

UTILIZING SNAKES AND LADDERS MEDIA IN LEARNING MATHEMATIC ELEMENTARY SCHOOL STUDENTS

Ukhti Hanifah Tiarawati^{1*}, Sukartono²

^{1,2}Universitas Muhammadiyah Surakarta

¹a510200019@student.ums.ac.id

Abstract

This research is motivated by the selection of learning methods that are not appropriate, resulting in a lack of interest in learning in students, especially in mathematics. The fact found in the field is that teachers in learning activities only use the lecture method, this causes the learning to feel very monotonous so that students feel bored and lack interest in learning. The purpose of this study was to describe the use of snakes and ladders media in learning math with length, weight, and time material in standard units in grade 2 in elementary school. This research uses a qualitative approach with a case study design. This research data consists of primary data and secondary data. Data collection used interview, observation, and documentation techniques. Data validity used source triangulation and technique triangulation. Data analysis used the Miles and Huberman model which consists of data collection, data reduction, data presentation, and conclusion drawing. Based on the results of the study, it can be concluded that the use of snakes and ladders media in learning mathematics material on length, weight, and time in standard units can foster students' interest in learning. The selection of media in the form of a snakes and ladders game can foster students' interest in learning which is indicated by the interest, enthusiasm, and enthusiasm of students in playing the media and involving the active role of students so that learning is fun.

Keywords: Mathematics Learning; Media; Snakes and Ladders

Abstrak

Penelitian ini dilatarbelakangi oleh pemilihan metode pembelajaran yang kurang tepat sehingga mengakibatkan kurangnya minat belajar dalam diri siswa terutama dalam pelajaran matematika. Fakta yang ditemukan di lapangan bahwa guru dalam kegiatan pembelajaran hanya menggunakan metode ceramah, hal tersebut menyebabkan pembelajaran yang dilakukan terasa sangat monoton sehingga peserta didik terasa jenuh dan kurang adanya minat dalam belajar. Tujuan penelitian ini yaitu untuk mendeskripsikan penggunaan media ular tangga dalam pembelajaran matematika dengan materi panjang, berat dan waktu dalam satuan baku pada kelas 2 di Sekolah Dasar. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus. Data penelitian ini terdiri dari data primer dan data sekunder. Pengumpulan data menggunakan teknik wawancara, observasi, dan dokumentasi. Keabsahan data menggunakan triangulasi sumber dan triangulasi teknik. Analisis data menggunakan model Miles dan Huberman yang terdiri dari pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan. Berdasarkan hasil penelitian dapat disimpulkan bahwa penggunaan media ular tangga dalam pembelajaran matematika materi panjang, berat, dan waktu dalam satuan baku dapat menumbuhkan minat belajar peserta didik. Pemilihan media berbentuk permainan ular tangga ini dapat menumbuhkan minat belajar peserta didik yang ditunjukkan dengan ketertarikan, semangat, antusias peserta didik dalam memainkan media dan melibatkan peran aktif peserta didik sehingga pembelajaran menyenangkan

Kata Kunci: Pembelajaran Matematika; Media; Ular Tangga

Received : 2024-02-26

Approved : 2024-04-16

Revised : 2024-04-13

Published : 2024-04-30



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Introduction

The quality of learning greatly affects the achievement of national education goals. In order to more easily achieve educational goals, it can be done by implementing effective and quality learning. Effective learning is inseparable from quality learning because the quality of learning

outcomes depends on the effectiveness of learning that occurs (Anggraini, 2022). The implementation of effective and quality learning is influenced by several factors, including educators, student readiness, learning media used and infrastructure that supports learning activities (Junaedi, 2019). In implementing learning, teachers are required to be able to create active, creative, innovative, and fun learning. Fun learning refers to learning activities that are accompanied by fun engagement and exploration for students by using new tools and technology in learning activities (Kangas et al., 2017). So that it can attract students' attention while involving the active role of students and in the learning process not only centered on the teacher. One way to carry out active and effective learning is in the learning process teachers use learning media that can make students interested in participating in learning and can foster interest in learning in students.

