



Loose Parts Media Learning Management to Improve Linguistic Skills in Non-Formal Early Childhood Education Institutions in Wonosobo District, Wonosobo Regency

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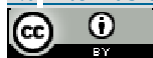
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ABSTRACT

The purpose of this study was to determine the effect of learning management with loose parts media on improving the linguistic abilities of children aged 5-6 years in non-formal PAUD institutions throughout Wonosobo District. This research, conducted in a non-formal PAUD institution in Wonosobo District, used a qualitative descriptive method to explore the impact of loose parts media on the logical and linguistic intelligence of children aged 5-6 years. Data was collected through direct observation, structured interviews, and documentation, focusing on children's interactions with loose parts and teachers' responses to this learning method. The analysis involved data reduction, presentation, and conclusion drawing, with the findings expected to enhance future learning methods. This study found that children aged 5-6 years in Non-Formal PAUD, Wonosobo District, can express their desires and dislikes through speaking skills, with language development indicators including understanding commands and repeating complex sentences. The application of loose parts in learning management significantly enhances their linguistic abilities, as demonstrated by positive outcomes in one well-implemented institution. However, challenges such as limited funding and lack of training information hindered broader implementation. To address these, it is suggested that BOSP funds be allocated for materials and educator training

INTRODUCTION

Early childhood education is a crucial phase in individual development, especially in forming the basic foundation of critical, creative, collaborative, and communicative thinking skills (Fathoni, 2024; Fatoni, 2019; Rachmah et al., 2022; Rohmah et al., 2023). One innovative learning approach in early childhood education is through the application of the STEAM (Science, Technology, Engineering, Art, and Mathematics) method (Mu'minah, 2020). This method combines various disciplines to stimulate high-level thinking in children, especially in reasoning and problem-solving skills. In Wonosobo District, this method has begun to be applied in non-formal PAUD institutions as an effort to prepare children to face future challenges, including the demographic bonus projected to occur in 2045.

In this context, loose parts learning media becomes an important tool in the STEAM method. Loose parts are objects that do not have a specific function but can be used creatively in children's learning activities. The use of this media not only encourages children to think critically and creatively, but also develops their linguistic abilities, which is one aspect of multiple intelligences according to Howard Gardner's theory. In Wonosobo District, the use of loose parts media in non-formal PAUD is expected to improve the linguistic abilities of children aged 5-6 years, preparing them to become a superior generation in the future.

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This study focuses on the influence of learning management with loose parts media on improving the linguistic abilities of children aged 5-6 years in non-formal PAUD institutions throughout Wonosobo District. This approach is expected to stimulate linguistic development through play and exploration activities designed to hone children's communication and language skills. By combining STEAM elements in learning, this study aims to prove that this method is effective in improving the linguistic abilities of early childhood.

In Indonesia, although the quality of education has begun to improve, there is still a significant gap in the quality of early childhood learning compared to developed countries (Nurfatimah et al., 2022; Sumiyaty et al., 2023). Moreover, the lack of implementation of innovative approaches such as STEAM in various regions is a challenge in preparing the younger generation to be able to compete in the global era. Howard Gardner's theory of multiple intelligences is the main foundation in this study, which states that every individual has various types of intelligence, including linguistic intelligence (Lalujan et al., 2019; Syarifah, 2019). By applying loose parts media in learning, it is expected to optimize the development of linguistic intelligence in early childhood through interactive and exploration-based learning experiences.

Previous research generally used descriptive qualitative methodology, research subjects were often children aged 5-6 years with a focus on aspects of art and creativity, and it was found that teachers had limited knowledge in managing loose parts learning media in PAUD, so it was recommended to organize activity invitations, vary loose parts components, and improve teacher skills through workshops (Umami & Afnida, 2023). Community service activities have succeeded in increasing the knowledge and skills of managing literacy and STEAM-based learning using loose parts in 91% of PAUD teachers in Cluster 4 PAUD Pelangi, Gladag Village, Kabat District, Banyuwangi Regency, with the teacher attendance rate at each meeting reaching more than 90% (Umami & Atika, 2023).

