

# Strengthening Digital Literacy of Elementary School Students Through Utilization of Wordwall as Game-Based Learning Interactive Media

Fitri Hamidah<sup>1</sup>, Fajar Setiawan<sup>2</sup>, Lilik Binti Mirnawati<sup>3</sup> 

<sup>1,2,3</sup> Primary Teacher Education, Muhammadiyah University Of Surabaya, Surabaya, Indonesia

## ARTICLE INFO

### Article history:

Received December 23, 2022

Accepted April 26, 2023

Available online May 25, 2023

### Kata Kunci:

Literasi Digital, Implementasi Wordwall, Game-Based Learning, Media Pembelajaran

### Keywords:

Digital Literacy, Word Wall Implementation, Game-Based Learning, Learning Media



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright © 2023 by Author. Published by Universitas Pendidikan Ganesha.

## ABSTRAK

Kurangnya media pembelajaran yang inovatif berdampak pada kemampuan siswa yang semakin kurang. Selain itu permasalahan lainnya juga ditemukan literasi digital siswa yang kurang. Penelitian ini bertujuan untuk mengkreasikan penggunaan wordwall sebagai media interaktif game-based learning untuk memberikan penguatan literasi digital khususnya bagi peserta didik sekolah dasar. Jenis penelitian ini yaitu penelitian kualitatif. Metode penelitian dalam penelitian ini ialah metode kualitatif dengan pendekatan deskriptif. subjek penelitian siswa kelas atas (kelas V) yang berjumlah 20 orang. Metode pengumpulan data menggunakan observasi, wawancara, dan dokumentasi. Instrument pengumpulan data menggunakan kuesioner. Teknik analisis data menggunakan analisis deskriptif kualitatif. Hasil penelitian yaitu siswa antusias mengikuti pembelajaran di kelas sehingga pembelajaran menjadi lebih menyenangkan dibandingkan dengan pembelajaran konvensional, dan siswa tidak merasa bosan saat pembelajaran berlangsung. Berdasarkan kemampuan literasi digital, diketahui bahwa siswa mampu dan mahir dalam mengoperasikan template word wall teknologi digital mengejar dalam labirin dan permainan mencocokkan dari awal hingga akhir permainan. Dengan pemanfaatan wordwall dapat memberikan penguatan literasi digital peserta didik sekolah dasar. Simpulan penelitian ini yaitu pemanfaatan wordwall merupakan sebuah hal baru yang dapat membangkitkan antusiasme peserta didik dalam pembelajaran.

## ABSTRACT

The lack of innovative learning media impacts students' diminishing abilities. Besides that, other problems were also found in students' needing more digital literacy. This study aims to create the use of word walls as an interactive media game-based learning to strengthen digital literacy, especially for elementary school students. This type of research is qualitative research. The research method in this study is a qualitative method with a descriptive approach. The research subjects of upper-class students (grade V) totaling 20 people. Methods of data collection using observation, interviews, and documentation. The data collection instrument used a questionnaire. The data analysis technique uses qualitative descriptive analysis. The research results are that students are enthusiastic about participating in class so that learning becomes more enjoyable compared to conventional learning, and students do not feel bored when learning occurs. Based on digital literacy skills, it is known that students are capable and proficient in operating digital technology word wall templates chasing in mazes, and matching games from the beginning to the end of the game. Using word walls can strengthen digital literacy for elementary school students. This study concludes that using word walls is a new thing that can arouse students' enthusiasm in learning.

## 1. INTRODUCTION

In simple terms, literacy is literacy skills, reading and writing, and the ability to improve syntactic abilities (Huettig & Pickering, 2019; Mirnawati & Fabriya, 2022). Literacy activities in Indonesia are currently very concerning. Based on a survey conducted by the Program for International Student Assessment (PISA) in uploaded Organization for Economic Co-operation and Development (OECD) pada 2019, Indonesia is ranked 62nd out of 70 countries or is in the top 10 countries the lowest having the lowest

literacy level. Therefore, the government has made various efforts to improve and strengthen literacy in Indonesia. In education, the government's efforts to strengthen literacy for elementary school students are carried out with a reading literacy culture before learning begins by going through the habit of reading for 15 minutes before studying. It aims to make students diligent in reading. But in reality, many elementary school students need more time to read textbooks. One of the reasons for this is the large number of students who interact or are addicted to gadgets, be it through smartphones or laptops used to access online games and video games compared to learning so that it will have a negative impact (Putri, 2018; Safitri et al., 2019). This condition causes a decrease in ability literacy of learners who have the potential to be affected in negative terms, then should be directed to the use of gadgets for positive things.

