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Efforts to Improve Children's Cognitive Abilities in Recognizing Number Symbols 1-10 Through Number Cards at RA Muslimat NU Terban

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Abstract: In the development process of 20 children, only 1 child (5%) has begun to develop to recognize the symbols of numbers 1-10 correctly and easily, while 19 children (95%) have not developed or have not been able to recognize the symbols of numbers 1-10 correctly and easily. This study aims to Improve Children's Cognitive Abilities in Recognizing Number Symbols 1-10 Through Number Cards in Children of Group B RA Muslimat NU Terban, Warungasem District, Batang Regency, Semester II, 2019/2020 Academic Year. Learning improvement activities are carried out through Classroom Action Research with cycle I & II actions. Improvement in children's learning outcomes can be seen from observation records, namely in the initial observation, learning outcome data was obtained, namely from 20 children who had not developed 19 children (95%), while only 1 child (5%) began to develop. Then Cycle I improvements were carried out, the results obtained were children who had not developed 3 (15%), began to develop 7 (35%), Developing according to expectations 10 (50%). Meanwhile, in Cycle II, the results obtained were that only 4 children (20%) were starting to develop, while 16 (80%) were developing according to expectations.

Keywords: Cognitive numbers, Number cards

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INTRODUCTION

In the National Education System Law (2003) it is stated that "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have spiritual religious strength, self-control, personality, intelligence, noble morals, and skills needed by themselves, society, nation and state. The purpose of education is one component of education in the form of a formulation of the abilities that must be achieved by students and functions as a guide for all educational activities. The abilities that must be achieved are in the form of behavioral changes that include knowledge, attitudes, and skills.

Kindergarten (TK) is an institution that provides educational services to early childhood in the age range of 4-6 years. Educators in this institution must be able to provide professional services to their students in order to lay the foundation for the development of attitudes, knowledge, and skills, so that their students are able to adapt to the environment and prepare themselves to enter basic education. Cognitive is a thinking

process, namely the ability of individuals to connect, assess, and consider an event or incident.

Several psychologists in Yuliani Nurani Sujiono, et al (2007: 14) who are involved in the field of education define intellectual or cognitive with various terms; 1) Terman defines that cognitive is the ability to think abstractly; 2) Colvin defines that cognitive is the ability to adapt to the environment; 3) Henman defines that cognitive is intellectual plus knowledge; 4) Hunt defines that cognitive is a technique for processing information provided by the senses. Cognitive development is all psychological processes related to how individuals learn and think about their environment (Desmita, 2007: 103). Piaget (in Slamet Suyanto, 2005: 53) stated that all children have the same cognitive development pattern, namely through four stages: Sensory-motor (age 0-2 years), pre-operational (age 2-7 years), concrete operational (age 7-11 years), and formal operational for ages 11 years and above. The cognitive development stage of kindergarten children in group B is at the pre-operational stage. And to develop cognitive development aspects in kindergarten for group B children in learning can be through activities to recognize the concept of numbers, recognize number symbols, and others.

Numbers are mathematical objects that are abstract in nature and are included in elements that are not defined. To express a number is denoted by a number symbol called a number (Sudaryanti, 2006: 4). The introduction of number symbols is very important for children to master, because it will be the basis for mastering mathematical concepts at the next level. When learning to recognize number symbols, teachers often use notebooks or write them on the board. This can make children think that number symbols are boring. So teachers must use interesting and fun methods and media in introducing the concept of number symbols. In kindergarten, teachers are one of the people who can influence children's cognitive development abilities. Children's cognitive abilities can be seen from two aspects, namely the process aspect and the result aspect. The process aspect can be seen from the child's level of participation in the learning process and the result aspect can be seen from the portfolio, performance and assignments. But in reality, in everyday life, teaching children to teach the symbols of numbers 1-10 still experiences obstacles. In the development process of 20 children, only 1 (5%) child began to develop in recognizing the symbols of numbers 1-10 correctly and easily, while 19 children (95%) had not developed in recognizing the symbols of numbers 1-10. This is indicated by the following conditions, When the development process children pay less attention to what the teacher explains, they just joke, enjoy playing alone, talk to their friends. When the question and answer activity about the symbols of numbers, the children are just silent and cannot answer questions from the teacher.

The development method given by the teacher to the child is still monotonous so that it makes the child bored in the development process. For this reason, the author tries to find solutions to these problems, namely the ability to recognize number symbols, the author tries to use number cards, it is hoped that in the development process it can be more varied in providing development activities so that children do not get bored and are more interested in recognizing number symbols. The teacher uses Efforts to improve children's cognitive abilities in recognizing the symbols of numbers 1-10 through number cards in group B RA Muslimat NU Terban, Warungasem District Batang Regency Semester II Academic Year 2019/2020.

