Digital Storytelling Media to Improve Students' Speaking Skills in Elementary School

Novita Nur Cahyanti1, Ermawati Zulikhatin Nuroh2
12 Fakultas Psikologi dan Ilmu Pendidikan, Universitas Muhammadiyah Sidoarjo, Sidoarjo, Indonesia

ABSTRACT

The research conducted was based on the development of digital-based learning media, where it was found that the majority of educators paid little attention to the application of media as a learning tool in the digital era. This study aims to analyze the improvement of students speaking skills when combining the application of digital story media. The research method used in this study is a quantitative method with one group pretest-posttest design. The population used in the study were students from grade V elementary school totaling 23 children. The assessment in the research process uses a speaking skill rubric that can be developed again according to the needs of students. So that later it can foster students' creative ideas.

1. INTRODUCTION

National education in the future has goals of building a national education system that produces a smart and highly competent generation in 2025. Intellectual, spiritual, and communication intelligence, communication itself can be started by learning to develop skills in speaking. Speaking is a language skill that is learned since childhood and starts from listening skills (Sadiku, 2015; Tarigan, 2008). Communication looks more effective in the general public if it is done by speaking or talking. Basically, speaking skills are used as an expression of an individual in expressing opinions or thoughts (L. S. Dewi et al., 2022; Rand & Morrow, 2021). Speaking skills can be started by students through storytelling exercises, such as presenting the content of an event in a fictional story. Authors in fiction stories usually process written works based on the imagination that comes to mind, such as linking them to events that have been experienced, insights, views, interpretations, or assessments of various events or situations, either event that have been experienced themselves or made up (Chen, 2021; Kurniasih et al., 2020). In the application of learning fifth-grade fiction stories in elementary schools, educators will previously present fiction story material with media in the form of textbooks and conventional learning models, so that students have not had the opportunity to receive sufficient learning innovations.

Understanding and literacy skills are low because the process of students finding and express a problem is still minimal by facilities and only rely on books or explanations from educators. That way, in addition to
providing material, educators can add learning innovations such as making learning media for students in the classroom or outside the classroom (Maruti, 2022; Winandari et al., 2022). Of course, before implementing learning process updates, educators must pay attention to the needs of students first. In previous research that examined the effect of digital media on student learning outcomes (Okwara et al., 2017). There were results of the influence of digital media in increasing students' literacy. The researcher combines digital media in the form of audio boards as digital learning media in improving literacy in reading and writing in grade IV. Another study found that in its application, digital stories can increase students' literacy interest (Schnier, 2021). Researchers proved the improvement of students' learning outcomes through two cycles of the learning process. The first cycle was conducted without using digital story media, and in the second cycle, researchers used digital story media in the learning process. Students' skills in thinking critically about the material conveyed by educators are needed in the learning process, but in fact students' skills in critical thinking and speaking in elementary schools cannot be said to be optimal, which has an impact on students' learning outcomes on the final score which is below average (Astatiria & Bayu, 2021; Made et al., 2022). Then other research using digital stories in the application of language skills proves an increase in student learning outcomes (Staley & Freeman, 2017). Digital story media can arouse interest in learning in the language of students who are influenced by the attractive appearance and provision of innovative media (Adiyawati & Nuroh, 2023; Karakaita Putri et al., 2019).

The research conducted used digital media in the form of an animated story that was previously developed from several previous analysis results that used digital media in different forms. From the previous explanation, it can be concluded that digital-based media can be used as an innovation in increasing the resources of educators to be able to make diverse learning media innovations, especially in presenting fictional story material in improving speaking skills. For example in presenting fictional stories can also be made independently by educators so that the learning received by students can vary and add insight (Nurhaliza et al., 2022; Staley & Freeman, 2017). The first step for students in learning to think independently can be started with critical thinking in elementary school, while skills in reading and writing in Indonesia are still fairly low. By applying digital story media, researchers hope that students in the future can learn to think critically when communicating or have public speaking skills, and can also innovate in the next digital era (Desyandri et al., 2021; Indrianti et al., 2022).