Learning media is everything that is used as an intermediary from teachers to students in order to stimulate students to be motivated and able to follow the learning process in a complete and meaningful way (Hasan et al., 2021). Interesting learning media will foster student interest in learning. If the teacher displays something interesting in learning, students will feel encouraged and have interest and motivation to take part in learning so that the learning process will be more enjoyable. Students' interest and motivation to learn depend not only on their individual evaluations of teachers' teaching behavior but also on teachers' teaching practices (Schiefele, 2017). Interest in learning is the driving force from within students to carry out learning activities to increase skills, knowledge and experience (Rifa'i, 2023). Students who have an interest in learning will show enthusiasm in learning activities, and focus on the learning that takes place. To get good learning results, it is necessary to have interest in learning in students. Conversely, students who do not have an interest in learning during learning will not get maximum learning results. So to foster student interest in learning, you can use interesting learning media, so that students will be moved to take part in learning well. The use of snakes and ladders game as learning media is easy to do and easy to understand by students, the rules are simple and students can be entertained in a positive and interactive way (Febrita & Ulfah, n.d.).

One of the interesting learning media for elementary school students is game-based learning media. This is in accordance with the characteristics of elementary school children, namely enjoying playing, moving, working in groups, and enjoying doing things directly (Sirotus et al., 2019). Games help students develop the skills, knowledge, and values needed to be active students (Ucus, 2015). So, teachers in developing learning media should contain elements of games that can make students move, work, or learn in groups, and provide opportunities for students to be able to play an active role in learning. Learning while playing can be done by using learning media such as snakes and ladders game media. This game is very easy to use and certainly has its own appeal for elementary school students. The use of snakes and ladders game as learning media is easy to do and easy to understand by students, the rules are simple and can entertain students in a positive and interactive way (Ilmiah et al., 2022). In addition, the use of snakes and ladders game as a learning media can be modified by including learning materials and questions in certain columns. The learning material is put into the game and combined with the fantasy of the game to produce game learning content (Shi & Shih, 2015). By utilizing snakes and ladders learning media, it is hoped that it can foster students' interest in learning.

One of the subjects that can be implemented while playing is math. Math lessons are usually the least interested by students and are often considered difficult but by doing math learning

with the game method can create a new atmosphere in learning. At the primary school level, mathematical concepts can be motivated through appropriately designed hands-on activities supported by manipulative materials, which can be implemented through games (Abramovich et al., 2019). Elementary school students still find it difficult to concentrate on abstract concepts so educational games are usually prepared for elementary school students (Ucus, 2015). Learning math with the game method can foster student interest in learning in an effort to improve skills, conceptualization, understanding and improve problem-solving abilities (Maisyarah & Firman, 2019). Games allow students to acquire math concepts because students' interest, attention, and curiosity are automatically increased during learning through play activities (Ilhan, 2021).

Based on observations made by researchers at State Elementary School 3 Ledokdawan, teachers in the teaching and learning process only use books and blackboards, not using learning media to support the delivery of material. The teacher in the teaching process uses the lecture method and then gives assignments. This makes learning uninteresting and very monotonous. So that students are bored and students also do not play an active role in learning.

To overcome this, researchers are interested in conducting research on the use of snakes and ladders media in learning math so that the learning process is not monotonous and fosters students' interest in learning. In addition, students can also feel learning while playing and can play an active role in the learning process. This study was conducted to describe the planning and use of snakes and ladders media and to describe what are the supporting factors, obstacles, and solutions. The novelty of this research is that the media is made with a large size so that it can be used by one class instead of individuals so that students' attention can be focused on one point and the media is made with durable materials. In addition, there are also questions, materials, and challenges in each plot so that it is expected to be able to train cooperation and cohesiveness in students.

Research Method

This research uses a qualitative approach. According to (Abdussamad, 2021) qualitative research is research that focuses on describing a certain state of objects or phenomena. This research uses a case study design. Case studies are in-depth research on individuals, groups, organizations, activities within a certain time and have the aim of obtaining a complete and in-depth description of an entity and producing data which is then analyzed to produce theory (Abdussamad, 2021). Researchers use case studies to study in depth the use of snakes and ladders media in learning mathematics in grade 2 elementary schools.

