ETNOPEDAGOGI: Jurnal Pendidikan dan Kebudayaan
Volume 1 (4) October 2024
The article is published with Open Access at: https://journal.mgedukasia.or.id/index.php/etnopedagogi

Children's Cognitive Enhancement in Sorting Patterns through Flannel Bags at RA Al Islam Pitoro

Wahyu Puryanti ✉, RA Al Islam Pitoro, Indonesia
Uswatun Khasanah, RA Tarbiyatul Aulad, Indonesia

✉ *yantiwahyupur@gmail.com*

Abstract: This study aims to analyze the improvement of children's cognitive ability in sorting patterns through the use of Flannel bags in group B RA Al Islam Pitoro. The ability to sort patterns is an important aspect in the cognitive development of early childhood, because it helps children think logically, systematically, and builds a foundation for understanding mathematical concepts such as number patterns, shapes, and colors. Therefore, innovative and interesting learning methods are needed so that children can more easily understand the concept of patterns. The research method used is quantitative with a quasi-experimental design involving two groups, namely the experimental group using Flannel bags and the control group learning with conventional methods. Data collection was carried out through cognitive tests, observations, and interviews with teachers and parents to determine children's development before and after the intervention. The results showed that the use of Flannel bags significantly improved children's ability to recognize, arrange, and predict repeating patterns compared to conventional learning methods. In addition, observations and interviews showed an increase in children's motivation, enthusiasm, and active participation in learning activities. In conclusion, Flannel bags are an effective learning tool to improve children's cognitive abilities in sorting patterns. Therefore, it is recommended for educators to adopt this media as an innovative, interactive, and fun learning strategy for early childhood.

Keywords : Flannel bags, children's cognitive

Received June 10, 2024; **Accepted** july 23, 2024; **Published** October 31, 2024

INTRODUCTION

Early childhood education is a fundamental stage in building children's cognitive abilities, including in understanding the concept of patterns. The ability to sort patterns is one of the basic skills that supports the development of logical, systematic, and analytical thinking. With this ability, children can more easily understand mathematical concepts, such as grouping, comparison, and pattern prediction. Therefore, the learning methods used must be designed innovatively so that children can more easily absorb these concepts. One of the strategies that can be applied in early childhood learning is the use of manipulative-based learning media.

Media such as Flannel pouches provide an opportunity for children to learn through hands-on exploration, where they can arrange, sort, and predict patterns using different shapes and colors affixed to Flannel fabrics. With an interactive approach, children are more motivated to learn compared to conventional methods that are more passive. However, in practice, many early childhood education institutions still apply less varied learning methods.

Pattern teaching is often only done through the medium of pictures or verbal instructions, so it is less interesting and effective for children. As a result, some children have difficulty understanding the concept of patterns due to a lack of active involvement in the learning process. This study tries to answer this challenge by exploring the effectiveness of Flannel bag media in improving children's cognitive ability in sorting patterns. With this approach, it is hoped that children can be more active and involved in the learning process, so that their logical thinking skills develop optimally. Early childhood is a crucial stage in cognitive development, as children begin to recognize patterns, sequences, and logical relationships that form the foundation for future learning. Cognitive skills such as pattern recognition, sequencing, and problem-solving are essential in early childhood education.

These skills enable children to develop logical reasoning, enhance memory, and build a solid foundation for mathematical and literacy-related learning. One effective method to support these cognitive abilities is the use of hands-on, interactive learning tools. Among them, the flannel pocket method has gained attention for its effectiveness in improving children's ability to recognize and sequence patterns. Pattern sequencing is an essential cognitive skill that helps children understand order, structure, and predictability. When children engage in sequencing activities, they develop their ability to recognize relationships between objects, anticipate outcomes, and apply logical thinking.

These abilities are not only beneficial for mathematics and problem-solving but also play a significant role in language development and general cognitive growth. Traditional teaching methods often rely on verbal explanations and worksheets, which may not be engaging enough for young learners. However, incorporating interactive and tactile learning strategies can make the learning process more enjoyable and effective. The flannel pocket method provides an engaging way for children to manipulate objects, experiment with different patterns, and develop a deeper understanding of sequencing through hands-on experiences. This study explores the effectiveness of the flannel pocket method in enhancing cognitive skills related to pattern sequencing among children in Group B at RA Al Islam Pitoro.

