

Finding Letter Game to Improve Early Literacy Skills in 4-5 Year Old Children at Yasmin Preschool, Jember

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Abstract: This research aims to improve early literacy skills in children aged 4-5 years at PAUD Yasmin through the use of games. "Finding Letter". The action research method was used by involving 15 children (8 girls and 7 boys) at PAUD Yasmin. In the first cycle, the success rate reached 70%, with 4 children who had not yet reached the success criteria. In the second cycle, the success rate increased to 85%, with 2 children still making mistakes in the alphabetical order but achieving the set success rate of 80%. Data was collected through observation, tests, and interviews. Research findings show that the use of games "Finding Letter" significantly improve children's early literacy skills. The implications of these findings emphasize the importance of utilizing educational games to improve early literacy skills in childhood.

Keywords: Early literacy, 4-5 year olds, finding letter game.

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INTRODUCTION

The importance of early literacy in early childhood is widely recognized as a key foundation in their literacy development. PAUD Yasmin has become the center of attention in strengthening the early literacy of children aged 4–5 years. One approach that can be used is through educational games, such as Game Finding Letter, which have great potential to improve early literacy skills. Early literacy itself is a basic reading and writing ability, including the recognition of vowels and consonants in early childhood (Amini, 2016; Listriani, Hapidin, & Sumadi, 2020). This ability is important to be built from an early age because it will affect children's cognitive, social, and personal development in the future.

In class A, it was found that children had difficulty recognizing letters, writing letters, and arranging letters into words. During the implementation of learning, PPL students have tried to provide treatment related to early literacy by using various interactive games. Through interactive games, children are invited to be more enthusiastic in recognizing letters, arranging letters to form words, arranging puzzles accompanied by music, and group games in arranging letters. Based on this background, the author took the title of the research "Improving Children's Literacy Through Game Finding Letters in Children Aged 4–5 Years in Group A PAUD Yasmin Jember."

The formulation of this research problem is how to improve the early literacy of children aged 4–5 years in group A PAUD Yasmin Jember. The benefit of the research is to find out the extent to which Game Finding Letter can play a role in the development of children's early literacy skills. This game is considered to be able to provide significant benefits because children can improve letter recognition in an interactive and fun way. Through these activities, children can better recognize letters, distinguish similar letters, and understand the relationship between uppercase and lowercase letters. In addition, the game also helps to strengthen eye and hand coordination, improve concentration, and expand vocabulary comprehension. By providing fun learning, Game Finding Letter can encourage motivation to learn while building a strong foundation for early literacy.

Early literacy skills play an important role in the development of preschool-age children. At the age of 4–5 years, children are at a sensitive time to develop reading and writing skills. Glen in Ahmad (2012) states that reading is more effective at the age of four than at the age of five, even three-year-olds tend to learn more easily than four-year-olds. However, the earlier the child's age, the greater the demand for patience from parents and teachers in guiding them.

One of the aspects that is important to develop from an early age is language. Permendikbud Number 137 of 2014 concerning National Education Standards emphasizes that aspects of language development include the ability to understand, express language, and literacy. The introduction of reading and writing can be done through a play approach that is tailored to the child's developmental stage. Literacy is defined as the ability of children to know and understand the relationship between the shape and sound of letters, so that they can recognize and interpret the symbols of the script (Darjowidjojo, 2003). Thus, the stimulation of letter recognition is an important stage in early childhood language development.

Children who are able to recognize and pronounce the letters of the alphabet a–z generally have fewer difficulties when learning to read than children who do not know them. In accordance with the Child Development Achievement Level Standard (STPPA) in Permendikbud No. 137, literacy at the age of 4–5 years includes recognizing symbols, animal sounds or objects around, making meaningful doodles, and imitating writing and pronouncing the letters A–Z. Thus, knowing literacy is the ability of children to know and understand the signs of letters in the alphabet grammar a–z which symbolize the sound of language and the shape of the letters. In this study, knowing literacy is defined as children's understanding of the letters of the alphabet, the ability to read words, imitate simple writing, and the recognition of syllables.