The research location is State Elementary School 3 Ledokdawan which is located in Dusun Muneng, Ledokdawan Village, Geyer Subdistrict, Grobogan Regency, Central Java. The research was conducted on January 8, 2024. The research data consisted of primary and secondary data. Primary data in this study are observation, documentation and interviews with students and guardians of grade 2 SD Negeri 3 Ledokdawan. Secondary data is obtained indirectly or through intermediary media in the form of documents, previous studies and books that support the research.

Data collection was conducted using interview, observation, and documentation techniques. An interview is a process of communication interaction conducted by two people, and discusses a predetermined goal (Sidiq & Choiri, 2019). Interviews in this study were conducted with grade 2 students and grade 2 guardians of SD Negeri 3 Ledokdawan. This research observed the implementation of the use of snakes and ladders media and made observations about the learning interest of grade 2 students of SD Negeri 3 Ledokdawan.

Documentation in the form of learning media and photos of activities. Data validity was carried out by triangulating sources and triangulating techniques. Source triangulation is data tested from various informants. Technical triangulation is data testing carried out using different techniques (Alfansyur & Mariyani, 2020). Data analysis in this study used the Miles and Huberman model which consists of data collection, data reduction, data presentation, and conclusion drawing (Ahmad & Muslimah, 2021).

Results and Discussion

The research was conducted in grade 2 of State Elementary School 3 Ledokdawan on January 8, 2024. Researchers made observations regarding the implementation of the use of snakes and ladders media in learning mathematics. According to the results of interviews conducted by researchers, it shows that the use of snakes and ladders media in learning mathematics material on length, weight and time in standard units shows that the use of snakes and ladders media in learning mathematics includes the use of effective and efficient media to support learning and increase student learning motivation and the active role of students in learning, so that by using snakes and ladders media this can make students understand the material, foster learning motivation, be active in learning and students are able to answer the questions given.

The use of snakes and ladders media in learning mathematics in class 2 of State Elementary School 3 Ledokdawan is expected to be able to make the learning atmosphere more interesting because learning is done by learning and playing, can foster student learning motivation. This is in accordance with the results of the researcher's observations when observing the learning process using snakes and ladders media, when learning activities take place students are very enthusiastic about learning, students are active in playing games, discussing and answering the questions given. In addition, using this snakes and ladders media can train cohesiveness, cooperation between fellow students.

Planning of snakes and ladders media in learning mathematics in class 2 at State Elementary School 3 Ledokdawan

In the planning stage of using snakes and ladders media in learning mathematics in grade 2, the stages are that the teacher makes a lesson plan as a guide to what is done in learning. Furthermore, the teacher studies the learning objectives to be achieved and then prepares the material to be delivered in learning. In this study the material to be studied is length, weight and time in standard units. Then choose and make media. In making media adapted to the requirements of educational game tools according to (Asip et al., 2023), namely: 1) educational requirements, the media contains math learning material. 2) technical requirements, using materials that are safe and do not harm children, durable, durable, can be used individually or in groups and are easy to use. 3) aesthetic requirements, the size of the media is not too big or too small, adjusted to the characteristics of the child and uses a harmonious and attractive color combination, so that it can attract his attention.



Figure 1. snakes and ladders media

In terms of appearance, this media has been adjusted to the requirements of a good educational game tool. For example, the media is printed using MMT technology using plastic material so that it is lightweight, safe for students to use, durable and can be used repeatedly. The design is attractive, there is an integration between colors, images and writing on the game board. The color selection in this media uses attractive colors such as blue, yellow, red and other colors and there are pictures that are attractive to students. In addition, in this snakes and ladders game board, there are several types of plots such as challenge plots, material plots and question plots.