The purpose of conducting digital story media learning research on students' speaking skills, researchers want to know whether there is an increase in learning outcomes in students' speaking skills if combining digital story media in the form of audiovisuals on grade V fiction story material in elementary schools. With diverse learning needs, digital stories can be used for various purposes in teaching at the elementary school level. At each level of education, it usually has its own important role in the success and learning completeness of students in their education (Amrulloh & Galushasti, 2022; Putri Ningrat et al., 2018). Students through media-based learning will later be given a story in the form of audiovisuals and later students will be encouraged to re-present the contents of the story events. The collaboration between traditional culture with local wisdom in the content of the story with a display in digital media can foster a sense of sympathy for students because things that are generally found in the real world can be seen in a different and innovative version. Through digital story media, educators can create stories that suit the needs of their students and then demonstrate how ideas can be conveyed using digital technology (Saripudin et al., 2021; Tse et al., 2021). This can be used as a provision for students in terms of literacy skills in the digital era, using learning through visual technology can also improve students' effective communication skills in an innovative technology-based world. Then there are also steps in applying digital story media to the learning process: (1) select and create learning media ideas, (2) analyze learner needs, (3) determine the focus or learning objectives, (4) determine the type of media to be used, (5) determine participants or learners, (6) assemble learning media sketches, (7) then harmonize with available media devices (Fadillah et al., 2021; Wu & Chen, 2020).

The difference from the research conducted with previous studies is that previous studies have not applied digital story media in the form of audiovisuals in improving students' speaking skills in the classroom. In addition, previous studies used digital story media in the form of audio media and digital picture books in learning different materials with different research models. While this study uses digital story media to improve students' speaking skills in grade V elementary school. Researchers use several mobile applications to support the creation of media that are differentiated from previous studies such as, the Cam Scanner application which is intended to print images so that they can be read by the Android system, Flipa Clip as a color application on the model or character, Bg Eraser as a background on the image to adjust to the storyline and Capcut as the final application for assembling each storyline. The aims of this study is to analyze the improvement of students speaking skills when combining the application of digital story media.

2. METHOD

This study was conducted by researchers using quantitative methods, using the One Group Pretest - Posttest Design technique (John W Creswell, 2014). The subjects used in the study were all students in class V at
the elementary school with a total of 23 students. While the object used is to use digital-based story media that will be applied to fifth-grade elementary school students. The form of experimental analysis used in the study used Pre-Experimental Design. The form of Pre - Experimental design used by researchers uses One - Group Pretest - Posttest design. The sample in this study used a pre-Experimental quantitative sample with a minimum sample size. Based on this procedure, researchers used 23 students in grade V elementary school.

In the research procedure, researchers will conduct observations and instrument validation, assessment, and validation of digital story media-based learning media. The theme in the content of the story used is folklore which is often found in fairy tale books by containing the local wisdom of the archipelago's culture, especially the West Kalimantan region. The theme of the story is selected and adjusted to the needs of students regarding the ethics of behaving towards parents by combining learning from across cultures in Indonesia and the selected region is adjusted to the origin of the creation of the story.

Researchers used research instruments in the form of observation data (interviews), learning modules, Learning Implementation Design sheets, and speaking skills assessment rubrics to the main Student Teaching Materials Learning media in the form of fictional stories and audiovisual media in the form of digital stories. The assessment used in the research is in the form of a rubric for students’ speaking skills. The theme presented is a folklore that is often found in fairy tale books by containing the local wisdom of the archipelago's culture, especially the culture in the Legend of Batu Menangis story. In addition, audiovisual media itself in previous studies has produced a lot of effectiveness as a learning media tool, especially in improving student achievement. There is also a speaking skill assessment rubric lattice that is used as a guideline for assessing students and is contained in Table 1.

Table 1. Speaking Skills Assessment Rubric

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Score 3</th>
<th>Score 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pronunciation</td>
<td>There are problems in pronunciation that make listeners have to focus and sometimes cause misunderstandings</td>
<td>Difficult to understand due to problems with pronunciation and repeated repetition of words</td>
<td>Almost always words that are not clear in pronunciation come out so they cannot be understood</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Structure</td>
<td>There are some grammatical errors but they do not affect the meaning of the story</td>
<td>Many language errors that affect the meaning of the story and often repeat corrective sentences</td>
<td>Grammar is so bad that conversations are hard to understand</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Vocabulary</td>
<td>Sometimes the pronunciation is not correct and requires further explanation due to inappropriate vocabulary</td>
<td>Often uses inappropriate vocabulary so that pronunciation in speech becomes limited</td>
<td>Using the wrong vocabulary so it can't be understood</td>
<td>Vocabulary is very limited so it is not possible to speak fluently</td>
</tr>
<tr>
<td>4</td>
<td>Speaking Fluency</td>
<td>Not too fluent because they have difficulty in expressing the language</td>
<td>Often hesitates and stops because of language limitations</td>
<td>Frequently pauses and is silent while talking</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Talk Content</td>
<td>The entire contents of the expression can be understood even though there are occasional repetitions in certain parts</td>
<td>Most of the contents of the expressions are understandable although there are some repetitions</td>
<td>It is difficult to express some words or sentences in the presentation of the story</td>
<td>Incomprehensible even in simple words</td>
</tr>
</tbody>
</table>
3. RESULT AND DISCUSSION