In digital technology like today, humans cannot be separated from it through gadgets. Using gadgets can strengthen literacy by applying digital literacy, especially for elementary school students. Digital literacy is the ability to use information and communication technology (ICT) to communicate content/information with cognitive and technical abilities to improve and have reading skills, as well as support schools and students to compete in a digital society (Naila et al., 2021; Pangrazio et al., 2020). Digital literacy can also mean knowledge and the ability to apply digital media by utilizing mobile devices and computers, networks, or other digital communication tools in using, evaluating, finding, creating information, and utilizing it carefully, accurately, precisely, and complying with the law with the aim of means of supporting communication activities optimally (Novitasari & Fauziddin, 2022; Setyaningsih et al., 2019)

With this digital literacy, an educator can: utilize it by making learning media relevant to subjects to provide literacy reinforcement for students in elementary school, one of which is game-based learning media learning. The word learning media comes from the Latin word "medius," which means "middle," intermediary, or introduction (Arsyad, 2015). Media learning is a tool for the learning process, namely everything that can be used to stimulate thoughts, feelings, attention, and abilities or skills of students to encourage the occurrence learning process in students (Setiawan et al., 2021). Learning media, too, can be interpreted as an intermediary in the physical form in that it contains messages relevant to the current learning activity (Setiawan, 2019). Learning media has a significant role important in learning. With the learning media, teaching and learning become easy and exciting so that students actively follow and engage in learning and have the opportunity to create and develop their potential (Nurrita, 2018). A Educators must be selective in choosing learning media that must be relevant according to the subjects and the needs of students to achieve goals learning can be achieved and evoke an atmosphere of teaching and learning in more fun classes.

Game-based learning refers to certain game principles that provide exciting experiences and apply them in real life by involving users so that the learning environment becomes interactive and collaborative learning activities (Anastasiadis et al., 2018; Trybus, 2015). Game-based learning is game-based learning that aims to make the learning atmosphere more enjoyable without ignoring the subjects studied by students (Hwa, 2018; Pratama & Setyaningrum, 2018). Games-based learning can also interpret game-based learning by utilizing the digital game as a medium to convey learning, improve the ability to understand and knowledge and assess or evaluate the material of a scientific discipline (Maulidina et al., 2018). Referring to two opinions, the researcher concluded that game-based learning is game-based learning by utilizing principles and forms of certain digital games implemented in real life with involved users. In this research, through based learning game-based learning, researchers will utilize a digital platform called word wall. Word wall is a digital website platform that contains educational and innovative quiz-based games that are engaging and accessible anytime and anywhere with an internet network or Wi-Fi.

There are many templates in this digital learning platform, including; matching games, shuffle cards, group sorting, maze chase, labelled diagrams, whack-a-mole, quiz, correct sentences, missing words, game quizzes, right or wrong, airplanes, unlocking boxes, finding matches, anagrams, matching pairs, crosswords, and blowing up balloons. The advantages of word wall media, namely; 1) the abundance of templates for basic and standard users are 18 templates, while for pro users totalling 33 templates, 2) some themes or templates attract the attention of users, 3) easy to use for beginners, 4) there are multiplayer templates can be followed by all students by joining in the same game and the same time using each device. The drawbacks of this word wall media are; 1) the font size cannot be changed, 2) paid-for new users can only make five appropriate game models available templates, and if they want to make more or use another template must subscribe to the standard or pro.

In this study, researchers will use two-word wall templates, maze chase, and matching games. The researcher chose both games because maze games and matching games are enjoyable if applied to learning. In a game maze, students can walk around the road and choose answers suitably. Meanwhile, in the matching game, students will be invited to think in pairs of right answers to the correct answer in exciting

ways. In this study, students will learn while playing. Given the use of this word wall, not all schools implement it. Therefore, researchers want to know the utilization of word wall in context 1) the responses of principals, teachers, and students regarding the use of the chase word wall template in mazes and games matching, 2) the difference between learning with a word wall and learning previous or conventional, 3) constraints in word wall implementation, and 4) digital literacy of students after implementing the use of word walls in schools, 5) suggestions for implementing future learning. Using this word wall can later strengthen participants' digital literacy among elementary school students.

