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The Use of Loose Parts Media To Improve Alphabet Recognition At TK IT Nurul Fikri Padangsidimpuan

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Abstract

This study aims to determine the alphabet recognition skills of children in Group B, including correctly naming, pointing to, and differentiating letter shapes. Children were able to distinguish between the letters b and d, n and h, w and m, m and n, and f and t using *Loose parts* Media. *Loose parts* Media utilizes loose materials derived from natural materials such as seeds, stones, twigs, shells, sand, soil, etc., and manufactured materials such as garlands, beads, lifeboats, Lego, buttons, etc., which can enhance children's creativity and encourage active participation in learning and exploring their surroundings. The study used the Classroom Action Research (CAR) method, implemented in two cycles. The study population was all 12 children in Group B. Data collection techniques included observation, checklists, and documentation. Tests were used to obtain data and to assess alphabet recognition skills through play, finding letters, making letter shapes, and grouping letters based on their shapes. The research results revealed that the use of *Loose parts* Media improved the alphabet recognition skills of children in Group B, with 66.25% achieving success in Cycle I and 88.75% achieving success in Cycle II, categorized as "good." Therefore, the use of *Loose parts* Media is effective in improving alphabet recognition in children in Group B.

Keywords: Loose parts, Learning media, Letter recognition

Abstrak

Penelitian ini bertujuan untuk mengetahui kemampuan pengenalan huruf abjad anak kelompok B pada menyebutkan, menunjukkan, dan membedakan bentuk huruf dengan benar. Anak mampu membedakan antara huruf b dengan d, huruf n dengan h, huruf w dan m, huruf m dan n, huruf f dan t dengan menggunakan Media *Loose parts*. Media *Loose parts* adalah media yang menggunakan bahan-bahan lepasan yang bisa diambil dari bahan alam seperti biji-bijian, batu, ranting, kulit kerang, pasir, tanah, dll, dan bahan pabrikan seperti roncean, mote, sekoci, lego, kancing, dll yang dapat meningkatkan kreativitas anak serta dapat membuat anak menjadi aktif serta semangat belajar dan bereksplorasi dengan lingkungan sekitar. Penelitian menggunakan metode Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus. Populasi penelitian ini adalah seluruh anak kelompok B yang berjumlah 12 orang. Teknik pengumpulan data dilakukan melalui instrument observasi daftar ceklis dan dokumentasi. Dimana tes untuk memperoleh data dan untuk mengetahui kemampuan mengenal huruf abjad melalui bermain menemukan huruf, membuat bentuk huruf dan mengelompokkan huruf berdasarkan bentuknya. Dari hasil penelitian diketahui bahwa penggunaan Media *Loose parts* mampu meningkatkan kemampuan pengenalan huruf abjad pada anak kelompok B dimana pada siklus I sebesar 66,25 % dan pada siklus II sebesar 88,75 % dengan kategori "baik". Dengan demikian, penggunaan Media *Loose parts* efektif untuk meningkatkan pengenalan huruf abjad pada anak B.

Kata Kunci: *Loose parts*, Media pembelajaran, Pengenalan huruf.

Introduction

Children represent the next generation of a nation, ensuring a continuous and natural progression of society. From generation to generation, a nation's society undergoes varying developmental phases where the quality of its people is determined by the experiences and learning acquired, both formally and informally. Childhood is often referred to as the *golden age* because brain development, socio-emotional growth, and learning capabilities—including language development—occur at an exceptionally rapid pace. Suyanto (2005: 2) states, "according to various studies in neurology, it is proven that 50% of a child's intelligence is formed within the first four years. By the time a child reaches eight years old, their brain development reaches 80%, and it culminates at age 18." Law Number 20 of 2003, Article 1, Paragraph 14 concerning early childhood education, elaborates that coaching through the provision of educational stimuli is necessary to foster physical and spiritual growth and development from birth until the age of 6. The potential developed through educational stimuli during this golden age encompasses language, socio-emotional, cognitive, artistic, and physical-motor aspects, ensuring rapid and comprehensive development during this period (Riska Damayanti Yakin, et al. in Ita, Wewe & Goo, 2023).