Result

From the results of the Pretest and Posttest assessments, it was found that there was an increase in the scores of students on fictional story material using digital-based story media, in improving students' speaking skills. The benefits obtained in the results of the study, digital-based stories can basically stimulate the work of students' brains, can improve children's language, can stimulate students' emotions, and through the stories presented by students can learn to interpret an event. Thus, it is found that media and learning models are mandatory for educators to provide to students. Interest in learning using interesting media will also affect the stimulus of students. Then expression itself can be regarded as a productive and expressive activity in channeling their creative ideas. More specifically, learning-based learning methods have a high level of identification that causes educators and students to know what difficulties are faced in the learning process. The sketch display of digital-based fiction story media is in Figure 1.

![Character Sketches](image1)

**Figure 1. Character Sketches**

The graphical results of the pretest and post-test assessments show the difference between the scores of students after and before the implementation of digital-based media, the Pretest results can be seen through the graph in Figure 2.

![Pretest and Posttest Graph](image2)

**Figure 3. Pretest and Posttest Graph**

Based on Figure 3, in the initial learning process, it was found that the minimum score of students was 25 and the maximum score was 95 with an average score of 59. It is known that the average value collected is less than 70, so it is hoped that in the Posttest assessment process, the value obtained by students can be greater. Generally, learning that can be said to be good can be seen from the discovery of changes and learning outcomes obtained from the teacher as an educational facilitator. The criteria used in the assessment process are elements contained in the speaking skills indicators. In the findings of learning outcomes after the application of digital-based story learning media, there was an increase in the minimum score of 45 and then a maximum score of 100 with an average score of 80. Then as for the results of the research assumption test which includes the Normality test, Homogeneous test, and one Sample T- Test using the SPSS 26 application. The result of normality test is show in Table 2.
Table 2. Normality Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro–Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistics</td>
<td>df</td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>0.121</td>
<td>23</td>
</tr>
<tr>
<td>Posttest</td>
<td>0.222</td>
<td>23</td>
</tr>
</tbody>
</table>

Based on the results of the Normality test in Table 2, it is concluded that the scores of students before and after being given treatment on the Pretest and Posttest assessments are normally distributed because the value is greater than 0.05. Homogeneity test result is show in Table 3.

Table 3. Homogeneity Test Result

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Levene Statistics</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on Means</td>
<td>0.010</td>
<td>1</td>
<td>44</td>
<td>0.919</td>
</tr>
<tr>
<td>Based on Median</td>
<td>0.023</td>
<td>1</td>
<td>44</td>
<td>0.881</td>
</tr>
</tbody>
</table>

Based on the Homogeneity test results in Table 3, it can be concluded that the value of learning outcomes on significance based on the mean is Homogeneous because the value is greater than 0.05. On sample t-test result is show in Table 4.

Table 4. One Sample T- Test Result

<table>
<thead>
<tr>
<th>PP</th>
<th>Pretest-posttest</th>
<th>Means</th>
<th>Deviation</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>SSig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td>-20.652</td>
<td>15.544</td>
<td>-27.374</td>
<td>-13.931</td>
<td>-6.372</td>
<td>22</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on the results in Table 4, there is a significant value = 0.000 which is less than 0.05. So it can be said if H_0 is rejected and H_α is accepted. Then it can be concluded from the results of previous calculations, that the speaking skills of fifth-grade elementary school students increase after the application of digital-based story media.

From the results of the calculation, it can be concluded that there is a significant increase in the Posttest value from the results of the Pretest value. This means that there is an influence or significant increase between the value before giving digital-based story media and learning using digital story media. Evidenced by the results of the increase in the value on the Posttest which was found to be better than the previous Pretest value, so that learning on fiction story material using digital-based story media is efficient in overcoming and making an assessment evaluation plan for students, so that it does not only focus on learning material, but educators can also find gaps experienced by students in understanding the material. The graph of the improvement of the results of students' speaking skills in Figure 3.

