



Optimizing the Ability to Recognize Letters of Children Aged 4-5 Years Through Letter Card-Based Learning

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ABSTRACT

The ability to recognize letters is one of the important aspects in the development of early childhood literacy which is the basis for the ability to read and write at the next level of Education. The results of initial observations at TP Cempaka cikakak show that the ability to recognize letters of children aged 4-5 years is still low because learning uses more conventional methods and has not utilized learning media that are interesting and in accordance with the characteristics of children. This study aims to describe the application of letter card media and analyze the improvement of the ability to recognize letters of children aged 4-5 years through the use of these media. The study used the method of classroom Action Research (PTK) with Kemmis and McTaggart model which was carried out in two cycles, including the stages of planning, implementation of action, observation, and reflection. The study subjects were 13 children aged 4-5 years at TP Cempaka Cikakak. Data collection techniques were conducted through observation, interviews, and documentation, while data analysis used quantitative and qualitative descriptive techniques. The results showed that children's ability to recognize letters increased gradually. The average achievement increased from 26.92% in the pre-action phase to 52.12% in cycle I and reached 80.58% in Cycle II. The improvement was seen in the ability of children to recognize letter symbols, name letters, distinguish letter shapes that are almost the same, and connect letters with the initial sound of words. The results showed that the media letter cards effectively improve the ability to recognize letters of children aged 4-5 years and can be used as an alternative learning media to support the development of early literacy in early childhood education.

Early Childhood, Letter Recognition Skills, Letter Card Media, Early Literacy.

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INTRODUCTION

The ability to recognize letters is one of the important aspects in the development of early childhood literacy which is the basis for reading and writing skills at the next level of Education. Mastery of this ability helps children recognize letter symbols, distinguish different letter shapes and those

that have similarities, and connect letters with sounds. This ability plays a role in supporting language development and preparing children to follow the learning process in elementary school. Therefore, the development of the ability to recognize letters needs to be done through learning activities that are in accordance with the characteristics of early childhood, namely by applying the approach of learning while playing and utilizing learning media that are concrete, interesting, and fun. (Susanto, 2021) states that letter recognition is an important stage in language development because it is the foundation for the formation of more complex literacy skills. In line with this opinion, (Arsyad, 2017) explained that the use of appropriate learning media can increase students' attention, motivation, and understanding of the material learned.

Although the ability to recognize letters is an important aspect in the development of early childhood literacy, the results of observations in the field show that this ability is still a challenge in the learning process in various early childhood education institutions. Similar conditions were found at TP Cempaka Cikakak, where early observations showed that most children aged 4-5 years have not been able to recognize letter symbols precisely, name letters, distinguish letters that have a similar shape, such as b and d or p and q, and connect letters with the initial sound of words. The results showed that the average ability to recognize children's letters reached 26.92%. A total of 10 children (77%) are in the category of undeveloped (BB), while 3 children (23%) are in the category of developing (MB). No child has reached the category of developing as expected (BSH) or developing very well (BSB). The findings indicate that children's letter recognition skills are still at a low level so that more effective learning efforts and more optimal stimulation are needed to improve these abilities.

The low ability to recognize children's letters is influenced by various factors related to the learning process. The observation showed that learning activities are still dominated by teachers through the lecture method, while the use of learning media that are interesting and in accordance with the characteristics of children is still limited. This condition causes learning to be less varied so that children easily feel bored and less actively involved in learning activities. In fact, early childhood is easier to understand the concept when obtaining a concrete learning experience, interactive, and packaged in the form of play activities. Therefore, learning innovations are needed that are able to create a fun learning atmosphere, increase children's active participation, and facilitate the letter recognition process more effectively.

One of the Learning media that can be used to improve the ability to recognize early childhood letters is the letter card media. This medium provides

opportunities for children to learn directly through various activities, such as observing, holding, matching, grouping, and mentioning letter symbols. These activities make the learning process more concrete, interactive, and meaningful in accordance with the characteristics of early childhood learning. In addition, the media of letter cards can be applied through various educational games that encourage the active involvement of children during the learning process. Thus, the use of letter card media has the potential to increase the ability to recognize letters while creating a learning atmosphere that is more interesting, fun, and centered on children's activities.

