure. A demanding multimedia-based project in which students generated digital stories might give meaningful experience and increase improvement students' spoken ability.

Keywords: Digital Story Telling, Project Based Learning, Speaking

1. INTRODUCTION

English is a language that is widely used as a means of communication by most people throughout the world. As an international language, many people learn English as a second or foreign language (Jannah, 2020). Besides that, English is a communication tool that is used verbally and writing. English is a foreign language that is often used in Indonesia and is even taught in schools. English is not only an academic requirement for limited mastery in aspects of language knowledge, but also as a language of science and technology. This means that English is used to communicate and is extracted in science and technology. In mastering English, there are four skills that must be mastered, namely speaking, listening, writing and grammar. All of these aspects play an important role in learning English, but speaking is the aspect that many people need more often. According to (Gatra, 2018), he speaking aspect is one aspect that can be an appropriate way to convey feelings, ideas and can build social development.

Moreover, according to Dinasari E, (2020) speaking is an active-productive ability. Oral messages conveyed by speaking are the use of the voice to pronounce words chosen, fit with the meaning to be expressed, then arranged in grammatical rules and pronounced with appropriate intonation so that the message conveyed can be understood by the listener. Speaking is also called a productive skill because the speaker actively produces language to make meaning. The real challenges of speaking practice occur when students face real communication. Basically, there are three main difficulties in speaking. The first is the knowledge factor: aspects that the language student does not yet know that enable production. Second is the skill factor: the student's knowledge is not automatic enough to ensure fluency. Then, students' affective factors also hinder their speaking fluency, such as low self-confidence and high anxiety (Thornbury in (Wahyuni et al., 2018).

In line with the definition, based on observations made, many students still have speaking problems, especially students at Bumigora University. First, students are not interested in speaking English because they are not confident, because they always using the National Language, namely Indonesian. When the lecturer asks questions using English, students answer in Indonesian because they are embarrassed and afraid of being laughed by their friends in class and they have few vocabularies. Second, students still often make mistakes in pronunciation of English words so they are more silent and inactive in class. Third, students have problems with phonology such as stress, intonation, and other phonological problems, so that students still make mistakes in speaking English

This condition can be addressed by presenting learning situations that can encourage students to be active in activities to develop communication skills. The literature review shows that the adoption of Digital Story Telling can solve students' problems in improving their speaking skills. Action research

conducted by (Syafryadin, 2019) proves that there is a significant influence of the Digital Story Telling method on high school students' speaking abilities in various text genres. Furthermore, using the Digital Story Telling approach becomes a pedagogical tool for teachers in preparing lesson plans to understand the material. And also, it results in students becoming more critical, creative and confident as a digital generation. Similar research by Zamzam (2020.) shows that things are not much different.

The data shows that the t-count score (3.3) is higher than the t-table (2.00). This means that the hypothesis is accepted. Therefore, it can be concluded that the Digital Story Telling approach can improve speaking skills. Then, the results of the research also concluded that by using this approach, students learn more independently. This is also in line with research by Nair and Viknesh, (2021) which proves that Digital Story Telling can be used as a useful tool by educators in improving the speaking skills of students from various levels of education, from elementary to tertiary education, and using this method will help students communicate and speak more effectively. Then, according to Cahyanti and Nuroh (2023) state that by using quantitative method with one group pretest-posttest design, the results is by digital-based story media can improve students' speaking skills. The impact of the research conducted is that digital story media can help improve students' language skills. Thus, digital story media can be a learning innovation in schools and can be developed again according to the needs of students. So that later it can foster students' creative ideas. Furthermore, (Azizah, 2014) emphasize that based on the results of the research application of Digital story telling in English Language subject, the learning results after application methods of digital storytelling.

