



Impact of Use of Word Card Media on Early Child Brain Development and its Implications on Early Reading Creativity

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Abstract. The objective of this classroom action research was to increase children's early reading creativity at Aisyiyah Kebakkramat Kindergarten by using letter card props. This research is a classroom action research using qualitative descriptive analysis. The subjects in this study were 15 children in group B1 consisting of 7 boys and 8 girls in 2022/2023. The documentation method, observation method, interview method, and test method were all employed in this study to obtain data. From the research results, the following data were obtained: in the pre-action, 30.00% was obtained. The action of each cycle has increased quite well. In the first cycle, the percentage of completeness was 55.00%, while in the second cycle, overall student mastery increased quite significantly to 80.00%. So, it can be concluded that the use of word card teaching aids can increase children's early reading creativity in Aisyiyah Kebakkramat Kindergarten. Even though some children have not completed (developed according to expectations) as a whole, the results of the research show that more than 80% of children develop according to expectations in learning.

Keywords: early childhood, word cards, early reading creativity.

1 Introduction

Early childhood education is a process that supports children's overall development from birth to age six, which includes both physical and non-physical aspects. It does this by providing stimulation for children's proper and appropriate physical, spiritual, motor, intellectual, emotional, and social development.

Education is the basic capital for preparing quality people. According to Law Number 20 of 2003 concerning the National Education System, education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills. that is needed by himself, society, nation, and state. Preschool education can be obtained from the family, environment, or pre-school education services such as PAUD and the like [1].

There are around 100 billion brain cells in early childhood. These nerve cells need to be stimulated and used frequently to keep multiplying. One form of child intelligence is language intelligence, namely the ability to read, write, and communicate. To optimize children's language skills, namely in terms of reading, continuous stimulation is needed. Learning activities in kindergarten prioritize learning while playing and playing while learning which naturally motivates children to know something more deeply and spontaneously develops their abilities.

Young age is the best age.,therefore education at this time is fundamental and determines the next child's development. In this period, most prospective parents go through a phase when they are vulnerable to rapid growth and development. At this time children need stimulation or stimulation from their environment. If the child gets a good stimulus, then all aspects of the child's development will experience optimal development. According to [2] when children go through the two-word stage, their knowledge of meaning also increases rapidly. Research conducted by Core in 1997 showed that the vocabulary of six-year-old children ranged from 8,000-14,000 words and they learned an average of 22 new words per day. Children's initial reading ability is an early-level reading ability that can recognize syllables, can pronounce letter sounds, and understand various symbols in the form of a series of letters in writing and pictures.

Learning that can stimulate early reading skills is by providing learning that attracts children's attention such as learning while playing and learning using media. The selection of media can affect the process and results of children's learning. Therefore, teachers need to be careful and creative in choosing and utilizing learning media that will be used to help increase children's learning interests and achievement of learning outcomes. The fact is that the learning that is carried out to introduce early reading to children is still using the question-and-answer method, and worksheets for students, the teacher also gives examples of still using blackboard media. Seeing this phenomenon, the teacher's knowledge is still lacking about learning media and many children still do not pay attention to the teacher. The solution that can be given to overcome this problem is to use interesting media for children, one of which is using picture word cards to introduce early reading to early childhood. Picture word card media is a small card that contains pictures, text, or symbols that remind or guide students to something related to that picture. In this research, the writer uses picture word cards media with two syllables. Due to the breadth of the existing discussion and to optimize researchers in achieving goals, the research was limited to the effect of the syllable method with picture word cards as media on early reading skills in Kindergarten. Kindergarten-aged children have a unique development in reading. Nurbiana Dhieni [3], the basic development of early reading skills in children aged 4-6 years takes place in five stages namely: 1) Fantasy Stage (Magical Stage) At this stage children begin to learn to use books, think that books are important by flipping through the book repeatedly, and likes to bring his favorite book. 2) Self-Concept Stage. Children see themselves as readers and begin to involve themselves in reading activities, pretending to read books. 3) Picture Reading Stage (Bridging Reading Stage) Children are aware of visible prints, begin to be able to find familiar words, can repeat written stories, and already know the alphabet. 4) The Stage of Recognition of Reading (Reader Take-off Stage) Children begin to be interested in reading and begin to read signs in the environment such as

reading cartons of milk, food wrappers, toothpaste, and others. 5) Fluent Reading Stage (Independent Reader Stage) Children can read various types of books freely. Parents and teachers still have to keep reading books to children.