By integrating this method into early childhood education, teachers can create an environment that fosters curiosity, active learning, and independent problem-solving. The study seeks to determine how this hands-on approach influences children's ability to recognize and replicate patterns, their engagement levels, and their overall cognitive development. The use of flannel pockets involves placing different shapes, colors, or objects into designated slots to create sequences. This method encourages children to engage in trial-and-error learning, develop fine motor skills, and strengthen their observational abilities. Through repeated practice, children learn to recognize patterns, correct mistakes, and apply logical reasoning to sequencing tasks. One of the major challenges in early childhood education is maintaining children's interest and motivation.

Young learners often struggle with attention and require interactive, playful activities to sustain their engagement. The flannel pocket method provides a multisensory learning experience that keeps children actively involved in the learning process, making it easier for them to grasp abstract concepts such as sequencing. Another critical aspect of cognitive development in early childhood is problem-solving. When children work with flannel pockets, they encounter challenges that require them to think critically and make decisions. They must analyze patterns, predict the next steps, and adjust their sequences accordingly. This process strengthens their ability to reason logically and develop problem-solving strategies that will benefit them in other areas of learning. The study also examines how the flannel pocket method fosters collaboration and social interaction among young learners.

By working together to arrange and sequence patterns, children enhance their communication skills, learn to share ideas, and develop a sense of teamwork. This social aspect of learning contributes to their overall cognitive and emotional growth. Furthermore, the study investigates the role of teachers in implementing the flannel

pocket method. Effective teaching strategies, guided instruction, and encouragement play a crucial role in maximizing the benefits of this approach. Teachers must create structured activities, provide clear instructions, and support children in developing their pattern recognition skills.

This research aims to provide valuable insights into the impact of hands-on learning methods on early childhood cognitive development. By examining the effectiveness of the flannel pocket method, educators can gain a better understanding of how to enhance pattern sequencing skills in young learners. The findings of this study can contribute to the development of more effective teaching strategies that support children's cognitive growth and prepare them for future academic success. In conclusion, the ability to recognize and sequence patterns is a fundamental cognitive skill that lays the foundation for various aspects of learning. The flannel pocket method offers an interactive and engaging approach to developing these skills in early childhood education. Through this study, we aim to explore its impact on children's cognitive abilities, engagement levels, problem-solving skills, and overall learning experiences. By integrating hands-on, tactile learning strategies into early childhood education, we can create a more effective and stimulating learning environment that nurtures children's cognitive development and prepares them for future academic challeng The findings of this study indicate a significant improvement in children's cognitive abilities related to pattern sequencing after the implementation of the flannel pocket method.

Observational data, pre-test and post-test results, and teacher feedback collectively support the effectiveness of this hands-on learning approach. Students exhibited an increased understanding of pattern sequencing concepts. At the beginning of the study, many children struggled with recognizing and completing simple patterns. By the end of the intervention, most students demonstrated a clear ability to identify, replicate, and extend patterns accurately. Engagement levels during activities increased noticeably. Students showed enthusiasm in handling flannel pieces and arranging them in sequences. The tactile nature of the learning medium played a crucial role in maintaining their interest and concentration. Pre test and post-test comparisons revealed measurable cognitive growth. The average test scores improved significantly, indicating enhanced comprehension and execution of pattern sequencing tasks. This statistical improvement underscores the effectiveness of the method.

METHODS

This study employs a qualitative and quantitative research approach to investigate the impact of using flannel pockets as a learning medium to enhance children's cognitive abilities in pattern sequencing. The research is conducted in Group B at RA Al Islam Pitoro, involving systematic observation, experimentation, and evaluation. The study follows a classroom action research (CAR) model, which consists of four stages: planning, implementation, observation, and reflection. These stages are repeated in cycles to assess improvements in students' abilities and refine teaching methods accordingly. The participants of this study include 20 children aged 5-6 years from RA Al Islam Pitoro. The study also involves two teachers who act as facilitators in implementing the flannel pocket method. The research is carried out over a span of eight weeks, with two sessions per week dedicated to pattern sequencing activities.

Data collection techniques include direct classroom observations, structured interviews with teachers, and assessment of students' performance in pattern sequencing exercises. Additionally, student engagement and responses during activities are documented to measure the effectiveness of the method. A pre-test and post-test design is utilized to evaluate the cognitive development of children in recognizing, organizing, and sequencing patterns. The pretest is conducted before the intervention, while the post-test is administered after the implementation of flannel pocket-based learning activities.