Figure 3. Graph of Speaking Skills

Based on Figure 3 show that digital-based story media can also be applied to improving students' speaking learning outcomes. From previous studies that describe if visual or audio-only story media can hone literacy alone, the results of this study will complement the benefits provided by digital story media in improving students' communication skills.
Discussion

Learning media in the digital era is currently a lot of digital media created in order to help the learning process in students, but from the results of the analysis. There are still many found if the digital media developed is still lacking in the content of local wisdom values, especially in elementary schools (Arisetyawan et al., 2021; Ferdianto & Setiyani, 2018). The content of local wisdom in question contains culture or habits in the content of the media developed, as well as fictional story material that mostly takes examples of stories from abroad (Fu et al., 2022; Sumardi & Wahyudiati, 2022). This makes students’ reasoning in creative thinking a little hampered because it is not in accordance with the habits of daily life in their own environment. Educators can develop audiovisual media-based learning media with examples such as creating digital stories with the contents of fictional fairy tales in the archipelago (Mardiana & Kuswanto, 2017; Rutta et al., 2021). The number of stories from their own region actually greatly facilitates the development of independent media innovations by educators, if the educator wants to try to be creative according to their abilities. In the application of speaking skills, educators can provide learning through fictional story material or narrative stories by utilizing digital media by using audiovisual media in its delivery (Munawaroh, 2019; Razmi et al., 2014). Learners can be trained in public speaking skills by expressing it through writing first, then students can present the contents of the story or event in their essay in public or in front of the class itself. This is a small action that can be carried out by students in improving students structured speech acts through oral communication.

The occurrence of improved speaking skills using digital-based story media raises many other ideas and ideas that will be developed over time, as the development of digital-based story media structures in the future. The development that can be done is regarding the content of the theme and plot in the story, more active animation movement images, more interesting audio accompaniment, and increasing the development of these media in other learning materials (Kaminskiene & Khetsuriani, 2019; Saripudin et al., 2021). From the results of the research conducted, researchers also distribute the results of learning media that have proven their effectiveness to educators in elementary schools. Researchers provide knowledge in the process of making and the flow of applying digital-based story media as an alternative in supporting educator resources in elementary schools. Learning based on the use of media makes educators a facilitator in every learning activity (N. R. Dewi et al., 2018; Rizal et al., 2022). This means that if an educator or teacher can develop a learning media or learning model in the teaching and learning process, then the educator indirectly becomes a professional educational facilitator. The use of learning using learning media was chosen in this study because it can build the initial teaching skills needed by educators in overcoming larger gaps and practical problems that often cannot be taught openly to the general public (Bosica et al., 2021; Hava, 2019).

Overall, digital-based story media can be applied in various subjects in elementary schools, but not all subjects can also be conveyed through digital media alone (Moradi & Chen, 2019; Riwanoto & Wulandari, 2018). There are some subjects that still cannot be adapted to non-concrete media. Digital media itself also requires time in the process of making and applying it. Thus, the solution that can be applied in processing a learning media must further examine the needs of students, as well as the compatibility between the media and the material that will be made objects in digital media (Saripudin et al., 2021; Somdee & Suppasetseere, 2013). Because it can make an innovation in the scope of education, students who receive it later can also be inspired by these educators in terms of technology. Skills not only in language can be developed, but skills in utilizing information technology are also important in building education in the modern era.

The implications of this study indicate that the use of digital storytelling media can improve students’ speaking skills in elementary schools. This can have a positive impact on developing students’ verbal communication skills and preparing them for social situations involving conversation and presentations. This research is limited to elementary school students, so the generalization of the findings may not be directly applicable to higher education levels. Differences in students’ speaking abilities and maturity levels can affect research results at different levels of education.

4. CONCLUSION

The results of the research that has been carried out show that the use of digital-based story media can improve students’ speaking skills. By bringing various benefits from the results of the research conducted, digital-based story media in addition to helping the process of improving language skills can also hone the psychology of students and knowledge of information technology in the application of material delivered by educators in elementary schools. So it is hoped that educators can combine and develop more digital story media for literacy development at various levels of education in schools, especially in elementary schools.
5. REFERENCES