Initial observations in Wonosobo District showed that learning in non-formal PAUD institutions still tended to be conventional and did not involve innovative media such as loose parts. Most teachers were also not fully aware of the potential of implementing STEAM in daily learning, especially in improving children's linguistic abilities.

The novelty of this study lies in the combination of learning management with the STEAM method and loose parts media in the context of improving the linguistic abilities of early childhood. This study offers a new approach to PAUD education in Indonesia, especially in non-urban areas, by emphasizing the important role of loose parts media in learning.

This study fills the gap in the literature related to the effectiveness of using loose parts media in improving the linguistic abilities of early childhood, which has so far been more focused on cognitive and motor aspects. In addition, this study also highlights the lack of STEAM implementation in the context of early childhood education in non-urban areas. The purpose of this study was to determine the effect of learning management with loose parts media on improving the linguistic abilities of children aged 5-6 years in non-formal PAUD institutions throughout Wonosobo District.

RESULTS AND DISCUSSION

Terry stated that management is the process of achieving goals through efforts made by others. According to Mulyasa (2004), learning is basically an interaction between students and their environment, which causes behavioral changes towards a better direction (Hasmawati, 2020; Syahputra & Aslami, 2023; Thoha, 2016). Siantajani (2020) explained that STEAM is an abbreviation for the combination of five fields, namely science, technology, engineering, art, and mathematics. Science is the science that studies nature based on facts obtained through experiments and observations (Marwiyah, 2022). Technology is the application of science in industry, engineering, and other fields to find useful solutions in solving problems. Art is the creative ability to create something that has value. Mathematics is the science of numbers, number operations, relationships, combinations, generalizations and their structures, measurements, and transformations.

METHODS

The methodology section of this research provides a comprehensive overview of the qualitative approach used to explore the impact of loose parts media on improving the logical and linguistic intelligence of children aged 5-6 years in a non-formal PAUD (Pendidikan Anak Usia Dini) institution in Wonosobo District. The research employs a qualitative approach to delve deeply into the subject matter. Qualitative research is particularly suited for exploring complex phenomena where the researcher aims to gain an in-depth understanding of the participants' experiences, behaviors, and interactions within their natural settings (L. Haven & Van Grootel, 2019; Maher & Dertadian, 2018). The choice of this approach allows for the observation of phenomena as they occur in real-time, offering insights into the dynamics between loose parts media and child development. The study uses a qualitative descriptive method. This method is chosen because it systematically and factually describes the phenomena being observed, providing a detailed account of the interactions between children and loose parts media. Descriptive research is used to illustrate how children engage with the media and how it influences their cognitive development, particularly in logical and linguistic intelligence.

Multiple data collection techniques were employed to gather comprehensive data:

1. **Direct Observation.** Researchers conducted direct observations using a checklist to systematically record children's behaviors and interactions with the loose parts media. This method allows for the real-time capturing of data on how children play and learn through these activities.
2. **Structured Interviews.** Structured interviews were conducted with both teachers and students. This technique provided deeper insights into the teachers' experiences and perspectives on the effectiveness of loose parts media in enhancing children's intelligence. Interviews with children helped capture their direct experiences and responses to the learning activities.
3. **Documentation.** Relevant documentation related to the history and conditions of the school environment was collected. This included records, reports, and any other materials that provided context and background information essential for understanding the setting and participants.

