


Analysis of Student Satisfaction with Facilities and Infrastructure in Dormitory of Medan State University: A Quantitative Descriptive Approach

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ABSTRACT

This research aims to develop a phonics-based learning method using a "Magic Board" to stimulate reading abilities in children aged 5–6 years at Kindergarten A Grace. The study adopts the Rowntree development model, which includes the stages of planning, development, and evaluation, and is tested using Tessmer's formative evaluation approach. This includes self-evaluation, expert review, one-to-one evaluation, and small group evaluation. Data were collected through observation, interviews, and documentation. The validation results from expert judgment indicated that the media aspect achieved a score of 90%, while the material aspect scored 97%, demonstrating high validity. In the one-to-one evaluation involving three children, the effectiveness reached 92%, while the small group evaluation with nine children yielded a practicality score of 93%, resulting in an average practicality of 92% (categorized as very practical). The development of the Magic Board media for children aged 5–6 years at Kindergarten A Grace is therefore proven to be highly valid and practical. These findings are supported by the strong alignment between the media content and the characteristics of young learners, as well as its relevance to the curriculum in use. The media development process involved several key stages, from initial prototype design and expert review to child-centered evaluations using Tessmer's formative assessment. Each step yielded positive results, supporting the effectiveness of the Magic Board as a learning tool in early childhood education.

Keywords: *Phonics Method, Magic Board, Early Childhood Education, Reading Skills, Kindergarten.*

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INTRODUCTION

In the early stages of cognitive development, every child is unique. One of the most fundamental requirements for healthy growth and development is comprehensive stimulation, which must be provided consistently. Each day, parents and educators can do many things to help children learn by exposing them to new experiences and information through various forms of supportive media. Children are believed to learn best through play (Rantina et al., 2021).

In Islam, a child is seen as a gift from Allah (SWT), entrusted to parents to ensure their well-being and development. The formative years of a child's life—often referred to as the "golden age"—hold unparalleled significance. During this period, children need to be nurtured in ways that unlock their latent potential. Early childhood education serves as the foundation for all subsequent formal education. At a young age, children encounter numerous experiences that shape their future. Their potential for future growth is strongly influenced by the development that occurs during these early years. Developmental achievement goals vary for each age group (Aisha, 2023).

The characteristics of development in early childhood include cognitive and verbal skills, moral and religious understanding, artistic expression, physical and motor

development, as well as social-emotional growth. These aspects are outlined in the Regulation of the Minister of Education and Culture No. 137 of 2014 regarding the Standard Level of Child Development Achievement. Although developmental progress in each domain is continuous and varies with age, it is important to recognize that achievement in one stage of life significantly impacts the next.

A child's ability to remember is closely tied to the development of their language. By the age of six, children can typically remember an average of 5.5 new words per day. As their language skills improve, they become better equipped to adapt to their social environments, including their homes, families, and schools. One integral aspect of children's development is their desire to communicate (Heru, M., 2020). Through the process of speaking, children learn to express their thoughts and emotions. A rich vocabulary is also acquired during this phase.

Education in early childhood is crucial for a child's overall development, as it lays the groundwork for future academic success. At this stage, children possess remarkable abilities to absorb knowledge, although their attention span remains relatively short. Nonetheless, they display a positive attitude toward learning. During these formative years, children's diverse talents, particularly in language development, are most actively cultivated.

Based on general experience, there is a strong connection between core learning—particularly learning through play—and the development of students' reading skills. Language serves as a medium for internal expression and a tool for interpersonal communication. Therefore, it's appropriate and meaningful development must be instilled in children from an early age. The development of language skills is essential for early childhood growth, as language plays a key role in socialization and in helping children adapt to their environment (Mardhotillah., 2021).

In many learning activities, numerous students still face difficulties in reading basic words. Many children require significant teacher support to memorize words because they have not yet mastered the alphabet. Moreover, learning activities—especially those involving media—often lack creativity and variation. A lack of student focus on teacher instructions is one of the key reasons why reading abilities remain below the expected standard. This issue often arises when students are not engaged in learning and when teachers fail to utilize diverse and effective instructional media in the classroom.