Then, there is an envelope that contains material and questions. The material presented in the mathematical snakes and ladders educational game tool is designed in accordance with the lesson plan and teacher's book with the material of length, weight and time in standard units. The material uses language that is easily understood by students. The questions given are adjusted to the material that has been taught to students, this is to measure the extent of students' understanding of the material that has been given. There are 4 pawns that will be used to play because this game is done in groups. The presentation of learning using this math snakes and ladders media is a combination of learning while playing by inserting material and questions in the game.

This math ladder snake is in accordance with the characteristics of elementary school students who are still in the child stage, where children still like to play. With the learning while playing model, students' interest in participating in learning will arise by itself so that students will be motivated to learn.

The use of snakes and ladders media in learning mathematics in grade 2 at State Elementary School 3 Ledokdawan

The use of snakes and ladders media in learning mathematics in grade 2 at State Elementary School 3 Ledokdawan is carried out during teaching and learning activities in the classroom. The use of this media is carried out by the teacher during the core learning activities. In this study, snakes and ladders media were used by teachers in mathematics learning with material material on length, weight and time in standard units. During the core activities, the teacher provides the material first and then continues using snakes and ladders media. The use of snakes and ladders media aims to foster students' interest in learning and activeness in participating in learning.

The way to play snakes and ladders learning media is as follows:

- a. One class is divided into 4 groups, each game group consists of 6 students

- b. Each group representative hompimpa/suit to determine the order of the game.
- c. The game starts from rolling the dice
- d. The value of the dice that comes out determines how many steps the learner must take
- e. There are moon plots, stars and challenge boxes
- f. If the pawn stops on the moon plot, the learner takes the moon envelope containing the learning material and the learner must read the material in the envelope after reading the material the student is given the opportunity to advance according to the instructions contained in the envelope.
- g. If the pawn stops on the star plot, the learner takes a star envelope containing questions about length, weight and time in standard units and questions can be answered individually or by discussing with their groupmates. If the answer is right/wrong, they can move forward/backward according to the instructions on the envelope.
- h. If the pawn stops on the challenge plot, one group must carry out the challenge listed in the box together with their group mates.
- i. If the pawn stops on a plot with a ladder, then the learner has the right to go up to the box according to the height of the ladder
- j. If the pawn stops on a plot with a picture of a snake, then the learners must go down to the box according to the snake's mouth
- k. If the learner gets a dice number 6, then the student gets the opportunity to randomize the dice 1 more time;
- l. The game is won by the group that reaches the top of the snakes and ladders..



Figure 2. Use of snakes and ladders media

Based on Figure 2 above during learning activities using snakes and ladders media in learning mathematics with length, weight and time material in standard units, namely during the game, students are very enthusiastic and excited about playing this snakes and ladders game, students are compact and able to cooperate with their groupmates in discussing, answering questions and when doing challenges together. In addition, using this snakes and ladders media makes students play an active role in participating in learning activities, because this game is carried out alternately so that each student gets a turn to play. Students are able to answer the questions in the plot, this means that this snakes and ladders media is able to make students understand the learning delivered. This is in accordance with the opinion (Sabila et al., 2021) which states that the effectiveness of using snakes and ladders media makes students easy to accept material and easier to gain understanding and motivation to learn.

Based on the results of interviews conducted by researchers with homeroom teacher 2, the results show that the use of snakes and ladders learning media at grade 2 at State Elementary School 3 Ledokdawan in learning mathematics with material on length, weight and time in standard units is considered to increase students' learning motivation. According to the

homeroom teacher, using the snakes and ladders game as a learning media makes math learning run very actively and is able to attract the attention of students, this can be seen from their enthusiasm and enthusiasm when playing the snakes and ladders game while answering questions, doing challenges together and reading out the existing material. In line with (Ariyanto et al., 2020) which suggests that snakes and ladders media can attract and involve all students to be more active in the learning process. Most students are able to answer the questions in the question envelope, this means that using snakes and ladders media can make students understand the material being studied. In addition, because this game is carried out in groups so that it can make students work well with their groupmates. Because by using snakes and ladders media, students can learn while playing and they continue to want to play while answering the questions, so that without realizing it, students are active by themselves in learning activities. This is in accordance with the opinion (Sabila et al., 2021) which states that the snakes and ladders game makes students active because this game requires students to do and find their own learning outcomes.