Suyadi and Ulfah explain: Early childhood education is a formative effort directed at children from birth up to the age of six, conducted through the provision of educational stimulation to assist physical and spiritual growth and development so that children are prepared to enter further education. (Suyadi & Ulfah, 2017: 22)

Early childhood education serves as a formative and educational endeavor aimed at ensuring children grow and develop optimally, both physically and psychologically. One of the fundamental language skills that must be developed early on is the ability to recognize letters of the alphabet. Alphabet recognition acts as the initial foundation for children to learn reading and writing in subsequent stages.

According to Syaifdaningsih in Rahmatun Nessa, et al. (2023: 193), "recognizing letters is an important part of a child's language development because letter recognition is a fundamental aspect that needs to be developed optimally from an early age so that children can recognize text and words in their environment. Early childhood letter shape recognition is a child's capability to know and understand letter symbols in developing their symbolic thinking skills." Furthermore, Darjowidjojo in Tuti Alawiyah Nasution (2017: 57) expresses that "the ability to recognize letter shapes is a developmental stage where children transition from not knowing to understanding the relationship between the shape and sound of letters, allowing them to identify shapes and assign meaning to them."

Early childhood alphabet recognition encompasses the ability to name letter symbols, recognize letter shapes, differentiate between letters, and connect letters with the initial sound of a word. Furthermore, the Ministry of Education and Culture Regulation (PERMENDIKBUD) Number 137 of 2014 concerning the National Standards for Early Childhood Education outlines three scopes of language development: understanding language, expressing language, and literacy. In accordance with the Standard of Child Development Achievement Level (STPPA) in Permendikbud Number 137 of 2014, language development in early literacy for children aged 5-6 includes understanding known letter symbols, recognizing the initial letter sounds of surrounding objects, understanding groups of pictures with the same initial sound/letter, comprehending the relationship between sounds and letter shapes, reading one's own name, writing one's own name, and understanding the meaning of words in a story.

A phenomenon observed in the field is that parents often worry their children will fall behind in school if they are not equipped with reading, writing, and arithmetic skills (commonly known as *calistung*) beforehand. This anxiety has grown, particularly because during periods of remote learning from home, many children had not yet learned to read prior to entering elementary school. Consequently, parents sometimes pressure their children to learn *calistung*. However, in reality, many children experience difficulty

in recognizing letters due to monotonous and unengaging learning processes. Teachers frequently rely on conventional lecturing methods or worksheets, causing children to become bored and passive.

Based on field observations, during remote learning, students were unable to properly recognize letters, and their capabilities were very low and had not developed according to the curriculum. Specifically: (1) 3 students could not recognize letter shapes and sounds; (2) 3 students could not differentiate between uppercase and lowercase letters; (3) 6 students could not recognize letters at all; (4) 9 students were unable to arrange words; and (5) 2 students could not group letters based on their shapes. Given these issues, the researcher aimed to further investigate and improve students' letter recognition skills utilizing Loose parts media. Loose parts represent highly accessible materials that can be effectively integrated into early childhood learning processes.

Preliminary observations at TK IT Nurul Fikri Padangsidempuan revealed that the majority of Group B children were not yet able to recognize letters well. The children struggled to differentiate visually similar letters such as *b* and *d*, *n* and *h*, *w* and *m*, *m* and *n*, as well as *f* and *t*. They were also unable to recite the letters sequentially. This condition was attributed to the lack of engaging learning media and direct play-based activities.

Early childhood learning consists of activities tailored to the children's developmental levels. For young children, playing is learning. Play refers to activities that bring joy and cheerfulness to children while supporting holistic development across physical, intellectual, moral, and socio-emotional domains. Learning media act as intermediary tools used by teachers to facilitate the delivery of messages or instructional materials to students in the classroom.