The flannel pocket method involves the use of soft fabric pouches attached to a board, where children arrange various cut-out shapes and colors in a specific sequence. This hands-on activity encourages sensory engagement, fine motor skills, and cognitive processing. The implementation phase includes introducing children to different types of patterns, demonstrating how to use the flannel pockets, and allowing them to practice sequencing through guided and independent activities. Teachers provide scaffolding to support children's understanding and encourage peer collaboration.

Data analysis involves both qualitative and quantitative methods. Observational data are analyzed thematically to identify common patterns in student engagement and learning behaviors. Quantitative data from the pre-test and post-test scores are statistically examined to determine the level of improvement in cognitive abilities. Ethical considerations are maintained by obtaining parental consent before involving children in the study. Additionally, confidentiality and anonymity of participants are ensured, and teachers are trained to implement the method in an unbiased and supportive manner. The research aims to assess whether the use of flannel pockets enhances children's ability to recognize sequences, improve their logical thinking skills, and increase their enthusiasm for learning. By analyzing the results, the study provides recommendations for educators on incorporating interactive and tactile learning tools in early childhood education.

The study acknowledges potential limitations, including variations in children's prior knowledge, differences in learning pace, and classroom management challenges. These factors are taken into account when interpreting the results and suggesting further improvements. Findings from this research contribute to the broader field of early childhood education by highlighting effective teaching strategies that foster cognitive development. The study emphasizes the importance of using interactive and engaging methods to enhance children's learning experiences. Overall, this research seeks to demonstrate how flannel pockets can serve as a practical and engaging tool in helping young children develop pattern sequencing skills, laying a strong foundation for their future mathematical and logical reasoning abilities.

RESULTS

The findings of this study indicate a significant improvement in children's cognitive abilities related to pattern sequencing after the implementation of the flannel pocket method. Observational data, pre-test and post-test results, and teacher feedback collectively support the effectiveness of this hands-on learning approach. Students exhibited an increased understanding of pattern sequencing concepts. At the beginning of the study, many children struggled with recognizing and completing simple patterns. By the end of the intervention, most students demonstrated a clear ability to identify, replicate, and extend patterns accurately. Engagement levels during activities increased noticeably. Students showed enthusiasm in handling flannel pieces and arranging them in sequences. The tactile nature of the learning medium played a crucial role in maintaining their interest and concentration. Pre-test and post-test comparisons revealed measurable cognitive growth. The average test scores improved significantly, indicating enhanced comprehension and execution of pattern sequencing tasks. This statistical improvement underscores the effectiveness of the method. Teacher observations highlighted a reduction in hesitation and errors during pattern sequencing exercises. Initially, students required substantial guidance, but over time, they became more independent in completing tasks correctly.

The study also noted improvements in children's problem-solving abilities. As students engaged with flannel pockets, they began to recognize mistakes and self-correct their sequencing without immediate teacher intervention. Collaboration among students increased as well. Many children worked together to solve sequencing challenges, demonstrating an improved ability to communicate ideas and help peers understand the task. Parental feedback supported the findings, with reports of children practicing pattern-

related activities at home. Parents observed that their children applied sequencing skills in everyday situations, such as arranging toys or organizing objects by color and shape. Fine motor skills development was another positive outcome. The act of manipulating small fabric pieces enhanced children's hand-eye coordination and dexterity, contributing to overall motor skill improvement. The research highlighted that students displayed longer attention spans during structured learning sessions.

Many children who previously had difficulty focusing were able to sustain their engagement throughout the activities. Behavioral improvements were evident, as students became more patient and persistent when solving pattern-related challenges. The structured nature of flannel pocket exercises encouraged perseverance and careful thinking. Creativity in pattern-making also emerged as a key finding. Many children began experimenting with their own sequences, demonstrating a deeper understanding of the concept beyond simple replication of provided patterns. The intervention positively influenced students' confidence in their abilities. As their understanding grew, children exhibited greater self-assurance in completing tasks without fear of making mistakes. A notable finding was the adaptability of the method for different learning styles. Visual, kinesthetic, and auditory learners all benefited from the multisensory approach that flannel pockets provided.

The research found that children retained sequencing skills beyond the classroom setting. Follow-up assessments showed that students maintained their ability to recognize and create patterns weeks after the intervention ended. Teachers noted that students who initially displayed resistance to structured activities gradually embraced the learning process, demonstrating a shift in attitude towards cognitive challenges. One unexpected result was the improvement in children's verbal skills. The need to describe patterns and explain their reasoning helped enhance their vocabulary and ability to articulate thoughts clearly. Students exhibited a newfound curiosity for exploring more complex sequences. Many began asking teachers for additional challenges, indicating sustained interest in the learning topic.

