



Media Implementation *Magic Box* for Early Childhood Symbolic Thinking

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Abstract

The importance of early childhood education cannot be separated from its role in forming the basis for the development of various aspects of a child's life. At this stage, children begin to get to know the world around them, develop social interaction skills, and build the cognitive foundations they will use in the future. The ability to think symbolically is the basis for children to understand and process more complex information in the future. Through this ability, children begin to develop the ability to imagine, solve problems and think abstractly. The research used is qualitative descriptive research. The research location is TK Aisyiyah 02 Tambakromo. The number of subjects in this study was 23 people. The data in this research was collected through several techniques, namely observation, interviews and documentation. The data obtained in this research was collected and analyzed using thematic analysis techniques with data analysis steps including Data Reduction, Data Presentation, and Drawing Conclusions. The results obtained are that the use of learning media is very necessary in helping early childhood understanding. Based on the data obtained, the implementation of magic box media can improve students' symbolic abilities as evidenced by the fact that all students are in the criteria of developing according to expectations (BSH) and developing very well (BSB).

Keywords: *Symbolic Abilities, Magic Box, Early Childhood*



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INTRODUCTION

Education in Indonesia continues to experience significant development, especially early childhood education which is an important foundation in shaping children's character and skills. Early childhood education does not only focus on imparting basic knowledge, but also on forming values that will become the foundation for children's future development. According to Minister of Education and Culture Regulation Number 146 of 2014 Article 5, aspects developed in early

childhood education include religious values, morals, physical and motor development, cognitive, social emotional, language and art. According to Minister of Education and Culture Regulation Number 146 of 2014 Article 5, aspects developed in early childhood education include religious values, moral values, physical and motor development, cognitive, social emotional, language and art to improve children's thinking abilities (Firman & Anhusadar, 2022).

The importance of early childhood education cannot be separated from its role in forming the basis for the development of various aspects of a child's life. At this stage, children begin to get to know the world around them, develop social interaction skills, and build cognitive foundations that they will use in the future. In accordance with the statement (Wicaksono et al., 2022) that in early childhood, children's ability to develop is so rapid that it is called the "elmas period". Knowledge for early childhood currently tends to be relative, and its development will occur well if it is based on facts as children develop further as they get older (Istiqomah & Maelmonah, 2021). One of the most important cognitive abilities is the ability to think symbolically. This ability allows children to understand and use symbols, such as words, numbers, or pictures, to represent specific objects, actions, or concepts.

Thinking is a human personal activity that results in discovery that is directed towards a goal (Suparna, 2023). Symbolic thinking means that young children think about symbols or imagine an object that is not in front of them (Mutiah, 2010). Symbolic thinking is that children represent objects that are not in front of them by using number and letter symbols (Lelni Hardiyanti, Sasmiati, 2018). The ability to think symbolically is the basis for children to understand and process more complex information in the future. Through this ability, children begin to develop the ability to imagine, solve problems and think abstractly. This also becomes an important basis for the development of language and mathematics in the future. In this way, early childhood education not only aims to equip children with basic knowledge, but also to develop cognitive abilities that will become the basis for further learning at a higher educational level.

One of the development of children's thinking that children must achieve is symbolic thinking. In the development of symbolic thinking, what occurs is that children begin to use symbols. Symbolic thinking is a preoperational stage of thinking where children develop the ability to imagine and begin to use symbols. The concepts that children will learn will be packaged through letter learning activities (Diana Mutiah, 2010).

Quality early childhood education, which pays attention to the development of symbolic thinking abilities, will have a huge positive impact on children's academic and non-academic abilities in the future. Therefore, it is important for educators and parents to pay serious attention to the development of these aspects in early childhood education. This will ensure that children have a strong foundation to grow and develop into individuals who are intelligent, creative, and able to adapt to the various challenges they will face in the future.

Remembering that cognitive abilities are related to children's symbolic thinking abilities which need to be developed, there are many ways to develop children's cognitive abilities, one of which is using media. The role of media in learning, especially in early childhood education, is increasingly important, considering that children's development at that time is not in the concrete thinking period. Therefore,

one of the principles of education for early childhood must be based on reality, meaning that children can learn things in a real way (Hurlock, 2011).

Selfelldt and Wasik stated that it is important for children to learn number symbols, because the aim is to develop perfection in a number (Selfelldt, C. & Wasik, 2008). In play groups, young children have the opportunity to develop symbolic thinking abilities through various specially designed activities. Learning groups provide a stimulus-rich environment, where children can interact with peers and learning media that support their cognitive development. This shows that stimulation can help children develop optimally (Wardani & Suryana, 2021).