Dickinson and Tabors (2001) divide the stages of early literacy development into three. First, the early stage, where children begin to develop phonological awareness, recognize letters, and understand that letters can form words. Second, the advanced early stage, when children are able to distinguish the beginning and end sounds in words and understand the relationship between sound and letters more deeply. Third, the modeling stage, where children begin to use the knowledge of letters and sounds to read and write independently, and are able to recognize word patterns and structures. Marie Clay also stated the stages of literacy development, namely the pre-alphabetic stage, the alphabetic stage, and the confirmative stage. In the pre-alphabet stage, children are already involved in simple reading and writing activities, even though they do not understand the relationship between letters and sounds. The alphabetic stage is characterized by the ability to recognize letters and the sounds of letters. Meanwhile, the confirmative stage is characterized by a more systematic phonetic analysis strategy in reading words.

Vygotsky through the theory of social interaction asserts that the development of children's literacy occurs through the guidance of adults or more competent peers. The concept of the Proximal Development Zone (ZPD) is an important basis for children to develop more optimally when receiving social support (Setyowati & Hendayana, 2019). In this context, interactive games such as Game Finding Letter are an effective vehicle to facilitate such social interactions.

Interactive games allow children to be actively involved in the game, control the characters or elements of the game, and make decisions that affect the outcome of the game (Fifitin, 2008). Clontz (2018) added that one type of word puzzles in language games is able to train children's knowledge in recognizing letters and words. In Game Finding Letters, the letters are displayed in interesting forms such as simple pictures or phrases. Children are challenged to find the requested letters, either by composing or searching for missing letters, using physical movements, music, and visual media. The main goal of the Letter Finding Game is to train children in recognizing and distinguishing letters, so that they gain an initial understanding of the writing system. Through this game, children can improve visual perception, concentration, and observation skills. Thus, Game Finding Letter is not just a game, but also an educational means that is able to prepare children for more complex reading and writing skills.

METHODS

This study uses a classroom action research (PTK) approach. The PTK method was chosen because it is in accordance with the research objectives, which are to improve the practice of early literacy learning in early childhood through planned, structured, and repetitive activities. PTK is basically a research activity that is carried out in the classroom or outside the classroom, provided that there is a group of children who learn and observe the process and results. In the context of this research, PTK provides an opportunity for teachers and researchers to try new strategies in learning, then observe the impact of these actions directly on children's development.

According to Arikunto (2015), PTK can be interpreted as research that involves observing the causes and effects of a treatment given, as well as documenting the entire process that occurs from the beginning of treatment to obtaining a certain impact. PTK does not only stop at the provision of treatment, but also emphasizes reflective analysis, so that teachers can correct the weaknesses of the previous cycle. In line with that, Asrosi (2009) explained that a research plan is a series of activities that are systematically prepared by teachers to achieve research objectives. The plan includes the selection of methods, planning action steps, determining data collection techniques, and analyzing and interpreting research results.

Furthermore, Arikunto (2015:42) emphasized that the PTK model generally consists of four main stages, namely planning, implementation, observation, and reflection. These four stages are carried out sequentially and repeatedly in the form of cycles. Through this cycle, the researcher can improve the quality of the action at the next stage until the desired result is achieved. Thus, the design of PTK can be understood as a set of systematic activities carried out by teachers and researchers to improve the quality of learning.

The subjects of the study were group A children at the Yasmin Early Childhood Laboratory School in Jember. The selection of this subject was based on the consideration that some children of group A still showed limitations in the aspect of early literacy. They have difficulty in naming letters, showing letters, connecting letters with pictures, and arranging letters according to instructions. This condition shows the need for more innovative and fun learning improvement efforts, one of which is through the use of Game Finding Letters.

The number of children studied was 15 people, consisting of 7 boys and 8 girls. This composition allows researchers to obtain a sufficient picture of the diversity of early literacy abilities of children aged 4–5 years. The research was carried out at the Yasmin Early Childhood Education Laboratory School in Jember which is located at Jalan Karimata No. 49, Summersari Village, Jember Regency. The selection of this location was also considered because the school has adequate facilities to support the implementation of educational game-based learning.