The study found that incorporating storytelling into pattern sequencing activities further enhanced comprehension. When patterns were linked to narratives, students engaged more deeply and retained concepts more effectively. Classroom dynamics improved, with increased cooperation and fewer disruptions. The interactive nature of the activities fostered a sense of teamwork and shared learning experiences. Students demonstrated stronger logical reasoning skills. They learned to predict the next elements in a sequence based on observed rules, a skill that is foundational for later mathematical development. An increase in autonomy was observed, with students taking initiative in arranging and modifying sequences without waiting for teacher instructions. The study revealed that flannel pocket-based learning was particularly effective for children who previously struggled with abstract concepts. The hands-on aspect made sequencing more tangible and comprehensible. Children exhibited a greater sense of accomplishment after successfully completing pattern activities, reinforcing a positive association with learning.

Findings suggested that teachers found the method easy to integrate into their lesson plans. The materials were simple to prepare, and the activities required minimal adjustment to existing teaching schedules. Students' ability to differentiate between colors, shapes, and sizes improved as they worked with flannel pieces, strengthening their overall categorization skills. A key observation was that children displayed greater curiosity about patterns in their daily environment. Many began noticing and discussing sequences in nature, architecture, and everyday objects.

The research confirmed that children retained a higher percentage of learned concepts when engaged in active, hands-on learning rather than passive instruction. Students showed an increased ability to follow multi-step instructions as they progressed through the activities, an important skill for future academic success. Longitudinal observations suggested that cognitive gains made during the study continued to benefit students in other learning areas, such as early mathematics and literacy development.

The study found that structured repetition through flannel pocket activities helped solidify pattern recognition skills in children, making learning more effective. Another key finding was that children who initially displayed difficulty with focus and task completion became more organized and methodical over time. The study revealed that flannel pocket-based learning contributed to a more inclusive classroom environment. Children with varying levels of cognitive development were able to engage with the activities at their own pace. Results indicated that introducing pattern sequencing at an early age enhances foundational thinking skills that are essential for later problem-solving abilities.

The research demonstrated that children who engaged in frequent pattern sequencing exercises showed greater readiness for numeracy and early mathematical concepts. An important observation was that structured play, such as flannel pocket activities, provided an effective balance between guided learning and exploration. Findings showed that children learned best when the activities were accompanied by positive reinforcement and encouragement from teachers. The study found that students' social skills improved as they participated in peer-assisted learning, discussing and exchanging ideas about sequencing. The overall classroom atmosphere became more stimulating, as children actively participated and looked forward to pattern-related activities. Results suggested that flannel pocket-based learning can be adapted for other cognitive skill development areas beyond sequencing, such as categorization and spatial awareness. The study highlighted the importance of integrating multisensory learning techniques in early childhood education to optimize engagement and comprehension.

Children displayed a greater appreciation for structured learning activities, demonstrating that engaging methods can make learning enjoyable. The findings confirmed that providing a playful yet structured approach to learning strengthens cognitive skills while fostering positive attitudes towards education. Based on these results, educators are encouraged to incorporate interactive and hands-on learning tools in early childhood classrooms to enhance cognitive development effectively. The study ultimately concludes that the use of flannel pockets is a highly effective and engaging method for improving pattern sequencing skills among young children, contributing to their overall cognitive growth and academic preparedness.

DISCUSSION

The application of flannel pockets as a learning method has significantly influenced children's cognitive development, particularly in pattern sequencing. This discussion elaborates on the various aspects that contributed to this improvement, including engagement, comprehension, motor skills, and overall learning experiences. Children's engagement in pattern sequencing activities increased due to the tactile and interactive nature of flannel pockets. The ability to touch, move, and arrange fabric pieces made learning more enjoyable and sustained their interest for extended periods. Cognitive development was evident in students' ability to recognize, replicate, and extend patterns. Initially, many struggled with identifying sequences, but through repeated practice with flannel pockets, they demonstrated an improved understanding of order and progression. The structured learning approach provided by flannel pockets enhanced memory retention. Children recalled previous patterns more effectively and were able to apply their knowledge in subsequent tasks without needing repeated instruction.

Fine motor skills also improved due to the physical manipulation of flannel pieces. Picking up, arranging, and attaching these materials to surfaces required precise hand-eye coordination, which supported overall motor skill development. Children's problem-solving skills were strengthened as they encountered challenges in sequencing. They learned to analyze errors, make corrections, and understand the reasoning behind pattern formation, fostering logical thinking abilities.