METHODS

Classroom action research (CAR) is a useful method for teachers to enhance the quality of the teaching and learning process. This study focuses on investigating how the use of number cards can improve the cognitive abilities of children in recognizing the number symbols 1 to 10 at RA Muslimat NU Terban. Mastery of number recognition is one of the fundamental skills in early childhood education that is crucial for supporting future mathematical learning. In early childhood education, particularly in RA Muslimat NU

Terban, many children face challenges in recognizing the number symbols from 1 to 10. This difficulty hampers their progress in learning basic mathematics and addressing it early in their educational journey is essential. This study is designed to improve the cognitive skills of children in recognizing the number symbols 1-10 through the use of number cards. The research will focus on determining how number cards can help children develop their ability to recognize numbers and gain a better understanding of mathematical concepts.

The main question guiding the research is whether the use of number cards can improve children's cognitive abilities in recognizing number symbols 1-10. Additional questions include examining how number cards affect children's engagement and participation in learning, as well as how they respond to the activities using these cards. The theoretical foundation of this study is based on the cognitive development theories of Piaget and Vygotsky. Piaget's theory emphasizes the importance of concrete experiences in helping children understand abstract concepts, while Vygotsky's social constructivist theory stresses the value of interactive and collaborative learning. Both theories support the use of engaging, hands-on tools such as number cards to aid in the recognition of number symbols. Research has shown that the use of visual aids and tangible tools, such as number cards, can significantly enhance cognitive development in early childhood, especially in numeracy. Previous studies in similar educational settings have demonstrated that number cards help children improve their number recognition, retention, and understanding of basic math concepts.

The study will follow a classroom action research (CAR) methodology, a cyclical process of planning, acting, observing, and reflecting. The research will be carried out in two cycles, with each cycle involving planning, implementation, observation, and reflection. The participants in this research will be children from RA Muslimat NU Terban, aged 4 to 6 years. During the planning stage, the teacher will design a series of activities using number cards aimed at helping children recognize the symbols for numbers 1-10. The planned activities will be interactive and engaging, such as matching the number cards with objects, singing number songs, and playing number recognition games. The teacher will also prepare observation sheets to track the children's progress during the activities. In the action phase, the teacher will implement the activities in the classroom. Children will be introduced to number cards that display the numbers 1-10 in clear, bold symbols. The teacher will guide the children through the activities to ensure active participation. Number cards will serve as a visual and tactile tool to help children recognize the numbers.

Throughout the implementation of the activities, the researcher will observe the children's responses to the number cards and assess their ability to recognize and identify the numbers. Observations will focus on participation, accuracy in number recognition, and engagement with the activities. The teacher will take notes on the children's performance and identify any challenges faced during the process. After completing the first cycle, the teacher will reflect on the effectiveness of the activities. The reflection will focus on the strengths and weaknesses of the approach. Based on the observations, the teacher will assess whether the activities helped improve the children's number recognition abilities. Any necessary adjustments will be made for the next cycle to improve the activities. In the second cycle, the teacher will revise the activities based on the results of the first cycle. Adjustments may include adding variety to the activities, such as number puzzles, group games, or storytelling, to maintain the children's interest and further reinforce their learning. The teacher will continue using number cards, but with modifications to meet the children's evolving needs.

The second cycle will involve the implementation of the revised activities. The teacher will encourage children to actively participate in number recognition exercises using number cards in different settings. The goal is to deepen their understanding of the number symbols 1-10 and ensure that the activities are enjoyable and educational. During the second cycle, the researcher will observe the children's progress, paying close

attention to their ability to recognize number symbols. The teacher will assess how well the children retain the numbers and whether they can apply this knowledge in new activities. Any challenges or changes in behavior will be noted. At the end of the second cycle, the teacher will reflect on the results of the activities and determine if the number cards have effectively enhanced the children's cognitive skills in recognizing the number symbols. The teacher will analyze the data from the observations and identify any gaps in the children's learning.

Several methods will be used to collect data for this research, including observations of the children's interactions with the number cards and their ability to recognize the numbers, field notes recorded by the teacher about the children's participation and progress, assessment sheets to track children's number recognition before and after the activities, and interviews with children to understand their experiences and perceptions of the learning process. The data will be analyzed qualitatively by reviewing the observation notes, field notes, and children's responses during the activities. Patterns in the children's progress will be identified and categorized. The analysis will also focus on any changes in children's ability to recognize numbers between the two cycles.