The data analysis process in this study was conducted descriptively and qualitatively through three main stages:

1. **Data Reduction.** This initial stage involves selecting, focusing, and simplifying the raw data collected from observations, interviews, and documentation. The purpose of data reduction is to distill the most relevant information that directly addresses the research questions.
2. **Data Presentation.** After reducing the data, it is then presented in an organized manner. This could include charts, narratives, or tables that summarize the key findings without losing the richness of the original data. The presentation is designed to make the data more accessible and easier to interpret.
3. **Drawing Conclusions.** In this final stage, the researchers synthesize the data to answer the research questions. The conclusions drawn from the analysis

provide insights into the effectiveness of loose parts media in developing children's logical and linguistic intelligence. These findings are expected to contribute to the future development of learning methods.

The research was conducted over a period from December 2023 to January 2024. This timeframe allowed the researchers to observe and gather data over a sufficient period to ensure the reliability and validity of the findings. The methodology employed in this study is crucial for achieving the research objectives. The qualitative approach, coupled with the descriptive method, allows for a rich, detailed understanding of the educational environment and the effectiveness of specific teaching strategies. By combining direct observation, interviews, and documentation, the researchers ensure that the data collected is comprehensive and provides a holistic view of the subject matter. This detailed methodology outlines a systematic approach to exploring how loose parts media can impact the cognitive development of young children, providing a foundation for further research and practical applications in educational settings.

RESULTS

Linguistic Abilities of Children Aged 5 - 6 Years

Based on the results of observations conducted by researchers, it was found that the activities carried out by teachers were directed at efforts to stimulate children's linguistic abilities. The activities given to children had been well designed by teachers the day before and were relevant to the planning that had been prepared. However, even though these steps were appropriate, not all non-formal PAUD institutions that serve children aged 5-6 years utilize loose parts media in stimulating their students' linguistic abilities. Of the four institutions serving children aged 5-6 years, only one institution has implemented the use of loose parts media, namely KB Shafiya Smart School. The other three institutions, namely TPA Tri Putra, PP Qiroati Hidayatul Mubtadiin, and KB Bintang Kecil, have not used this method in their learning.

The use of loose parts media at KB Shafiya Smart School showed significant results. It was seen that most of the children at the institution were able to tell stories, which showed an increase in their vocabulary. The children also appeared to be able to answer questions well, and understand the instructions given. They could identify sounds, recognize letters and words, and read simple words. In addition, children are also able to write their own names using various media provided. From these findings, it can be concluded that the application of loose parts media in learning can provide a positive contribution to the development of children's linguistic abilities. Other Non-Formal PAUD institutions are expected to consider using this method to improve the quality of education they provide, especially in stimulating the linguistic abilities of early childhood children.

Loose Parts Media Management Can Improve the Linguistic Development of Children Aged 5-6 Years

The use of loose parts media in learning at non-formal PAUD Wonosobo District has been proven effective in improving the language skills of children aged 5-6 years. The definition of management, according to Imron Fauzi (2012: 36), is the science and art of managing human resources and other resources

effectively and efficiently to achieve certain goals (Al Hamdani, 2022). Meanwhile, learning management focuses on understanding, improving, and implementing well-managed teaching programs.

Based on the results of observations and data analysis, it is concluded that the implementation of learning management using loose parts media has a positive impact on the development of children's language skills. The loose parts media used include various materials that are easily found around the school environment, such as plastic, stones, and other natural materials, which can be arranged and disassembled according to children's creativity. These materials allow children to play and create independently, which in turn stimulates the use of language through various interactive activities.

As shown by Izzatulummah's (2022) research which states that playing loose parts can effectively develop fine motor skills in TK 'Aisyiyah Bustanul Athfal II, Probolinggo City, the results of this study also show that loose parts play an important role in developing children's linguistic abilities in non-formal PAUD, Wonosobo District (Izzatulummah et al., 2022). One way this media improves language skills is by providing opportunities for children to interact and talk with their friends. When children play with loose parts, they often need to give instructions and explain what they are doing, which encourages them to use language more often.