Based on the results of previous studies that are relevant to this research, (Nuri et al., 2022) states that "game-based learning can improve literacy and numeracy skills of elementary school students. According to (Rashid et al., 2018) "With interactive and adaptive game-based learning, it will make learning more fun, increase students' understanding of the material, and indirectly gain knowledge and skills during digital-based learning." The opinion of other researchers states that "game-based learning makes students very enthusiastic and enthusiastic in participating in learning so it can be seen that game-based learning is better than conventional learning" (Hwa, 2018). The use of word wall media can improve student learning outcomes in elementary school (Maghfiroh, 2018). The statement aligns with the research researchers will do by combining game-based learning using word walls. Using digital word wall platforms based on game-based learning is expected to provide digital reinforcement literacy for elementary school students. Based on the background above, the purpose of the researchers in conducting this research was to create the use of word walls as an interactive game-based learning media to strengthen digital literacy, especially for elementary school students.

## 2. METHOD

This research was conducted at SD Muhammadiyah 2 Surabaya with the subject research high-class students (grade V) totalling 20 people due to high-class students' level of thinking as well as the ability to respond, understand, and capture information better than low class. The lesson load in this research is Natural Science (IPA) about abnormalities in passive movement organs (bones). The reason the researcher took the content of science lessons because the material is relevant to the researcher's word wall template implemented in this research. In this study, researchers used qualitative research methods with a descriptive approach. Qualitative research focuses on understanding the phenomena experienced by research subjects, such as behavior, perceptions, motivations, and actions, holistically and using descriptions in the form of language and words in a special natural context and by utilizing various natural methods (Moleong, 2016). Qualitative research includes categorization, conceptualization, and descriptions developed based on real-life "events" during fieldwork (Haven & Grootel, 2019; Rijali, 2018). Qualitative research often involves finding data from multiple sources to gain a deep understanding of the social reality of individuals, including their opinions, views, and attitudes, as well as qualitative data discovery and analysis techniques (Mohajan, 2018; Nassaji, 2015). The instrument grid is presented in Table 1.

**Table 1.** Instrument Grid

Instrument Type	Aspects
Observation	a. Implementation of Word Wall Implementation in Classroom Learning
	b. Digital Literacy Skills of Students
Interview	a. Implementation of Utilization of the Word wall Template Chase in the maze and Matching Games During The Learning
	b. The Difference Between Learning by Utilizing Word wall and Conventional Learning
	c. Obstacles in Word wall Implementation During Classroom Learning
	d. Digital Literacy of Students After the Implementation of Word wall Utilization in School
	e. Suggestions for Application of Future Learning

In this study, researchers used data collection techniques through three steps or stages: observation, interviews, and documentation with instruments; research observation sheets, interview sheets, and photos or videos during the research implementation process are underway. Observation is an observation activity or recording carried out systematically and aimed to observe behavior or activity during the learning process (Cintia et al., 2018). Researchers made observations to dig up various information and obtain data at SD Muhammadiyah 2 Surabaya, as for the aspects observed by researchers in the context of using a word wall templates for chasing in mazes and matching games and digital literacy

of students in elementary schools. An interview is a conversation between two or more people to get the correct data information from sources (Sari et al., 2021). Researchers conducted interviews and addressed the principal, teachers, classes, and students at SD Muhammadiyah 2 Surabaya. Documentation in the form of photos or videos of activities carried out during the research is intended to strengthen research data.

Based on data research techniques conducted, researchers use the triangulation technique. Triangulation is comparing all data with different data collection techniques to ensure the validity of the data (Fatahillah et al., 2017; Mutiani et al., 2020). Triangulation aims to provide a cross-check that all data have no differences. In this study, researchers will use a combination of technical triangulation and source triangulation. The triangulation technique is different data collection technique to get the data from the same source (Hidayati & Septiani, 2015). Source triangulation is one way to get data from different sources with the same technique (Hidayati & Septiani, 2015).

