

Information Technology in the Development of Language Aspects of Early Childhood

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Abstract

This study aims to analyze the use of Information Technology in the development of language aspects of early childhood in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah Sumberkare Wonomerto Probolinggo, East Java. This research uses a qualitative approach, it is used to find more in-depth information about Information Technology in the Development of Early Childhood Language Aspects, while the type of research used is a case study focused on a particular case to be observed and analyzed carefully to completion. The results showed that: the use of information technology in the development of language aspects of early childhood, as follows; Children can develop language through audiovisuals, children can develop language with busy books, develop children's language through play media, and can develop children's language through teaching aids.

Keywords:

Information Technology, Linguistic Aspects

1. Introduction

At present, entering the 21st century, the Indonesian nation has progressed very rapidly in the development of science and technology (Syakroni et al., 2019). This is marked by the existence of information and communication that spreads rapidly in every line of life, including in the world of education (Fu, 2013). Education is faced with a variety of information that is packaged in various forms that can be accessed easily and quickly in the era of globalization of information (Islam et al., 2018). Along with these developments, the world of education also experienced a significant impact. This impact has a direct effect on the educational process, both positive and negative. The role of information technology in education is very large (Muali et al., 2019), not only at the level of higher education but also at the level of early childhood education (Kettunen et al., 2015). Language is all types of communication in which the mind and heart of the person are symbolized to others because in its development language begins with the first cry until it can speak. Therefore, aspects of linguistic development that can be considered in children's development include vocabulary, semantics, syntax, phonemes, phonology, and morphology which should be known and developed in the learning process. Because in the learning process it is necessary to develop linguistic aspects to be able to convey the information that will be given to students (Suyadi, n.d.).

Several studies that have been carried out regarding the development of children's language aspects, one of which was revealed by Mikko Kuronen & Elina Tergujeff concluded that students obtained phonological and phonetic aspects of the target language. Learning the phonological aspect - 2 pitch accents - also seems to support

the acquisition of prosodic-phonetic features in the target language: native speaking contours of speech, f_0 higher SD, higher f_0 mean, and greater pitch range (Kuronen & Tergujeff, 2020). Furthermore, it was also revealed in Xiaolu Yang's research, Rushen Shi and Kailin Xu concluded that although in general, they preferred certain events, Chinese-speaking children aged 30 months showed some abilities to understand the perfect marker and imperfect marker differently (Zhang et al., 2018).

The development of linguistic aspects in children occurs from listening, seeing, and imitating the adults around them. Language is used to teach children about something (Atagi & Sandhofer, 2020). Vygotsky argues, children learn language from adults and then internalize it as a means of thinking and control. The development of linguistic aspects is also stated to develop by or in line with biological development (Dastpak et al., 2017). So that if the biological development is not yet at a certain stage, language skills cannot be forced. Biological development here is related to physiological growth such as the tongue is still too big, the larynx is still too high, the mouth is small or narrow, and so on. Furthermore, Chomsky and Weiwen Zhang said that language is acquired by nature and runs continuously according to a developed genetic schedule (Chomsky & Zhang, 2018). This means that the development of the language aspect will adjust to the development of the child's body or biology.

The development of the linguistic aspects of children allows children to learn to understand and control themselves (Bååth et al., 2019). When children learn to speak, they accidentally develop knowledge of phonological systems, syntax, semantics, and pragmatic systems (Mary Renck Jalongo, 2014). Raudhatul Athfal and Raudhatul Athfal Darul Arofah Sumberkare Wonomerto Probolinggo, East Java is an educational institution that has an important role in various aspects of language development in early childhood. In this case, early childhood is a golden age as well as a critical period in the stages of human development that will determine children's development, then this period is the right time to preserve the basics of children's language development. Therefore, to maximize development in early childhood, teachers should be able to provide stimulation so that children can express their ideas and thoughts to adults by talking.

Based on the experiences and observations of researchers while teaching at Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah Sumberkare Wonomerto Probolinggo East Java, the assessment of researchers that the development of linguistic aspects of early childhood in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah is still not running optimally, as a result of several problems, including that the existing information technology has not been properly empowered and the child has not been seen to be active in the learning process so that the development of language aspects has not been achieved optimally. Given the importance of the development of linguistic aspects in children, the researcher aims to identify and analyze the use of information technology in the development of language aspects of early childhood in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah Sumberkare Wonomerto Probolinggo, East Java.