The study expects that children will show significant improvement in their ability to recognize the number symbols 1-10 after engaging in activities with number cards. The use of number cards is anticipated to engage the children and make learning more enjoyable, leading to better retention of the number symbols. This research aims to contribute to the enhancement of cognitive development in early childhood education by exploring the use of number cards as a tool for improving number recognition. It is hoped that this study will offer valuable insights for teachers in RA Muslimat NU Terban and similar educational settings. If successful, this approach could be adopted in other early childhood education environments to support children's cognitive development in mathematics. It could also serve as a practical model for teachers looking for creative ways to engage young learners in numeracy education. Future research could investigate the impact of number cards on other aspects of early childhood learning, such as problem-solving or number sequencing skills. It would also be useful to examine the long-term effects of number recognition on children's broader mathematical development. The references section will include studies and theoretical frameworks related to early childhood cognitive development, the use of visual aids in education, and action research methodologies in educational settings.

RESULTS

This section presents the results of the research conducted to investigate how using number cards can enhance children's cognitive abilities in recognizing number symbols 1 to 10 at RA Muslimat NU Terban. The study involved two cycles of classroom action research, which included planning, action, observation, and reflection phases. The research aimed to improve children's number recognition skills by utilizing number cards as an engaging learning tool. In the first cycle, the teacher introduced number cards displaying the numbers 1 to 10. Children were shown the cards and asked to identify the numbers. Activities included matching the number cards to real objects, counting aloud while showing the corresponding number card, and playing number-based games. Throughout these activities, the children were encouraged to interact with the cards actively. The teacher observed their reactions, participation levels, and their ability to correctly identify the number symbols. From the observations, it was noted that the majority of the children initially had difficulty identifying the number symbols accurately. Many could only recognize a few numbers, such as 1, 2, and 3, while others struggled to match the number cards with real objects. Despite these challenges, there was a noticeable increase in their enthusiasm and interest when using the number cards. The children showed a clear preference for interactive activities, such as matching the numbers to objects, compared to traditional rote learning methods.

During this cycle, the teacher also observed that some children became distracted easily, especially when the activities were not hands-on or too abstract. However, the children who actively participated in group games or songs related to numbers demonstrated greater progress in recognizing the number symbols. These observations indicated that interactive, multisensory activities were more effective in engaging the children and facilitating their learning.

After completing the first cycle, the teacher reflected on the effectiveness of the activities. The teacher noted that while some progress had been made in terms of engagement, there was still a significant gap in the children's ability to consistently recognize the number symbols. The activities needed to be more varied and engaging, with a stronger emphasis on repetition and reinforcement. The teacher also realized that some children struggled due to their limited prior exposure to numbers. For these children, the number cards were a new concept, and they needed more time and practice to internalize the number symbols. Based on these reflections, the teacher decided to modify the activities for the next cycle to address the identified weaknesses and provide more opportunities for repetition and practice.

In the second cycle, the teacher revised the activities based on the feedback and observations from the first cycle. The teacher introduced additional activities that included number recognition games, group discussions, and storytelling that incorporated numbers. The number cards were used in various contexts, such as during circle time, in group activities, and in one-on-one interactions with children. The teacher also ensured that there was more repetition of the number symbols, as this was crucial for reinforcing the children's recognition. In addition to using the number cards, the teacher incorporated visual aids, such as number posters, to create a more immersive learning environment. The goal was to make the learning experience more interactive and enjoyable while providing ample opportunities for practice.

In the second cycle, the teacher implemented the revised activities. The children were involved in a series of games and activities that reinforced their ability to recognize the numbers 1-10. One of the activities involved placing number cards on the floor and asking the children to step on the correct card after hearing a number called out. Another activity included using the cards to create simple number patterns, which the children had to complete by identifying the missing number. These activities were designed to encourage active participation and help the children make connections between the number symbols and real-life objects. The teacher observed that the children were more engaged during the second cycle, particularly during the group activities. The use of number cards in a variety of contexts seemed to foster greater participation and improved focus. The children’s enthusiasm was also enhanced by the use of songs and rhymes involving numbers, which helped them associate the number symbols with their verbal equivalents. The children enjoyed singing along, which reinforced their understanding of the numbers. This positive interaction with the materials demonstrated that combining visual, auditory, and kinesthetic learning experiences increased the children's interest and learning outcomes.