In terms of reading interest or literacy, UNESCO has ranked Indonesia among the lowest in the world. According to UNESCO statistics, only 0.001% of the Indonesian population—or 1 out of every 1,000 people—demonstrates a serious interest in reading. Out of 61 countries surveyed, Indonesia ranked 60th. One major cause of this low literacy rate is the absence of a strong reading culture from an early age. Reading—whether physical books, holy texts, digital books, online articles, journals, magazines, or newspapers—is not yet a widespread habit. In today's fast-paced globalized era, people often seek instant access to information but fail to use available resources wisely.

Despite the many advantages of the internet, it has also presented challenges, especially for children. Excessive screen time can lead to internet addiction and exposure to inappropriate content. As children spend more time in front of screens, their cognitive activity decreases, making reading less appealing and reducing their capacity for critical thinking (Indah, 2023).

Interacting with the surrounding environment through language is a vital social skill. When engaging with adults, children begin to ask and answer questions with increasing confidence. In this context, the use of Magic Board media presents a unique and valuable approach. Unlike digital tools such as tablets or computers that rely on technology, electricity, and software, the Magic Board is a physical medium. While it does not offer dynamic digital content like videos or animations, its simplicity can be a strength.

In educational settings, the Magic Board serves as a straightforward visual aid, distinct from more complex media that might overwhelm young learners. Designed to promote more effective engagement, the Magic Board's visual and flexible nature captures children's attention and supports the development of reading skills in a way that is both meaningful and age-appropriate.

Initial observations of reading abilities in children aged 5–6 years in Tanjung Batu Village, Cape Rock Subdistrict, were conducted from May 20–23, 2024. Based on interviews with teachers at Ar Rahmah Kindergarten, an assessment was carried out to identify children's reading skills. The author interviewed both parents and teachers and reviewed instructional videos using the magic board to evaluate the children's vocabulary recognition.

Findings from Ar-Rahmah Kindergarten indicate that most students still struggle to recognize and interpret letters. Out of the fifteen enrolled students, only a few demonstrated familiarity with the alphabet. One of the main reasons identified is that printed learning materials are not sufficiently engaging, and there are numerous issues with the learning media currently in use.

Furthermore, on October 2, a needs analysis was conducted with children aged 5–6 years in two kindergartens in Tanjung Batu, including PGRI Kindergarten. The analysis involved interviews and direct observations of the learning media used to support children's reading development—particularly the potential use of magic board media. Observations at PGRI Kindergarten revealed that many children's reading abilities were still underdeveloped. This was largely attributed to limited focus and concentration during lessons, as the instructional materials—particularly printed media—lacked engaging visuals and content, making it difficult to capture the children's attention.

These findings are consistent with a study conducted by Rayon (2024) titled *The Influence of Flannel Board Media on Improving Early Reading Ability in Children Aged 5–6 Years at TKN Golo Jambu*. The research showed that flannel board media is highly suitable for young learners, as it positively impacts early reading development. It helps children recognize letters, associate sounds with letters, and read simple words. Additionally, the flannel board makes learning more enjoyable and interactive through the use of colorful visuals and engaging letter designs.

Based on the observations, interviews, and findings from previous research, it is evident that there is a need to develop more effective media to support early reading skills. Therefore, this study aims to develop a phonics-based method through the use of magic board media to stimulate reading abilities in children aged 5–6 years, under the title: "Development of a Phonics Method Through Magic Board Media to Stimulate Reading Ability in Children Aged 5–6 Years".

METHOD

This study employs a developmental research design (Research and Development) using a qualitative approach. It adopts the Rowntree development model, which is integrated with Tessmer's formative evaluation stages. The research focuses on developing a phonics-based method to enhance early reading skills using magic board media. The development process involves three main phases: planning, development, and evaluation. The participants in this study were children aged 5–6 years at Ar Rahmah Kindergarten. The research was conducted over a one-month period, from January 15 to February 15, 2025. Data were collected through walkthroughs and observations.

FINDINGS AND DISCUSSION

Results of Planning Stage

The first stage of the research began with analyzing the indicators of language development in early reading skills for children aged 5–6 years, based on Permendikbud No. 146 of 2014. In designing the media, both the design aspects and the form of the media were carefully considered to align with the characteristics of appropriate learning media for early childhood. Furthermore, the researcher conducted a needs analysis to understand the specific requirements of children in Class B3. The analysis provided valuable insights into the needs and challenges faced at AR-Rahmah Kindergarten, particularly in Class B3. One of the main issues

identified was the limited availability of engaging learning media to support the development of early reading skills.