Figure 3. Interview with homeroom teacher

Based on the results of interviews with grade 2 students at State Elementary School 3 Ledokdawan during the use of snakes and ladders media in mathematics learning with length, weight and time material in standard units, it can be concluded that students really like learning activities carried out using this media because by using this media students can learn while playing, learning is very fun and interesting so that students do not feel bored and not monotonous. Learners are very enthusiastic and happy when they get their turn to play and can answer the questions in the question envelope. Low-grade students have high learning enthusiasm when using game-based media (Ariyanto et al., 2020). In addition, by using this learning media, students can also work together and maintain cohesiveness with their groupmates.

In accordance with the results of interviews, observations and documentation, it can be concluded that snakes and ladders media used in mathematics learning with length, weight and time material in standard units can increase students' interest in learning. In addition, the response of students when participating in learning activities is very enthusiastic, active in learning and able to work together in their respective groups. So this snakes and ladders media is considered efficient and effective for use in learning in elementary schools. This is in line with research conducted (Nurussofa & Astuti, 2023) which states that snakes and ladders media are feasible to use in increasing the mathematics learning motivation of elementary school students with the final results of feasibility validation reaching 89% which is included in the very feasible category.

Supporting factors and inhibiting factors for the use of snakes and ladders media in learning mathematics in grade 2 at State Elementary School 3 Ledokdawan.

The use of snakes and ladders media to increase students' learning motivation in mathematics subjects of length, weight and time in standard units in class 2 at State Elementary School 3 Ledokdawan there are several supporting factors and inhibiting factors, including the following.

a. Supporting Factors

Based on the results of interviews and observations, the supporting factors in the use of snakes and ladders media in learning mathematics material on length, weight and time in standard units in class 2 at State Elementary School 3 Ledokdawan include a sense of interest, enthusiasm and interest in learning students who grow when learning using snakes and ladders media. Teacher mastery and ability in every learning process using snakes and ladders media. According to (Saputri et al., 2021) the teacher's skill in using learning media is very important in the successful use of media and in order to create interactive learning and attract students' attention. Snakes and ladders media includes media that has a size that is not too large so that it can overcome space limitations. In addition, this media is practical and durable because it uses durable materials and is easy to carry as needed. The media is effective and cost-effective, namely the media is not only used in one lesson but can be used according to the needs of the material and other subjects.

b. Inhibiting Factors

Based on the results of interviews and observations, the inhibiting factors in the use of snakes and ladders media in mathematics learning materials on length, weight and time in standard units in class 2 at State Elementary School 3 Ledokdawan are limited learning time and the classroom atmosphere becomes not conducive because students are very enthusiastic in playing snakes and ladders media so that the atmosphere becomes crowded. This is in line with research conducted (Siahaan et al., 2020) which states that in the process of learning while playing using snakes and ladders media students look crowded but they are active and enjoy learning.

Solutions to overcome the inhibiting factors of using snakes and ladders media in learning mathematics in class 2**a. Time limitation problem**

The use of snakes and ladders media is carried out with 60 minutes in the last lesson hour. The time is used to provide material, play snakes and ladders, and evaluate students. Because students are so cool in playing this media they feel still not satisfied and want to play again until they reach the finish plot. The use of snakes and ladders media requires a lot of time to explain to students (Pratiwi et al., 2022). The solution to overcome the problem of limited time in using snakes and ladders media in learning mathematics can be done by dividing learning activities into several meetings or activities carried out at the beginning of the lesson so that there is more time.

b. Class Problems that become Less Conducive

The use of snakes and ladders media students seem very cool and happy when taking place in the classroom, so that the classroom atmosphere which is usually very tense in learning math becomes crowded and less conducive because of the enthusiasm and enthusiasm of students. This problem can be overcome by the teacher providing more intensive rules and supervision. To create a conducive class, before learning the teacher can

make an agreement and condition students to remain calm during learning and will give rewards if students are disciplined and calm (Ahmad & Mustika, 2021).

