An Analysis of the Use of Puzzle-Based Learning Media in Enhancing Students' Interest in Science Subjects in Grade V at SD Negeri 19 Tulang Bawang Udik

Asri Nuraini[1], Masrurotul Mahmudah[2], Nurul Aisyah[3]
[1,2,3] Universitas Ma'arif Lampung, Indonesia

Keyword
Puzzle-Based Learning Media, Students' Interest

ABSTRACT
Puzzle learning media is widely applied at elementary school level because it is useful in focusing students' attention and motivating. This media not only functions as a tool to increase students' concentration, but is also an effective way to increase interest in learning. By using interesting and interactive learning media, such as puzzles, students can learn in a fun way while increasing their understanding of the material being taught. The aim of this research is to find out how the use of puzzle learning media can increase students' interest in learning in science subjects in Class V of SD Negeri 19 Tulang Bawang Udik. This research uses a qualitative approach with descriptive methods. The data collection techniques used were interviews, observation and documentation. The subjects of this research were teachers and students of class V at SD Negeri 19 Tulang Bawang Udik. This research data was analyzed by data reduction, data presentation, and drawing conclusions or verification. The results of this research show that the use of puzzle learning media can increase students' interest in learning. This is characterized by an increased sense of enjoyment in the learning process, active involvement of students, students' interest in the material and participating in learning well, showing students' attention to the learning process, showing students' attention, such as listening to the teacher's explanation.

Article History
Received: 24 March 2025, Revised: 27 May 2025, Accepted: 30 May 2025

✉ **Corresponding Author** asri78310@gmail.com

INTRODUCTION

Learning is a complex and continuous process through which individuals acquire knowledge, skills, attitudes, or values through experience, study, or instruction.[1] This process can occur formally within educational settings such as schools or universities, as well as

[1] Kartini, I. A. K. P. (2023). Penggunaan Media Puzzle untuk Menumbuhkan Hasil Belajar Peserta Didik pada Tema Kegemaranku. Journal of Education Action Research, 7(3), 303–309.

informally through personal interactions and preferences.[2] In formal education, learning is often structured within a curriculum designed to achieve specific objectives. This curriculum includes subjects and skills considered essential for the intellectual and social development of students.

The role of the teacher in the learning process is highly significant and multifaceted. As educators, teachers are responsible for effectively delivering the knowledge and skills outlined in the curriculum, ensuring that students understand and are able to apply the information.[3] In addition, teachers serve as facilitators who create a conducive learning environment, encourage active participation, and provide the necessary resources and support for students to learn both independently and collaboratively.[4] Teachers also fulfill the roles of mentors and motivators, offering guidance, constructive feedback, and encouragement to support students in realizing their full potential.[5] By understanding the individual needs and learning styles of students, teachers can adapt their teaching methods to ensure that all learners are able to grow and succeed. Through these roles, teachers not only support students in achieving academic success, but also contribute to their social and emotional development, preparing them to become competent and contributing members of society.

In the effort to improve the quality of education, various teaching methods and media continue to be developed and implemented in schools. One subject that requires particular attention is Natural and Social Sciences (IPA), which includes important topics such as food chains. Food chains are a fascinating component of science education. A food chain refers to the relationship among living organisms in which one organism eats and is eaten by another within an ecosystem. Food chains help students understand the concepts of energy flow, material cycles, and ecological balance. They are essential for understanding the interdependence among organisms in nature.6 However, in practice, many students struggle to understand the concepts within this subject matter. This issue stems from various factors, including a lack of variety in teaching methods, limited engaging learning media, and insufficient motivational support from families and the surrounding environment. Even though the curriculum and learning materials are appropriate, students' interest in learning tends to decline if these are not accompanied by enjoyable and interactive media.

In the learning process, teachers can utilize various types of educational games as learning media to motivate students and elicit positive responses. Through this approach, students' learning experiences go beyond mere play and become meaningful activities that foster enjoyment and better understanding of the subject matter.