Observation guidelines are used to observe children's early literacy skills during learning activities. This instrument is prepared in the form of an observation sheet or

checklist with clear indicators. The aspects observed included four early literacy skills: (1) the child was able to arrange the letters according to the instructions, (2) the child was able to show the letters asked, (3) the child was able to say the letters that had been arranged, and (4) the child was able to connect the letters with his partner. Each indicator is given a simple assessment criterion, namely "emerging" or "not emerging", to make it easier for researchers to assess children's skills objectively.

In addition to observation, the researcher also uses documentation as a data collection instrument. Documentation is carried out by recording, storing, and selecting data that is relevant to the implementation of actions. Documentation data is in the form of photos of children's activities, teachers' activities, and children's works during the activity. This document was obtained by using an adequate mobile phone camera to record visual evidence of the activity. The documentation functions to complement the observation results as well as supporting data for the validation of research results. In the planning stage, the researcher prepared a learning scenario that focused on the use of Game Finding Letters. This game was chosen because it is considered to be able to attract children's attention, increase motivation, and facilitate early literacy mastery. The researcher also prepares observation instruments and documentation guidelines, as well as sets success indicators to be achieved.

The implementation stage is carried out in accordance with the plan that has been prepared. Teachers carry out learning activities by presenting the Game Finding Letter game. Children are invited to arrange the letters according to the instructions, look for the requested letters, and connect the letters with the appropriate pictures. The activity is carried out interactively with a play-while learning approach, so that children can be more enthusiastic about participating in learning. At the observation stage, researchers and collaborators recorded the child's behavior and ability using the observation sheets that had been provided. Observational data were collected to find out the extent to which early literacy indicators appeared in each child. Observations are made directly during the learning process, so that the data obtained is more accurate and real.

The reflection stage is carried out after the implementation of actions in each cycle. The researcher and collaborators analyzed the data collected, both from observation results and documentation. Reflection aims to identify successes and obstacles that arise in the cycle. If the success indicators have not been achieved, the researcher makes strategic improvements in the next cycle. Reflection also helps teachers to assess the effectiveness of Game Finding Letter in improving children's early literacy.

Through this calculation, researchers can find out the level of achievement of children's early literacy classically. The results of the analysis are then compared with the standard of success that has been set. The criteria for research success are determined based on the standards that apply in the institution. This research is declared successful if at least 80% of the number of children has achieved learning completeness in the early literacy aspect. Indicators that are benchmarks for success include the ability to name letters, show letters, connect letters with pictures, and arrange letters according to instructions. If most children manage to achieve these indicators, then it can be concluded that the use of Game Finding Letter is effective in improving children's early literacy.

The number of cycles carried out adjusts to the needs of the research. If the results in the first cycle have met the success criteria, then the research can be stopped. However, if the target has not been achieved, the research will continue in the next cycle with improvements based on the results of reflection. The flexibility of this number of cycles is in accordance with the characteristics of PTK which emphasizes continuous improvement based on the results of reflection at each stage. With the PTK approach, researchers can directly observe the development of children's skills from cycle to cycle, as well as reflect and improve strategies on an ongoing basis. The use of observation guidelines and documentation provides complete and valid data, while the analysis of the percentage of completeness allows the researcher to assess the achievement objectively. The

determination of a success criterion of 80% is a clear benchmark for the success of the research.

RESULTS

This research was carried out on Monday, May 8, 2023, with a total of 15 subjects, consisting of 7 boys and 8 girls. Initial data was obtained through a preliminary study with classroom teachers. From this information, it is known that out of a total of 15 children, as many as 7 children showed early literacy skills that were still not optimal. These shortcomings can be seen in several indicators, such as difficulty in mentioning the letters, showing the letters in question, and arranging the letters correctly. Based on these initial conditions, the researcher felt the need to carry out corrective actions in the form of Classroom Action Research (PTK) to improve children's early literacy skills through the use of Game Finding Letters.