This is evident from the results of observation and tests, class VIII C test results indicate t-hitung is greater than t-table $8,96 > 2,04$, be aware that learning to use a method of digital storytelling is very good when applied to support their language learning material with English retelling the recount text with the theme of holiday experience. Realizing the potential of the digital story telling method in this research, we will adopt this method to improve students' speaking skills. According to Fortinasari et, al (2022) Digital storytelling is an alternative learning media that is very creative and innovative. In creating digital storytelling, teachers not only master the material and technology used, but must be able to describe what is needed so that students not only understand the learning material but can also apply it in everyday life.

In addition, Digital Story Telling is the right type for a project to encourage students in speaking skills. There are several steps of DST that we will carry out in this research: (a) students compose stories for later scripts. This helps them develop critical thinking and linguistic knowledge, (b) audio recordings, students practice how to produce correct pronunciation, including stress and intonation patterns, (c) students capture pictures and/or videos. Then, they will practice with image scanning and editing,

working therefore increasing their visual and technological literacy, (d)students combine different types of media such as audio and images into a timeline and add music tracks (video editing), and (e) students present digital stories. Therefore, in this research, we innovated learning by adopting Digital Story Telling as a method to improve students' speaking skills. Specifically, this research aims to find out whether learning using the digital story telling method can improve students' speaking skills and analyzing student learning motivation when implemented using the Digital Story Telling method.

2. RESEARCH METHOD

This research is classroom action research in the Speaking course by implementing learning using Digital Story Telling media, the output of which is expected to improve the Speaking learning process so that it has implications for increasing the level of students' speaking abilities. The method used mix method, quantitative and qualitative. In analyzing qualitative data, the researcher used constant comparative technique, they are assembling the data, coding the data, comparing the data, building interpretation, and reporting the outcomes. The quantitative data were presented in the form of mean score. It was done to compare the students' speaking ability before and after each cycle or the result of pre-test and post-test showing whether or not there was improvement in speaking ability.

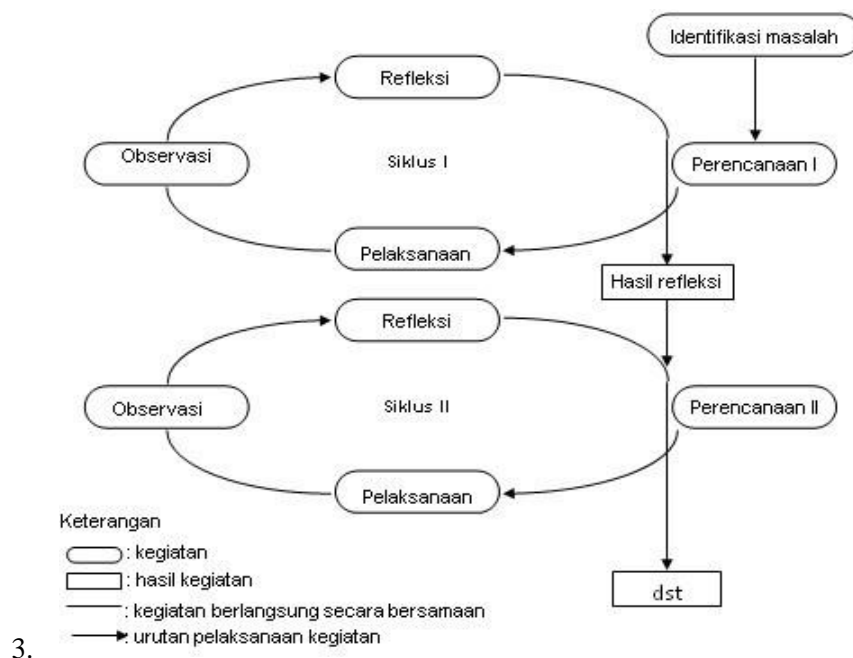


Figure 1. Kemmis and Mc Taggart (1988) Classroom Action Research Model in Pahleviannur, et.al, (2022)

Classroom action research is a way to solve problems in the classroom, then improve them so that they can improve the quality of learning. The classroom action research model used is the Kemmis and Mc Taggart (1988) model in (Pahleviannur et al., 2022) with a series of activities, namely planning, acting, observing and reflecting (9). The four research stages above can be described as in Figure 1.