Puzzle-based learning media are commonly used in early childhood education programs, as they serve as educational tools that support learning while carrying intrinsic

---

[2] Putri, S. A., Destiniar, D., & Suned, S. (2022). Pengaruh Penggunaan Media Puzzle Pecahan Terhadap Hasil Belajar Matematika Peserta didik Kelas III SD Negeri 100 Palembang. Jurnal Pendidikan Dan Konseling, 4(4),

[3] Maulidah, A. N. (2021). Penggunaan Media Puzzle secara Daring terhadap Hasil Belajar IPA Kelas V SD. Jurnal Mimbar Ilmu, 26(2)

[4] Antoro, B., Amelia, M. M., Hakim, L., & Rozi, F. (2023). Inovasi Media Pembelajaran Matematika Menggunakan Puzzle untuk Menumbuhkan Minat Belajar Peserta didik SDN 064024 Medan. Jurnal Madaniya, 4(1)

[5] Ernis, P., & Hazmi, N. (2021). Peningkatan Hasil Belajar Ipa Materi Komponen Ekosistem Melalui Media Puzzle Peserta didik Kelas V SD Negeri 01 Gunuang Malintang Kecamatan Pangkalan Koto Baru. Journal of Elemantary School (JOES), 4(1)

[6] Syarif, M. I., Subhan, S., Indriani, M., Safrizal, S., & Wardahni, N. E. Pendas : Jurnal Ilmiah Pendidikan Dasar, ISSN Cetak : 2477-2143 ISSN Online : 2548-6950 Volume 09 Nomor 04, Desember 2024 138 (2022). Pengembangan Media Pembelajaran Ipa Berbasis Puzzle Rantai Makanan Dan Augmented Reality. Jurnal Ibriez, 7(2)

educational value. Through puzzles, children gradually learn to recognize shapes, colors, numbers, and sizes. Modern puzzles come in diverse forms and vibrant colors, which can support children's cognitive development, particularly at an early age.

A puzzle is an educational game tool that stimulates children's cognitive abilities, typically played by assembling matching puzzle pieces. Puzzle media consist of image fragments, boxes, letters, or numbers that form a specific pattern. This structure encourages students to complete the game quickly and accurately, fostering a sense of challenge and engagement.7 Playing puzzles is a highly engaging activity that requires patience and stimulates children to think creatively and use their imagination to assemble puzzle pieces into a complete form. While assembling the puzzle, students must understand the material provided in order to answer related questions and maintain concentration throughout the activity.[8]

In classroom practice, teachers usually implement several steps when using puzzles to be played. The activities carried out by the teacher in using puzzles in group work are as follows: 1) The teacher first establishes the rules for using the puzzles. Playing with puzzle media is done by dividing students into several groups. 2) Before starting, groups are formed, with each group consisting of five members. 3) Prepare the puzzles in envelopes to be distributed to each group. 4) Set a time limit when the game begins, for example, 15 minutes. 5) Representatives from each group gather around the table and approach the envelopes containing the puzzles. 6) Each group then completes the puzzle they received, working together collaboratively with their group members. 7) While the students assemble the puzzles with their groups, the teacher asks questions related to the images being assembled.[9]

The term 'learning interest' linguistically consists of two words: interest and learning. Interest means 'a strong inclination of the heart towards something, enthusiasm, or desire,' while learning means 'the effort to acquire knowledge or skills.' Therefore, linguistically, learning interest is a strong desire of the heart to strive to gain knowledge or skills.

According to Muhibbin Syah, learning interest is the strong inclination of a student's heart towards the learning process of a particular subject conducted by a teacher, enabling the student to achieve academic success. In the learning process, the use of engaging media such as puzzles can be a strategic step to encourage student involvement. This involvement indirectly fosters students' interest in the subject matter.[10] Interest itself is the feeling of liking and attachment to a particular thing or activity. In line with this view, Sirait Daradjat states that interest is a stable inclination of the soul toward something considered valuable by an individual. Something is considered valuable if it aligns with the needs or interests of that individual. Therefore, when learning media correspond to students' needs and interests, learning interest will naturally grow and develop.