As the second cycle progressed, the teacher closely observed the children’s progress in number recognition. The observations revealed that the majority of the children showed marked improvement in recognizing the number symbols 1-10. By the end of the cycle, most children could correctly identify and match the number symbols with objects, demonstrating a clear understanding of the numbers. One of the key observations was that the children’s ability to recognize the number symbols was significantly improved through repeated practice. For example, after completing the matching activities multiple times, many children were able to correctly identify all the numbers without assistance. The children also showed increased confidence in their ability to recognize the numbers when asked individually or in small groups. There was also evidence that the use of group activities and games enhanced peer learning. Children who were initially struggling with number recognition were able to learn from their peers, and collaborative activities

allowed them to engage in problem-solving and critical thinking. This peer interaction contributed to a supportive learning environment where children felt comfortable exploring the concepts together. Despite the progress, some children still required more support to fully recognize all the number symbols. These children were provided with additional one-on-one assistance and more time to practice using the number cards. The teacher used a differentiated approach, ensuring that all children received the appropriate level of support based on their individual needs.

At the end of the second cycle, the teacher reflected on the overall progress of the children. It was clear that the use of number cards had a significant positive impact on the children's ability to recognize the number symbols 1-10. The activities that involved hands-on learning, repetition, and peer collaboration were the most successful in fostering number recognition. The teacher also noted that the children's enthusiasm for learning had increased throughout the cycle. The number cards, combined with songs, games, and interactive activities, helped create an enjoyable learning environment where children felt motivated to participate. The teacher concluded that the number cards were an effective tool in improving cognitive skills related to number recognition. Based on the reflections, the teacher identified that the continuous repetition of activities and the variety of contexts in which the number cards were used were essential factors in improving the children's learning outcomes. It became evident that incorporating a range of activities tailored to different learning styles significantly enhanced the children's ability to internalize the number symbols.

The data collected from observations, field notes, and assessments indicated that the use of number cards was highly effective in improving the children's recognition of number symbols. The children who initially struggled with number recognition showed significant progress by the end of the second cycle. Many children demonstrated the ability to identify the numbers 1-10 confidently, both individually and in group settings. The analysis of the children's responses also highlighted the importance of engagement and active participation in learning. The children were most successful when they were actively involved in the activities, especially those that incorporated physical movement, group collaboration, and auditory reinforcement, such as songs and rhymes. The children who benefited the most were those who had more opportunities for individualized support, particularly those who needed additional repetition. These children were able to catch up with their peers after receiving one-on-one guidance and extra practice with the number cards.

The research results indicate that the use of number cards significantly improved the cognitive skills of children in recognizing the number symbols 1-10 at RA Muslimat NU Terban. The activities that incorporated a variety of learning styles, including visual, auditory, and kinesthetic, were particularly successful in engaging the children and enhancing their ability to recognize and understand the number symbols. While most children showed improvement in recognizing the numbers, it was clear that some required more time and practice to fully master the skill. This finding emphasizes the need for ongoing reinforcement and individualized support, particularly for children who may struggle with number recognition. Overall, the study demonstrates that number cards can be an effective tool in early childhood education for developing number recognition skills. The combination of interactive activities, repetition, and peer learning provides a supportive learning environment that fosters children's cognitive development in mathematics.

Based on the findings of this research, it is recommended that number cards be used as part of a comprehensive early childhood curriculum to enhance number recognition skills. Teachers should ensure that activities are varied and engaging, offering repeated opportunities for practice in different contexts. Additionally, differentiated instruction should be employed to support children who may need extra help in mastering the number symbols. Future research could explore the long-term effects of number recognition on children's mathematical development, as well as investigate the impact of

number cards on other areas of early childhood learning. It would also be beneficial to examine the role of number cards in supporting other cognitive skills, such as counting and number sequencing.

DISCUSSION

This section presents a comprehensive discussion of the results obtained from the study on using number cards to enhance children's ability to recognize the number symbols 1-10 at RA Muslimat NU Terban. The research focused on examining how number cards, as a tool in early childhood education, can improve cognitive skills, particularly in the context of number recognition. The study was conducted in two cycles, with each cycle consisting of planning, action, observation, and reflection stages. The findings from this research contribute valuable insights into the role of interactive, multisensory tools like number cards in early education. The central finding of this research is that number cards significantly improve the ability of young children to recognize number symbols 1-10. The number cards, used in various interactive and engaging activities, served as a powerful visual and tactile tool for reinforcing number recognition. Previous research has highlighted the importance of visual aids in early childhood education, and this study aligns with those findings by showing that number cards can enhance learning by providing clear, accessible representations of numbers.