Conclusion

Based on the results of research conducted by researchers regarding the use of snakes and ladders media in learning mathematics material on length, weight and time in standard units, it can be concluded that the media can foster students' interest in learning. The selection of media in the form of a snakes and ladders game can foster students' interest in learning which is indicated by the interest, enthusiasm, enthusiasm of students in playing the media and involving the active role of students so that learning is fun. In addition, this media also trains students in terms of cohesiveness and cooperation between group members. The success of this media has supporting factors, among others, students' interest in the media, the teacher's mastery ability in learning, the media has the right size, is practical, durable and can be used according to material needs. The inhibiting factors include limited time and the classroom atmosphere becomes not conducive. Based on the research that has been done, the suggestions from researchers are; 1) For students, using snakes and ladders media can foster student interest in learning and be able to make students play an active role in learning; 2) For teachers, teachers should be more creative in developing media so that learning is not monotonous by using lecture and question and answer methods only; 3) For researchers, it is an experience and must learn again so that one day they can become a creative teacher in utilizing learning media.

References

- Abdussamad, Z. (2021). *Metode Penelitian Kualitatif* (P. Rapanna (ed.); Pertama). Syakir Media Press.
- Abramovich, S., Grinshpan, A. Z., & Milligan, D. L. (2019). Teaching Mathematics through Concept Motivation and Action Learning. *International Journal of Mathematic And Mathematical Sciences*, 2019.
- Ahmad, F., & Mustika, D. (2021). Problematika Guru Dalam Menerapkan Media pada Pembelajaran Kelas Rendah di Sekolah Dasar. *Jurnal Basicedu*, 5(4), 2008–2014.
- Ahmad, & Muslimah. (2021). Memahami Teknik Pengolahan dan Analisis Data Kualitatif. *Journal PINCIS*, 1(1), 173–186.
- Alfansyur, A., & Mariyani. (2020). Seni Mengelola Data : Penerapan Triangulasi Teknik , Sumber Dan Waktu pada Penelitian Pendidikan Sosial. *Historis: Jurnal Kajian, Penelitian & Pengembangan Pendidikan Sejarah* 5(2), 146–150.
- Anggraini, P. (2022). Pola pembelajaran efektif dalam meningkatkan kualitas pembelajaran pada anak usia dini. *PINTU : Pusat Penjamin Mutu*, 3(2).
- Ariyanto, B., Chamidah, A., & Suryandari, S. (2020). Pengembangan Media Ular Tangga Terhadap Pembelajaran Matematika Materi Pecahan Sederhana Pada Siswa Sekolah Dasar. *Trapsila: Jurnal Pendidikan Dasar*, 2(01), 85. <https://doi.org/10.30742/tpd.v2i01.917>
- Asip, M., Ina, N. M. I. K. R., Elisa, D. K., Ina, A., Purwanto, N., Owa, K., Mariyana, R., Yuniati, Y., & Sriasih, N. K. (2023). Pentingnya Alat Permainan Edukatif (Ape) Bagi Anak (M. Martini (ed.); Issue August). *Media Sains Indonesia*. <https://doi.org/10.31219/osf.io/pbndj>