The implementation of the research was carried out in several cycles. Each cycle is designed to provide treatment through educational games that are interactive, with the hope of gradually improving early literacy skills. Cycle I was held on Monday, March 13, 2023, with the learning topic "Welcoming Ramadan." At this stage, the researcher designed two forms of games using Game Finding Letters in the form of letter puzzles. The rules of the game are that children are asked to put together a letter puzzle according to the example while accompanied by music. When the music is playing, children should follow the movements as shown in the video. After the music stops, they are allowed to continue putting together the puzzle that has begun.

The implementation of the game in cycle I showed a fairly good response. The children seemed more enthusiastic and enthusiastic about participating in the activities. They enjoy a mix of movement, music, and letter-composing activities. However, there are still several obstacles that need to be observed. Some children still make mistakes, such as placing the letters upside down or mispositioning. There are even children who cry when they lose a game because they are not used to receiving defeat. This shows the need to improve game strategies so that children are better prepared to accept consequences and understand the rules of the game clearly.

Based on the results of observations, it is known that learning through Game Finding Letter in cycle I has not fully succeeded in achieving the specified target. The percentage of children's success in meeting the early literacy indicators only reaches 70%. Of the 15 children, there are still 5 children who have not been able to understand the commands properly and made mistakes in arranging the letters. Because this study set a success standard of 80%, it can be concluded that the results of the first cycle have not met the expected success criteria. Another factor that affects is that observation in cycle I is only carried out once, so the opportunity for children to practice is still limited. Therefore, the researcher decided to continue to cycle II by making a number of improvements to learning strategies.

Reflection from cycle I is the basis for compiling improvements in cycle II. One of the weaknesses in cycle I is the rules of the game that children do not fully understand and there is a feeling of not being ready when losing. Therefore, in cycle II, the researcher decided to make a game in the form of a group so that children are more motivated, feel safer, and learn to work together. Cycle II will be held on Monday, May 15, 2023. At this stage, the researchers free the children to choose their own group mates, so they are more comfortable working together. Each group consists of 5 children. The researcher prepared two main types of games, namely letter puzzle games and letter relay games. In the letter puzzle game, children are asked to arrange the letters according to the example together in a group. Meanwhile, in the letter relay game, children take turns carrying letters from one point to another to be arranged into the right words.

The implementation of games in groups has proven to be more effective. Children look more enthusiastic, enthusiastic, and able to work well together. The results of

observations showed a significant increase. Out of 15 children, only two still put the letters upside down. In addition, in cycle II there were no children who cried because they lost. Children can better accept the rules of the game, understand the instructions given by the teacher, and learn to deal with the consequences more maturely. The success percentage in cycle II reached 85%. This figure has exceeded the set success standard of 80%. This means that the research has reached the desired target. This success shows that improving strategies through group play, variations of game types, and more detailed explanations of rules can significantly improve children's early literacy skills.

When compared, the results of the study show a real development from cycle I to cycle II. In the first cycle, the success rate reached only 70%, with five children still making fundamental mistakes in arranging letters. After improvements were made in cycle II, the success rate increased to 85%, and only two children still had difficulties. In addition, the affective aspect of children has also changed. In the first cycle, there were still children who cried when they lost, while in the second cycle, all children were able to accept the rules and consequences of the game well.

This improvement shows that the Game Finding Letter strategy implemented in a sustainable manner can have a positive impact on the development of early childhood literacy. Small improvements in implementation, such as group setting, game variation, and explanation of instructions, prove to be crucial in supporting a child's success. It also shows that children learn more effectively when they feel happy, supported by peers, and given the opportunity to practice in a fun atmosphere.

Based on the results of the research in cycles I and II, it can be concluded that the initial literacy ability of children in group A PAUD Yasmin Jember has experienced a significant increase through the application of Game Finding Letter. Of the 15 children, initially 7 children had low literacy skills, most of them have now shown positive development. The percentage of completeness that was initially 70% in the first cycle increased to 85% in the second cycle. Improvement of strategies carried out in the form of group games has proven to be effective in overcoming problems that arise in cycle I, both in terms of understanding instructions and children's attitudes when playing.