The steps in learning using puzzle media engage students, which indirectly fosters their interest. Interest is defined as a preference and attachment to a particular thing or activity.[11]

---

[7] Indriyanti, L., Gani, A. A., & Muhardini, S. (2020). Pengembangan Media Puzzle untuk Menumbuhkan Hasil Belajar Peserta didik Kelas 1 SDN 38 Mataram. Jurnal CIVICUS : Pendidikan-PenelitianPengabdian, 8(2)

[8] Hayati, I. A. (2023). Media Puzzle Untuk Menumbuhkan Hasil Belajar Cerita Dongeng Dalam Pembelajaran Bahasa Indonesia di Sekolah Dasar. Jurnal Educatio, 9(2)

[9] Utami, R. S. (2022). Hubungan Antara Minat Belajar dengan Prestasi Belajar Siswa. Jurnal Psikologi dan Pendidikan, 7(2), 33-40.

[10] Ramdani, A., & Nuraeni, T. (2020). Pengaruh Penggunaan Media Puzzle terhadap Minat dan Hasil Belajar Peserta didik pada Mata Pelajaran IPA di Sekolah Dasar. Jurnal Pendidikan Dasar Nusantara, 5(1), 45-52.

[11] Nur, Rumakhit. (2020). "Pengembangan Media Puzzle Untuk Pembelajaran Materi Mengidentifikasi Beberapa Jenis Simbiosis Dan Rantai Makanan Kelas IV Sekolah Dasar." Jurnal Simki-Pendagogia 1 (2): 6

Some indicators of learning interest include: a) Feeling of enjoyment. A student who feels happy or fond of a particular subject will continue to study the subject willingly. There is no sense of compulsion to learn. For example, the student enjoys attending the lessons, does not feel bored, and rarely skips class. b) Student involvement. The attraction to an object that causes a person to feel interested and eager to engage in activities related to that object. Examples include actively participating in discussions, asking questions, and answering the teacher's questions. c) Student attraction. Related to the driving force that encourages a tendency to be interested in people, objects, activities, or affective experiences stimulated by the activity itself. Examples include enthusiasm in following lessons and not procrastinating on assignments given by the teacher. d) Student attention. Attention is the concentration or mental activity directed toward observation and understanding, while disregarding other distractions. A student who has an interest in a particular object will naturally pay attention to it. Examples include listening to the teacher's explanation and taking notes during the lesson.[12] All these aspects are interconnected in creating an enjoyable and effective learning experience for students.

Relevant research includes previous studies related to the issue under investigation. One such study was conducted by Diah Amanah, titled "The Use of Puzzle Picture Media to Improve Science Learning Outcomes on the Topic of Human Respiratory Organs for Grade V Students in the First Semester at MI Klumpit, Karanggede District, Boyolali Regency, Academic Year 2017/2018." The similarity with this study is its aim to examine the improvement of science learning outcomes using puzzle media. The methodology employed in that research was Classroom Action Research (CAR).

Another relevant study was conducted by Rumaisa Khairani, titled "Efforts to Improve Social Studies Learning Outcomes Using Puzzle Media in Grade III at SDIT Raflesia, Depok." The similarity in this study is the use of puzzle media to enhance students' learning interest.

Based on initial surveys and interviews with the Grade V teacher at SD Negeri 19 Tulang Bawang Udik, it was found that students' learning interest in science remains very low. In response to this issue, the teacher attempted to implement puzzle media to foster students' learning interest.

The theoretical benefits of this research include enriching the theoretical framework related to active learning media, especially game-based learning such as puzzles. Additionally, it strengthens motivation theories which state that active engagement and enjoyment in learning have been proven to increase students' learning interest. This research also adds scientific references on the importance of using innovative learning media to improve the quality of the teaching and learning process.

The practical benefits for teachers include providing an alternative creative and enjoyable learning media to stimulate students' learning interest, particularly in subjects perceived as difficult or boring. Furthermore, it assists teachers in managing less conducive classroom environments.