The learning method is a complete and systematic plan for presenting subject matter. Learning methods are carried out regularly and in stages in different ways to achieve certain goals under different conditions. According to [4] One of the main purposes of learning media is to serve as a teaching tool, which also affects the atmosphere, circumstances, and learning environment that the teacher sets up and designs. To transmit information in teaching and learning circumstances, media is a tool or facility that serves as an intermediary conduit, or bridge, between communicators (messengers) and communicants (recipients of messages). According to [5] For elementary school pupils in the first grade, learning to read involves going through the process of beginning reading. Students acquire knowledge, develop reading strategies, and improve their ability to comprehend what they are reading. As a result, teachers must plan reading instruction such that students develop the habit of reading for enjoyment. The reader is still learning to develop reading abilities and skills at the starting point reading levels, thus they are not yet present. At this level, reading is a practice exercise for identifying written language. According to [6] Beginning reading is the child's initial stage in the process of learning to read. Beginning reading as a basic reading skill for students and a tool for students to find out the meaning of the content of the subjects they study at school. The faster students can read the greater the chance to understand the contents of the meaning of the subjects at school. As a skill that underlies the next skill, the beginning reading skill must be considered by the teacher.

According there are 5 learning methods for beginning reading, namely: 1). Spell Method, this method begins teaching by introducing the letters alphabetically. The letters are memorized and pronounced by the child according to their sound alphabetically. For example, A/a, B/b, C/c, D/d, E/e, F/f, and so on, pronounced as (a), (be), (ce), (de), (ef), and so on, 2). The sound method is part of the spelling method, it's just that in practice the sound method goes through a process of practice and repetition. For example: the letter b is pronounced (eb), d is pronounced (ed), and so on. 3). The syllable method is also known as the syllable method. The learning process of this method begins with the introduction of syllables, such as: ba, bi, bu, be, bo, ca, ci, cu, ce, co, da, di, du, de, do, ka, ki, ku, ke, me and so on. The syllables are strung together into meaningful words, for example: ba - ju, bi - bi, bo - la, ka - ki, and so on. This activity can be continued with the process of assembling words into simple sentences. 4). The word method is a method that begins with the introduction of words that have functional and contextual meaning. It is better to be introduced to words consisting of two syllables first. 5). Learning to read sentences as a whole is possible with the global approach. The sentencing approach is the foundation of this global strategy. The idea is that the teacher demonstrates sentences beneath the pictures while she teaches reading and writing. 6). The Synthetic Analytical Structural Method commonly abbreviated as SAS is a method that can be used in learning to read and write in the beginning. Of the several methods described above, the author chose the syllable method because early childhood learning must start with something simple, namely introducing words consisting of two syllables first. Gagne and Briggs [7] implicitly said that the learning medium comprises

tangible devices—such as books, tape recorders, cassette players, video cameras, video recorders, films, slides (picture frames), photos, pictures, drawings, and graphics—that are used to physically transfer the information in instructional materials. According to [11] These types of media can be grouped into two, namely: 1) Two-Dimensional Media, which is media that can only be seen as good with the help of a projector. For example, word cards with pictures, sketches, diagrams, charts, graphs, charts, flip-charts, posters, maps, and others. 2) Real Object Media or Three-dimensional Media, is media that can be seen from all directions and can be felt in its shape, where three-dimensional media is embodied by abstract concepts. For example: real objects, models, mock-ups, specimens, dioramas, and so on.

Of the several types of learning media used, the author chooses picture word card media for the beginning reading ability of children aged 5-6 years. According to [7], Flash cards are little cards with images, text, or symbols that serve as reminders or pointers for students about a subject related to the image. The size of flashcards can be changed depending on the size of the class you are working with, but they are typically 8×12 cm. Letter cards, for example, can be used to practice fluent spelling. It is possible to teach pupils how to spell and expand their vocabulary by using cards with pictures of objects, animals, and other things. These cards become instructions and stimuli for students to give the desired response. According to Gagne (in [8] Flash cards are viewed as teaching tools where the main points of instruction are conveyed through simulation in either a descriptive or demonstrative manner, emphasizing their role as a messenger. The method used by the teacher is one of the main keys to the success of an activity which must be relevant to the objectives of mastering words, transitions, and vocabulary with a variety of media and forms of activities to be carried out.