Thus, this study shows that Game Finding Letter is an effective and fun method to improve the early literacy of children aged 4–5 years. In addition to helping children recognize letters, this game also trains their motor skills, coordination, concentration, and social skills. The success of this research is expected to be the basis for teachers to apply similar strategies in early literacy learning in other early childhood education programs, so that children can have a more meaningful and enjoyable learning experience from an early age.

DISCUSSION

The learning carried out through this research action uses Game Finding Letter with the aim of improving children's early literacy skills at the Yasmin Early Childhood Laboratory School in Jember. The results obtained showed a significant increase in children's abilities, where in cycle II the child's initial literacy ability reached the standard of completeness of 80%. This achievement is proof that the use of interactive games can help children learn more meaningfully and funly.

In cycle I, children's abilities showed quite good development, which classically reached 70% or about 10 children who were able to meet the success indicators. However, this result still does not meet the set completeness criteria, which is 80%. There are still several weaknesses that affect children's achievements. First, the delivery of the rules of the game by teachers is not well understood by children. Children have difficulty following instructions because the explanations given are still too quick or unclear. Second, children's attention to the teacher's explanation is still limited. Some children don't seem to be focused when the rules are explained, so they make mistakes in the game. Third, the letter card media used in cycle I is actually confusing for children. The color of the letter

cards used is the same, so that children have difficulty distinguishing similar letters, such as the letters b and d or u and n. As a result, the results of children's activities are not fully in accordance with the directions given.

The problems in the first cycle show that in early childhood learning, the media and the way teachers deliver are very decisive for success. Children at the age of 4–5 years are at the stage of concrete thinking, so they need an interesting and easily distinguishable medium. Therefore, in cycle II, a number of improvements were made at the planning and implementation stages. Teachers apply the way of delivering the rules of play more simply and repeat so that it is easy for children to understand. Teachers also set clear rules before the game starts, including consequences for the child who loses, so that they learn discipline and are ready to face the rules of the game. In the media aspect, letter cards are fixed with different colors for letters that are often confusing, such as b and d or u and n. This color adjustment makes it easier for children to distinguish letters so they no longer place the puzzle wrong.

After improvements were made in cycle II, the success target increased to 85%. This figure has exceeded the minimum completeness criteria set, which is 80%. These results show that improvements in instruction and learning media can have a great influence on improving children's early literacy skills. In other words, interactive games such as Game Finding Letter have been proven to improve children's basic skills in recognizing letters, arranging letters, and understanding teachers' commands better.

The increase from cycle I to cycle II is in line with the opinion of Clegg (2006), who stated that interactive games can improve children's early literacy skills. Through play activities, children learn without feeling burdened, because they consider learning as part of daily play activities. Azhar Arsyad (2005) also emphasized that letter cards are an effective learning tool in developing children's abilities related to letters and symbols. Letter cards with relevant pictures can help children recognize letters more easily, understand the relationship between letters and meaning, and practice simple reading and writing skills.

Interactive game-based learning also supports children's overall language development. Introduction to reading and writing through a play approach in accordance with the stages of early childhood development as stipulated in Permendikbud Number 137 of 2014 concerning National Education Standards. At the age of 4–5 years, children are in a sensitive period to develop language. They learn to recognize symbols, understand phonemes, and begin to build relationships between sounds and letters. By presenting interesting games, teachers can help children develop language aspects, both receptive and expressive, as well as instill the foundation of literacy.

The results of this study also show an increase in children's active participation during learning activities. In cycle I, there are still children who are passive, lack of attention, and confused about the rules of the game. But after improvement in cycle II, children became more engaged, enthusiastic, and able to follow instructions well. In fact, the learning atmosphere becomes more fun because children not only focus on the final result, but also enjoy the game process. Children no longer cry when they lose, because from the beginning the teacher has explained the rules and consequences clearly. This shows that children begin to learn to accept social rules and understand the concept of winning and losing as part of learning.