RESEARCH METHODS

The type of research used is qualitative with a phenomenological approach and descriptive qualitative analysis. According to Denzin and Lincoln, as cited in the book by Umar Sidik and Moh. Miftachul Choiri, qualitative research is research conducted in a natural setting with the aim of interpreting the phenomena that occur, and it is carried out by

[12] Edy Syahputra, Snowball Throwing Tingkatkan minat dan hasil belajar, Sukabumi: Haura Publishing, 2020. Hlm. 19

employing various methods available within qualitative research.[13] The subjects of this study were 29 fifth-grade students at SD Negeri 19 Tulang Bawang Udik, consisting of 12 males and 17 females. The researcher employed a non-probability sampling technique known as snowball sampling. Snowball sampling is a method of sampling from data sources with the intention of gradually collecting a larger sample size.[14]

In this study, the data collection methods used were observation, interviews, and documentation. Observation involved directly observing the science teacher's implementation of puzzle media in the learning process. Interviews were conducted to gather in-depth information from the science teacher and students who experienced the teacher's use of puzzle media to foster their learning interest. The interview questions aimed to understand how students responded to the use of puzzle learning media and whether there were significant changes in their learning interest.

Documentation involved archiving students' scores from science lessons that used puzzle media. This documentation is important for analysis as it serves as primary data to validate the data obtained from observations and interviews. Data display refers to the presentation of analyzed data in an easy-to-understand and interpretable form. The purpose of data display is to clearly communicate information so that readers or audiences can comprehend the findings and patterns within the data.

Data verification is the process of ensuring that the data collected or generated in the study are accurate, valid, and reliable. In this research, data verification was carried out to test the validity, consistency, and integrity of the data obtained. This process is crucial to ensure that the data used for analysis and forming conclusions or findings are free from errors or inaccuracies that could affect the research results.[15] According to Sugiono, data reduction is the initial step in analysis aimed at simplifying data obtained from interviews, observations, or documentation. This is done by summarizing the core information, categorizing, and discarding irrelevant data.

Furthermore, the data analysis technique uses data triangulation, which is defined as the process of checking data from multiple sources using various methods and at different times.[16] Thus, there are three types of data triangulation: source triangulation, data collection technique triangulation, and time triangulation. According to Sugiyono, as cited in the journal by Andarusni Alfansyur and Mariyani, source triangulation means testing data from various informant sources from whom the data are collected. Source triangulation can enhance the credibility of the data if it is carried out by cross-checking the data obtained during the research through multiple sources or informants.[17] The descriptive analysis conducted by the researcher uses inductive reasoning. This research is carried out through observation or empirical data collection in the field, from which general conclusions are drawn using inductive thinking.

---

[13] Sidiq, U., & Choiri, M. M. (2023). Metode Penelitian Kualitatif di Bidang Pendidikan(1st ed.). Ponorogo: Nata Karya.

[14] Andarusni, Alfansyur, & Mariyani (2020)Seni Mengelola Data : Penerapan Triangulasi Teknik, Sumber Dan Waktu Pada Penelitian Pendidikan Sosial. Jurnal Kajian, Penelitian & Pengembangan Pendidikan Sejarah, 5(1)

[15] Zaputra, R., Festiyed, F., Adha, Y., dan Yerimadesi, Y. (2021). Meta-Analisis: Validitas Dan Praktikalitas Modul Ipa Berbasis Saintifik. Bio-Lectura, 8(1)

[16] Mekarisce, A. A (2020). Teknik Pemeriksaan Keabsahan Data pada Penelitian Kualitatif di Bidang Kesehatan Masyarakat. Jurnal Ilmiah Kesehatan Masyarakat: Media Komunikasi Komunitas Kesehatan Masyarakat, 12(3)

[17] Sugiyono,(2021) Metode Penelitian Pendidikan (pendekatan kuantitatif, kualitatif, dan R&D), (Bandung : Alfabeta,), hlm. 10

RESULTS AND DISCUSSION

This section discusses the research data obtained from the field. The data were collected through several methods, namely observation, interviews, and documentation. The primary method of data collection was interviews conducted with the fifth-grade teacher at SD Negeri 19 Tulang Bawang Udik. This study aims to analyze the use of puzzle learning media in enhancing students' learning interest in the Science subject at SD Negeri 19 Tulang Bawang Udik.