Meldia is a connection with intermediaries whose function is to distribute messages and information from sources received by people who receive messages that occur in learning. In the learning process the teacher acts as the messenger and the students act as the messenger (Nunun, 2014). The benefits of learning media in the learning process are as follows: a. As a tool to create an effective learning situation, b. Teaching will attract the attention of young children so that they can develop motivation to learn, c. The meaning of teaching materials will be clearer so that it can be understood by young children, d. Teaching methods will be more varied, not just verbal communication through the speaking of words by the teacher, so that young children do not get bored and teachers do not run out of energy if the teacher teaches for every lesson hour, e.g. Early childhood children carry out a lot of learning and teaching activities, because they not only listen to the teacher's explanations, but also other activities, including observing and demonstrating the criteria for selecting good media (Sri Widayati, 2020).

However, in practice, there are still many challenges faced in optimizing children's symbolic thinking abilities in learning groups. One of the challenges is the lack of interactive and interesting learning media to stimulate children's symbolic thinking abilities. Meldia *Magic Box* present as an innovative solution to support children's learning in learning groups. A magic box is a box that is used for learning or acquiring knowledge with the aim of increasing children's attention, creativity, learning outcomes and making it fun for children. Magic box is an educational game. Educational games are designed as games that are used in the learning process and the games themselves contain educational elements or educational values (Andang, 2006). This media is designed to provide a fun and interactive learning experience, which is able to stimulate children's imagination and symbolic thinking abilities. In accordance with the opinion (Bodeldarsyah & Yulianti, 2019) that learning media is very important to support the explanation of material. By using Magic Box media, it is hoped that children can more easily understand abstract concepts through concrete symbolic representation, so that learning becomes more effective and meaningful. The existence of strategies and media can maximize capability development (Umaroh et al., 2023).

Media implementation *Magic Box* in learning groups is a strategic step in improving the quality of early childhood learning in Indonesia. This media not only helps children develop symbolic thinking abilities, but also supports teachers in creating a creative and innovative learning atmosphere. Learning media during learning must be fun so that children are motivated to participate (Ramlah et al., 2023). Therefore, it is important to explore further how the Meldia Magic Box can be integrated optimally in the learning process in play groups, in order to improve the symbolic thinking abilities of young children.

METHODOLOGY

The research used is quantitative research. This research aims to explore in depth the implementation of *Meldia Magic Box* in developing the symbolic thinking abilities of early childhood in the Belmain Group. The research location is at TK Aisyiyah 02 Tambakromo which is located in Delsa Tambaharjo, Tambakromo District, Pati Regency, Central Java Province. The number of subjects in this research was 23 people. The data in this research was collected through several techniques, namely observation, interviews and documentation. The data obtained in this research were collected and analyzed using telecommunications analysis techniques with data analysis steps including data reduction, data presentation, and drawing conclusions.

RESULTS AND DISCUSSION

The research began by conducting interviews with teachers in the play group at Kindergarten Aisyiyah 02 Tambakromo. The results obtained were that the teacher had carried out learning in accordance with the early childhood education curriculum. Before carrying out the lesson, the teacher first makes a plan for implementing the lesson and prepares the media that will be used during the lesson. The obstacle experienced by teachers in preparing the Learning Implementation Plan (RPP) is how to design lessons that are interesting and enable students to carry out learning and play activities according to their age development level. The teacher also said that the media used was still limited to using tools and materials that were available in the surrounding environment. In interview activities, it was also found that there were still many students who did not understand the symbols when participating in learning. This is a problem that will be solved by implementing more interactive learning using magic box media.

The next step is to develop more innovative learning by implementing a magic box to improve students' symbolic abilities. The steps taken by teachers before implementing magic box learning media are by first identifying learning needs related to the development of children's symbolic thinking abilities. This is done by understanding students' characteristics, their level of symbolic development, and the applicable curriculum. Then the teacher developed a media magic box. *Meldia Magic Box* is prepared with content and tools that are appropriate to the learning objectives and symbolic development objectives. This box can contain various objects, pictures, letters, numbers and educational toys designed to stimulate imagination and symbolization.

The *Meldia Magic Box* implementation activity was attended by 23 student participants. The teacher begins by introducing the *Meldia Magic Box* to the children. *Melrelka* is invited to explore the contents of the box independently or as a group, while being given clear instructions but still leaving room for creativity. The teacher guides activities that involve the *Meldia Magic Box*, a story lesson using objects from the box, grouping objects based on shape or color, and playing roles using the toys provided. This activity is designed to hone the ability to think symbolically through the use of symbols in meaningful contexts. During the activity, the teacher actively interacts with the children, asking questions that encourage children to think symbolically, such as "What can we make with this object?" or "What does this object represent?". Teachers also encourage discussions between children to share ideas and their own understanding of the symbols used.

