The Use of Application *Anyflip* as Media *Storytelling in* Early Childhood

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Article Info	Abstract
	This study aims to examine the effectiveness of the AnyFlip application as a digital storytelling medium in improving early childhood language skills. The research method uses a quantitative experimental approach with a Pre-experimental One-Group Pretest-Posttest Design involving early childhood children at TK Aisyah Bustanul Athfal through purposive sampling technique. The study was conducted in three sessions with a duration of 30 minutes per session in experimental and control classes. The experimental class applied the storytelling method using the AnyFlip application that facilitates interactive learning through visual and audio features, while the control class used conventional methods. The research instrument was a performance test to measure speaking ability and story retelling. Data were analyzed using paired sample t-test after meeting the normality and homogeneity prerequisite tests. The results showed a significant difference with the experimental class average of 80.70 and control class of 67.50. A significance value of less than 0.05 indicates that the AnyFlip application has a positive effect on improving early childhood language skills. The study concludes that integrating AnyFlip with storytelling methods is effective in developing children's expressive language skills in the digital era.

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1. INTRODUCTION

The rapid development of the digital era has made technology and media a familiar part of everyday life, even for young children. They are born and raised in an environment filled with gadgets, the internet, and various digital platforms. Massive exposure and controlled use of technology by parents can have a significant positive impact on children's cognitive, social, and emotional development. This is in line with what was stated by (Ahmad. S.M et al., 2024). Controlled digital use by parents and children can foster positive habits that promote cognitive, social, and emotional development, as well as train children to think critically and develop broader perspectives.

Early childhood children born after 2010 are referred to as Generation Alpha, a generation deeply familiar with digital technology, especially gadgets. The increasingly rapid pace of development has made it impossible for individuals to escape technology. The Fourth Industrial Revolution (IR4.0) emphasizes the inextricable integration of technology and everyday life. This rapid development has had a significant impact on aspects of early childhood development, one of which is language. In this context, digital technology can have a two-pronged impact on children's language skills. Children who use gadgets under supervision and guidance have the potential to reap educational benefits, while excessive and unsupervised use can hinder the development of language and interaction skills. (Lestari. D.K et al., 2024). Thus, the challenge for educators in this digital

era is **directing the use of technology to function as a means of improving language skills,** not as a barrier to communication.

Early childhood language skills are children's abilities to receive **and convey messages through language**, which develop gradually and are influenced by environmental stimulation, social interaction, and meaningful learning experiences. According to Shofia & Aries (2024), Early childhood language skills can be developed through storytelling activities that involve listening, understanding the story, expressing opinions, enriching vocabulary, and retelling the story in one's own words. Language skills are divided into two categories: receptive and expressive. Expressive language skills include the ability to retell the story in one's own words. According to (Luthfiyah, 2025), expressive language skills are demonstrated through children's activities in conveying information verbally and expressing it in written form to be communicated to others. Therefore, the development of expressive language skills in early childhood needs to be supported through storytelling activities integrated with digital literacy, so that children gain a more interesting, interactive, and meaningful learning experience in speaking skills, as well as retelling the stories they hear.

In the context of digital literacy, Applications *AnyFlip* become one of the most prominent innovations as an educational tool. The application *AnyFlip* is a digital book application that is attractive, efficient, and easy to operate via a gadget or a laptop. (Martani, K.D., 2020). Based on facts from Aisyah Bustanul Athfal Kindergarten, approximately 70% of children are accustomed to using gadgets at home to watch videos or play games. However, teacher observations indicate that some children tend to have difficulty expressing ideas verbally and have limited vocabulary when telling stories. Conversely, children who receive language stimulation through educational digital media such as interactive stories show greater improvement in speaking and listening skills. Through *AnyFlip,* Educators can present stories in the form of engaging digital illustrated books, complete with animation, sound, and narration that stimulate children's imagination and language skills of *storytelling. This* digital-based system allows children to **listen, imitate, understand the storyline, and enriching vocabulary**In addition, the interaction between teacher and child during the storytelling process also helps strengthen children's natural speaking skills.

Furthermore, *AnyFlip* can be integrated with **storytelling** as an effective strategy in developing the language skills of early childhood. Storytelling has high pedagogical value because able to convey information verbally and put it into written form to be communicated to others. When storytelling is done through digital media such as *AnyFlip*, children not only listen to stories, but also see moving illustrations, hear expressive voice intonations, and imitate pronunciation with more enthusiasm. This makes the language learning process more engaging, **interactive, communicative, and contextual** in accordance with the characteristics of Generation Alpha, who are accustomed to visual and audio stimulation.