Departing from previous studies that only focus on certain aspects of language, in the sense that it is not comprehensive, whereas in this study the researchers are interested in examining all aspects of development that exist in early childhood, in this case, the development of aspects of children's language is related or it can be studied with information technology as a medium in the learning process.

2. Information Technology and the development of children's language aspects

Technology is a scientific application that studies and develops the capabilities of engineering with certain steps and techniques in a field, while information is data that has been processed into a form that has meaning for the recipient and has real value (Baharun, 2019), so that it can be used as a basis for making decisions, and feels for current decisions or future decisions (Fauzi et al., 2018). In this case, the term information technology which is popular today is part of a long chain of development terms in the world of Information Systems (Muali et al., 2018). The term information technology refers more to the technology used in conveying and processing information (Tappert & Agerwala, 2019). The role of this information technology can give is to obtain information for personal life such as information about health, hobbies, recreation, and spirituality (Tuluk & Kepeçoğlu, 2019). Then for professions such as science, technology, trade, business news, and professional associations. A means of cooperation between individuals or groups with one another or groups without knowing the boundaries of distance and time, country, race, economic class, ideology, or other factors that can hinder exchanging ideas (Pritchard, A; McIntosh, K; McChesney, 2019).

The development of linguistic aspects is one of the abilities that children must have, according to their age stages and developmental characteristics. Development is a change that lasts a lifetime and is influenced by various interacting factors such as biological, cognitive, and socio-emotional (Vaiouli & Andreou, 2018). Language is a system of symbols for communication that includes phonology, morphology, syntax, semantic, and pragmatic language (Asrial et al., 2019). With language, children can communicate their intentions, goals, thoughts, and feelings to others (Ersan, 2020).

The development of speaking and writing is a process that uses expressive language in shaping meaning. The study of the development of speech in children cannot be separated from the fact that there are differences in speed in speaking, as well as the quality and quantity of children in producing language (Acosta-tello, n.d.). One child is faster, more flexible, more complex, in speaking his language, or slower than the other. The study of the development of writing in children is related to a process carried out by children to produce writing forms (Bahlmann & Joy, 2019).

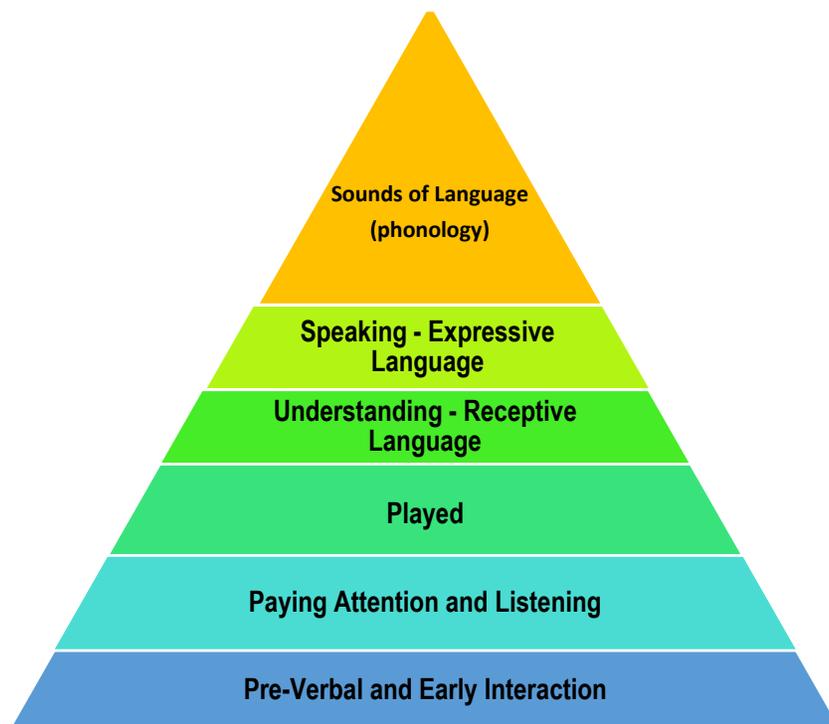


Figure 1. The Pyramid of Children's Language Aspects

The following is a picture of the development pyramid of children's language aspects, in this development pyramid, there are six stages of ability that a child must master. A child will process to develop in mastering the abilities that are the basis for communication so that the child can communicate well (Morgan & Dipper, 20018).