Currently, the learning media used by teachers are less varied and lack innovation, causing teachers to rely heavily on lectures and direct explanations, without the support of interactive or stimulating media. Through observations and interviews with the teacher, it was found that the available media for supporting children's language development include whiteboards, letter trees, letter flashcards, and posters. However, these resources are limited in number and visual appeal, which often leads to children becoming bored when used for extended periods. In response to these challenges, the researcher designed and developed a magic board media aimed at supporting more engaging and effective early reading instruction for children aged 5–6 years.

Results of Development Stage

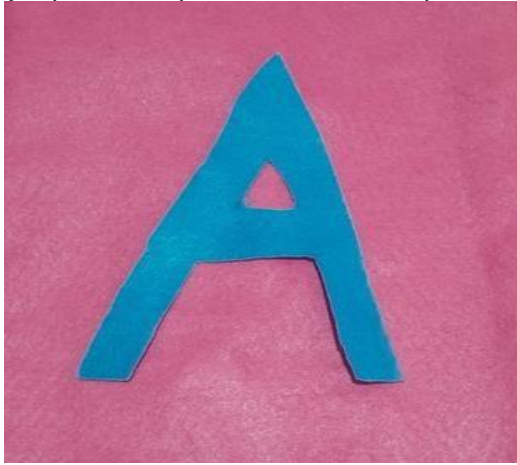
At this stage, the process began with designing the Magic Board media to support children's language development. The design of the board was based on relevant regulations, particularly the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 156 concerning the 2013 Early Childhood Education Curriculum, which emphasizes the importance of language development for children aged 5 to 6 years. At this developmental stage, children begin to understand the relationship between sounds and letter symbols, as well as listen to and comprehend stories read aloud by the teacher.

As the first step in the development process, the researcher selected the content to be displayed on the Magic Board. To help children grasp the concept of letter-sound correspondence, the researcher designed specific activities using the Magic Board media. In the initial phase of designing the board, the process started by preparing materials, which included flannel fabric, scissors, and pencils to draw letter patterns. However, after completing the letters using flannel, the media underwent revision due to issues with the flannel material—it was too thin and lacked durability. As a result, the Magic Board media was redesigned and rebuilt using plywood to ensure greater sturdiness and usability.

Letter Alphabet

Revision 1:

The first revision is illustrated in Figure 1, where the letters were originally made using flannel cloth. However, the texture was too thin and not sturdy, making it unsuitable for repeated use by young children. Therefore, the media was revised and reconstructed using plywood for the letters A–Z. The researcher replaced the previously flannel-based Magic Board media with plywood material to enhance durability and usability. This improvement is shown in Figure 2, where the alphabet letters made from plywood appear significantly more solid and neatly shaped, providing a more effective and engaging learning tool for children.



Picture 1. Flannel Alphabet



Picture 2. Alphabet Letters Made of Plywood

Revision 2

In the second revision, the researcher assigned a different color to each letter from A to Z to help differentiate between consonants and vowels. For the consonant letters (B, C, D, F, G, H, J, K, L, M, N, P, Q, R, S, T, V, W, X, Y, Z), the researcher used the color orange for each letter. Meanwhile, for the vowel letters (A, I, U, E, O), the researcher assigned the following colors: yellow for A, green for I, red for U, blue for E, and purple for O.

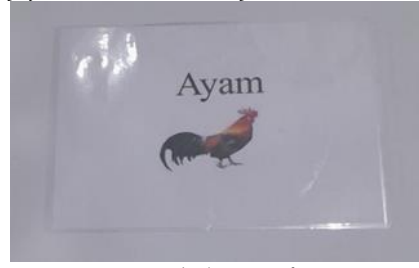


Picture 3. Alphabet Plywood

To enhance durability and maintain cleanliness, the alphabet letter cards featuring animal pictures should be made from durable materials that are not easily soiled, such as laminated material. This ensures that the letter cards can be used for an extended period without being easily damaged or stained, keeping them engaging and hygienic for children throughout the learning process.