To complement the data and obtain comprehensive information, documentation was also used as a supporting data collection tool. Documentation served to strengthen the research findings regarding the use of puzzle learning media to increase students' interest in learning Science. This research was conducted at SD Negeri 19 Tulang Bawang Udik from January 6, 2025, to February 7, 2025.

According to Kustandi Sutjipto, as cited in the journal by Mar'atus Slolichah Muntaha Rahmi, M. Arif Budiman, and Ari Widyaningrum, learning media are tools that assist the teaching and learning process by clarifying the message delivered, thus helping to achieve learning objectives effectively.[18] Furthermore, according to Gerlach & Ely, as cited in the journal by Feriska Achlikul Zahwa and Imam Syafi'i, media is a tool that includes human materials used in an event to assist the audience in acquiring knowledge

Puzzle is an educational game tool that can stimulate a child's abilities, played by assembling pairs of puzzle pieces. Puzzle media consists of game components such as picture pieces, boxes, letters, and numbers arranged in specific patterns, which motivate students to complete the game quickly and accurately.[19] Playing puzzles is a highly engaging activity that requires patience to stimulate children to think and imagine as they assemble puzzle pieces into a complete form. In arranging the puzzle, students must understand the material that has been provided in order to answer the related questions and maintain concentration during the game.

One fifth-grade student at SD Negeri 19 Tulang Bawang Udik expressed the opinion that the use of puzzle learning media greatly fosters students' interest, making them more enthusiastic in participating in lessons and preventing boredom during the learning process in the classroom.[20] Meanwhile, Sinta stated that puzzle media greatly attracts students' interest because, through puzzle-based learning, they are taught to collaborate in finding solutions as a group. This encourages students to become more active and responsible during the learning process.[21] This indicates that the use of puzzle-based instructional media is highly effective in fostering students' interest in learning. In analyzing the puzzle-based learning process, Teacher Siska stated: "In the first semester, I had already implemented puzzle-based instructional media, but it was not optimal due to the lack of supporting materials such as puzzle boards, guide illustrations, and storage spaces. Additionally, the students were unfamiliar with this type of media, which resulted in low learning interest. However, in the second semester, after I began using the puzzle-based media more completely, a significant difference was observed. Students' interest increased, and they became more engaged and attentive during the lessons.[22] This happened because they felt happy with the presence of

---

[18] M. Arif Budiman dan Ari Widyaningrum, "Pengembangan Media Pembelajaran Interaktif Macromedia Flash 8 Pada Pembelajaran Tematik Tema Pengalamanku," International Journal of Elementary Education 3, no. 2 (2021): 178–85/.

[19] Indriyanti, L., Gani, A. A., & Muhardini, S. (2020). Pengembangan Media Puzzle untuk Menumbuhkan Hasil Belajar Peserta didik Kelas 1 SDN 38 Mataram. Jurnal CIVICUS : Pendidikan-PenelitianPengabdian, 8(2)

[20] Fatan peserta didik kelas V SD Negeri 19 Tulang Bawang Udik, 6 Januari 2025

[21] Sinta peserta didik kelas V SD Negeri 19 Tulang Bawang Udik, 13 Januari 2025

[22] Siska,wali kelas V SD Negeri 19 Tulang Bawang Udik, 3 Februari 2025

various games in the learning process, making the classroom atmosphere more interactive and enjoyable.