The research started from a problem in learning. Existing problems are discussed and explored together by the research team. The next activity is to conduct a pre-survey to capture the initial conditions of the research subjects before administering the action. Another thing that is also done is measuring the level of students' speaking abilities. The results obtained from both were diagnosed together and became the basis for research planning. Planning is carried out in general and specifically. General planning covers the entire research, while specific planning includes actions for each research cycle which are always carried out at the beginning of the cycle. Next, action is given and observation is carried out while the action is being given. At the end of the cycle, reflection is carried out to see the process and the achievement of the results of the actions that have been given. The action taken is learning using Digital Story Telling media to increase the level of students' speaking abilities. In each cycle, learning using Digital Story Telling media is carried out in class. After that, a reflection of the first cycle is carried out which is used as a basis for determining the next action.

The subjects of this research were second semester students of classes A and B of the Computer Science study program, Faculty of Engineering, Bumigora University who took English language courses with a total of 60 students. Based on direct observations of the researcher, who is also a lecturer who teaches English courses, and discussions with the research team, there are several reasons underlying the decision to choose classes A and B for semester 2 as classes given action learning using Digital Story Telling media, namely (1) level students' speaking comprehension is relatively low seen from the pre-test; (2) most of the students in the class showed less enthusiasm for speaking and attending lectures. On average, they have no interest in taking English speaking courses. This research aims to find out whether learning using Digital Story Telling media can increase the level of speaking ability, so the object of this research is the speaking learning process of students who receive action in implementing the Digital Story Telling strategy. Data collection was carried out by observation, administering tests and questionnaires.

Data collection using test-giving techniques was carried out to measure students' speaking levels using a speaking test. The test instrument used in this research consisted of four tools, namely a pre-test, two speaking lessons assisted by Digital Story Telling, and a post-test. The test designed is in the form of a speaking practice test. Based on the data collection techniques above, there are two types of data that

will be collected from this research, namely quantitative data, obtained from test results, and qualitative data obtained from observations during the administration of actions and questionnaires. Data obtained from the speaking test was analyzed quantitatively to obtain the average score achieved by students before and after being given the action. This average score is then compared in each cycle to determine the improvement in students' speaking. In contrast to data obtained from speaking test results, data obtained from observations and questionnaires (qualitative data) are analyzed descriptively.

This qualitative data is used to describe the process of learning speaking (speaking) in the classroom during the delivery of actions and responses or student responses to the implementation of actions, in this case namely learning using Digital Story Telling media in learning speaking (speaking). The success criteria in this research include process and product success. Process success can be seen from the increase in the Speaking learning process. This increase is marked by students' learning attitudes that are more enthusiastic and enthusiastic. All these improvements can be observed during the lecture. Thus, in terms of process, indicators of the success of this research can be observed during lectures which show active lecture interactions, solid group collaboration, and their enthusiastic attitude. This step can be taken through open questionnaires and observations. The criteria for product success are shown by increasing students' speaking skills. In every process of learning to speak, the success of the product will always be measured. The measurement instrument is in the form of a speaking ability test which is measured using an assessment rubric.

3. FINDINGS AND DISCUSSION

3.1 Findings

In order to answer the first research question, the researcher presents the cycle of classroom action research by Metler (2009) which was used as the guidance to conduct and apply the digital storytelling. As stated in the previous chapter, this research consisted of two cycles which each cycle consisted of four stages. There was the Development of Students' Spoken Language Ability that summarized in Table 1.