2 Method

Methods that can be used with direct practice, while the steps of activities that can be carried out by children with indicators: reading pictures that have words or sentences in, [9] include: Preparing children, providing equipment (word card media pictures), prepare pictures according to the theme, practice how to use media, pair pictures with picture word cards, read pictures according to the paired word cards. This research was conducted in the eighth semester of the 2022/2023 school year. This research was conducted in group B TK Aisyiyah Kebak Kebakkramat District. This Pretest-posttest control group design is a method used in experimental research. All of the study's participants were children in group B at Aisyiyah Kebak Kindergarten, Kebakkramat District, totaling 35 people. The samples used in this study were Class B1 Nurul Huda, totaling 15 students as the experimental group, and Class B2 Asih, totaling 15 students as the control group. The data collection technique used is the observation technique. In collecting data, observation guidelines were used. Before compiling observation guidelines, a lesson plan and instrument grid were first prepared after that instrument testing was carried out. Research instrument testing was carried out to get an empirical picture of the feasibility of the instrument to be used as a research instrument, this test included the results of the content validity test, item validity, and reliability test. Before being

given the treatment the experimental group and the control group were given a pretest so that the writer knows how far the children's initial reading ability is. After that the posttest is carried out, and the next step is the normality test, this test is carried out to find out if the data is normally distributed, then it is continued with a homogeneity test to find out the level of homogeneity of the data and the last thing to do is to test the hypothesis by using the t-test.

Previously, the researcher made initial observations of the research subjects, namely the children of Group B1 to obtain research data. In the initial observation, the researchers looked at the symptoms of the child's low language skills. Based on the description of the research data, the group of children who were given treatment using the syllable method with picture word card media obtained higher initial reading abilities compared to the group of children who were not given treatment or by using conventional methods. The difference in initial reading results between children who were given treatment using the syllable method with picture word card media and children who were not given treatment or by using conventional methods was the effect or impact of the different learning treatments given to each group of children. This is to the theory stated by [10] that the use of picture word card media can bring children to a pleasant learning environment in early reading learning because the teacher uses playing strategies and the technique used is wordplay which can provide an active situation. and fun. Children who took part in the learning activities used the syllable method with picture word cards as media and obtained higher initial reading ability because learning with picture word cards was used while playing, according to the specified theme. Learning with the syllable method using picture word cards is different from learning using conventional methods. The conventional method or what is often known as the lecture method is more likely to attract children's attention. The lecture method causes children to tend not to pay attention and are busy playing alone or with their friends. Unlike the case with the use of picture word card media in learning to give children an understanding that the reading process includes activities to introduce letters, syllables, and words. In addition, the process of reading is done repeatedly to become more skilled at reading words. Beginning reading in early childhood is very important to know so that teachers and children will know how to read simply. Teachers also have to understand more about what media can develop these beginner reading skills. So that in learning do not use conventional methods because these methods make children less focused on the material provided by the teacher.

3 Results

The results of this study indicate that the syllable method of teaching, using picture word cards, has a significant impact on the early reading abilities of students in Group B1 at TK Aisyiyah Kebakkramat for the Academic Year 2022/2023. This suggests that this approach is effective in improving the early reading skills of children.

Furthermore, the results of observations and reflections on the learning process also demonstrate the success of this method. The increase in student learning outcomes, which meet the teacher's expectations, and the overall classroom performance are clear

evidence of this success. The use of word cards as teaching aids has been proven to be an appropriate strategy for teachers to address the limitations of the lecture-based method. Lecture-based teaching tends to make teachers more dominant in the teaching and learning process, leaving students with limited opportunities to develop their thinking abilities, both individually and in groups. The action research conducted in two cycles has successfully enhanced the creativity of children in early reading.