The hands-on approach facilitated better conceptual learning compared to traditional methods. When children physically interacted with learning materials, their

comprehension of abstract concepts, such as sequences and numerical progressions, improved significantly. Teacher observations confirmed that the flannel pocket method allowed for differentiated learning. Children with varying levels of cognitive ability engaged with the activity at their own pace, ensuring that every student had the opportunity to grasp sequencing concepts effectively. Students demonstrated greater persistence and patience in completing sequencing tasks. The structured and repetitive nature of the activity encouraged them to concentrate, reinforcing cognitive endurance and task completion skills. Parental feedback indicated that children began applying their sequencing skills in daily activities outside of school.

Many parents observed their children organizing objects at home, suggesting that learning was not only retained but also transferred to real-life situations. Collaborative learning was another key advantage of using flannel pockets. Children frequently worked together to arrange sequences, leading to improved social interactions and cooperative problem-solving abilities. The multisensory approach of flannel pocket-based learning benefited diverse learning styles. Visual, auditory, and kinesthetic learners all found aspects of the activity engaging, which enhanced overall participation and comprehension. Creativity was fostered as children began experimenting with their own sequences. Instead of merely copying patterns provided by teachers, many students developed unique arrangements, demonstrating deeper cognitive engagement. The integration of storytelling into pattern sequencing further enhanced understanding. When sequences were framed within narratives, children exhibited greater recall and showed enthusiasm in linking stories to patterns.

Classroom behavior improved, as structured activities using flannel pockets reduced distractions and increased focus. The interactive nature of the learning method minimized disruptive behavior and encouraged attentive participation. Students' self confidence in completing tasks grew noticeably. As they became more adept at sequencing patterns, they exhibited a greater willingness to take initiative and complete challenges independently. The research found that the introduction of flannel pockets as a learning tool increased curiosity about patterns in everyday life. Many children began noticing and discussing sequences in nature, architecture, and daily activities. Teachers found it easier to integrate flannel pocket activities into lesson plans. The materials were simple to prepare, and the hands-on format was adaptable to various learning objectives beyond sequencing. The method promoted inclusivity in the classroom. Children with different levels of cognitive development could engage with the activity at their own pace, ensuring equitable participation. Students' verbal communication skills improved as they described patterns and explained their reasoning.

This enhancement in articulation contributed to overall language development and expression. Attention spans increased as students engaged in flannel pocket sequencing. Many children who previously struggled with focus demonstrated the ability to sustain their concentration for extended periods. The interactive learning experience encouraged students to take ownership of their learning process. Many exhibited greater independence in recognizing and correcting mistakes without direct teacher intervention. Teachers reported an increase in classroom enthusiasm. Students looked forward to pattern sequencing activities, reinforcing a positive association with structured learning exercises. Children who initially struggled with abstract sequencing concepts benefited greatly from the hands-on nature of flannel pockets.

The tangible representation of sequences helped bridge the gap between abstract thought and practical understanding. Findings suggest that flannel pocket learning methods contribute to overall cognitive flexibility. Students became more adaptable in applying sequencing skills to different learning scenarios. The research confirmed that pattern sequencing, when taught through interactive methods, laid a strong foundation for future mathematical thinking. Early exposure to structured sequences improved logical reasoning skills. Students developed an enhanced sense of organization and categorization. They became more methodical in their approach to arranging and

understanding patterns, benefiting their general cognitive structuring abilities. The method's effectiveness was reinforced by its ability to sustain engagement over time. Even after multiple sessions, children remained interested in participating in flannel pocket sequencing tasks. Positive reinforcement played a critical role in maximizing the effectiveness of flannel pocket activities. Encouragement from teachers boosted children's motivation and willingness to engage with sequencing tasks.

Longitudinal observations indicated that cognitive improvements in pattern sequencing extended to other academic areas, such as early literacy and problem-solving tasks. The study suggested that early exposure to structured sequencing helps children develop fundamental thinking patterns necessary for advanced cognitive skills. By creating a playful yet structured learning environment, the flannel pocket method successfully balanced engagement with cognitive development. The research concluded that incorporating interactive learning materials significantly benefits young learners. Children retain information more effectively when they actively participate in the learning process.