Various previous studies have shown that the use of letter card media contributes positively to improving the ability to recognize letters in early childhood. (Firdaus, 2019) suggests that the application of letter card media through play activities can help children recognize letter symbols more effectively. The findings are supported by (Paridah et al., 2020) which states that the medium of letter cards not only improves early literacy skills, but also encourages children's active participation during the learning process. Furthermore, (Astuti et al., 2021) explained that the use of letter cards as a visual medium helps children distinguish letter shapes that have similarities. The results of the study (Udju et al., 2022) also showed that the use of letter card media was able to increase learning motivation as well as the ability to recognize early childhood letters. In line with these findings, (Julia et al., 2022) concluded that game-based learning by utilizing letter card media has a positive impact on language development and early literacy skills of children.

Although the effectiveness of letter card media in improving the ability to recognize early childhood letters has been widely reported in various studies, most studies are still oriented to measuring learning outcomes without outlining the process of improving learning that is done gradually through classroom Action Research (PTK) approaches. In addition, research that systematically describes the development of the ability to recognize letters in each action cycle based on the category of undeveloped (BB), began to develop (MB), developed as expected (BSH), and developed very well (BSB) is still relatively limited, especially in children aged 4-5 years in TP Cempaka Cikakak. This condition shows that there is still a research gap, so research is needed that not only measures the improvement of learning outcomes, but also explains the process of continuous improvement of learning through each cycle of action.

Based on these research gaps, the novelty of this study lies in the application of letter card media through the Class Action Research (PTK) approach of Kemmis and McTaggart models to improve the ability to recognize letters of children aged 4-5 years at TP Cempaka Cikakak. This study not only

focuses on the achievement of learning outcomes, but also provides an overview of the learning improvement process that is carried out systematically through the stages of planning, implementation of action, observation, and reflection in each cycle. Thus, this study produces empirical information about the effectiveness of letter card media while providing alternative learning strategies that can be applied by early childhood teachers in improving the ability to recognize children's letters gradually and continuously.

Based on the description, This study aims to analyze the application of letter card media in the learning process and assess the improvement of the ability to recognize letters in children aged 4-5 years at TP Cempaka Cikakak. This study uses the approach of classroom Action Research (PTK) with Kemmis and McTaggart models implemented in two cycles. Each cycle includes four stages, namely planning, implementation of action, observation, and reflection as a basis for improving learning in the next cycle. Data collection was conducted through observation, interview, and documentation techniques, while data analysis used quantitative and qualitative descriptive approaches to describe changes in children's letter recognition skills during the implementation of actions. The results are expected to contribute to the development of early literacy learning in early childhood education, as well as a reference for teachers in choosing and implementing effective learning media to improve children's letter recognition skills.

RESEARCH METHODS

This study uses the method of classroom Action Research (PTK) with Kemmis and McTaggart models implemented in two cycles. Each cycle consists of four stages, namely planning (planning), implementation of action (action), observation (observation), and reflection (reflection). The implementation of the cycle is carried out on an ongoing basis, where the results of reflection in each cycle become the basis for drawing up corrective actions in the next cycle. This study uses descriptive quantitative and qualitative approaches to analyze the improvement of children's letter recognition skills and describe the learning process that occurs during the implementation of the action.

This research was carried out at TP Cempaka Cikakak, Sukabumi Regency, in the even semester of the 2025/2026 academic year. The subjects of the study consisted of 13 children aged 4-5 years, both male and female, all of which were used as subjects using saturated sampling technique (total sampling) because the population is relatively small. In the implementation of the study, the class teacher acts as the executor of the action, while the

researcher is responsible for planning, observing, collecting data, and analyzing the results of the study.

The action applied in this study is the use of letter card media as a learning tool to improve the ability to recognize children's letters. The Media is implemented through various play activities that include introducing letter symbols, naming letters, matching letters with pictures, finding letter pairs, distinguishing letters that have similar shapes, and connecting letters with the initial sound of words. All learning activities are designed according to the characteristics and stages of early childhood development so as to encourage active participation, increase learning motivation, and make it easier for children to understand the concept of letter recognition.

Data collection in this study was conducted through observation, interviews, and documentation. Observation sheet is used to measure the ability to recognize the letters of children based on indicators that have been set. Interviews were conducted with class teachers to obtain information about the initial conditions of learning, the obstacles encountered, as well as the development of children's abilities during the implementation of actions. Meanwhile, documentation in the form of photos of learning activities and other supporting documents are used as evidence of the implementation of actions as well as to strengthen the validity of research results.

Observation instruments in this study were developed based on indicators of the ability to recognize letters of children aged 4-5 years, which include the ability to recognize letter symbols, name letters, show letters according to instructions, distinguish letters that have similar shapes, and connect letters with the initial sound of words. To ensure the suitability of the instrument with the purpose of research and characteristics of early childhood development, the instrument first through the content validation process (content validity) by asking for input from the supervisor and class teacher before being used in data collection.