First, the study by Martani (2020) focuses on the effectiveness of media *books* using the application *AnyFlip* to improve the learning outcomes of Indonesian fourth-grade elementary school students. The results of this study prove that the use of *AnyFlip* effectively improves student learning outcomes significantly. This finding confirms the superiority of the application *AnyFlip,* which is known to be efficient, engaging, and easily accessible as a language education medium. Although the findings confirm the potential of AnyFlip as an effective language education medium at the elementary school level, research that specifically tests the integration of *AnyFlip* with the method of *storytelling* in the context of early childhood (PAUD) is still limited. Previous research generally focused on children who already possess basic reading skills. Therefore, this study aims to bridge

this gap by conducting an experimental study to empirically test how AnyFlip's interactive features facilitate the development of early childhood language skills, particularly in reading comprehension, speaking, and retelling stories that have been read.

Second, a more relevant study at a similar age level was conducted by Nurelah and Lenny (2024). Their research specifically targeted children aged 5-6 years and showed that the implementation of Digital Storytelling was effective in improving their reading skills. children's receptive language. This finding strengthens the argument that the method of *storytelling,* which is supported by digital technology, is very relevant and has a positive impact on language development at the PAUD level.

Therefore, this study aims to quantitatively test the effectiveness of application integration. *AnyFlip* is a method of Digital Storytelling in improving language skills, particularly in the aspects of comprehension, vocabulary mastery, and the ability to retell stories in early childhood. The use of digital media in storytelling activities in early childhood is no longer seen merely as a means of conveying stories, but rather functions as pedagogical scaffolding that can enrich the quality of children's linguistic interactions. Digital media allows children to receive visual and auditory stimuli simultaneously, so that the language acquisition process takes place more optimally. Empirical findings show that the use of digital storybooks contributes significantly to improving children's language skills, particularly in aspects of vocabulary mastery, listening skills, and speaking skills. This is due to the characteristics of digital media that can provide a more lively and multisensory learning experience (Ningrum et al., 2025).

In the context of language learning, digital storytelling has been shown to provide a more engaging, communicative, and meaningful learning experience for young children. Research on children aged 5–6 years shows that the application of digital storytelling significantly improves children's receptive language skills. Children involved in this activity show significant improvements in listening skills and the ability to recognize and understand new vocabulary compared to before receiving digital-based learning interventions (Nurelah & Nuraeni, 2024).

In line with this, the use of digital flipbook media as a concrete representation of digital storybooks has also proven effective in increasing children's interest in learning and active involvement in language learning. Dynamic visuals, interactive animations, and interesting story presentation make digital flipbooks more capable of maintaining children's attention compared to conventional print media. This active involvement is an important factor in supporting children's language development optimally (Adawiah et al., 2024).

Furthermore, children's active involvement in digital storytelling activities positively impacts the development of narrative skills. Children are not only able to retell stories but also begin to construct more complex sentences and expand their vocabulary. These findings reinforce the view that digital storytelling functions not only as a visual medium but also as a tool that encourages verbal interaction and higher-level cognitive processes compared to conventional learning methods (Maulida, 2024).

The effectiveness of digital storytelling is even more optimal when combined with the STEAM (Science, Technology, Engineering, Arts, and Mathematics) approach. This approach allows children to gain contextual and interactive experiences learning foreign languages, such as English, from an early age. Thus, digital media not only supports mother tongue development but also acts as an initial bridge in developing children's additional language competencies (Yulian & Putri, 2024).

Furthermore, digital animation media has been shown to significantly support the storytelling skills of children aged 5–6 years. Through animation, children not only act as passive listeners but are also encouraged to interpret visuals, understand vocal intonation,

and recognize the narrative structure of the story. This process systematically encourages the development of children's language skills, both receptive and expressive (Wahyuni et al., 2025).

Therefore, the integration of various forms of digital media, such as digital storytelling, digital flipbooks, and digital animation, in early childhood language learning not only contributes to the cognitive aspect but also strengthens the communicative aspect, which is the main foundation in the development of early childhood language literacy. In early childhood language development, children's active involvement through the use of digital media has been shown to have a significant impact on improving narrative skills. This is reflected in children's ability to retell stories coherently, construct more complex sentences, and enrich their vocabulary. Findings from a phenomenological study revealed that digital storytelling not only improves children's expressive language skills but also encourages active participation in speaking activities and enriches the narrative structure used in storytelling (Prastyo et al., 2025).