Picture 4. Cards letter before revision

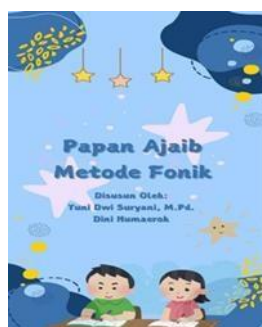


Picture 5. Cards letter after revision

Once the media is completed, it undergoes validation by both media experts and material experts, which results in revisions. These revisions include the creation of a reading recording method using the phonics approach, divided into two sections: one for vowel letters and another for consonant letters. Additionally, QR codes are added to facilitate easier access to the recordings. A manual for using the phonics method is also prepared, including the following sections: title, name of the supervising lecturer and researcher, table of contents, definition of the phonics method, step-by-step usage instructions, and QR code access. For example, the manual would resemble a book with the following structure:



Picture 6. Example guidebook use phonics



Picture 7. Title And Name writer



Picture 8. Register Contents



Picture 9. Definition Method Phonics



Picture 10. Steps to use the magic board letter A



Figure 11. Scan code of the book



Picture 12. Description writer

Improvements were made to the shape of the letter Q to ensure it aligns more closely with standard letter shapes. Additionally, a storage container was created from cardboard, covered with yellow flannel, to provide a more organized and neat way to store the alphabet letter cards, animal picture cards, and the instruction manual for using the magic board media.



Picture 13. Before revised



Picture 14. After revision



Picture 15. Box storage media

After all revisions were completed, the Magic Board media received an assessment from the media validator, scoring 90%, and from the material validator, scoring 97%. This was followed by a trial conducted with children aged 5-6 years in Class B3 at Ar-Rahmah Kindergarten, using the phonics method.

The activity involved distinguishing between vowels and consonants by using different colors for each. For example, the letter A was associated with a chicken, and B with a bear. The wooden letters, with textured surfaces, helped children recognize letters through touch. The visual elements, such as illustrated instructions and QR cards, made the media more engaging and easier to use. As a result, children enjoyed learning through games with the Magic Board.

Based on construct validation theory, which evaluates how well the learning media aligns with the characteristics of children aged 5-6 years, and content validation theory, which assesses how well the media fits the curriculum, the Magic Board media was found to be effective and suitable. The researcher meticulously planned the design of the Magic Board media, which involved using yellow flannel for the storage box. Tools and materials used included: a ruler or measuring tape, hinges, sandpaper (from coarse to fine), a pencil for marking measurements, and the following dimensions for the wooden board: 60 x 40 cm. The wooden poles had a width of 38 cm and a height of 132 cm. The design also incorporated blue flannel for the background, nails to secure the material, and printed animal images on A5-sized paper. These images were cut so that children couldn't touch them directly and were color-enhanced to make them more appealing.

The font size was 17 cm, with a 3mm layer of wood and a variety of colors – yellow, green, blue, and red for vowels (A, I, U, E, O), and orange for consonants. This color-coding enhanced the visual appeal of the letters. After the design was completed, printed materials were bound, and the media usage guide was stored in a separate cardboard box covered with flannel.

To create an engaging media design book with instructions for using the Magic Board, several key components are systematically organized. These include the title, table of contents, and an explanation of the phonics approach as the first section. The final pages of the book feature illustrations and step-by-step instructions for reading the alphabet using the phonics method. The instructions separate vowels and consonants, making it easier for children to understand. Additionally, a QR code is included for easy access to audio pronunciations of animal-themed alphabet letters from A to Z, using the phonics approach.

The identity and background of the creator of the media are detailed in the "Description of the Writer" section, which is located on the back cover. The design

incorporates visually appealing and interactive elements to ensure that the teaching process is not only engaging but also effective for children. To assess the validity of the material and the Magic Board media design, researchers created validation sheets. These sheets were used to evaluate both the content and the design of the media. In addition, observation sheets were used to monitor children's behavior while using the Magic Board during the product prototype stage. Both validation and observation sheets employed a Likert scale, adapted from evaluations commonly used in Early Childhood Education.

