

USING STORYTELLING TO DEVELOP ENGLISH VOCABULARY ON EARLY AGE CHILDREN MEASURED BY MEAN LENGTH OF UTTERANCE (MLU)

Rizky Vita Losi¹, Virdyra Tasril², Rika Widya³, Maulana Akbar⁴
University of Pembangunan Panca Budi, Medan, Indonesia^{1,2,3,4}

rizkyvitalosi@dosen.pancabudi.ac.id

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Abstract

For early childhood, listening to stories can be a very useful stimulation for the development of their language skills. The development of English language skills from an early age plays an important role, because through language, children begin to hone their reasoning and skills by learning to express their thoughts and emotions. This study aimed to measure the Mean of Length Utterance (MLU) in early age children stimulated by storytelling aided by digital printing puppets. This research was a qualitative research conducted at Al-Washliyah Kindergarten. The utterances in English which were stimulated by storytelling by utilizing digital printing puppets became the data in this study. The findings showed that children's English skills developed when the teacher told stories using digital printing puppet media in the learning process. Storytelling is beneficial not only for learning the mother tongue but also for learning foreign languages because it aids in the memorization of new words by stimulating attention, providing excitement, and so on. Children absorb new material faster and better, making language development more accessible.

Keywords— Mean Length of Utterance; Storytelling; Digital Printing Puppet.

Introduction

Promoting English to early age children seems to be accessible yet challenging. On the other hand, early childhood has a Learning Acquisition Device (LAD), according to language acquisition theory (Sumarni et al., 2021). According to this hypothesis, every child is born with a language device in their brain that allows them to acquire a language. All that is required of children is that they exercise their language skills. After three years, children are more likely to accept their new language, and this is because the child's early language mastery is better. According to other studies, around half of children are ready to learn a new language (Wulandari, 2018). According to another viewpoint, children are prepared to learn new languages when they reach the age of eight (Nasuha, 2020).

English is regarded as a global language. English's global spread has had a significant impact on education systems in many countries throughout the world. For many students in non-English speaking countries, such as Indonesia, learning English is one of the most crucial tasks. It is difficult to develop the language spontaneously in an atmosphere where English is spoken as a foreign language and English education takes place in a classroom setting. Students are rarely provided opportunities to practice their English in social settings. It is critical to provide a learning environment that allows students to explore and practice using English in their everyday lives (Kim & Ji-sun, 2009; Losi et al., 2022).

The critical distinction between both views is that the earlier a new language is learned before reaching puberty, the easier it is for children to learn. Adults who learn a new language are not engaging. According to research, thus learning English in the early years is optimal (Kong, 2021). Without stimulation and practice, children's new language acquisition is not automatic. It is not enough to communicate with others; early childhood needs stimulation for

the LAD to work correctly.

Given that the majority of early age children have already been exposed to English education, we must look beyond the current debate over the appropriateness of early English education and instead consider how to support a developmentally appropriate foreign language learning environment that will increase children's interest in learning English (Choi et al., 2019).

Growing vocabulary strength is critical for literacy development in both the home language and a foreign language at an early age. Because a strong vocabulary is linked to early literacy development in children (Roskos et al., 2013), vocabulary is valued as "the heart" of language comprehension, making it a focus in preschool language and literacy programs. Despite this widely held belief, families and schools continue to struggle with efficient vocabulary learning methods. Neuman and Dwyer (2014) stated that suitable vocabulary development tactics and activities for young children are critical, and it is also advisable to increase vocabulary from an early age to aid scaffold reading and further strengthen the child's competency.