Data analysis in this study using descriptive quantitative and qualitative approaches. Quantitative Data obtained from the observation of the ability to recognize letters of children, then processed in the form of scores and percentage of achievement in each cycle by using the formula:

$$P = F/N \times 100\%$$

Description:

P = percentage of achievement

F = score obtained

N = maximum score

The percentage obtained is further classified into four categories of development, namely undeveloped (BB), began to develop (MB), developed as expected (BSH), and developed very well (BSB). Meanwhile, qualitative data obtained through observation, interviews, and documentation were analyzed using interactive analysis techniques that include data reduction, data presentation, and conclusion, so as to provide a comprehensive picture of the learning process and support the interpretation of research results.

The validity of the data in this study is maintained through triangulation techniques, namely by comparing information obtained from observations, interviews, and documentation. The application of triangulation aims to improve the accuracy, consistency, and credibility of the data obtained during the study. In addition, reflection activities at the end of each cycle are used to evaluate the implementation of actions, identify obstacles that arise, and formulate learning improvements that will be applied in the next cycle.

This study has some limitations, including the number of subjects involving only 13 children aged 4-5 years in one early childhood education institution and the implementation of research is limited to two cycles. Therefore, the results of the study cannot yet be widely generalized to different contexts. Nonetheless, the findings of the study provide empirical evidence that the application of letter card media can improve the ability to recognize early childhood letters. The results of this study can also be a reference for early childhood education teachers in developing early literacy learning and become the basis for further research with a larger number of subjects, more diverse research locations, and longer implementation times.

RESULTS AND DISCUSSION

This class action research was carried out in two cycles to improve the ability to recognize letters of children aged 4-5 years through the application of letter card media at TP Cempaka Cikakak. Each cycle follows the stages of Kemmis and McTaggart's model, namely planning, action, observation, and reflection. The results showed that the application of letter card media has a positive impact on improving the ability to recognize children's letters. The improvement is seen gradually in each cycle, which is indicated by the increase in the percentage of achievement in the ability to recognize letters after the learning action is given.

The observation results in the pre-action stage showed that the ability to recognize letters of children is still in the low category with an average achievement of 26.92%. Of the 13 children who were the subjects of the study, 10 children (77%) were in the category of undeveloped (BB) and 3 children

(23%) were in the category of developing (MB). There are no children who have reached the category of developing as expected (BSH) or developing very well (BSB). The findings indicate that the learning process before giving the action has not been able to provide optimal stimulation to the development of children's letter recognition skills. This condition is thought to be influenced by teacher-centered learning, the use of a more dominant lecture method, and the use of less varied learning media. As a result, the involvement of children in learning activities is still low so that their attention and interest in learning to recognize letters has not developed optimally.

The results of the implementation of actions in the first cycle showed an increase in the ability to recognize children's letters after the application of letter card media in the learning process. The average achievement of the ability to recognize letters increased to 52.12%, higher than the conditions in the pre-action stage. During learning activities, children began to show enthusiasm and better involvement in various activities using letter card media, such as naming letters, matching letter symbols, finding letter pairs, and showing letters according to teacher instructions. However, the observation results showed that most children are still in the category of developing start (MB) by 62%, while 38% of children have reached the category of developing as expected (BSH). These results indicate that the application of letter cards media began to have a positive impact on improving the ability to recognize children's letters. However, the achievement in the first cycle has not met the indicators of research success, so it is necessary to refine the learning strategy through action in the second cycle.

The implementation of actions in the second cycle focused on improving learning strategies through a variety of activities using letter cards, providing wider opportunities for children to practice independently, positive reinforcement, and individual assistance for children who still have difficulty recognizing letters. These improvements provide more optimal results, shown by the increase in the average achievement of the ability to recognize letters to 80.58%. The observation results showed that all children had achieved the development indicators set, with 54% in the category of developing as expected (BSH) and 46% in the category of developing very well (BSB). There are no more children who are in the category of undeveloped (BB) or beginning to develop (MB). These findings indicate that the application of letter card media is able to create a more concrete, interactive, and fun learning experience so that children more easily recognize letter symbols, distinguish similar letter shapes, and correctly name letters. Thus, the indicators of research success has been achieved in the second cycle.

To give an idea of the development of children's letter recognition skills at each stage of the study, a comparison of the average percentage of achievement is presented in Table 1.

Chart 1.