In other words, learning media enhance the effectiveness and efficiency of instruction. Therefore, the role of media is indispensable, particularly in early childhood educational institutions. Loose parts are open-ended materials that can be moved, carried, combined, redesigned, lined up, and taken apart or put back together in multiple ways. Loose parts are easily found in our surroundings. They are called "loose parts" because the materials are detached, repurposed, or unused items taking the form of small, discrete pieces that can be easily separated and reassembled.

Loose parts are highly magical, flexible materials that conform to a child's ideas, train creative thinking, and foster problem-solving skills. They can transform into anything depending on the child's imagination, unlike pre-manufactured, fixed toys. There are four primary benefits for children playing with loose parts:

1. Developing inquiry skills: Curiosity is a vital element in forming inquiry-based thinking—the ability to acquire information, analyze, and make judgments when interacting with loose parts.
2. Teaching children to ask questions: Open-ended learning activities stimulate children's thinking and curiosity, prompting them to ask questions as they test their ideas. They ponder, "What happens if...", "If I add something, then...", and "What happens if I mix this object with that?" Therefore, the presence of a supportive adult is crucial to respond to these questions and provoke new ones based on the child's innate curiosity.
3. Developing various aspects of child development: Six aspects of child development are stimulated when playing with loose parts. A diverse range of loose parts can stimulate religious and moral values by learning about the Creator of nature. Physical motor skills (both gross and fine) are stimulated as children enthusiastically move around collecting and manipulating parts. Socio-emotional, cognitive, and language skills grow as children collaborate, share toys, communicate, and solve problems during play. Artistic development is nurtured as they create diverse forms, colors, movements, and sizes using loose parts.

4. Developing imagination and creativity: In an open atmosphere, children play following their imagination and interests, allowing their activities to flow organically based on spontaneous creativity, without the imposition of a teacher's predetermined ideas. (Fitriyani, 2020: 49)

The types of loose parts include:

- Natural materials: Stones, leaves, seeds, sand, dried flowers, wood chips, moss, shells, feathers, twigs, mud, etc.
- Wood and bamboo: Wooden spools, old flutes, puzzle pieces, wooden frames, wooden pegs, corks, wood offcuts, etc.
- Plastic: CD cases, straws, bottle caps, bottles, PVC pipes, beads, plastic balls, funnels, etc.
- Fabric and yarn: Fabric scraps, flannel, chiffon, burlap, scarves, wool, yarn, silk, embroidery thread, ribbons, lace, string, rubber bands, etc.
- Metal: Spoons, cans, bolts, padlocks, keys, hairpins, magnets, nuts, etc.
- Glass and ceramics: Small bottles, glass beads, glass vases, marbles, mirrors, glasses, etc.
- Recycled packaging: Cardboard, tissue rolls, food wrappers, egg cartons, cereal boxes, paper scraps, boxes, etc. (Fitriyani, 2020: 50)

For Group B children, alphabet recognition can be taught through enjoyable activities utilizing engaging media, such as Loose parts. Loose parts media provide various textures and shapes suitable for this age group. They can consist of natural or synthetic objects easily found around the home. They increase children's creativity, making them active, enthusiastic learners who eagerly explore their environment. Several studies indicate that Loose parts media effectively enhance children's engagement in learning by providing concrete and enjoyable educational experiences, making the learning atmosphere active and meaningful.

According to Solikhah et al. (2025: 64), "the application of loose parts media to improve reading skills provides a meaningful experience for children and enhances their inherent abilities." Tungga Purnama Sari and Ardiana Faizah (2024: 111) state that "loose parts media is an alternative tool used to increase children's knowledge through nature and the surrounding environment, enhancing creativity so the learning process becomes more concrete." Ni Dewi Eka Suwaryaningrat (2024: 989) notes, "the use of loose part media in the form of natural materials to improve letter recognition (b-d, p-q, m-w) is highly effective when implemented in kindergarten learning, specifically at TK GMIM 15 Tandurusa Kota Bitung."