One of the various ways to acquire English vocabulary for children early is through storytelling. Storytelling, traditional family activity for children at an early age to improve literacy, can also be utilized to foster the acquisition of a language other than the mother tongue (Khamsuk & Whanchit, 2021). There are numerous benefits to storytelling for young learners (YL), including the fact that it integrates all four skills: listening, speaking, reading, and writing in a relevant context. According to Glaze, Burk, Jennings, and Koisavalia, Linguistic stories convey grammar, vocabulary, and speech in an appropriate context that aids comprehension (cited in Ioannou-georgiou & Verdugo, 2008). It also promotes cultural awareness and provides information on values and beliefs. It piques children's interest in the world and pushes them to learn more about it. Stories, according to (Wasik & Bond, 2001), provide an attractive manner of contextualizing for young learners while also introducing new language and making it comprehensible and memorable.

In the classroom, stories are typically given to increase literacy, build comprehension skills, teach morality, entertain, foster creativity, provide a cultural aspect, and teach a language, among other things. When performing storytelling activities, however, the teacher must consider a few factors, such as the criteria for picking stories that are easily relatable to the students' experiences. Prepared materials, such as books, illustrations, media, arts, images, story props, or puppets, are required for a teacher to convey the chosen story successfully (Ellis et al., 2014).

There were some recent study to uncover practical ways to teach preschoolers vocabulary. They believed that vocabulary development should begin in early childhood, and thus they created shared reading activities to encourage word learning based on the methodologies pioneered by Vaahtoranta et al. (2017). The results suggest that all experimental groups gained a considerable amount of vocabulary. Even though the interactive elaborative narrative was expected to benefit more, word gains did not differ between the groups.

As a result, word or vocabulary acquisition is critical for further syntactic development. It signals the start of the possibility of effective oral communication between the child's development and the outside environment. Knowing a word requires more than just knowing its meaning and phonic form. Knowing a word thus entails implicitly knowing the class of words to which it belongs, as this information dictates the positions it might occupy in a sentence and understanding the constraints it places on the syntactic context in which it belongs.

Early age children's development in gaining English vocabulary had been researched and measured by Brown & Brown (1996) using Mean Length Utterance (MLU). The Mean length of utterance-morpheme (MLU-m) has been proposed as a grammatical development index. Some authors claim that chronological age and MLU-m have a link in the international literature. In predicting grammatical development, generation and vocabulary may interact. As a result, the children show sensitivity to grammatical principles and regularities incomprehension before being able to employ them in production language.

Some research recommends calculating the MLU in words (MLU-w) and the MLU-m calculation. A measure like this would provide information on a child's total language development. According to a study that demonstrated a high correlation between MLU-m and MLU-w, MLU-w is a more trustworthy measure for determining utterance length and is more

sensitive to the child's linguistic complexity (Rice et al., 2010). Thus, the assumption is designed that as vocabulary develops, MLU expands in proportion as well. This study aimed to look into the use of storytelling to develop English vocabulary as measured by the mean length of utterance in words (MLU-w) to learn more about the language development of early age children.

Literature Review

Storytelling

Telo et al. (2021) define storytelling as a social and cultural activity centered on the act of telling and sharing stories. Sharing stories has always been one of the most prevalent ways of passing down knowledge from generation to generation. Storytelling is perhaps one of the oldest methods of instructional methods. In early childhood schools, a storytelling session in which a teacher narrates a story to the children helps pique their attention and motivation and supports sense-making by relating the story to their daily lives and earlier experiences (Bietti et al., 2018).

Storytelling is a traditional method of teaching as well as a modern device in education because it not only helps us learn a language or have a good time, but it also guides us in our life experiences by assisting young school children in developing better psychological and physical well-being and individuals who can contribute to the society in which they live. Thus, storytelling is beneficial for learning our mother tongues and for learning second languages because it aids in memorizing new words through repetitions, interest, and enjoyment. As youngsters absorb new content more quickly and smoothly, language acquisition becomes considerably more manageable.

In this study, some media were made to support storytelling stimulation to the children. The media was made from a digital printing puppet, and pictures or story figures were printed digitally. Then it was modified on a board and became a puppet to be shown to children to attract their attention and find it fun in the storytelling process.