Furthermore, the effectiveness of digital storytelling is maximized when integrated with the STEAM (Science, Technology, Engineering, Arts, and Mathematics) approach, particularly in introducing foreign language literacy, such as English, from an early age. Digital media with integrated themes allows children to understand and remember new concepts and vocabulary more meaningfully through contextual and engaging audio-visual stimulation, enabling the language learning process to occur naturally and enjoyably (Yulian & Putri, 2024).

Furthermore, the use of digital animation media has also been shown to support the storytelling skills of children aged 5–6 years. In this activity, children not only act as passive listeners but are actively encouraged to interpret visual elements, understand vocal intonation, and recognize the narrative structure of the story. This process encourages the systematic development of children's language skills. Other research shows that interactive digital storytelling contributes to improving children's meta-language skills, including understanding the relationships between story elements, such as plot, characters, and setting, which are important foundations for the development of early childhood language literacy (Sari & Wirman, 2024).

2. RESEARCH METHOD

This research used a quantitative experimental research method. According to Muin, quantitative research is a scientific procedure conducted by researchers using a numerical approach or measurable data. This data is then analyzed statistically to obtain answers or solutions to the research problems (Muin, 2023). The design used is the Pre-experimental Design type. *One-Group Pretest-Posttest Design. This* approach was chosen to test the effectiveness of the intervention provided, namely the implementation of the application. *AnyFlip is integrated* with the method of *storytelling*, on the language skills of early childhood children. This design involves administering an initial test (*pretest*) to measure the subject's initial language abilities, followed by treatment (intervention) using media *AnyFlip* over a period of time, and ends with a final test (*posttest*) to measure changes or improvements in language ability after treatment.

The research subjects were early childhood children at Aisyah Bustanul Athfal Kindergarten, who were recruited using the technique *purposive sampling* based on criteria relevant to the research problem, such as the level of exposure to gadgets at home and potential difficulties in expressing ideas orally. The research instrument used was a performance test (*performance test*) to measure speaking ability, retelling stories that have

been read, in accordance with the focus of the research. The instrument grid is compiled and attached to ensure the validity of the measurement.

The research implementation procedure includes three main stages: (1) Preparation Stage, which includes the preparation of learning tools and research instruments; (2) Implementation Stage, which begins with *pretest*, continued intervention uses *AnyFlip* as a method of storytelling, and ends with *posttest*; and (3) Data Analysis Stage. The data analysis technique used is inferential statistical analysis, namely the paired t-test (*paired sample t-test*) to compare the differences in average scores *pretest* and *posttest*. The purpose of using this t-test is to test the hypothesis regarding the significant influence of the use of the application. *AnyFlip* towards improving the language skills of early childhood.

3. RESEARCH RESULTS AND DISCUSSION

This research was conducted on two groups of students: an experimental class and a control class, with a total of thirteen meetings. Each class held three learning sessions, each lasting 30 minutes. The researcher acted directly as a teacher to ensure the learning process adhered to the research design and to maintain uniformity of treatment across each class.

The main objective of this study is to determine the effect of using the application *AnyFlip* as a storytelling medium for early childhood that focuses on early childhood language skills. Learning using *storytelling is* chosen because this method is considered effective in stimulating speaking skills and retelling the content of the story in their own language.

The research was carried out in the experimental class in three meetings. In the first meeting, the activity began with the implementation of a *pre-test* for thirty minutes to determine the child's initial language skills and understanding of the story. After that, activities were carried out *storytelling* using a picture storybook for thirty minutes. The author reads the story with engaging expression and intonation to capture students' attention. This activity not only aims to provide understanding of the story's content but also encourages children to repeat new words they hear, imitate sentences used by the teacher, and answer simple questions related to the story's content. Through this activity, children begin to develop their language skills, particularly in listening, understanding, and expressing ideas verbally.

The second meeting in the experimental class was carried out by implementing the use of anyflip combined with activities of *storytelling*. Children are divided into several small groups with members varying in ability and character. After the teacher reads the story, the children discuss it in groups to understand the plot and the characters. They then participate in an educational game in the form of a small tournament that includes questions and answers about the story. This activity encourages children to be more active in speaking. In this context, children's expressive language skills develop through two-way communication between the teacher and students and among their peers within the group.