3. Methods

3.1 Method

This research uses a qualitative approach, it is used to find more in-depth information about Information Technology in the Development of Early Childhood Language Aspects, while the type of research used is a case study focused on a particular case to be observed and analyzed carefully to completion. Researchers try to describe and analyze the use of information technology in the development of language aspects of early childhood in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah Sumberkare Wonomerto Probolinggo East Java, Indonesia. Researchers, in this case, go directly to the field and interact with research subjects actively. Data collection techniques were carried out through observation and in-depth interviews. while data analysis through three stages, namely: data reduction, data presentation, and verification.

3.2 Materials

The material used in this study is to use technology media related to learning, including a) using media that contains sound and image elements, these elements can be applied using image media by telling the contents of the images and recordings so that students can learn immediately correct the use of sentences in the language. b) use busy books to increase vocabulary and governance of the language used by children. c) use play media to increase

creativity and all the potential that the child has. d) using teaching aids to stimulate language skills in children so that they can develop semantic aspects in children.

4. Results and Discussion

The results showed that the use of information technology in the development of language aspects of early childhood in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah Sumberkare Wonomerto Probolinggo, listed in the Table 1.

Table 1. Research Result

No	Research Result	Media Used
1.	Children can develop language through audiovisuals	Pictures and records
2.	Children can develop language with busy book	Busy book
3.	Developing children's language through play media	Puzzle, swing, dakon
4.	Developing children's language through play media	Hand puppets and various fruits, vegetables, and animals

4.1. Children can develop language through audiovisuals

Audiovisual has sound elements and image elements, namely sound elements when learning to hear is done in the form of listening to stories and picture elements when learning is done by displaying images. Through the audio-visual Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah, two learning activities can be carried out at the same time that can develop the child's syntactic or grammatical aspects, even though the child has not learned correctly the use of sentences in the language, but often hears and imitates the adults around him, children can imitate the use of oral grammar well.

Teachers who use audio-visual media in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah are very effective in developing children's language, seen from the enthusiasm of children starting learning with audiovisual and it makes children very expressive in retelling at the end of learning.

4.2. Children can develop language with busy book

Busy books are made of flannel cloth which is shaped like a book made of paper that can be filled in according to learning themes such as various kinds of transportation, all kinds of animals, all kinds of flowers, and others.

In Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah for the first time using this busy book because they were motivated by the lack of monotonous learning variations such as recognizing letters and numbers in workbooks, in the end, this busy book became a new medium of learning which was expected to improve children's language.

The use of busy books in learning at Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah makes children feel happy during the learning process, this busy book media also greatly influences the development of children's language aspects, namely the addition of vocabulary and language management used by children, children are more systematic in mentioning sentences or names of means of transportation, various animals and others.

4.3. Developing children's language through play media

Play media is an object that children use as a means of playing in increasing creativity and all the potential that children have, in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah are accustomed to using this game media and are very liked by children. The game media used must have an element of comfort, safety, and have an educational element.

The playing media used in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah are various, such as puzzles, swings, dakon, and so on. In the puzzle game, children can say the parts that have been successfully installed so that they can add vocabulary to the development of the language aspect. When learning with play media makes children happy, comfortable, and happy, all brain nerves are relaxed, making it easier to absorb various knowledge and build positive experiences.

4.4. Able to develop children's language through teaching aids

Among the media used by Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah is a visual aid is an object that is used to develop aspects of children's language. Props and games are not much different, games can also be used as props. The teaching aids used must be educational. Educational aids are made to stimulate language skills in children so that they can develop semantic aspects in children. Children at this age can express their desires in words, can show rejection, and choose the right words.

Some of the teaching aids in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah as learning media are hand puppets and various kinds of fruits, vegetables, and animals. Hand puppets are used as props to tell various stories such as the story of the Prophet's companions which aims to introduce prophets and friends, other things aim to develop children's linguistic aspects so that they can express their desires in words, be able to show rejection and have the right words.

5. Conclusion

Based on the results of the research above, it can be concluded that the use of information technology in the development of language aspects of early childhood in Raudhatul Athfal Tarbiyatul Ula and Raudhatul Athfal Darul Arofah Sumberkare Wonorejo Probolinggo East Java, Indonesia. as follows; Children can develop language through audiovisuals, children can develop language with busy books, develop children's language through play media and can develop children's language through teaching aids.

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