Comparison of children's ability to recognize letters at each stage of the study

Stage	Percentage
Preview	26,92%
Cycle I	52.12%
Cycle II	80.58%

Based on Table 1, it can be seen that the child's ability to recognize letters gradually increases with each cycle of actions. The average percentage of achievement increased from 26.92% in the pre-action stage to 52.12% in cycle I, then again increased to 80.58% in Cycle II. Overall there was an increase of 53.66 percentage points from the initial condition to the end of the study. The results showed that the application of letter cards media was able to significantly improve the ability to recognize children's letters. This increase indicates that learning that utilizes concrete media and play activities provide a more meaningful learning experience, so that children more easily recognize letter symbols, distinguish similar letter shapes, and connect letters with the initial sound of words. Thus, the letter card media proved effective in improving the ability to recognize letters of children aged 4-5 years at TP Cempaka Cikakak.

The findings of this study indicate that the application of letter card media can increase children's involvement in the learning process of recognizing letters. During the activity, the child not only acts as a receiver of information, but is also actively involved through various activities, such as observing, holding, matching, grouping, and mentioning letter symbols. The hands-on learning experience helps children understand letter shapes, distinguish letters that have similarities, and connect letter symbols with the initial sound of words more effectively. This condition shows that the use of concrete and interactive media can create a more meaningful learning process in accordance with the characteristics of early childhood learning. The findings are in line with the opinion (Arsyad, 2017) which states that learning media serves to increase attention, motivation, and learning effectiveness because it is able to present a more real learning experience. In addition, the results of this study also support the theory (Susanto, 2021) which explains that the ability to recognize letters will develop optimally if children receive interesting

stimulation, carried out repeatedly, and adjusted to the child's developmental stage.

The findings of this study are also in line with various previous studies that have shown the effectiveness of letter card media in developing early childhood literacy skills. (Firdaus, 2019) reported that the use of letter card media can improve children's ability to recognize letter symbols through fun play activities. Furthermore, (Paridah et al., 2020) revealed that the application of letter cards was able to increase children's participation and active involvement during the early literacy learning process. Research results (Astuti et al., 2021) also showed that the media of letter Cards is effective in helping children distinguish letter shapes that have similarities. The findings are reinforced by research (Udju et al., 2022) who concluded that the use of letter card media not only increases learning motivation, but also has a positive effect on the ability to recognize early childhood letters. In addition, (Julia et al., 2022) states that game-based learning by utilizing letter card media provides better results than conventional learning. The similarity of the results of the study reinforces the finding that the letter card media is one of the effective learning alternatives to stimulate the ability to recognize letters and support the development of early childhood literacy.

Although this study shows positive results, there are some limitations that need to be considered. The study involved only 13 children aged 4-5 years at one institution, namely TP Cempaka Cikakak, so the findings obtained cannot be generalized to a wider population. In addition, the implementation of research that is limited to two cycles has not been able to provide an overview of the sustainability of improving the ability to recognize letters in the long term. This study also has not compared the effectiveness of letter card media with other learning media. Therefore, further research is recommended to involve a larger number of subjects, carried out over a longer period, and test the effectiveness of letter card media with various other learning media in order to obtain more comprehensive results and have higher generalization power.

The implications of this study indicate that the letter card media can be used as an effective alternative learning media to improve the ability to recognize letters in early childhood. The application of this media is able to create a learning process that is more interactive, fun, and centered on children's activities, so as to increase their involvement and interest in learning. Therefore, early childhood teachers are advised to develop various variations of game-based learning activities using letter card media that are tailored to the characteristics and needs of children's development. In addition to providing practical benefits for teachers in optimizing early literacy learning, the results of

this study are also a reference for further research development. The next study is expected to involve a larger number of subjects, carried out over a longer period of time, and compare the effectiveness of letter card media with other learning media. Thus, a more comprehensive understanding of effective strategies for developing early childhood literacy skills will be obtained.

CONCLUSION

The application of letter card media proved effective in improving the ability to recognize letters of children aged 4-5 years at TP Cempaka Cikakak. The results showed an increase in the ability to recognize letters gradually, marked by an increase in the average percentage of achievement from 26.92% in the pre-action stage to 52.12% in cycle I and 80.58% in Cycle II. The increase showed that the use of media packaged letter cards through play activities was able to increase children's involvement in learning so that they could more easily recognize letter symbols, name letters, distinguish letter shapes that have similarities, and connect letters with the initial sound of words. These findings indicate that the medium of letter cards not only serves as a learning tool, but also as an effective strategy in creating active, fun, and child-centered learning. Therefore, the letter card media can be recommended as an alternative to early literacy learning in early childhood education and as a reference for teachers in developing innovative learning activities to improve children's letter recognition skills.

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