The role of teachers in this process is also very important. Teachers can use loose parts media to motivate children to speak more by asking open-ended questions and asking them to explain their actions. For example, teachers can ask, "What are you doing with this bamboo?" or "What kind of trash can you make with this wooden block?" These kinds of questions encourage children to think and speak, thus improving their language skills in a variety of contexts.

In addition, children's creativity is also encouraged through the use of loose parts, which then improves their language skills. When children create with the materials around them, they often have to use language to explain their ideas or ask for help from friends. This gives children the opportunity to practice using language in more creative and interesting contexts.

Examples of activities that can be done include making simple building structures such as houses, buildings, or trash cans with loose parts provided by the teacher. In this process, children talk and interact with their friends or with the teacher, describing their ideas through the language they use. This activity not only strengthens children's language skills but also improves their social interaction and creativity.

Problems and solutions for learning with loose parts media to improve linguistic abilities of students in the 5-6 year age group

The use of loose parts media in early childhood learning has been proven effective in supporting the development of language, creativity, and critical thinking skills of children aged 5-6 years (Harun & Rahardjo, 2022). Loose parts are materials that are open, can be separated, and reassembled, both from nature and synthetic materials (Wahyuningsih et al., 2020). Through the use of loose parts, children can learn and play according to their ideas and imagination, thus encouraging the development of their linguistic abilities and creativity. In the

context of learning in non-formal PAUD in Wonosobo District, loose parts media has been applied as a strategy to improve children's linguistic abilities. The use of this media allows children to play and learn independently with materials that are easily found in their environment. For example, children can use objects such as twigs, shells, used plastic, and metal to make unique and meaningful creations. Through this activity, children are encouraged to think critically and creatively, and increase their independence.

One of the advantages of loose parts media is its ability to train children's social and emotional skills through interaction with their surroundings (Afika & Wathon, 2023; Lismayani et al., 2023). When children play with loose parts, they often need to communicate with their friends to share ideas, give instructions, or ask for help. This provides an opportunity for children to practice their language skills in a real social context. In addition, this interaction also helps children develop effective communication skills, which are important for their social and emotional development. The strategy of using loose parts media to improve the linguistic skills of children aged 5-6 years involves arranging a good learning space and managing effective teaching (Farida, 2020). Arranging the right play equipment and materials is essential to creating an optimal learning environment. In addition, teachers must have the ability to manage the class well, so that children can play and learn optimally. Teachers also need to actively motivate children to talk more by asking open-ended questions and stimulating discussions among them.

Although loose parts learning can be done online, especially during the pandemic, its effectiveness is still proven. Even in an online setting, children can continue to play and learn independently using materials prepared by parents or teachers at home. In this case, loose parts play an important role in stimulating children's creativity, which in turn also helps improve their linguistic abilities. The use of loose parts in linguistic learning can help children develop speaking and imagination skills. Children often use words to describe what they do with loose parts, such as "building," "combining," or "destroying." This helps them enrich their vocabulary and improve their language skills. In addition, by using loose parts, children can be creative and imagine different scenarios, which allows them to use language in more complex and creative contexts. However, the implementation of the loose parts method in non-formal PAUD in Wonosobo District still faces several obstacles. One of the main challenges is the lack of adequate resources and infrastructure. Many early childhood education institutions do not have sufficient facilities to support the optimal use of loose parts. In addition, awareness and knowledge about the benefits of loose parts among teachers and parents are still limited. Many teachers do not fully understand how to use loose parts effectively in learning, so further training and socialization are needed to improve their understanding. Another obstacle is the lack of support from institutions in implementing the loose parts method. Some institutions may not have clear policies on the use of loose parts in learning, which causes non-uniformity in its implementation. In addition, systematic

evaluation and assessment of learning activities using loose parts are also lacking, making it difficult to measure their effectiveness accurately. Parental participation is also an important factor in the success of implementing loose parts. Unfortunately, not all parents understand the importance of supporting children's play and learning activities with loose parts at home. To overcome this problem, there needs to be better communication between teachers and parents, so that parents can be more involved in supporting their children's language development through the use of loose parts. However, with adequate support from local governments and ongoing technical guidance, these obstacles can be overcome. The government has provided financial assistance and resources to improve school facilities and purchase the necessary loose parts materials. In addition, technical guidance activities in the implementation of the independence curriculum in PAUD have also been carried out to improve the quality of education.