Lestari, Ernitasari, and Lina explain: The use of the letter-arranging learning method through loose part media is highly effective in improving early literacy skills in early childhood. This method involves using loose parts as a medium to form letters into words, primarily aimed at stimulating early literacy skills. (Lestari, Ernitasari, and Lina, 2024: 2977)

According to Ganesha, et al. (2020: 1), "Loose parts are play materials consisting of open-ended, detached elements that can be taken apart, put back together, carried, combined, lined up, moved, and used alone or combined with other materials."

Kurniasih and Mulyani assert: The use of Loose parts Media effectively encourages children to (1) possess high curiosity and imagination, (2) produce creative works, (3) develop a sense of responsibility, (4) enjoy experimenting, (5) try new things, and (6) tend to conduct their own experiments. Additionally, teachers act as facilitators in guiding children to optimally utilize various Loose parts materials. (Kurniasih and Mulyani, 2025: 56)

The use of a nature-based STEM approach with natural loose parts media can assist early childhood development in fostering creativity, critical thinking skills, and environmental care through explorative and play activities (Wulansari et al., 2021).

TK IT Nurul Fikri is a school located in Padangsidempuan City. Based on field observations, during remote learning, children were unable to properly recognize letters and their abilities remained critically low. The specific breakdown was: (1) 3 children could not recognize letter shapes and sounds; (2) 3 children could not differentiate between uppercase and lowercase letters; (3) 6 children did not recognize any letters; (4) 9 children were unable to arrange words; and (5) 2 children could not group letters based on shapes.

Based on these issues, the researcher aimed to explore the use of Loose parts Media to improve alphabet recognition in Group B. Loose parts are easily accessible materials capable of boosting creativity and transforming children into active, enthusiastic learners who eagerly explore their surroundings.

Method

A research report outlines matters related to the research activity process. The purpose of research can be distinguished into three categories based on the parties utilizing the results:

1. Scientists, as findings through research expand the repertoire of scientific knowledge.
2. The government, bureaucrats, or other policymakers.
3. The general public, both individually and in groups. (Suharsimi Arikunto, 2010: 471)

The meaning of Classroom Action Research (CAR) semantically translates to *Action Research*; as defined by Carr & Kemmis (in McNiff, 1991, p.2, cited in I G.A.K. Wardani, 2025: 1.6):

"Action research is a form of self-reflective enquiry undertaken by participants (teachers, students or principals, for example) in social (including educational) situations in order to improve the rationality and justice of (1) their own social or educational practices, (2) their understanding of these practices, and (3) the situations (and institutions) in which the practices are carried out".

This study utilized the Classroom Action Research (CAR) method. CAR is conducted to directly improve the learning process through actions planned by the teacher. The research was carried out at TK IT Nurul Fikri Padangsidempuan during the odd semester of the 2025/2026 academic year. The research subjects were 12 Group B children, consisting of 7 boys and 5 girls. The research was conducted in two cycles, with each cycle comprising planning, action implementation, observation, and reflection phases.

The focus of the action in this study was the implementation of Loose parts Media in learning to improve alphabet recognition. This involved using natural loose parts (twigs, small stones, sand, palm ribs, skewers, popsicle sticks, chopsticks, shells, and seeds) and manufactured materials (bottle caps, Lego, beads, buttons, bobbins, and threading items). Data collection techniques included:

1. Observation: Observing the activities and development of children's letter recognition skills while they were directly engaged in the learning process.
2. Documentation: Taking photographs of the learning process as children learned through play.
3. Developmental Assessment: Utilizing an observation sheet encompassing five indicators.

The indicators of research success included:

1. The child is able to recognize the shapes of letters A-Z.
2. The child is able to differentiate between uppercase and lowercase letters.