Table 1. The Development of Students' Spoken Language Ability

Before Action Research	After Action Research
a. Lacked confidence in their speech.	increased self-assurance when giving oral descriptions
b. Struggled to speak with fluency	Increase fluency
c. Students make error sentences	Improved word pronunciation
d. Student had insufficient vocabulary	The Vocabulary Growth

In cycle 1, they used digital storytelling to describe seniors. Certain actions were taken in order to create enhancement. To begin with, the investigator presented the project's work. Next, the Students saw a sample of a digital narrative. and then summarized key ideas from it in writing. In collectives, they talked

about and read a writing that provides details about well-known individuals. This action that might improve kids' vocabulary and their comprehension of text that is Narrative. Second, the project investigation was developed by the pupils. Students created a list of interview questions at this point. Once the questions were written, they rehearsed the interview process. This stage's goals were to teach students how to pronounce words correctly and construct sentences correctly.

In order to organize the interview questions such that they obtained the desired information, the students collaborated in groups throughout the procedure. They started approaching the researcher for assistance in crafting the questions. The researcher kept an eye on things so she could provide comments and corrections on the work that the students had completed. The following stage involved conducting interviews to obtain information. In order to verify their English speaking, they also recorded the interview. Students interviewed their Friend or Senior in English in order to learn more about him. They conducted the interview outside of the classroom to allow for unrestricted communication. It could boost the students' self-assurance when speaking English. Additionally, they gained experience communicating in real-world situations using English, in order to verify that they can speak English.

Thirdly, students reported the project's progress to the researcher, who verified the outcomes of each group's interview. During the report stage, every student had a chance to present their findings in English, while the other students could offer recommendations. Additionally, the researcher used videos to provide them with practice pronouncing words correctly. The students were able to pronounce the new words correctly after watching the video and using it to describe it to their senior. The creation of products comes in fourth. All of the data was compiled by the students into a video profile. Following their writing of the senior's description, the students produced a narration, which was then recorded. It is necessary to pronounce words and tone correctly when recording audio. They had a lot of practice before the recording.

The project exhibition is the final phase. In front of the class, the students presented their finished project. The purpose of this last phase was to boost the students' confidence, fluency, and pronunciation. The students had drills to work on their pronunciation, fluency, and intonation prior to the presentation. Additionally, the researcher urged them to make gestures to draw in the audience. They made an effort to showcase their project as best they could in the presentation. The other students were free to speak at that same moment. The other students were free to provide suggestions and comments at the same time. In addition, the pupils' conduct was improving from before. It suggested that Between cycles, there was an improvement in the pupils' enthusiasm to study. Table 2 displays the shifts in students' motivation to learn during the course of the study.

Pre-research findings indicated that students' motivation to study was poor. The way the students in Bumigora University behaved during the lesson revealed it. These were: a. Students are absence of encouragement and learning needs, b. Students are Unhappy to search for and solve the issues, c. students Never dare to accept the failure. Every level of the project processes resulted in an improvement in the pupils' learning motivation.

Table 2. Students' Motivation

Before the research	Post 1	Post 2
a. Students are absence of encouragement and learning needs	Students have encouragement in learning needs	Students involves in learning process
b. Students are Unhappy to search for and solve the issues	Students are happy to search the issue	Students solve the problem and search the issue
c. Students Never dare to accept the failure	Students are brave to accept the failure	Students try to work harder to avoid the failure

The initial phase of the project was launched with the primary goal of grabbing students' interest. At this point, the teacher showed a video of the project work to the students to introduce them to the project. Every level of the project processes resulted in an improvement in the pupils' learning motivation. When the teaching learning process, the students feel inquisitive and enthusiastic about this difficult task. After that, they may create the schedule, guidelines, and protocols of the undertaking. The goal of this phase was to foster an environment of cooperation and collaboration between the instructor and the pupils. In the process of creating their products, the students looked for more resources on the internet, including tunes and images. They worked closely together to produce the digital narrative.

Finally, they used movie maker software to blend images, audio recordings, and music into a video profile. During the presentation, it was evident that the students put in the requisite of work for the project. They put on a very appealing presentation, demonstrating excellent teamwork. They employed entertaining music videos or songs to start the lecture. It demonstrated how much more creative they were. Lastly, the researcher inquired about the perceptions of the pupils on the learning. Students might provide the researcher feedback or criticism for next lessons. A few students said the assignment was engaging and enjoyable. They claimed to have the best. Some students did not completely participate in group work, according to the observation made in cycle 1.