Based on the data obtained, it is evident that the use of puzzle-based learning media has been implemented by teachers in the learning process. However, several aspects remain suboptimal, particularly in identifying media that align effectively with the required instructional models. Given that science subjects (IPA) frequently explore content derived from the surrounding environment, it is essential for students to become more familiar with real-world natural objects to ensure that learning through puzzle media is both more comprehensible and meaningful

This study aims to examine how the use of puzzle-based learning media can foster students' interest in science learning in Grade V at SD Negeri 19 Tulang Bawang Udik. The findings of this study will be presented based on several indicators of learning interest, as follows:

Use of Puzzle Media

The use of puzzle media in the learning process has been shown to be effective in enhancing students' interest and academic performance in various elementary schools.[23] One such example is SD Negeri 19 Tulang Bawang Udik, where many students demonstrate enthusiasm in participating in lessons due to the engaging nature of puzzle-based learning media, which significantly captures their interest in learning. Through the process of assembling image pieces into a complete picture, students become more motivated during the learning process. This study aims to investigate how the use of puzzle-based learning media can foster students' interest in learning.

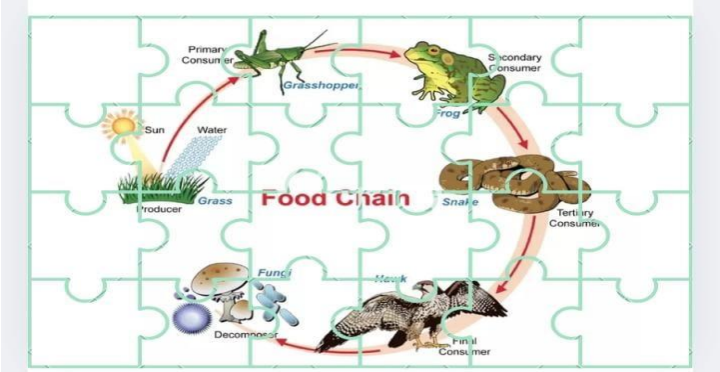

Figure 1. Puzzle-Based Learning Media

Figure 2. Classroom Learning Activities

[23] Surtika, Tika, Sumardi, Sumardi, & Yasbiati, Yasbiati. (2020). Pengaruh Media Puzzle Huruf Terhadap Kemampuan Mengenal Huruf Pada Anak Kelompok A Di TK ArRahman Kecamatan Sukahening. Jurnal Paud Agapedia, 3(1), 101–111.

Documentation of the teacher and fifth-grade students of SD Negeri 19 Tulang Bawang Udik assembling a food chain puzzle.

Fostering Students' Interest in Learning

Based on observations of the learning process and interviews with students, it was found that the use of puzzle-based learning media in science subjects (IPA) can foster students' interest in learning. According to the students, puzzle learning media make it easier for them to remember lessons that they find difficult, enabling them to learn and retain the material more effectively. Puzzle learning media also encourage students to be more active and enthusiastic during the science learning process.

The results from the data analysis regarding puzzle-based learning media, based on data collected through observation, interviews, and documentation on learning interest, are as follows:

a. Sense of Enjoyment

The use of puzzle learning media aims to achieve more effective learning and provide benefits for both teachers and students. Regarding the first indicator, sense of enjoyment, students showed enthusiasm in listening to and responding to the material explained by the teacher using puzzle media. Students were also active when the teacher asked them to re-explain the material being studied.

b. Interest in Learning

The learning process is considered successful when there is good interaction between the teacher and students, among students themselves, or between students and their environment, which can foster students' interest in learning.[24] At this indicator, interaction between students and their peers in group work, as well as with the teacher during the learning process, is evident. They frequently ask questions and actively participate in the use of the puzzle-based learning media. Such interaction encourages students to collaboratively discover and solve problems using the puzzle media provided to each group.

c. Demonstrating Attention During Learning

Efforts to foster learning interest are closely linked to the teacher's role as the class facilitator. At this third indicator, it is apparent that students show greater enthusiasm in listening to the teacher's explanations. They demonstrate discipline, responsibility, independence, and cooperation. This indicates that the use of puzzle-based learning media is not only engaging but also motivates students to be more eager in learning.

d. Involvement in Learning

Puzzle-based learning media is chosen because it enables students to better retain the material delivered by the teacher through active involvement. At this final indicator, when the teacher reviews the material, students exhibit more discipline, consistent attendance, and punctuality in submitting assignments. Moreover, they become more active in responding to questions and show increased enthusiasm when applying learning in the classroom using the puzzle learning media.