This improvement can be explained through Vygotsky's theory of social interaction, specifically the concept of the Zone of Proximal Development (ZPD). Children can develop new abilities when they are mentored by more competent adults or peers. In the context of Game Finding Letter, teachers play the role of facilitators who guide children, while peers in the group also provide support. Thus, social interaction during play contributes greatly to improving children's early literacy skills.

The results of this study support the view that a fun learning approach can motivate children to learn better. Early childhood has the characteristics of getting bored quickly and having difficulty focusing if learning is done in a monotonous manner. By combining

music, movement, and letter play, Game Finding Letter provides a multisensory learning experience. Children not only learn visually by looking at letters, but also use the motor aspect through body movements, as well as the auditory aspect through the rhythm of music. This multisensory approach strengthens the child's memory of the letters learned.

Based on the description above, it can be concluded that the use of Game Finding Letter in early literacy learning has a significant positive impact. The improvement that occurred from cycle I to cycle II showed that this game not only helped children recognize letters, but also improved their concentration, eye-hand coordination, and social skills. Furthermore, this game instills a fun learning experience so that children are more motivated to learn to read and write. Thus, the results of this study confirm the importance of innovation in early childhood learning. Teachers are required to be creative in choosing media and methods, so that children get meaningful learning experiences. Game Finding Letter is one of the alternatives that can be applied in early childhood learning to improve children's early literacy skills while creating a fun, interesting, and effective learning atmosphere.

CONCLUSION

Based on the results of the research and discussions that have been carried out, it can be concluded that through Game Finding Letter, it can improve the early literacy skills of children in group A of the Yasmin Jember Early Childhood Education Laboratory School optimally, by arranging letters according to instructions, showing letters according to instructions, mentioning letters, connecting letters correctly. In addition, the Finding Letter game also has additional benefits, such as strengthening eye-hand coordination, improving concentration, and enriching vocabulary comprehension in children. With better letter recognition and improved early literacy skills, children can build a strong foundation for future language learning and literacy.

REFERENCES

- Arikunto, S. (2002). *Prosedur Penelitian*. Bandung: Rineka Cipta.
- Dasopang, M. D., Lubis, A. H., & Dasopang, H. R. (2022). How do Millennial Parents Internalize Islamic Values in Their Early Childhood in the Digital Era? *AL-ISHLAH: Jurnal Pendidikan*, 14(1), 697–708.
- Dasopang, M. D., Nasution, I. F. A., & Lubis, A. H. (2023). The Role of Religious and Cultural Education as A Resolution of Radicalism Conflict in Sibolga Community. *HTS Theological Studies*, 79(1), 1–7.
- Elisyah, Nur, Islami Fatwa, Dinda Adha Hutabarat, and Zaharatul Humaira. 2024. "Pelatihan Gamifikasi: Implementasi Permainan Edukatif Untuk Meningkatkan Kualitas Pembelajaran Di SD Swasta Srikandi Lhokseumawe." *PUSAKA: Jurnal Pengabdian Masyarakat* 1(2):29–37. doi:10.62945/pusaka.v1i2.164.
- Erawadi, E., Hamka, H., & Juliana, F. (2017). The Analysis of Student's Stressed Syllables Mastery at Sixth Semester of TBI in IAIN Padangsidimpuan. *English Education: English Journal for Teaching and Learning*, 5(1), 44–57.
- Fatimah, A., & Maryani, K. (2018). Visual Literasi Media Pembelajaran Buku Cerita Anak. *Jurnal Inovasi Teknologi Pendidikan*, 5(1), 61–69. <https://doi.org/10.21831/jitp.v5i1.16212>
- Gogahu, D. G. S., & Prasetyo, T. (2020). Pengembangan Media Pembelajaran Berbasis E-Bookstory untuk Meningkatkan Literasi Membaca Siswa Sekolah Dasar. *Jurnal Basicedu*, 4(4), 1004–1015.