Figure 1. Digital Printing Puppets

Balakrishnan & Thambu (2017) conducted case studies to collect qualitative data from seven mixed-ethnic children (Malay, Indian, Arabic). The children were enthusiastic about using storytelling, and they were able to apply the morals from the stories to their own lives. The researchers concluded that storytelling is an excellent learning method for children when the story is conveyed in an interactive manner that promotes learner involvement.

Language Development in Early Age Children

The process of language development begins at an early age. Infants cannot generate

utterances directly when they are born to the world, such as mama, shoe, toys, and so on, but there are stages in their speaking actions of language development. Human babies produce a range of sounds, including crying, cooing, and gurgling (Steinberg & Morris, 2001).

The babies produce much noise throughout the first stage of language development, which lasts from birth to approximately six months (Boeree, 2003). They squeak, growl, yell, and coo. Cooing is essentially the formation of what will become vowels later on (a, e, i, o, and u).

Babbling is the following stage. This is the process by which a baby constructs more complex sentences. A baby between the ages of 6 and 10 months is challenged with this situation. Children practice their vowels at this stage, starting with the round, back vowels (oo, oh, ah...) and progressing to the unrounded front vowels (ee, eh, ay...).

Furthermore, children progress from babbling to voicing their first words after a babbling period (holophrastic stage). This usually happens around one year, but it can happen much earlier or later. When a child can utter a recognizable speech form in combination with an object or event in the environment, they are said to have learned their first word (Steinberg, 2001).

According to (Boeree, 2003), most children can produce three or four words and understand 30 to 40 by one year. Again, some children can comprehend and employ as many as 80. By 14 months, the number of terms known has increased to 50 to 100, with even the slowest quarter of the population knowing 20 to 50. Most children can produce 25 to 50 words on their own by the age of 18 months and understand hundreds more.

Children begin to pronounce two-word sentences and telegraphic speech between 18 and 24 months (about). They demonstrate how simple conjunction of the two words can perform several grammatical purposes. After 24 months, children use grammatical structures and irregular verb tenses, which they learned before regular tenses.

Language acquisition does not stop at the age of two. Over-regularization is something that three-year-olds are infamous for. Most languages include irregularities, but three-year-olds appreciate rules. They will ignore some of the irregulars they picked up when they were two, such as "I go-ed" instead of "I went," and "foots" instead of "feet." Three-year-olds can speak in four-word sentences, and they may have a vocabulary of 1000 words.

Furthermore, they have a vocabulary of 600-1000 words. Four-year-olds are natural questioners and begin to use many wh-words such as where, what, who, why, and when (in that sequence). They can handle five-word conversations and have vocabularies of up to 1500 words.

When children reach the age of five, they can create six-word sentences (with clauses, no fewer) and utilize up to 2000 words. A first-grader uses up to 6,000 words. On the other hand, adults can utilize up to 25,000 words and identify up to 50,000. Negative sentences, question forms, passives, and relative clauses are just a few of the numerous complicated rules children learn during their first five years of life. One of the first sentence structure rules that children learn is negation.

The first period appears in the form of a 'no' or 'not' at the beginning of an affirmative statement. The auxiliary 'do' and 'can' appear with the negation marker in the second period, rather than outside it as in the first. As in the first, the negative attributes appear internally within the utterance rather than outside it. The copula 'be' and the modal 'will' appear with negation in the third period, and imperative negatives are created using 'do' instead of the simple opposite. These are the stages of negative sentences or dissolution that children go through in their first five years (Wilymafidini, 2018).

Mean Length of Utterance in Words (MLU-w)

The Mean Length of Utterance (MLU) is substantially connected with children's chronological age. As a result, the MLU value should represent a particular stage in the child's language development and thus be used to determine the child's actual age. In other words, the child's age should progress in tandem with their linguistic development.

Despite its origins as a measure of morphosyntactic skill, Dethorne et al. (2005) determined that MLU is better considered a worldwide measure of expressive language ability.

Eisenberg et al. (2016) suggested that MLU be recognized as "one of several alternative approaches to quantifying utterance length" rather than a morphosyntax measurement.