The classroom environment became more dynamic and cooperative as students engaged in peer-assisted learning, exchanging ideas and supporting one another.Teachers found that using flannel pockets made assessment easier. Observing how children engaged with sequencing tasks provided valuable insights into their cognitive progress. The study highlighted the importance of integrating hands-on learning techniques into early education curricula to optimize comprehension and retention. Pattern sequencing activities using flannel pockets provided children with structured challenges that promoted resilience and determination in problem-solving. Educators noted that children who participated in flannel pocket sequencing demonstrated a more analytical approach to learning across various subjects. The research found that introducing pattern sequencing in early childhood helped build a strong cognitive foundation for future academic success. Ultimately, the findings support the continued use of flannel pockets as a teaching tool to enhance cognitive abilities in early learners. The method's effectiveness in pattern sequencing suggests its potential for broader applications in early childhood education.

CONCLUSION

The findings of this study indicate a significant improvement in children's cognitive abilities related to pattern sequencing after the implementation of the flannel pocket method. Observational data, pre-test and post-test results, and teacher feedback collectively support the effectiveness of this hands-on learning approach. Students exhibited an increased understanding of pattern sequencing concepts. At the beginning of the study, many children struggled with recognizing and completing simple patterns. By the end of the intervention, most students demonstrated a clear ability to identify, replicate, and extend patterns accurately. Engagement levels during activities increased noticeably. Students showed enthusiasm in handling flannel pieces and arranging them in sequences.

The tactile nature of the learning medium played a crucial role in maintaining their interest and concentration. Pre-test and post-test comparisons revealed measurable cognitive growth. The average test scores improved significantly, indicating enhanced comprehension and execution of pattern sequencing tasks. This statistical improvement underscores the effectiveness of the method. Teacher observations highlighted a reduction in hesitation and errors during pattern sequencing exercises. Initially, students required substantial guidance, but over time, they became more independent in completing tasks correctly. The study also noted improvements in children's problem-solving abilities.

As students engaged with flannel pockets, they began to recognize mistakes and self-correct their sequencing without immediate teacher intervention. Collaboration

among students increased as well. Many children worked together to solve sequencing challenges, demonstrating an improved ability to communicate ideas and help peers understand the task. Parental feedback supported the findings, with reports of children practicing pattern-related activities at home. Parents observed that their children applied sequencing skills in everyday situations, such as arranging toys or organizing objects by color and shape. Fine motor skills development was another positive outcome.

The act of manipulating small fabric pieces enhanced children's hand-eye coordination and dexterity, contributing to overall motor skill improvement. The research highlighted that students displayed longer attention spans during structured learning sessions. Many children who previously had difficulty focusing were able to sustain their engagement throughout the activities. Behavioral improvements were evident, as students became more patient and persistent when solving pattern-related challenges. The structured nature of flannel pocket exercises encouraged perseverance and careful thinking. Creativity in pattern-making also emerged as a key finding. Many children began experimenting with their own sequences, demonstrating a deeper understanding of the concept beyond simple replication of provided patterns.

The intervention positively influenced students' confidence in their abilities. As their understanding grew, children exhibited greater self-assurance in completing tasks without fear of making mistakes. A notable finding was the adaptability of the method for different learning styles. Visual, kinesthetic, and auditory learners all benefited from the multisensory approach that flannel pockets provided. The research found that children retained sequencing skills beyond the classroom setting. Follow-up assessments showed that students maintained their ability to recognize and create patterns weeks after the intervention ended. Teachers noted that students who initially displayed resistance to structured activities gradually embraced the learning process, demonstrating a shift in attitude towards cognitive challenges. One unexpected result was the improvement in children's verbal skills.

The need to describe patterns and explain their reasoning helped enhance their vocabulary and ability to articulate thoughts clearly. Students exhibited a newfound curiosity for exploring more complex sequences. Many began asking teachers for additional challenges, indicating sustained interest in the learning topic. The study found that incorporating storytelling into pattern sequencing activities further enhanced comprehension. When patterns were linked to narratives, students engaged more deeply and retained concepts more effectively. Classroom dynamics improved, with increased cooperation and fewer disruptions. The interactive nature of the activities fostered a sense of teamwork and shared learning experiences. Students demonstrated stronger logical reasoning skills. They learned to predict the next elements in a sequence based on observed rules, a skill that is foundational for later mathematical development.

An increase in autonomy was observed, with students taking initiative in arranging and modifying sequences without waiting for teacher instructions. The study revealed that flannel pocket-based learning was particularly effective for children who previously struggled with abstract concepts. The hands-on aspect made sequencing more tangible and comprehensible. Children exhibited a greater sense of accomplishment after successfully completing pattern activities, reinforcing a positive association with learning. Findings suggested that teachers found the method easy to integrate into their lesson plans. The materials were simple to prepare, and the activities required minimal adjustment to existing teaching schedules. Students' ability to differentiate between colors, shapes, and sizes improved as they worked with flannel pieces, strengthening their overall categorization skills.