During the prototype product stage, the researcher prepared evaluation devices to assess the validity of the Magic Board media in terms of material and design. These devices included the validation sheets and observation sheets, which were used to assess children's reactions and engagement with the Magic Board media. The validation and observation sheets used in this study employed a Likert scale and were modified to align with the evaluation criteria in early childhood education.

Results of Evaluation Stages

After reaching the assessment stage, the author refers to the final product of the Magic Board media design, which has been adapted for early childhood learning, as the prototype. Following the creation of Prototype 1, the self-evaluation stage is conducted, after which the process moves to the expert review stage. In this phase, content and design experts evaluate the prototype. The next step in the assessment process involves small group evaluation, where nine children (ages 5-6 years) are involved, as well as one-on-one evaluations with three children. Prototype 2 is then tested with nine children. According to Tessmer's formative evaluation methodology, the results from each assessment stage are used to make modifications and improvements.

Results of Self Evaluation Stage

At this stage, the author tested the Magic Board material that had been created. The purpose of this review is to determine whether the material is easy to use and suitable for children. The results of the evaluation showed that the media still needed additional supporting elements to make it more attractive to children. The researchers found that the lack of visual elements could reduce the children's interest in using the media. As a follow-up, the researcher made improvements by adding color to the board, painting the letters in removable colors, and providing a protective finish on the letters to enhance the media's appeal and durability. With these improvements, the final result of the self-evaluation shows that the Magic Board media is now more aligned with the characteristics of children, more engaging, easy to use, and safe for children.

Results of Expert Reviews Stage

At the expert review stage, the Magic Board media is evaluated by validators, namely media experts and content experts. The product that has already been developed is then evaluated by media expert Mrs. Lia Dwi Pagarwati, M.Pd, and material expert Mrs. Dara Zulaiha, M.Pd. The purpose of this stage is to ensure that the process of validating the Magic Board media is thorough, assessing both the material and design.

The evaluation of the validity by the material/media experts was conducted in three stages. The first and second stages involved revising the description for each

indicator, ensuring that it aligned with the learning media. The validation sheets for material/media experts included two aspects: content validation and construct validation. In this stage, the material/media was deemed suitable for use after revisions were made based on the experts' suggestions.

Table 1. Results of Validator's Assessment Material

No	Aspect	Indicator	Amount question	recapitulation
1.	Suitability of Learning Media with the Curriculum Used	1,2,3,4	4	19
2.	Appearance of Learning Media According to the Characteristics of Children Aged 5-6 Years	5,6,7,8	4	16
Total Score		35		
Percentage		$35/36 \times 100\% = 97.2$		
Category		Very Valid		

Based on the table regarding material conformity with the indicators used, a score of 19 was obtained for the suitability of the media with the curriculum, and a score of 16 was obtained for the presentation of the learning media in accordance with the characteristics of children aged 5-6 years. Therefore, the score results from the two indicators and eight descriptors are classified as very valid, with a percentage of 97.2%, which is categorized as "very valid." This result is supported by the conformity indicator with the media used. The validation results assessed by material experts can be seen in Appendix Table 7, and the media validation results are presented in the following table.

Table 2. Results Evaluation Validators Media

Aspect	Indicator of Question	Total Score	Recapitulation
Education Aspects	1, 2, 3, 4	4	11
Technical Aspects	5, 6, 7, 8	4	15
Aesthetics Aspects	9, 10, 11, 12	4	10
Total Score		36	
Percentage		$36/40 \times 100\% = 90$	
Category		Very Valid	

Based on the evaluation of the media using three indicators—educational, technical/design, and aesthetic aspects—the results demonstrate that the media is highly valid. In the educational aspect, the media received a score of 11, assessed through four criteria: durability of the materials, appropriateness of color, suitability of size, and safety for children. In the technical/design aspect, it obtained a higher score of 15, based on similar considerations—emphasizing that the media is well-constructed, visually suitable, appropriately sized, and child-safe. For the aesthetic aspect, the media scored 10, evaluated through the proportional sizing between parts, color combination choices, portability, and ease of storage.