The third meeting in the experimental class focused on reflection and evaluation activities. The author invited the children to retell the story they had learned using their own words. This activity trained the children's ability to express ideas and form more coherent sentences. Furthermore, the author observed how the children interacted when responding to stories told by their classmates. After the reflection was complete, the activity continued with the implementation of a *post-test* to observe the ability to speak and retell the contents of the reading after the learning model was applied, *storytelling* using Anyflip. Based on observations, children appeared more confident when speaking in front of their peers, were more willing to express their opinions, and demonstrated the ability to speak and retell stories.

The learning process in the control class was also carried out in three meetings with the same duration, but without the use of AnyFlip. In the first meeting, students carried out a *pre-test* to measure initial abilities, then followed the *storytelling in* using the digital media Anyflip. The learning process is one-way, with the author reading the story while students simply listen. While this activity can enrich students' vocabulary, interaction between students is still very limited, so expressive language skills such as speaking and expressing opinions are not yet optimally developed.

In the second meeting in the control class, the author used a conventional learning method, reading a story from a book without involving games or discussions. Based on observations, students appeared less enthusiastic and tended to be passive. Some students appeared sleepy, talked with their desk mates without focusing on the material, and showed no initiative to participate in activities. The lack of interactive activities limited students' opportunities to practice speaking and interacting, resulting in the underdevelopment of language skills and social interaction with peers.

The third meeting in the control class began with a review of the previous story. The author asked several simple questions to assess students' understanding, then provided feedback on the *post-test* to measure final learning outcomes. Although there was a slight improvement in story comprehension, students' speaking and social interaction skills remained low due to a lack of activities that encouraged peer collaboration.

Before conducting hypothesis testing, researchers first carry out a **data analysis prerequisite test** to ensure that the data obtained meets the required statistical criteria. The prerequisite tests used include the **normality test** and the **homogeneity test**.

Tests of Normality

	kelas	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Nilai	pretest_kontrol	.141	10	.200[*]	.954	10	.719
	postest_kontrol	.145	10	.200[*]	.936	10	.506
	pretest_eksperiment	.146	10	.200[*]	.948	10	.646
	postest_eksperiment	.101	10	.200[*]	.969	10	.882

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Figure 1

Figure 1 above shows the results of the normality test, which shows that the language and social skills data for children in both the experimental and control classes are normally distributed. This means that the Kolmogorov-Smirnov method shows a score above 100, indicating that the data distribution in both research groups is within a reasonable range and does not deviate significantly from the normal distribution.

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Nilai	Based on Mean	.862	1	18	.366
	Based on Median	.853	1	18	.368
	Based on Median and with adjusted df	.853	1	14.939	.370
	Based on trimmed mean	.861	1	18	.366

Figure 2

Next, in Figure 2 are the results of the homogeneity **test,** is known that the variant data results from the pre-test and post-test. The data in the experimental and control classes showed that the sig data exceeded 0.05, meaning they had the same variance or were homogeneous. Thus, it can be concluded that both groups had a sufficient level of data uniformity for hypothesis testing.

Group Statistics

	Kelas	N	Mean	Std. Deviation	Std. Error Mean
Nilai	Pos_kontrol	10	67.50	2.451	.776
	pos_eksperiment	10	80.70	3.335	1.055

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Nilai	Equal variances assumed	.862	.366	-10.071	18	.000	-13.200	1.311	-15.954	-10.446
	Equal variances not assumed			-10.071	16.559	.000	-13.200	1.311	-15.971	-10.429

Figure 3

Figure 3 shows the results of the T-test, indicating that the research data have met the basic assumptions of statistical analysis. The average value of the experiment is 80.70, exceeding that of the control class of 67.50. The experimental data has a standard deviation value of 3.335, exceeding that of the control class of 2.451. So, the next step is **hypothesis testing,** that is, the T test shows less than 0.05, so it can be concluded that there are differences in the application of AnyFlip as a method of **storytelling** on speaking skills and the ability to retell the content of what is read.

4. CONCLUSION

This study concludes that the implementation of the AnyFlip application as a storytelling method significantly improves the language and social skills of early childhood children aged 5-6 years at Aisyah Bustanul Athfal Kindergarten, as evidenced by the results of the t-test, where the calculated t-table > t-table at a significance level of 5%, and the average score of the experimental class (80.70) is higher than the control class (67.50). The AnyFlip media makes storytelling activities more interactive through interesting animation, sound, and visual features, so that children are more active in understanding stories, mastering vocabulary, retelling, and interacting socially, such as working together in groups. This application is relevant for early childhood education in the digital era, especially for Generation Alpha, with recommendations for teachers to integrate it in a

controlled manner to optimize language and social development without neglecting parental supervision.

5. ACKNOWLEDGEMENT

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