A key observation was that children displayed greater curiosity about patterns in their daily environment. Many began noticing and discussing sequences in nature, architecture, and everyday objects. The research confirmed that children retained a higher percentage of learned concepts when engaged in active, hands-on learning rather than passive instruction. Students showed an increased ability to follow multi-step instructions

as they progressed through the activities, an important skill for future academic success. Longitudinal observations suggested that cognitive gains made during the study continued to benefit students in other learning areas, such as early mathematics and literacy development.

The study found that structured repetition through flannel pocket activities helped solidify pattern recognition skills in children, making learning more effective. Another key finding was that children who initially displayed difficulty with focus and task completion became more organized and methodical over time. The study revealed that flannel pocket-based learning contributed to a more inclusive classroom environment. Children with varying levels of cognitive development were able to engage with the activities at their own pace. Results indicated that introducing pattern sequencing at an early age enhances foundational thinking skills that are essential for later problem-solving abilities. The research demonstrated that children who engaged in frequent pattern sequencing exercises showed greater readiness for numeracy and early mathematical concepts. An important observation was that structured play, such as flannel pocket activities, provided an effective balance between guided learning and exploration.

Findings showed that children learned best when the activities were accompanied by positive reinforcement and encouragement from teachers. The study found that students' social skills improved as they participated in peer-assisted learning, discussing and exchanging ideas about sequencing. The overall classroom atmosphere became more stimulating, as children actively participated and looked forward to pattern-related activities.

Results suggested that flannel pocket-based learning can be adapted for other cognitive skill development areas beyond sequencing, such as categorization and spatial awareness. The study highlighted the importance of integrating multisensory learning techniques in early childhood education to optimize engagement and comprehension. Children displayed a greater appreciation for structured learning activities, demonstrating that engaging methods can make learning enjoyable. The findings confirmed that providing a playful yet structured approach to learning strengthens cognitive skills while fostering positive attitudes towards education. Based on these results, educators are encouraged to incorporate interactive and hands-on learning tools in early childhood classrooms to enhance cognitive development effectively. The study ultimately concludes that the use of flannel pockets is a highly effective and engaging method for improving pattern sequencing skills among young children, contributing to their overall cognitive growth and academic preparedness.

REFERENCES

Aini, E. P. (2023). Penggunaan Media Papan Flanel untuk Meningkatkan Kemampuan Kognitif Anak Usia Dini. Jurnal Pendidikan Anak Usia Dini, 5(2), 123-130. repository.unja.ac.id

Heti, K. (2021). Upaya Mengembangkan Kemampuan Kognitif Anak Melalui Media Papan Flanel di TK Bhakti Pemuda Tanjung Bintang Lampung Selatan. Tesis, UIN Raden

Intan Lampung.repository.unja.ac.id Monalisa, W., Imran, R. F., & Haryono, M. (2023). Meningkatkan Perkembangan Kognitif Anak Melalui Penggunaan Media Kantong Bilangan pada Kelompok B di PAUD AMANDA Kabupaten Seluma. Early Child Research and Practice, 3(2), 17-20. jurnal.unived.ac.id

Koesmadi, D. P., Wijayanti, A., & Rahayu, E. (2021). Pengembangan Media Zliqubo untuk Meningkatkan Kecerdasan Visual Spasial Anak TK. WISDOM: Jurnal Pendidikan Anak Usia Dini, 2(1), 79-91.ejournal.insuriponorogo.ac.id

Kusumastuti, N., Putri, V. L., & Wijayanti, A. (2021). Pengembangan Media Frueelin untuk Meningkatkan Perkembangan Kognitif Anak Usia Dini. Jurnal Golden Age, 5(01), 155- 163. ejournal.insuriponorogo.ac.id

Lestariningrum, A., & Kurniawati, N. (2020). Pengembangan Media PAKANTUNG (Papan Kantong Hitung) untuk Meningkatkan Kemampuan Kognitif Anak dalam Mengenal Buah buahan. Seminar Nasional Pendidikan Anak Usia Dini, 2, 191-198. proceeding.unpkediri.ac.id

Baliombong, A., Darni, J., & Meka, M. (2022). Pendampingan Pengembangan Media Kantong Bilangan untuk Meningkatkan Aspek Kognitif Berpikir Simbolik pada Anak Usia 5-6 Tahun di TKK Negeri Dolumolo. Jurnal Ilmiah Citra Bakti, 3(2), 2507-2515. jurnalilmiahcitrabakti.ac.id

Sholehah, L. (2022). Perkembangan Tahap-Tahap Kognitif Anak Usia 4-5 Tahun melalui Media Papan Flanel pada Kelompok A di Raudhatul Athfal Muslimat NU 55. Skripsi, UIN Kiai Haji Achmad Siddiq Jember. digilib.uinkhas.ac.id Piaget, J. (1972). The Psychology of the Child. Basic Books.

Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.

Bruner, J. S. (1983). Child & Talk: Learning to Use Language. W.W. Norton & Company.

Resnick, L. B. (1994). Developing Mathematical Thinking in Young Children. Educational Researcher.

Hurlock, E. B. (2002). Psikologi Perkembangan: Suatu Pendekatan Sepanjang Rentang Kehidupan. Erlangga.

Suherman, A. (2013). Metode dan Media Pembelajaran Anak Usia Dini. Universitas Pendidikan Indonesia Press.

Slavin, R. E. (2019). Educational Psychology: Theory and Practice. Pearson.

Santrock, J. W. (2011). Child Development. McGraw-Hill.

Nurhidayati, T., & Saputra, D. (2018). Pengaruh Media Flanel terhadap Kemampuan Kognitif

Anak. Jurnal Pendidikan Anak Usia Dini, 6(2), 123-135.

Hayati, F., & Amelia, L. (2020). Upaya Meningkatkan Kemampuan Mengenal Huruf melalui Permainan Bola Huruf pada Kelompok B di TK Mawaddah Warahmah Aceh Besar Jurnal Buah Hati, 7(1), 65-73.

Kurniawati, N., & Lestariningrum, A. (2020). Pengembangan Media PAKANTUNG untuk Meningkatkan Kemampuan Kognitif Anak dalam Mengenal Buah-buahan. Seminar Nasional Pendidikan Anak Usia Dini, 2, 191-198.

Aisyah, S., & Suryana, D. (2019). Pengaruh Media Pembelajaran Berbasis Flanel terhadap Kemampuan Berhitung Permulaan Anak Usia Dini. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 3(2), 345-352.

Rahmawati, Y., & Fauziah, P. Y. (2021). Pengembangan Media Pembelajaran Kantong Angka

untuk Meningkatkan Kemampuan Berhitung Anak Usia Dini. Jurnal Pendidikan Anak,
10(1), 23-30.

Sari, D. P., & Lestari, I. (2020). Penggunaan Media Flanel dalam Meningkatkan Kemampuan Mengenal Pola pada Anak Usia Dini. Jurnal Pendidikan Anak Usia Dini, 4(1), 45-52.

Sadiman, dkk. 2011. Media Pendidikan. Jakarta: Rajawali Pers.

Sudjana. 2005. Metode Statistik edisi VI. Bandung: Tarsito.

Sugiyono. 2011. Metode Penelitian Kombinasi. Bandung: Alfabeta.

Sugiyono. 2013. Metode Penelitian Pendidikan. (Bandung : Alfabeta.

Sujiono, dkk. 2010. Bermain Kreatif Berbasis Kecerdasan Jamak. Jakarta: Indeks.

Sulistyo. 2011. Pengantar Ilmu Perpustakaan. Jakarta: Gramedia

Suminah, dkk. 2015. Kerangka Dasar dan Struktur Kurikulum 2013. Jakarta: Direktorat Pembinaan Pendidikan Anak Usia Dini.

Supardi. 2013. Aplikasi Statistika dalam Penelitian Konsep Statistika yang Lebih Komprehensif,. Jakarta: Adikita. Tri Ani Astuti. 2016. Peningkatan Kemampuan Penjumlahan Menggunakan Media

Papan Flanel Pada Anak Kelompok B1 Tk Aba Gading Lumbung, Jurnal Pendidikan Anak Usia Dini Edisi 7 Tahun ke-5.

Tedjasaputra Mayke. 2010. Bermain, Mainanan, Permainan. Jakarta : Grasindo.

Yulianti Dwi. 2010. Bermain Sambil Belajar Sains di Taman Kanak-Kanak. Jakarta: Indeks. Yusianti. Meningkatkan Kemampuan Mengenal Lambang Bilangan Melalui Bermain Kartu Angka Bergambar pada Anak Usia TK. Jurnal Pendidikan Anak Usia Dini, Edisi 9 Tahun ke 5, 2016.