- Hamka, H. (2023). The Role of Principals on Teacher Performance Improvement in a Suburban School. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 15(1), 371–380.
- Hamka, H., Suen, M.-W., Anganthi, N. R. N., Haq, A. H. B., & Prasetyo, B. (2023). The Effectiveness of Gratitude Intervention in Reducing Negative Emotions in Sexual Abuse Victims. *Psikohumaniora: Jurnal Penelitian Psikologi*, 8(2), 227–240.
- Harahap, S. M., & Hamka, H. (2023). Investigating the Roles of Philosophy, Culture, Language and Islam in Angkola's Local Wisdom of 'Dalihan Na Tolu.' *HTS Theologiese Studies/Theological Studies*, 79(1), 8164.
- Hendrawati, S., Rosidin, U., & Astiani, S. (2020). Perilaku hidup bersih dan sehat (PHBS) siswa/siswi di sekolah menengah pertama negeri (SMPN). *Jurnal Perawat Indonesia*, 4(1), 295–307. <https://doi.org/https://doi.org/10.32584/jpi.v4i1.454>
- Lubis, A. H., Dasopang, M. D., Ramadhini, F., & Dalimunthe, E. M. (2022). Augmented Reality Pictorial Storybook: How does It Influence on Elementary School Mathematics Anxiety? *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 12(1), 41–53.
- Lubis, A. H., Yusup, F., Dasopang, M. D., & Januariyansah, S. (2021). Effectivity of Interactive Multimedia with Theocentric Approach to the Analytical Thinking Skills of Elementary School Students in Science Learning. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 11(2), 215–226.
- Manshur, U., & Ramdlani, M. (2019). Media audio visual dalam pembelajaran PAI. *Al-Murabbi: Jurnal Pendidikan Agama Islam*, 5(1), 1–8.
- Mardhiyah, R. H., Aldriani, S. N. F., Chitta, F., & Zulfikar, M. R. (2021). Pentingnya Keterampilan Belajar di Abad 21 sebagai Tuntutan dalam Pengembangan Sumber Daya Manusia. *Lectura: Jurnal Pendidikan*, 12(1), 29–40.
- Ningsih, Y. S., Mulia, M., & Lubis, A. H. (2023). Development of Picture Storybooks with TheoAnthropoEco Centric Approach for Elementary School Students. *AL-ISHLAH: Jurnal Pendidikan*, 15(2), 1888–1903.
- Nurhidayah, I., Asifah, L., & Rosidin, U. (2021). Pengetahuan , Sikap dan Perilaku Hidup Bersih dan Sehat pada Siswa Sekolah Dasar. 13(1), 61–71. <https://doi.org/10.32528/ijhs.v13i1.4864>
- Pebtiyanti, I., Ahmad, A., Dzaky, M., Fauziah, S. N., Rendi, & Puspitasari, P. (2023). Peran kurikulum merdeka dalam meningkatkan harmonisasi antara masyarakat dan sekolah. *Jurnal Pacu Pendidikan Dasar*, 3(1), 269–277. <https://doi.org/https://doi.org/10.22021/pacu.v3i1.411>
- Putra, Meiyaldi Eka, Fajar Maulana, Ramanda Rizky, and Islami Fatwa. 2023. "Peningkatan Hasil Belajar Mahasiswa Menggunakan Model Perkuliahan Problem Based Instruction (PBI) Mata Kuliah Gambar Teknik." *Jurnal Pendidikan Teknik Mesin* 10(1):22–30. doi:10.36706/jptm.v10i1.20850.
- Rahmah, S., & Lubis, A. H. (2024). Problem Posing as a Learning Model to Improve Primary School Students' Mathematics Learning Outcomes in Gayo Lues. *Journal of Indonesian Primary School*, 1(4), 93–104.
- Rahman, A., Munandar, S. A., Fitriani, A., Karlina, Y., & Yumriani. (2022). Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, 2(1), 1–8.
- Ranisa, R., Erawadi, E., & Hamka, H. (2018). Students' Mastery in Identifying Adverbs at Grade VIII SMPN 2 Batang Toru Tapanuli Selatan. *ENGLISH EDUCATION JOURNAL: English Journal for Teaching and Learning*, 6(2), 241–252.