In a different context, the research also indicates that the consistent use of word cards as teaching aids can enhance the early reading creativity of children in Group B2 at Aisyiyah Kindergarten. The continuous improvement in creativity from one cycle to the next indicates that using word cards aids in enhancing children's creativity in early reading. This approach not only boosts their creativity but also their comprehension of the study material. The overall learning percentage, as observed, increased from 40.00% in the initial observation to 65.00% in cycle I and reached 85.00% in cycle II.

Moreover, the study highlights the importance of children's language development and their emotional and social skills. This includes their ability to respect and tolerate various religious beliefs, act honestly, assist others, display politeness, maintain personal and environmental hygiene, and recognize holidays.

Table 1 outlines the achievement standards for early childhood development, covering various aspects such as spiritual intelligence, motor skills (both gross and fine), cognitive abilities (logical and symbolic thinking), language skills (comprehension and expressive language, literacy), and socio-emotional skills (self-awareness, responsibility, prosocial behavior). These standards provide a comprehensive framework for assessing and promoting the growth and development of children during their early years. A brief description of the achievement standards for early childhood development is shown in Table 1.

Table 1. Description of Achievement Standards for Early Childhood Development

Early Childhood Development Achievements Standards	Description
Spiritual Intelligence	the capacity to respect and toleration for other people's religious beliefs, worship, act honestly, help, be polite, respect, exercise, keep personal and environmental hygiene, and know holidays.
Motor Physics	Gross motor skills include coordination, flexibility, balance, agility, motor, non-motor, and the ability to move the body according to the rules.
	Fine motor skills include the ability and dexterity to explore and express oneself in various forms using fingers and tools.

cognitive	the capacity to respect and toleration for the religious views of others, to worship, to act honestly, to help, to be polite, to respect, to exercise, and to preserve personal and environmental hygiene.
	Logical thinking, covering all kinds of differences, classifications, patterns, proactive, planning, knowing cause and effect.
	Symbolic thinking includes the capacity to identify, define, and apply mathematical concepts, the capacity to identify letters, and the capacity to represent a wide range of objects and their ideas in pictures.
Language	Receptive language comprehension, including the ability to understand stories, sequences, and rules, and enjoy and appreciate reading.
	Expressive language includes the ability to ask questions, answer questions, communicate orally, repeat what is known, learn functional language, and express feelings, thoughts, and desires in the form of doodles.
	Literacy skills, include understanding the relationship between letter shapes and sounds, imitating letter shapes, and understanding words in stories.
Socio-Emotional	Self-awareness includes expressing one's abilities, knowing one's feelings and self-control, and being able to adjust oneself to suit others.
	A sense of responsibility towards oneself and others, including the ability to know one's rights, follow rules, govern oneself, and be responsible for one's actions for the benefit of others.
	Prosocial behavior includes the ability to play with peers, understand feelings, respond, share, and respect the rights and opinions of others; cooperate, tolerate, and behave politely.

4 Conclusions

Based on the results of data analysis, the conclusion of this study states that there is a significant effect of the syllable method using picture word cards on the initial reading ability of group B1 TK Aisyiyah Kebakkramat Academic Year 2022/2023.

Based on the results of observations and reflections on the learning process, it has been said to be successful. This is shown by an increase in student learning outcomes which have met the teacher's expectations and performance in learning, so that classroom actions have been successful with significant results. The use of word card props has proven to be the right step that teachers can use to overcome the weaknesses of the lecture method. In the lecture method learning, teachers tend to be active in the teaching and learning process, students in the teaching and learning process are less able to develop their thinking abilities, both individually and in groups. The implementation of classroom action research carried out by researchers in two cycles has been able to increase students' creativity in children's early reading.

Based on the results of the research conducted, it can be concluded that the use of word card teaching aids can increase the early reading creativity of Group B2 children at Aisyiyah Kindergarten always experiences an increase from one cycle to the next. This indicates an increase in children's creativity in learning to read early by using word card props. Using this method can increase children's creativity regarding the material being studied. The overall learning percentage in observation only reached 40.00%. In cycle I it was 65.00% and cycle II 85.00%.

Language refers to the child's ability to interact, both in terms of speaking and understanding. Emotional refers to the emotional development and social skills of children [11].

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