CONCLUSION

Based on the conducted research, it can be concluded that the use of puzzle-based learning media in science (IPA) lessons for fifth-grade students at SD Negeri 19 Tulang Bawang Udik has proven effective in fostering students' interest in learning. This is

[24] Aftika, Siti Nur. 2020. "Penerapan Media Puzzle Untuk Menumbuhkan Keterampilan Membaca Permulaan Peserta didik Pada Pembelajaraan Tematik Kelas I SDN Ragunan 012." Universitas Islam Negeri Syarif Hidayatullah Jakarta.

demonstrated through several key indicators, as follow: The Emergence of a Sense of Enjoyment — Students appeared enthusiastic and engaged throughout the learning process using puzzle learning media. They never felt bored, no students were observed to be sleepy, and there were no complaints. Instead, they were more active in listening to and responding to the material presented by the teacher. This indicates that an interactive learning method can foster student involvement and enthusiasm for learning. The Visible Interest in Learning — Students actively participated in lessons and did not procrastinate on assignments from the teacher. Positive interactions between students and teachers, as well as among students themselves, made them feel more comfortable in the classroom and easier to understand how to play and solve the puzzles. Students' Attention During Learning — Students demonstrated greater responsibility in completing puzzle learning media tasks, paid more attention when the teacher explained the material, and took notes during the lessons. This suggests that puzzle media help to improve their focus and concentration during learning. Involvement in Learning — Students were more active in answering questions, participating in discussions, and completing assignments with greater discipline and timeliness. This active participation indicates that puzzle media make learning more engaging and easier to comprehend for students. Overall, the use of puzzle-based learning media can serve as an effective solution for fostering students' interest in learning, particularly in science subjects. This media not only makes learning more enjoyable but also encourages students to be more active, interactive, and to gain a deeper understanding of the material.

BIBLIOGRAPHY

Andarusni, Alfansyur, & Mariyani (2020) Seni Mengelola Data : Penerapan Triangulasi Teknik, Sumber Dan Waktu Pada Penelitian Pendidikan Sosial. Jurnal Kajian, Penelitian & Pengembangan Pendidikan Sejarah, 5(1), 146–150. https://doi.org/10.31764/historis.v5i2.3432

Aftika, Siti Nur. (2020). "Penerapan Media Puzzle Untuk Menumbuhkan Keterampilan Membaca Permulaan Siswa Pada Pembelajaraan Tematik Kelas I SDN Ragunan 012." Universitas Islam Negeri Syarif Hidayatullah Jakarta

Antoro, B., Amelia, M. M., Hakim, L., & Rozi, F. (2023). Inovasi Media Pembelajaran Matematika Menggunakan Puzzle untuk Menumbuhkan Minat belajar peserta didik SDN 064024 Medan. Jurnal Madaniya, 4(1), 399–404. https://doi.org/https://doi.org/10.5 3696/27214834.372

Ernis, P., & Hazmi, N. (2021). Peningkatan Hasil Belajar Ipa Materi Komponen Ekosistem Melalui Media Puzzle Siswa Kelas V SD Negeri 01 Gunuang Malintang Kecamatan Pangkalan Koto Baru. Journal of Elemantary School (JOES), 4(1), 45–56. https://doi.org/https://doi.org/10.3 1539/joes.v4i1.2202

Hayati, I. A. (2023). Media Puzzle Untuk Menumbuhkan Hasil Belajar Cerita Dongeng Dalam Pembelajaran Bahasa Indonesia di Sekolah Dasar. Jurnal Educatio, 9(2), 440–444. https://doi.org/10.31949/educatio .v9i2.3043

Indriyanti, L., Gani, A. A., & Muhardini, S. (2020). Pengembangan Media Puzzle untuk Menumbuhkan Hasil Belajar Siswa Kelas 1 SDN 38 Mataram. Jurnal CIVICUS : Pendidikan-PenelitianPengabdian, 8(2), 108–118. https://doi.org/https://doi.org/10.3 1764/civicus.v8i2.2931