- Febrita, Y., & Ulfah, M. (n.d.). Peranan Media Pembelajaran Untuk Meningkatkan Motivasi Belajar Siswa. *Jurnal Diskusi Panel Nasional Pendidikan Maematika*, 0812(2019), 181–188.
- Hasan, M., Milawati, Darodjat, Khairani, H., & Tahrim, T. (2021). Media Pembelajaran. In *Tahta Media Group*.
- Ilhan, A. (2021). The Impact of Game-Based , Modeling , and Collaborative Learning Methods on the Achievements , Motivations , and Visual Mathematical Literacy Perceptions. *Sage Journals*. <https://doi.org/10.1177/21582440211003567>
- Ilmiah, Ridfah, A., Dewi, E. M. P., & Makassar, U. N. (2022). Efektifitas Media Permainan Ular Tangga Pada Pembelajaran Matematika Trigonometri Untuk Meningkatkan Minat dan Motivasi Belajar Siswa. *Jurnal Ilmiah Kajian Psikologi*, November.
- Junaedi, I. (2019). Proses pembelajaran yang efektif. *Journal of Information System, Applied, Management, Accounting and Research*, 3(2), 19–25.
- Kangas, M., Siklander, P., Randolph, J., & Ruokamo, H. (2017). Teachers ' engagement and students ' satisfaction with a playful learning environment. *Teaching and Teacher Education*, 63, 274–284. <https://doi.org/10.1016/j.tate.2016.12.018>
- Maisyarah, E., & Firman. (2019). Media Permainan Ular Tangga , Motivasi dan Hasil Belajar Peserta Didik. *Jurnal Pendidikan*, January.
- Nurussofa, R., & Astuti, H. P. (2023). Pengembangan Media Pembelajaran Permainan Ular Tangga Untuk Meningkatkan Motivasi Belajar Matematika Siswa Sekolah Dasar. *Jurnal Pembelajaran Dan Matematika Sigma (Jpms)*, 9(1), 22–28. <https://doi.org/10.36987/jpms.v9i1.4183>
- Pratiwi, A. S., Tyas, A., Hardini, A., Kristen, U., & Wacana, S. (2022). Pengembangan Media Pembelajaran Berbasis Permainan Ular Tangga untuk Meningkatkan Motivasi Belajar Siswa dalam Mata Pelajaran IPA Kelas IV SD. *Jurnal Ilmiah Ilmu Pendidikan*, 5, 5682–5689.
- Rifai, Y. S. (2023). Hubungan Bermain Game Online Dengan Minat Belajar Siswa Kelas IV SD Negeri Rejosari Natar Lampung Selatan. *Universitas Islam Negeri*.
- Sabila, S., M, K. N. N., Ayunda, S. S., & Khasanah, N. (2021). Pengaplikasian Game Edukasi (Ular Tangga) untuk Meningkatkan Konsentrasi terhadap Minat Belajar Peserta Didik. *SEMAI: Seminar Nasional PGMI*, 499–518.
- Saputri, S., Sabri, T., & Kartono, K. (2021). Analisis Keterampilan Guru Dalam Menggunakan Media Pada Pembelajaran Tematik Kelas V Sd. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK)*, 11(1). <https://doi.org/10.26418/jppk.v11i1.51767>
- Schiefele, U. (2017). Classroom management and mastery-oriented instruction as mediators of the effects of teacher motivation on student motivation. *Teaching and Teacher Education*, 64, 115–126. <https://doi.org/10.1016/j.tate.2017.02.004>
- Shi, Y., & Shih, J. (2015). Game Factors and Game-Based Learning Design Model. *International Journal of Computer Games Technology*, 2015.
- Siahaan, K. W. A., Sinaga, J., & Simanjuntak, M. (2020). Pengaruh Metode Think Phare and

Share Dengan Alat Permainan Edukatif Ular Tangga Terhadap Motivasi Belajar Anak Sekolah Dasar (SD). *Intelektiva: Jurnal Ekonomi, Sosial Dan Humaniora*, 2(2), 1–10. <https://www.jurnalintelektiva.com/index.php/jurnal/article/view/272>

Sidiq, U., & Choiri, M. M. (2019). Metode Penelitian Kualitatif di Bidang Pendidikan. In A. Mujahidin (Ed.), *Journal of Chemical Information and Modeling (Pertama, Vol. 53, Issue 9)*. CV Nata Karya

Sirotus, F., Rahmawati, F., Niawati, S., Atika, P., & Pandia, S. (2019). Perkembangan Kepribadian Anak Usia Sekolah Dasar di SDN Socah 2. *Jurnal IKIP PGRI Bojonegoro*, 2, 504–510.

Ucus, S. (2015). Elementary School Teachers ' Views on Game -based Learning as a Teaching Method. *Procedia - Social and Behavioral Sciences*, 186, 401–409. <https://doi.org/10.1016/j.sbspro.2015.04.216>