The pupils that participated in the group discussion were limited to a select few. The researcher attempted a new grouping strategy in an attempt to get every student to talk. Consequently, the students completed the second project in pairs during cycle 2. The steps were mostly the same as in cycle 1, but the subject of the description was location instead of an object. Using digital storytelling, students were to

market ecotourism products in Indonesia in the second cycle. They took on the role of informational TV hosts, sharing details about the intriguing ecotourism attraction. When it came to demonstrating the improved speaking competency, the second endeavor was more difficult. In couples, the students wrote a screenplay on their own to explain a specific ecotourism item. They were initially urged to gather data from a variety of sources. They have to read the material and choose the pertinent pieces. They were able to expand their vocabulary with this practice.

Furthermore, Digital storytelling has the potential to be a very useful teaching tool for students of all ages and grade levels who are given the task of creating original stories. As they start to conduct their own research and tell their own stories, learners' creative abilities are tapped into through the use of digital storytelling. They also learn how to use the internet and libraries to research rich, deep content while analyzing and synthesizing a wide range of information and opinions. Additionally, learners who participate in the creation of digital tales enhance their communication skills by learning how to arrange their ideas, formulate questions, express viewpoints, and build narratives. Students who have the opportunity to present their work to their peers may gain a great deal of experience in evaluating both their own and other students' work, which might enhance their social learning, collaboration, and emotional intelligence (Robin, 2016). Additionally, Afrilyasanti and Basthomi (2011) discovered that using digital storytelling in the classroom prompted students to pose queries, take part in spoken dialogues, and provide fresh ideas during language lessons.

After a thorough analysis of the research data, it was determined that students' speaking abilities were significantly enhanced by the use of digital storytelling in project-based learning. As a further observation, student score means increase from cycle to cycle. The improvement could be seen in **table 3**.

Table 3. Mean Scores of Each Speaking Element

Aspect	Pre-Test	Post Test 1	Post test 2
Grammar	45.50	60.54	71.40
Vocabulary	50.51	65.70	72.65
Pronunciation	60.21	70.20	74.60
Fluency	60.20	71.40	75.20
Confidence	65.40	70.50	76.40
Mean	56.37	67.66	74.05
Improvement		11.29%	6.39%

Based on the table 3 above, it shows that the aspects of grammar, vocabulary, pronunciation, fluency, confidence has improvement after the researcher giving the treatment by using Digital Story Telling. In cycle 1, the mean of improvement achieves 11.29% then after giving the treatment again in cycle 2, the mean of improvement achieves 6.39%.

4. CONCLUSION

From the results of the research carried out the results of the paired-samples-t-test showed that the p-value which was less than 0.05. It showed that there was significant difference in the scores of students' pre-test and post-test. The researcher concluded that the medium, digital storytelling could enhance the students' speaking skills in retelling a story. Moreover, the mean gain of the students' post-test was higher than the mean gain of the students' pre-test. In the pre-test, the mean gain was 56.37; however, the students could achieve 74.05 in the post-test. Therefore, it could be concluded that digital storytelling could help the students in improving their speaking skills in retelling a story. The results of the questionnaires and the interviews supported the results of the tests. Almost of the students agree with the statements given in the questionnaires and in the interviews. Moreover, the students' answers in the interviews showed that digital storytelling could effectively raise the students' motivation in learning since it was presented in the fascinating form. The interviewees assumed that it helped them to understand a complicated material without wasting much time.

Then, by the result of this research, it is known that by implementing a digital strategy the teachers are not the only source of learning, but is a facilitator and motivator during learning. So that the atmosphere learning becomes fun and not boring then it can be using digital storytelling strategies as a demanding alternative strategy students and teachers are active in the process learning. Learning with digital storytelling strategies requires students to be active, then teachers assist students to stay focused does the job or doesn't doing something else because it's connected with the internet.

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