Kartini, I. A. K. P. (2023). Penggunaan Media Puzzle untuk Menumbuhkan Hasil Belajar Peserta Didik pada Tema Kegemaranku. Journal of Education Action Research, 7(3), 303–309. https://doi.org/https://doi.org/10.2 3887/jear.v7i3.67292

Ramdani, A., & Nuraeni, T. (2020). Pengaruh Penggunaan Media Puzzle terhadap Minat dan Hasil Belajar Siswa pada Mata Pelajaran IPA di Sekolah Dasar. Jurnal Pendidikan Dasar

Nusantara, 5(1), 45-52.Maulidah, A. N. (2021). Penggunaan Media Puzzle secara Daring terhadap Hasil Belajar IPA Kelas V SD. Jurnal Mimbar Ilmu, 26(2), 281–286. https://doi.org/https://doi.org/10.2 3887/mi.v26i2.37488

Mekarisce, A. A. (2020). Teknik Pemeriksaan Keabsahan Data pada Penelitian Kualitatif di Bidang Kesehatan Masyarakat. JURNAL ILMIAH Kesehatan Masyarakat : Media Komunikasi Komunitas Kesehatan Masyarakat, 12(3), 145–151. https://doi.org/10.52022/jikm.v12i3.102

Putri, S. A., Destiniar, D., & Suned, S. (2022). Pengaruh Penggunaan Media Puzzle Pecahan Terhadap Hasil Belajar Matematika Siswa Kelas III SD Negeri 100 Palembang. Jurnal Pendidikan Dan Konseling, 4(4), 1783–1789. https://doi.org/https://doi.org/10.3 1004/jpdk.v4i4.5553

Surtika, Tika, Sumardi, Sumardi, & Yasbiati, Yasbiati. (2020). Pengaruh Media Puzzle Huruf Terhadap Kemampuan Mengenal Huruf Pada Anak Kelompok A Di TK ArRahman Kecamatan Sukahening. Jurnal Paud Agapedia, 3(1), 101–111.

Nur, Rumakhit. (2020). "Pengembangan Media Puzzle Untuk Pembelajaran Materi Mengidentifikasi Beberapa Jenis Simbiosis Dan Rantai Makanan Kelas IV Sekolah Dasar." Jurnal Simki-Pendagogia 1 (2): 6

Syarif, M. I., Subhan, S., Indriani, M., Safrizal, S., & Wardahni, N. E. Pendas: Jurnal Ilmiah Pendidikan Dasar, ISSN Cetak : 2477-2143 ISSN Online : 2548-6950 Volume 09 Nomor 04, Desember 2024 138 (2022). Pengembangan Media Pembelajaran Ipa Berbasis Puzzle Rantai Makanan Dan Augmented Reality. Jurnal Ibriez, 7(2), 171–180. https://doi.org/https://doi.org/10.2 1154/ibriez.v7i2.284

Utami, R. S. (2022). Hubungan Antara Minat Belajar dengan Prestasi Belajar Siswa. Jurnal Psikologi dan Pendidikan, 7(2), 33-40.

Zaputra, R., Festiyed, F., Adha, Y., dan Yerimadesi, Y. (2021). Meta-Analisis: Validitas Dan Praktikalitas Modul Ipa Berbasis Saintifik. Bio-Lectura, 8(1), 45–56. https://doi.org/10.31849/bl.v8i1.6039

Edy Syahputra, Snowball Throwing Tingkatkan minat dan hasil belajar, Sukabumi: Haura Publishing, 2020

Sidiq, U., & Choiri, M. M. (2022). Metode Penelitian Kualitatif di Bidang Pendidikan(1st ed.). Ponorogo: Nata Karya.

Sugiyono,(2021) Metode Penelitian Pendidikan (pendekatan kuantitatif, kualitatif, dan R&D), (Bandung : Alfabeta,), hlm. 10