Brown (cited in Utami & Sudipa, 2021) divides children's language acquisition into five stages depending on their MLU.

Table 1. The Stages in Children's Language Development based on the MLU

Stage	MLU	Children's Age in Months
I	1.0-2.0	12-26
II	2.0-2.5	27-30
III	2.5-3.0	31-34
IV	3.0-3.75	35-40
V	3.75-4.5	41-46
VI	4.5+	47+

Research Method

Research Design

Qualitative research is a sort of research that focuses on explaining and understanding real-world issues. Instead of gathering numerical data points or intervening or introducing treatments, as in quantitative research, qualitative research aids in the development of hypotheses and the investigation and understanding of quantitative data. Participants' experiences, perceptions, and behavior are gathered in qualitative research. Instead of how many or how much, it addresses the hows and whys. It could be designed as a stand-alone study that uses qualitative data (Moser & Korstjens, 2017).

This study aimed to know children's language development at an early age in line with the MLU. Children were stimulated by listening to storytelling at an early age, which was conducted for several weeks.

Participants

The participants were early age children or students at Al-Washliyah Kindergarten at Klambir V Kebun, Deli Serdang, North Sumatra. They were 15 students who were in the age range around 4 to 6 years old.

Data Collection and Analysis

The data of this study was the utterances that children produced at an early age. After being stimulated by storytelling in English for several weeks, the children were asked to pronounce words in English related to the story they had ever heard. Children's utterances or words were examined to determine their ability to acquire English as their foreign language. Then, the utterances were calculated and categorized based on Brown's theory:

$$MLU = \frac{\text{Total Number of Morphemes}}{\text{Total Number of Utterances}}$$

Results and Discussion

Result

This study used the Mean Length of Utterance (MLU) value for children at early age children as research data. The same stimulus was given to these early-age children through storytelling using digital printing puppets. Data collection was carried out at the IT Al-Washliyah Kindergarten. It is assumed that even though the children are of the same age, it does not mean that they have the same MLU. Therefore, it is very challenging to conduct this study to analyze the speech produced in early childhood to determine their ability to acquire their foreign language (English).

The results of this study can be used to understand the relationship between activities at early age children and the utterances that children can obtain. This study also examines how the MLU of children in storytelling activities is related to the given stimulus. Therefore, the results

of this study are expected to provide information about the MLU to pinpoint what areas can be improved in language development and what needs to be improved.

The results of the MLU measurement in fifteen early age children in Al-Washliyah Kindergarten can be seen in Table 1 below:

Table 1. The MLU of Children at Al-Washliyah Kindergarten

No.	Research Subjects	Age	MLU Result	The Suitability to The Stages of Language Development on Children Proposed by Brown
1	Elzia	5	4.32	Unsuitable
2	Alesha	5	4.89	Suitable
3	Nafeeza	5.5	4.95	Suitable
4	Anezka	5	4.97	Suitable
5	Kenzie	5	4.92	Suitable
6	Kariim	5.5	5	Suitable
7	Dhafi	5	4.89	Suitable
8	Syabil	5.5	5.03	Suitable
9	Nadhifa	5	4.97	Suitable
10	Omar	5	5	Suitable
11	Afiqah	5	4.97	Suitable
12	Rifal	5.5	5	Suitable
13	Syafira	5	4.57	Unsuitable
14	Azka	5.5	4.95	Suitable
15	Hamizan	5	4.59	Unsuitable

Table 1 shows that almost all research subjects achieved Mean Length of Utterance (MLU) based on their age. Subjects numbered 2-12, and 14 completed a total average of 5.34. The words they got from the storytelling method using digital printing puppets proved to be developing, and English is still occupied as a foreign language in Indonesia. The storytelling method using digital printing puppets was done in an exciting and fun way. This method supported children in developing English vocabulary efficiently when they listened to the stories. Their attention was also focused on the fun digital printing puppets, so they concentrated on the storyline. Storytelling also motivated them to recite the English vocabulary.