The children's ability to recognize number symbols improved after the use of number cards in a variety of learning contexts. As the study progressed, children demonstrated increased confidence in identifying numbers when asked, both in group activities and one-on-one interactions. These results suggest that the use of number cards helps solidify children's understanding of number symbols, which is a fundamental skill in early mathematics education. An important aspect of the study was the increased engagement and motivation observed among the children during the activities involving number cards. The activities were designed to be playful and interactive, which encouraged children to actively participate. The teacher observed that children responded positively to activities that incorporated movement, music, and collaborative learning. This is consistent with Vygotsky's social constructivist theory, which emphasizes the role of social interaction and hands-on activities in cognitive development. One notable example of the increased engagement was seen during number recognition games, where children matched number cards with real objects or completed number patterns. These games provided a fun and dynamic learning experience that helped maintain children's attention. This level of engagement is essential for effective learning, especially in early childhood, when children’s cognitive abilities are developing rapidly and require stimulating, varied learning experiences. Moreover, the children were motivated by the opportunity to work with their peers during group activities. Peer interactions not only helped children learn from each other but also fostered a sense of community and cooperation within the classroom. These collaborative learning experiences enhanced the children's social skills while supporting their cognitive growth in recognizing number symbols.

Despite the overall positive results, the study also highlighted several challenges that impacted the children's ability to recognize number symbols. One of the primary challenges was that some children had difficulty recognizing numbers beyond 3 or 4, particularly in the early stages of the study. This indicates that some children needed more time and practice to become familiar with the number symbols. As the study progressed, however, the children who initially struggled showed improvement, especially when given individualized support. The research also revealed that some children were distracted when activities did not involve hands-on interaction or were too abstract. This emphasizes the importance of incorporating active, concrete learning experiences for young children. When activities were more hands-on and engaging, such as when children were asked to physically step on number cards or match them to real objects, they demonstrated higher

levels of participation and focus. This finding supports the idea that young children benefit from multisensory learning experiences that involve movement, touch, and visual stimuli.

Another key observation from this study is the critical role that repetition plays in children's ability to internalize number symbols. Throughout the two cycles, it became evident that repeated exposure to number cards through various activities was essential for reinforcing the recognition of numbers. Children who participated in multiple repetitions of the activities, such as matching number cards to objects or singing number songs, showed notable improvement in their ability to recognize numbers. Repetition helps to strengthen neural connections associated with learning, especially in the early stages of cognitive development. The findings align with Piaget's theory of cognitive development, which stresses that children learn best through repeated interactions with their environment. In this case, repeated exposure to number cards in different contexts helped the children solidify their understanding of number symbols and fostered their ability to recognize them more easily.

While the majority of children showed improvement in number recognition, a small group continued to struggle, especially with higher numbers. This group required more individualized attention, such as one-on-one practice sessions or additional time to engage with the number cards. The teacher's role in providing differentiated instruction was vital in helping these children catch up with their peers. The findings suggest that not all children progress at the same rate, and some may require extra support to fully grasp the concepts. Differentiated instruction, which involves tailoring learning activities to meet the individual needs of each child, proved to be effective in supporting those who faced challenges. For example, children who struggled with recognizing higher numbers benefited from additional practice using the number cards in a more focused, individualized setting. The use of smaller group activities or one-on-one teaching sessions allowed the teacher to provide more direct support, which led to noticeable improvements in the children's recognition of number symbols.

The study also found that peer learning played an important role in the children's development of number recognition skills. The social nature of the activities encouraged children to collaborate, helping them to learn from each other. In group settings, children who were more confident in recognizing numbers assisted their peers who struggled, reinforcing their own understanding of the material while helping others. This peer-to-peer interaction is consistent with Vygotsky's theory, which emphasizes that social interaction is essential for cognitive development. Peer learning was particularly effective during group games and collaborative activities where children worked together to match number cards to real objects or complete number sequences. This collaborative process not only helped the children reinforce their knowledge of number symbols but also promoted communication, cooperation, and problem-solving skills. These social interactions were an essential part of the children's learning experience.