During learning activities using the Meldia Magic Box, the teacher carries out observations to observe how children use the Meldia Magic Box and how their symbolic thinking abilities develop. This observation includes paying attention to how children use symbols, how they solve problems, and how they express their ideas. At the end of the lesson, the teacher carries out an evaluation of the development of the child's symbolic thinking abilities. This evaluation is carried out by comparing the child's individual progress against the symbolic ability indicators that have been determined previously. The results obtained by students based on symbolic ability indicators are as follows:

Table 1. Data on students' ability to use Meldia Magic Box

Kritelria	Number of children with Kritelria			
	Bellum Belrkelmban g (BB)	Starting Developme nt (MB)	Developmen t According to Expectations (BSH)	Very Well Developed (BSB)
Recognize number symbols	-	-	10	13
Soften the number symbol	-	-	15	8
Know different types of symbols for vowels and consonants	-	-	12	11
Presenting various objects in the form of images and writing	-	-	8	15

In the results of the implementation carried out with teachers in the Belmain Group, various in-depth approaches to implementing learning in the classroom were revealed, especially in the context of media use. *Magic Box*. The teacher said that the implementation of media *Magic Box* has had a significant positive impact on the learning process. According to them, this media has succeeded in attracting children's interest and attention, thus making them more enthusiastic in participating in learning activities. The teacher also explained that media *Magic Box* helps children to more easily understand abstract concepts, because this media allows them to visualize ideas through concrete objects contained in the box. This is in accordance with the expectations (Handayani et al., 2023). that children in play groups will explore their surrounding environment to develop a more complex understanding so that cognitive aspects become the output of the learning process. Supported by the opinion (Putri et al., 2021) that the cognitive aspects of early childhood will develop very rapidly if they pay attention to stimuli that are appropriate to their level of development.

Apart from that, the teacher explains the use of media *Magic Box* not only improves children's symbolic thinking abilities, but also stimulates their creativity and ability to solve problems. Teachers see that children are more active in participating and are able to work together with their friends when using this media. In accordance with the opinion (Novitasari & Fauziddin, 2020) that young children have good memory abilities so that appropriate learning will bring out the child's natural

characteristics. Meanwhile, aspects of cognitive development that are monitored include: information or figurative knowledge, procedural or operational knowledge, temporal and spatial knowledge, as well as the ability to remember and memorize. So in this case teachers need to pay attention to the characteristics of children's development and understand the nature of children. However, teachers also recognize that there are challenges in implementation, including the need for more practice in integrating Meldia Magic Box with other learning materials, as well as ensuring that each child gets enough opportunities to engage optimally.

From the results obtained, it shows that media *magic box* can increase children's symbolic abilities. This means that teachers need to consider it in order to develop lessons using media that is appropriate to the age level. The symbolic ability indicator "presenting various objects in the form of images and writing" shows that a total of 15 people are in the Very Good Development (BSB) criteria. These data show that there is a need for media as well as good student memory skills to enable children to express themselves in the form of pictures and writing. In accordance with the opinion of (Priyono et al., 2021), young children can also remember or recognize an object even though the object is not in front of them.

Overall, teachers stated that the use of Meldia *Magic Box* This is a very useful innovation in the learning process at Belrmain Group, and they hope to continue developing this model to improve the quality of early childhood education. Apart from that, providing stimulation in the form of interactive learning media will increase children's understanding. This is in line with the opinion (Anida & Elliza, 2020) that children's development can be maximized with stimulation. In accordance with the opinion (Umiyati & Isnaningsih, 2024) that appropriate learning media accompanied by interesting learning activities will influence the child's level of development, in this case the child's symbolic abilities. Through gaming media *magic box*, children will feel interested in completing every activity so that it has an influence on the development of children's abilities.

CONCLUSION

Based on the results of the research, it can be concluded that the activity of playing the magic box which is implemented in group A at Aisyiyah 02 Tambakromo Kindergarten can improve the ability of children's symbolic thinking. The use of learning media is very necessary in helping early childhood understanding. Based on the data collected, the implementation of magic box media can improve children's symbolic thinking skills as evidenced by the fact that all children are in the criteria for developing as expected (BSH) and developing very well (BSB). Teachers must continue to follow the roundabout development of early childhood education by using media and learning models to foster children's interest in doing the activities provided and can improve the quality of teaching and learning processes. Schools are expected to facilitate infrastructure that supports and supports every activity in the learning process.