3. The child is able to recognize letter sounds.
4. The child is able to arrange words written on letter cards.
5. The child is able to group letters based on their shapes.

Data were analyzed using quantitative descriptive techniques by calculating the percentage of children's developmental achievement. Children's learning outcomes (letter recognition skills) were scored as follows: 1 = Not Yet Developed (*Belum berkembang / BB*) 2 = Beginning to Develop (*Mulai berkembang / MB*) 3 = Developing as Expected (*Berkembang sesuai harapan / BSH*) 4 = Developing Very Well (*Berkembang sangat baik / BSB*)

Every child received a score for three main aspects:

1. Recognizing letters
2. Naming letters
3. Shaping letters

The results were then calculated for the average score per child and per cycle using a simple formula: Average value = Total score of all aspects / Number of children or indicators.

The percentage of class success was calculated to track the improvement from cycle to cycle:

Percentage of success = Number of children who are BSH and BSB / Total number of children

Results and Discussion

Pre-Action (Pre-Cycle)

Initial observations revealed that the children's letter recognition skills were still low. Out of 12 children, only 4 were able to recognize letters well across the 3 main indicators. The initial baseline capability percentage reached only 53.33%. Children appeared disinterested during lessons because the media used lacked variety; instruction was limited to playing alphabet recognition videos tailored to the children's abilities. Furthermore, some children experienced difficulty naming letters and differentiating specific letter shapes.

Cycle I

In Cycle I, the teacher utilized illustrated letter cards and began introducing various Loose parts Media, such as sand, flour, sawdust, wood scraps, bottle caps, shells, small stones, used spoons, beads, and rubber seeds. The children were asked to search for letters in the sand, flour, and sawdust, then form letters using the provided materials, and finally identify which were uppercase and lowercase.

Table 1. Observation Sheet for Alphabet Recognition Skills - Cycle I

No.	Observed Aspect	bb (1)	MB (2)	BSH (3)	BSB (4)	Total Max Score	Capability Mastery (%)
1	Student recognizes letter shapes A-Z	1	2	8	1	33	68.75%
2	Student can differentiate uppercase and lowercase letters	1	2	8	1	33	68.75%

3	Student recognizes letter sounds	2	3	4	3	32	66.67%
4	Student can arrange words written on letter cards	0	9	3	0	27	56.25%
5	Student can group letters based on shapes	0	2	10	0	34	70.83%
Total		4	18	33	5	159	66.25%

Cycle I observation results showed mastery in recognizing letter shapes A-Z (68.75%), differentiating uppercase and lowercase letters (68.75%), recognizing letter sounds (66.67%), arranging words written on letter cards (56.25%), and grouping letters based on shape (70.83%). This data indicated that while the children began mastering the basics of letter recognition, reinforcement was still required—particularly in recognizing shapes A-Z, differentiating case, and recognizing sounds—so that all indicators could meet the established target. The overall completion rate was 66.25%.

However, there were still three capability indicators in the "Not Yet Developed" (BB) category and one in the "Beginning to Develop" (MB) category. Specifically:

- 1 child was in the BB category for recognizing letter shapes A-Z.
- 1 child was in the BB category for differentiating uppercase and lowercase letters.
- 2 children were in the BB category for recognizing letter sounds.
- 9 children were in the MB category for arranging words written on letter cards.

Cycle II

Reflections from Cycle I identified areas requiring improvement during the implementation of Loose parts Media. In this cycle, improvements focused heavily on refining the application of the media to achieve the expected results. In Cycle II, the teacher improved the instructional strategy by providing clearer examples, individual mentoring, and organizing letter recognition games using a wider variety of loose parts through small group work (2 children per group).