- Ricardo, R., & Meilani, R. I. (2017). Impak Minat dan Motivasi Belajar terhadap Hasil Belajar Siswa. *Jurnal Pendidikan Manajemen Perkantoran (JPManper)*, 2(2), 188–201.
- Santi, Undang, & Kasja. (2023). Peran Guru PAI dalam Membentuk Karakter Peserta Didik di Sekolah. *Jurnal Pendidikan Tambusai*, 7(2), 16078–16084. <https://doi.org/https://doi.org/10.31004/jptam.v7i2.8918>
- Sinaga, Nurul Afni, Fitri Ayu Ningtiyas, Rifaatul Mahmuzah, Yulia Zahara, and Islami Fatwa. 2023. "The Effect of Deductive-Inductive Learning Approach on Creative Thinking Ability and Learning Motivation." *Journal of Educational Research and Evaluation* 6(2):123–34. doi:10.24114/paradikma.v16i2.46952.
- Siraj, S., M. Yusuf, I. Fatwa, F. Rianda, and M. Mulyadi. 2023. "Pengembangan Model Pembelajaran Reflektif Berbasis Unity of Sciences Bagi Calon Guru Sekolah Menengah Kejuruan Profesional." *Jurnal Review Pendidikan Dan Pengajaran (JRPP)* 6(4):2030–38.
- Siregar, N., & Siregar, R. S. (2025). Analysis of numeracy literacy of junior high school students in AKM questions: Learning strategies based on higher order thinking skills at SMP Negeri 5 Tapung Hilir. *Jurnal Profesi Guru Indonesia*, 2(1), 359–367. <https://doi.org/10.62945/jpgi.v2i1.720>
- Siregar, R. S. (2024). *Fiqhu Al-Akbār: Taḥqī An-Naṣ Wa Taḥlīlu’Afkārihi*. UIN Ar-Raniry Fakultas Adab dan Humaniora.
- Siregar, R. S. (2024). Students' Preferences for Varied Learning Methods: An Empirical Study of the Effectiveness and Appeal of Diverse Instructional Approaches. *Jurnal Profesi Guru Indonesia*, 1(2), 140–152. <https://doi.org/https://doi.org/10.62945/jpgi.v1i2.679>
- Siregar, R. S. (2025). The Influence of Social Media as a Learning Resource on the Academic Behavior of Junior High School Adolescents. *KOGNITIF: Jurnal Ilmiah Pendidikan Dan Keguruan*, 2(1), 21–28.
- Siregar, R. S. (2025a). Arabic Language Learning Culture in Salaf Islamic Boarding Schools: An Ethnographic Study of Linguistic Punishment Practices and Traditions. *ETNOPELAGOGI: Jurnal Pendidikan Dan Kebudayaan*, 2(2), 1–9. <https://doi.org/https://doi.org/10.62945/etnopedagogi.v2i2.722>
- Siregar, R. S. (2025b). Evaluation of the Implementation of the Reading Literacy Program at SD Negeri 100190 Tarutung Bolak. *Journal of Indonesian Primary School*, 2(1), 240–250. <https://doi.org/https://doi.org/10.62945/jips.v2i1.723>
- Siregar, R. S. (2025c). Improving the Arabic Writing Skills of Students through the Application of Contextual Learning Methods at Dayah Irsyadul Abidin Qurani. *Indonesian Journal of Education and Social Humanities*, 2(1), 358–369. <https://doi.org/https://doi.org/10.62945/ijesh.v2i1.726>
- Siregar, R. S. (2025d). Principles of Subject-Based Arabic Curriculum Development: Language Skills Integration and Contextual Relevance. *DEEP LEARNING: Journal of Educational Research*, 1(2), 56–67. <https://doi.org/https://doi.org/10.62945/deeplearning.v1i2.229>
- Siregar, R. S. (2025e). Students' Cognitive Difficulties in Mastering the Nahwu Rules: A Descriptive Study at SMP IT Al Farabi Bilingual School. *Jurnal Cendekia Islam Indonesia*, 1(2), 10–20. <https://doi.org/https://doi.org/10.62945/jcii.v1i2.216>
- Sugiyono. (2018). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.