Overall, from the total of twelve descriptors across the three indicators, the media achieved a 90% validity rating, which falls under the "very valid" category. This indicates a strong alignment between the media's design and the intended learning goals. These findings are supported by the expert validation results, as shown in Appendix Table 8. The media expert also provided constructive suggestions for improvement, including the addition of clear usage instructions and phonics pronunciation guides. It was also recommended that the media be printed on A4 paper, bound properly, and stored in a designated box to enhance usability and

Results of Expert Reviews

The recapitulation table showing the percentage results from the material and media expert validators can be seen in the following table.

Table 3. Recapitulation of Evaluation by Validators

No.	Aspect	Presentation Recapitulation (%)
1.	Material	97.2
2.	Media	90
Total		187.2
Results Recapitulation		$(187.5)/2 = 93,75$
Category		Very Valid

Based on the validation results presented in the table, the material validation achieved a percentage of 97.2%, while the media validation reached 90%. Both results fall under the "very valid" category, indicating that the learning material and media meet the required standards. Furthermore, the overall average percentage of the validation results from expert reviewers for the Magic Board media was 93.75%, also categorized as very valid. This assessment was based on indicators from material validators, including content validity, construct validity, and aesthetic aspects. The detailed results of the expert review stage can be found in the table on page 9 of the attachment. Therefore, the Magic Board media for children aged 5–6 years at Kindergarten Ar Mercy is deemed suitable for field testing, with revisions made according to the suggestions provided by the expert validators.

Results of One – To – One Evaluation Stage

At the one-to-one evaluation stage, the researcher assessed the practicality of Prototype 1, which had already undergone expert validation. This evaluation took place at a kindergarten on January 13, 2025, where the researcher engaged three children aged 5-6 years in a learning session using the Magic Board media. The researcher visited the school directly, explaining the instructions for using the media. After providing the explanation, the evaluation proceeded, and the researcher took on the role of a guide throughout the learning process, assisting the children as they interacted with the Magic Board media. A colleague helped document the entire learning process, from the beginning to the end, to track the children's engagement and progress.

The results from this one-to-one evaluation stage were positive. The average score from the observations indicated that the Magic Board media was highly practical, with an average score of 92%, classified as very practical. The individual scores for each child were as follows: AY scored 30 points, with a percentage of 93%; FH scored 28 points, with a percentage of 87%; and MKA also scored 30 points, with a percentage of 93%. These results reflect that the children found the Magic Board media to be engaging and easy to use.

The evaluation focused on eight key indicators: recognizing letters, sounding out letters (phonics), understanding simple words, connecting letters with objects, following instructions on the Magic Board, using the Magic Board correctly, naming letters in the correct order, and spelling simple words. Based on these indicators, the Magic Board media was deemed easy for children to use, safe, engaging, and effective in supporting the learning process. As a result of these positive outcomes, the researcher moved forward with revising Prototype 1 into Prototype 2, which was then

Results of Small Group Evaluation

The media was then revised into Prototype 2, which was subsequently tested in the small group evaluation stage. On February 12, 2025, the researcher conducted this trial with nine children in a group setting. The children were observed to assess their engagement and behavior with Prototype 2, which was under development. The researcher directly entered the classroom to provide instructions on how to use the media. After explaining the usage, the small group process began, with the researcher facilitating the learning process and observing the children's activities as they interacted with the Magic Board media.

Upon introducing the Magic Board media to the group of nine children, their enthusiasm and curiosity were immediately evident. The children were eager to try holding and using the media, which led to a somewhat unorganized atmosphere. To ensure a smoother evaluation process, the researcher first took time to prepare the children so that the observation could proceed effectively and optimally.

The results from the small group evaluation stage were very promising. The average score from the observations was 93%, classified as very practical. The individual scores for each child were as follows: US scored 29 with a percentage of 90%, KR scored 31 with a percentage of 97%, GN scored 30 with a percentage of 93%, DL scored 31 with a percentage of 97%, BR scored 31 with a percentage of 97%, NZ scored 30 with a percentage of 93%, FN scored 29 with a percentage of 90%, ZA scored 29 with a percentage of 90%, and PR scored 31 with a percentage of 97%. The recapitulation of results from both the one-to-one evaluation stage and the small group evaluation stage showed an overall average of 92%, categorizing the media as very practical.

This indicates that Prototype 2 is highly effective and well-received by the children, with the media proving to be practical, engaging, and appropriate for their age group.