REFERENCES

- Andang, I. (2006). *Education Games*. Pilar Media.
- Anida, A., & Eliza, D. (2020). Pengembangan Model Pembelajaran Saintifik Berbasis Kearifan Lokal untuk Perkembangan Kognitif Anak Usia 5-6 Tahun. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(2), 1556–1565. <https://doi.org/10.31004/obsesi.v5i2.898>

- Bodedarsyah, A., & Yulianti, R. (2019). Meningkatkan Kemampuan Berpikir Simbolik Anak Usia Dini Kelompok A (Usia 4-5 Tahun) dengan Media Pembelajaran Lesung Angka. *Jurnal Ceria*, 2(6), 354–358. <https://www.paud.id/2015/09/t//ingkat->
- Diana Mutiah. (2010). *Psikologi Bermain Anak Usia Dini*. Kencana-Prenada Media Group.
- Firman, W., & Anhusadar, L. (2022). Peran Guru dalam Menstimulasi Kemampuan Kognitif Anak Usia Dini. *Kiddo: Jurnal Pendidikan Islam Anak Usia Dini*, 3(2), 28–37. <https://doi.org/10.19105/kiddo.v3i2.6721>
- Handayani, W., Kuswandi, D., Akbar, S., & Arifin, I. (2023). Pembelajaran Berbasis STEAM untuk Perkembangan Kognitif pada Anak. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 4(2), 770–778. <https://doi.org/10.37985/murhum.v4i2.390>
- Hurlock, E. B. (2011). *Psikologi Perkembangan: suatu pendekatan sepanjang rentang kehidupan*. Erlangga.
- Istiqomah, N., & Maemonah, M. (2021). Konsep Dasar Teori Perkembangan Kognitif Pada Anak Usia Dini Menurut Jean Piaget. *Khazanah Pendidikan*, 15(2), 151–158. <https://doi.org/10.30595/jkp.v15i2.10974>
- Leni Hardiyanti, Sasmia, L. S. (2018). *Penggunaan Media dan Kemampuan Berpikir Simbolik Anak Usia Dini*. 4(1).
- Mutiah, D. (2010). *Psikologi Bermain Anak Usia Dini*. Kencana.
- Novitasari, Y., & Fauziddin, M. (2020). Perkembangan Kognitif Bidang Auditori pada Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(1), 805. <https://doi.org/10.31004/obsesi.v5i1.640>
- Nunun, M. (2014). *Media dan Sumber Belajar Berbasis Teknologi Informasi dan Komunikasi*. Aswaja Pressindo.
- Priyono, F. H., Rahmawati, A., & Pudyaningtyas, A. R. (2021). Kemampuan Berpikir Simbolik Pada Anak Usia 5-6 Tahun. *Jurnal Kumara Cendekia*, 9(4), 212–218. <https://jurnal.uns.ac.id/kumara>
- Putri, V. L., Wijayanti, A., Kusumastuti, N. D., Stkip, P.-P., & Ngawi, M. (2021). Pengembangan Media Frueelin Untuk Meningkatkan Perkembangan Kognitif Anak Usia Dini. *Jurnal Golden Age*, 5(2), 155–163. <https://doi.org/10.29408/jga.v5i01.3385>
- Ramlah, F., Mukminin, A., & Raudhatul Jannah, S. (2023). Pengaruh Penggunaan Media Flash Card terhadap Kemampuan Berpikir Simbolik dan Kecerdasan Linguistik Anak Usia 5-6 Tahun. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 4(1), 259–271. <https://doi.org/10.37985/murhum.v4i1.202>
- Seefeldt, C. & Wasik, B. A. (2008). *Pendidikan anak usia dini : menyiapkan anak usia tiga, empat, dan lima tahun masuk sekolah*. Indeks.
- Sri Widayati, D. (2020). *Media Pembelajaran PAUD*. PT. Remaja Rosdakarya.
- Suparna, P. (2023). *Buku Ajar Psikologi Komunikasi*. NILACAKRA Publishing House.
- Umaroh, Kania, G., & Novianti Yusuf, R. (2023). Upaya Meningkatkan Kemampuan Berpikir Simbolik Dengan Menggunakan Media Papan Hubung Pada Anak Usia 5-6 Tahun. *Jurnal Tahsinia*, 4(1), 71–81.
- Umiyati, W., & Isnaningsih, A. (2024). Stimulasi Peningkatan Kemampuan Problem Solving pada Anak Usia 4-5 Tahun melalui Media Busy Jar. *Journal of Education Research*, 5(3), 3409–3415.
- Wardani, E. K., & Suryana, D. (2021). Permainan Edukatif Setatak Angka dalam Menstimulasi Kemampuan Berfikir Simbolik Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(3), 1790–1798. <https://doi.org/10.31004/obsesi.v6i3.1857>
- Wicaksono, A. W., Nafi'ah, A., Winona, A. F. S., & Muhid, A. (2022). Meningkatkan Kemampuan Kognitif melalui Metode Bernyanyi pada Anak Usia Dini: Literature Review. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 4(2), 408–420. <https://doi.org/10.35473/ijec.v4i2.1635>