The results of the study showed that the use of loose parts media in learning is very effective in improving the language skills and creativity of children aged 5-6 years. In some cases, children showed a significant increase in their creativity, with indicators such as fluency and originality increasing. Although the originality indicator is still relatively low because children tend to imitate their friends, this shows the great potential that loose parts have to develop children's creativity if applied consistently. In addition to linguistic development, the use of loose parts has also been shown to improve children's physical motor skills. Children who use loose parts in learning show progress in fine and gross motor skills, because they have to manipulate these objects to create various shapes and structures. Thus, loose parts are not only beneficial for language development, but also for other aspects of development. The application of loose parts in non-formal PAUD in Wonosobo District has shown positive results, although there are still some obstacles that need to be overcome. With the right support and ongoing training, loose parts can be a very effective learning method to improve children's language skills and creativity. Therefore, it is important for all parties, including teachers, parents, and the government, to work together to support the implementation of loose parts in learning. With increased awareness and adequate support, loose parts can be a very useful tool in supporting the development of language, creativity, and critical thinking skills of early childhood. Through consistent use and supported by an optimal learning environment, loose parts can make a significant contribution to the quality of early childhood education in Wonosobo District.

DISCUSSION

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CONCLUSIONS AND RECOMMENDATIONS

This study produced several important conclusions related to the linguistic development of children aged 5-6 years in Non-Formal PAUD, Wonosobo District. First, at this age, children are able to express their desires and dislikes through speaking skills. Indicators of language development include the ability to understand commands, repeat complex sentences, understand game rules, and enjoy reading activities. Second, the application of learning management using loose parts has been shown to have a significant impact on the linguistic abilities of children in this age group. This method helps children to develop language skills in a broader context, such as repeating sentences, understanding commands, and talking about their experiences. This was clearly seen in one of the four institutions that successfully planned, implemented, and evaluated the loose parts method well, which showed a positive impact on children's linguistic abilities. Third, there were several obstacles in the implementation of the loose parts method, including limited funds to provide the necessary materials and lack of information from related agencies regarding learning management training. The proposed solution includes the allocation of BOSP funds to purchase loose parts materials and following technical guidance for educators.

FURTHER STUDY

This study has several limitations that need to be considered, because they can affect the validity and reliability of the results obtained. First, this study uses qualitative methods and primary data collected through in-depth interviews. This method has the advantage of digging up in-depth and detailed information, but the results are highly dependent on the honesty and openness of the informant in providing answers. This dependence poses a risk that if the informant is not completely honest or open, the research results can be distorted. Second, the research results are also highly dependent on the researcher's interpretation of the implied meaning in the interview. Because interpretation is subjective, there is a possibility of bias in data analysis. This bias can come from the researcher's understanding that may not fully capture the meaning intended by the informant, or from the researcher's tendency to interpret data according to his or her own assumptions or expectations. To reduce the potential for bias, a triangulation process is carried out, both source triangulation and method triangulation. Source triangulation is carried out by verifying data from various informants and comparing it with the results of other studies. This step aims to ensure that the data obtained is consistent and reliable. While method triangulation involves the use of several data collection methods, such as in-depth interviews and direct observation. By combining these various methods, it

is hoped that the bias that may arise from one method can be minimized, so that the research results become more valid and comprehensive. However, it is recognized that the potential for bias cannot be completely eliminated, and the results of the study must be viewed in the context of these limitations. Therefore, the findings of this study should be considered carefully and not considered as absolute truth, but as one valuable perspective in understanding the phenomenon being studied.

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