Discussion

This study developed a magical learning board based on data analysis and expert review stages. The results of the validity tests for both the material and media showed a 93% validity rate, which is categorized as very valid. During the one-to-one evaluation and small group evaluation stages, the practicality of the media was assessed, resulting in a 92% average score, which was also considered very practical. This demonstrates that the magical board media is an excellent tool to support the learning process.

Regarding the advantages and disadvantages of the media developed, the magical board is made with felt to make it easier to attach and detach the letters, allowing for repeated use in reading activities. The colorful letters are designed to grab children's attention, and they aid in the fast introduction of letters. The media helps increase children's interest in learning to read at an early age, offering a fun way for them to learn letter sounds. Additionally, the letter cards help children connect letters with pictures that match the sounds. The media also includes an instruction manual, making it easier to use. The magical board can develop language skills in children, one of the assessment indicators used by the researchers being the children's ability to answer simple questions. Through collaboration between various aspects, it is expected to foster children's creativity, imagination, scientific thinking, and

vocabulary mastery, which will facilitate communication and interaction with their environment. It is important to have media that stimulates children's curiosity so they will ask questions or express their ideas.

In terms of design, the magical board is made from a felt-covered board with colorful alphabet letters. The consonants are all one color, while the vowels are given a special color as the base. The media also includes an instruction manual with a QR code and a reading guide. The materials used are easy to obtain, safe, and practical. With its engaging and interactive design, the learning process becomes more meaningful, easy to use, and fun for young students. However, the magical board media has some drawbacks. The work process to create the media is relatively long, and in terms of costs, it can be quite expensive. Therefore, the researcher hopes that future versions of the magical board can use more easily available and cost-effective materials.

Before starting the study, the researcher conducted a needs analysis in kindergartens for 5-6-year-olds, focusing on reading skills and other aspects of development. This observation was done to understand what kind of media could best support the learning stages that stimulate children's ability to read. After conducting the needs analysis through interviews, it was found that existing reading media such as flashcards, letter puzzles, and posters were often used, but they lacked variety. Children became bored if they were used for too long. As a result, the researcher developed the magical board media, which was accepted in schools as a tool to help develop children's reading abilities.

After conducting the planning stage with a needs analysis, the researcher moved on to product development, designing both the media and the materials. The activities using the magical board media were developed according to the 2013 curriculum and the learning themes for children aged 5-6 years. The material focused on helping children answer simple questions and understand the relationship between sounds and letters. The media development is based on validity theory, which includes content validity and construct validity.

Following the needs analysis and development stages, the researcher conducted an evaluation. In this stage, the researcher performed self-assessment and expert review to evaluate the magical board media. The expert review stage revealed several suggestions for improvement, such as ensuring that the letter cards were cut properly to avoid harming children and creating a storage box for the media. The instruction manual was also improved to integrate phonics methods and include a QR code. The criteria for the success of developing the magical board media focused on content validity, construct validity, and practicality.

According to Wulandari (2021), content validation is an important part of research. It helps assess whether an instrument can reliably measure the intended concept. This validation was performed at the beginning of the development process to ensure that every question or indicator aligns with the research objectives. Syaifudin (2020) emphasizes that construct validity ensures that each item used to measure aspects of thinking meets the standards in the curriculum, core competencies, indicators, and learning outcomes. In other words, construct validity ensures that each measurement item aligns with the learning objectives.

The material validation results for the magical board media showed a score of 97%, categorized as very valid. The indicators included: 1) The media's suitability to the curriculum used, which helps children spell simple words precisely and fluently, and 2) The media's design being appropriate for children aged 5-6 years, making it

easy for them to use and appealing with attractive colors. Media validation results showed a score of 90%, which also falls under the very valid category. The validation indicators included: 1) The media's suitability for learning purposes, 2) The media supporting learning, 3) The media's ability to stimulate child performance, 4) Educational values, 5) Suitability with child development stages, 6) Durability of materials, 7) Proper size matching, and 8) Safe for children. The magical board's overall average validation score was 93%, indicating a very valid product. However, there was a 7% gap due to variations in children's understanding, as not all children have the same ability to grasp phonics methods.