Table 2. Observation Sheet for Alphabet Recognition Skills - Cycle II

No.	Observed Aspect	BB (1)	MB (2)	BSH (3)	BSB (4)	Total Max Score	Capability Mastery (%)
1	Student recognizes letter shapes A-Z	0	1	2	9	44	91.67%
2	Student can differentiate uppercase and lowercase letters	0	1	1	10	45	93.75%
3	Student recognizes letter sounds	0	2	3	7	41	85.42%
4	Student can arrange words written on letter cards	0	2	4	6	40	83.33%

5	Student can group letters based on shapes	0	2	1	9	43	89.58%
Total		0	8	11	41	213	88.75%

Cycle II observation results demonstrated excellent mastery in recognizing letter shapes A-Z (91.67%), differentiating uppercase and lowercase letters (93.75%), recognizing letter sounds (85.42%), arranging words written on letter cards (83.33%), and grouping letters based on shape (89.58%). This indicated that the children had robustly developed the abilities to recognize letter shapes, distinguish case, and identify sounds. The research outcomes showed a significant improvement. A total of 10 children were able to recognize letters excellently, bringing the final capability mastery percentage to 88.75%.

Discussion

Initially, the implementation of learning using Loose parts Media was not optimal. This was evident from the per-indicator observations that still revealed several deficiencies. Despite the teacher's best efforts to introduce the alphabet, many children still struggled to recognize letter shapes and sounds.

A distinct improvement in the children's alphabet recognition skills occurred after the teacher integrated Loose parts Media into the learning process. Cycle I research results showed an increase in children's abilities compared to the prior method of simply having children watch videos and use letter cards. The children felt curious and eager to try forming letter shapes using the loose parts. The results demonstrated an increase in both activity and creativity, even though some children still exhibited lacking skills.

Comparing the average scores from the pre-action phase, Cycle I, and Cycle II reveals a definitive upward trajectory in children's alphabet recognition abilities due to the Loose parts Media. This is evidenced by the percentage progression from 66.25% in Cycle I to 88.75% in Cycle II. It can be concluded that learning outcomes achieved by applying Loose parts Media for alphabet recognition are superior to merely watching videos or relying solely on standard letter cards. Providing children the opportunity to exercise their creativity by constructing letter shapes out of physical, open-ended materials is highly effective. (*Note: Diagram 1, mentioned in the original text, would visually represent this Cycle I vs. Cycle II comparison.*)

Based on the action research conducted, it is evident that Loose parts Media is an educational tool capable of improving the alphabet recognition skills of Group B children at TK IT Nurul Fikri Padangsidempuan. Consequently, Loose parts Media serves as an effective alternative learning media to enhance language skills, specifically early childhood alphabet recognition.

Conclusion

1. The use of Loose parts Media in learning effectively improves the alphabet recognition skills of Group B children at TK IT Nurul Fikri Padangsidempuan. This improvement is visible from the progression of the baseline pre-action score of 53.33%, increasing to 66.25% in Cycle I, and ultimately reaching 88.75% in Cycle II.
2. There is a definitive enhancement in alphabet recognition capabilities through the use of loose parts media among the specified kindergarten group.
3. Loose parts Media transforms the learning process into an engaging, active, creative, and enjoyable experience. The children become more enthusiastic and are less prone to boredom when learning letters through these play-based activities.

Loose parts Media can serve as a primary reference for improving alphabet recognition skills. The researcher proposes the following recommendations:

1. For Parents: Parents can provide simple loose parts at home (such as bottle caps, popsicle sticks, colored buttons, small stones, and plastic string) for letter-arranging activities with their children.
2. For Teachers: Teachers can combine loose parts with other instructional methods to create a highly varied learning environment.
3. For Future Researchers: Further research could investigate the influence of specific types of loose parts (e.g., natural vs. synthetic, colored vs. uncolored) on the overall effectiveness of literacy learning.
4. For Stakeholders: Stakeholders should support the procurement of affordable, environmentally friendly learning media. Loose parts can act as an effective, economical media alternative, making them highly suitable for inclusion in school budget planning.

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