In addition to the number cards, the incorporation of music and rhymes into the activities also played a significant role in improving the children's recognition of number symbols. Songs that included number symbols and rhymes with repetitive elements helped the children remember the numbers more easily. Music is a powerful tool in early childhood education because it activates multiple areas of the brain, including those responsible for memory and language processing. By incorporating songs and rhymes into the learning process, the teacher was able to provide an auditory reinforcement of the number symbols, which further supported the children's learning. The rhythmic and repetitive nature of the songs helped the children internalize the numbers, making them easier to recognize and recall. This finding suggests that a multisensory approach, which includes both visual and auditory elements, can enhance the learning process in young children.

An important consideration in this study was the cultural and contextual relevance of the learning activities. The activities were designed with an awareness of the children's backgrounds and daily experiences, ensuring that the number cards and associated

activities were relatable to the children's lives. For instance, the teacher used number cards in conjunction with familiar objects from the children's environment, such as toys and everyday items, to create a more meaningful and contextually relevant learning experience. This approach is aligned with the principles of culturally responsive teaching, which emphasizes the importance of making learning experiences relevant to the children's cultural backgrounds. By using contextually familiar objects and situations, the teacher was able to help the children connect abstract mathematical concepts, such as number symbols, to their everyday lives. This approach not only improved their number recognition skills but also fostered a deeper connection between learning and the children's lived experiences.

The findings of this study suggest several implications for future teaching practices. First, it is clear that number cards can be an effective tool in improving number recognition in early childhood education. Teachers should consider incorporating number cards into their curricula as part of a hands-on, interactive approach to teaching numeracy skills. The activities should be varied to include different types of learning experiences, such as games, songs, and peer collaboration, to keep the children engaged and motivated. In addition, teachers should recognize that children develop at different rates and may require individualized support to master number recognition. Differentiated instruction, such as providing additional practice or one-on-one assistance, can help ensure that all children, regardless of their initial ability, can succeed in learning to recognize number symbols. Finally, it is important for educators to use a multisensory approach to teaching, combining visual, auditory, and kinesthetic elements in learning activities. This approach not only enhances children's engagement but also supports the development of their cognitive skills by addressing different learning styles.

In conclusion, this study demonstrates that the use of number cards is an effective method for improving cognitive skills related to number recognition in early childhood education. Through engaging and interactive activities, children showed significant improvement in recognizing the number symbols 1-10. The study highlights the importance of providing diverse, hands-on learning experiences that engage children's senses and foster active participation. Future research could further explore the long-term impact of number recognition on mathematical development and examine how different instructional strategies can support diverse learners in mastering foundational math skills.

CONCLUSION

The research conducted at RA Muslimat NU Terban demonstrated that the use of number cards significantly enhanced children's ability to recognize number symbols from 1 to 10. Through interactive activities, children were able to engage with the number symbols in ways that fostered active participation and deeper learning. The findings suggest that number cards, when used effectively, serve as a valuable tool in early childhood education for teaching foundational numeracy skills. One of the key insights from the study is that children's cognitive development, especially in recognizing number symbols, can be greatly improved by integrating visual, auditory, and kinesthetic learning experiences. The hands-on activities involving number cards helped children internalize the numbers by engaging multiple senses, which is consistent with theories of cognitive development such as those proposed by Piaget and Vygotsky. These multisensory activities not only helped children recognize the numbers more easily but also made learning more enjoyable and engaging. The research also highlighted the importance of repetition and reinforcement in the learning process. Children who participated in repeated activities involving number cards showed a greater ability to recognize and remember number symbols. This finding aligns with the understanding that young children require continuous practice and exposure to solidify their knowledge. The repetitive nature of the activities was crucial in helping children internalize the number symbols over time, which is essential for their

overall mathematical development. Furthermore, the study revealed that differentiated instruction was necessary to meet the diverse needs of the children. While most children progressed at a similar pace, some required additional support to fully master number recognition. Providing individualized attention to these children helped them catch up and eventually reach the same level of understanding as their peers. This finding emphasizes the importance of adapting teaching strategies to suit the varied developmental stages of young learners. The research also demonstrated the positive impact of peer learning and social interaction in the classroom. When children worked together in group activities or assisted one another in identifying number symbols, they reinforced their own learning while helping their peers. This collaborative approach not only enhanced the recognition of number symbols but also supported the development of social skills and communication. Peer learning proved to be an effective way to promote a cooperative and supportive classroom environment. In conclusion, this study provides strong evidence that the use of number cards is an effective strategy for improving cognitive skills related to number recognition in early childhood education. It underscores the value of hands-on, interactive learning experiences and the importance of engaging multiple learning styles to enhance children's understanding. The findings highlight that number cards, when incorporated into a varied and supportive teaching approach, can play a pivotal role in laying a solid foundation for future mathematical learning.

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