During the one-to-one evaluation stage, three children tested the prototype. The researcher introduced the magical board media, and the children displayed high enthusiasm and curiosity about the new tool. As a result, the observation was initially disrupted, but after proper guidance, the children engaged well with the media. The use of the magical board during the one-to-one evaluation scored an average of 92%, categorized as very practical.

In the small group evaluation stage, the prototype was tested with nine children at Ar Rahmah Kindergarten. The researcher provided instructions and examples on how to use the magical board. Children learned to read using the phonics method with the media, but some still needed assistance in recognizing letters and reading correctly. The small group evaluation scored an average of 93%, categorized as very practical. Both the one-to-one and small group evaluation stages resulted in an average practicality score of 92%. However, there was an 8% gap regarding the limitations of the media, specifically related to its use during the observation phase.

In conclusion, the magical board media developed in this study is categorized as very valid based on content validity and construct validity indicators. In terms of design, it received a very practical category, based on the evaluation stages of the one-to-one and small group trials. Research by Yulia Agustina and Komala Komala (2024) showed that the use of the flannel board media significantly improves early childhood reading skills. This media, consisting of flannel boards, word cards, and pictures, enhances reading comprehension and motivates children to engage in learning. Berta (2024) also confirmed that the use of flannel boards has a positive impact on early reading skills and can help improve motivation, letter and word recognition, and motor skills. Research by Novi & Bi (2021) showed that flannel board media is effective in teaching colors to children aged 4-5 years, with positive results in terms of learning outcomes. Previous research indicates that flannel board media is a valid and effective learning aid for improving early childhood reading skills. While its effectiveness can vary depending on the child's characteristics, when combined with appropriate methods, it can be a powerful tool for enhancing early reading abilities.

CONCLUSIONS

From the analysis and results of the discussion on the development of magical board media for children aged 5-6 years at Kindergarten A Grace, it is evident that the media is both very valid and practical. The high confidence in the results of the magic board media production process is supported by data from material validation tests, which reached a validity level of 97%. Additionally, the media validation scored 90%, which is also considered very valid. This is due to the media's validation aligning with the characteristics of the children and the content validation being in accordance with the curriculum used, both of which were deemed very valid. During the assessment process, the design of the magical board media was refined to support early childhood learning, starting with the initial prototype. The process then moved to the expert review stage, where content, media, and design experts provided

feedback after the self-evaluation phase, resulting in Prototype 1. The next step in the evaluation process involved a one-to-one evaluation with three children, followed by a small group evaluation with nine children (aged 5 to 6 years). Throughout each stage of the process, formative evaluation techniques were applied to calibrate the results.

REFERENCES

- Aisyah, S. (2023). *Perkembangan Bahasa Anak Usia Dini dan Strategi Stimulasi di TK*. Jakarta: Prenada Media.
- Agustina, Y., & Komala. (2024). Pengembangan media papan flanel dalam meningkatkan kemampuan membaca permulaan pada anak usia dini. *Ceria (Cerdas Energik Responsif Inovatif Adaptif)*, 7(6), 700–711.
- Mardhotillah, N. (2021). Perkembangan Kemampuan Berbahasa Anak Melalui Metode Fonik. *Jurnal Pendidikan Anak Usia Dini*, 4(2), 110-123
- Rantina M, Hasmalena, Nengsih YK (2021). *Buku Panduan Stimulasi Dan Deteksi Dini Tumbuh Kembang Anak Usia (0-6) Tahun*. Jawa Barat: Edu Publisher.
- Rayon, B. (2024). Pengaruh penggunaan media papan flanel terhadap peningkatan kemampuan membaca permulaan pada anak usia 5-6 tahun di TKN Golo Jambu. *Jurnal Ilmiah Kajian Multidisipliner*, 8(1).
- Syaifudin. (2020). Validitas dan reliabilitas instrumen penilaian pada mata pelajaran bahasa arab. *Cross-Border: Jurnal Kajian Perbatasan Antarnegara*, 3(2), 106–118.
- Wulandari, I., & Oktaviani, N. M. (2021). Validitas bahan ajar kurikulum pembelajaran untuk pendidikan guru sekolah dasar. *Jurnal Cakrawala Pendas*, 7(1), 90–9