Then, the calculation of MLU was examined based on the stage of children’s language development proposed by Brown. The MLU results of subjects 1, 13, and 15 showed that they did not reach the suitable MLU to 5 years old or 60 months. According to their age, which were 60 months, ideally, the subject might be in the Stage V+ category. The MLU result of subjects 1, 13, and 15 was not the same as other subjects of the same age, and they were at the same age, but their MLU results were different. Subjects 1, 13, and 15 were still in Stage V according to their MLU result.

The MLU result of subjects 2-12 and 14 showed that they reached the MLU based on their age of 5 or 5,5 years old or 66 months. According to the age, 60-66 months, ideally, the subjects were in the Stage V+ category. This result proved that the MLU result of subjects 2-12 and 14 were suitable for their age stages.

Discussion

Based on the results of the MLU measurement, twelve children reached the stage of language development according to their age. Meanwhile, three children had not reached the stage of language development according to their age. This study indicated that using digital printing puppets as storytelling media could develop English language skills in children at an

early age.

Early age children experience a golden age or the golden age at the age of 0-5 years, so it is better if, at that time, children are introduced to various languages because they will be easy to learn and remember. The method of memorizing vocabulary, which is often done at Al-Washliyah Kindergarten, provides a little experience for children to explore English. They only focused on the words given by the teachers without increasing their knowledge of other vocabularies. The use of digital printing puppets as a medium for storytelling allows children to increase their knowledge and explore the English they hear through stories. Digital printing puppet media can also attract children's attention to continue to focus during the storytelling process. Digital printing puppets with attractive appearances, bright colors, funny figures, and Islamic stories that match the school's character make digital printing puppets a suitable medium for developing English in early childhood.

Similar findings were also found in the research of Mujahidah et al. (2021). However, the media used was slightly different. They use cloth-based puppets and are moved with their fingers (Hand Puppets). The results showed that speaking, in general, can be interpreted as conveying intentions (ideas, thoughts, ideas, or heart content) to others by using spoken language to understand the meaning. Training children to communicate verbally can be done by doing activities that allow children to interact with friends and other people. Teachers can design various activities that enable children to express their feelings. The activity in question is a storytelling activity using media in the form of hand puppets. The purpose of storytelling using props is so that children can answer the questions what, why, where, how, and who.

Based on this theory, activities that can train children's verbal communication skills are using the storytelling method with the help of hand puppet media that can stimulate children to speak. To students in the form of the names of the characters in the story, how the personalities of each character are, and various other questions related to the stories that have been told. The existence of these questions will stimulate the child to speak.

The implementation of storytelling as a learning approach method will be able to train children's comprehension or concentration, train children's intelligence and potential, develop language skills and increase vocabulary in children, and create a happy atmosphere in the classroom. Storytelling using hand puppets means presenting a story using hand puppets as actors. The shape is attractive, varied, and varied colors will make children more interested in listening to and listening to the stories told. Therefore, children can be more active during the learning process.

Conclusion

From the research results that have been done, it was found that children's language developed when the storytelling method was done by using digital printing puppet media in the learning process. The role of storytelling using these media in developing children's language is to encourage children to be more skilled at speaking and make children more interested. Listening more actively increase children's confidence, improve listening skills, and develop language skills. Children can build literacy from an early age, enable children to retell stories they hear, improve word recognition and vocabulary, and develop their oral language skills. Digital printing puppets play a role because children can develop their language. Digital printing puppet media has various shapes, attractive colors, and uses that are not too complicated to attract children's attention to focus more on learning.

Storytelling is one of the traditional methods but also one of today's modern tools of teaching because they not only help us learn a language or have fun, they also guide children in life experiences as they help school-age children to develop better. So, storytelling is not only for learning the mother tongue but also for foreign languages as it helps in memorizing new phrases through repetition, increasing interest, fun entertainment, etc. Language acquisition is made more accessible because children absorb new material faster and better.

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