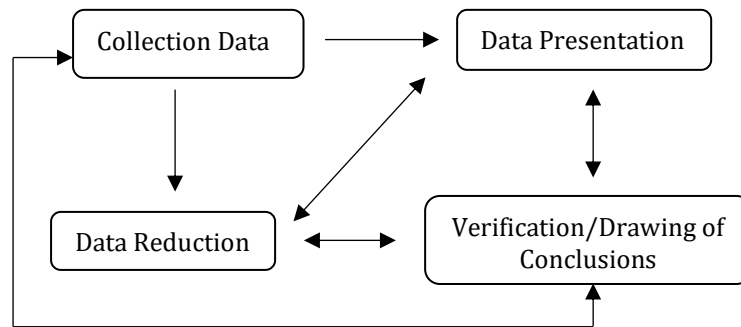


Figure 1. Qualitative Research Data Analysis Process

The figure shows the data analysis process that begins with data collection, presentation, reduction, and verification or withdrawal conclusion. Data collection is a central part of data analysis activities. Furthermore, the data collected enters the data presentation stage and then the data reduction process stage. Data reduction is a researcher's effort or effort in concluding the data, then sorting the data into conceptual units, certain categories, and specific themes (Rijali, 2018). Then the results of the data reduction are processed to look more intact. In this study, data reduction results can be in the form of sketches or concept maps, synopsis, matrices, and other forms. All things it is essential to facilitate the explanation and confirmation of conclusions.

### 3. RESULT AND DISCUSSION

#### Result

Based on the observations on aspects of internal word wall implementation learning in the classroom, the word wall digital platform is new in SD Muhammadiyah 2 Surabaya. The principal's opinion reinforces that deep Word wall implementation is new for digital-based learning. Learners are also enthusiastic about participating in class learning so that learning becomes more fun than conventional learning, and students do not feel bored when learning takes place. Meanwhile, based on digital literacy ability, it is known that students are capable and proficient in operating digital technology word wall templates chasing in a maze and matching games from the beginning to the end of the game. Students have skills in viewing images visually, audio, moving the screen or cursor, reading, and answering the questions in the game correctly. The following is a photo during the observation activity.



Figure 1. Observation of Wordwall Learning in Class



Based on Figure 1 shows the implementation of word wall implementation activities during class learning. In Figure 1, it can see that the students were delighted, enthusiastic, and excited when implementing the word wall in learning took place in class. Based on the results of interviews conducted by researchers with all informants regarding the application of word wall-based game-based learning in classroom learning, it is a new thing that makes students interested, not bored, and learning becomes more exciting and fun. Not only that, but students are also very enthusiastic, so the material taught is easy to understand. The application of word walls in classroom learning is more interesting than conventional learning. Therefore, students' digital literacy is also good because students can use digital word wall technology through their gadgets. The obstacles experienced were that some students needed gadgets, and the internet network was constrained. Based on the opinions of all sources, it stated that every week there is a need for digital learning, but still paying attention to the limitations and directions in using digital literacy so that students do not fall into negative influences. The following was a display of activity documentation from researchers conducting research at SD Muhammadiyah 2 Surabaya.



Figure 2. Chase in the Maze



Figure 3. Matching Game

Figure 2 shows the view of the word wall template for the maze chase game, while Figure 3 shows the matching game template. Based on these two images, there are visual images, text, and audio.

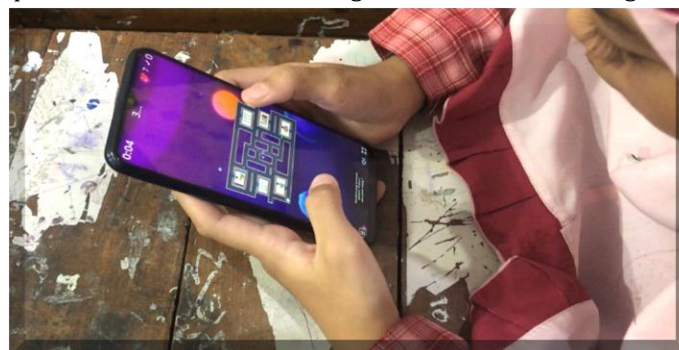


Figure 4. Students Playing Chase in the Maze



**Figure 5.** Students Playing Matching Game

In [Figure 4](#), you can see the documentation when students implement word wall implementation in the game of chasing in the maze. [Figure 5](#) shows when students apply word wall implementation in matching games.

### Discussion

In the following, researchers will discuss the results of the sustainability analysis of this research which includes implementing the use of a deep-chasing word wall template mazes and matching games as learning progresses, differences between learning by using word walls and learning conventional, constraints in word wall implementation during classroom learning, literacy of students after implementing the use of word walls in schools, and suggestions for future application of learning.

### Implementation of Utilization of the Word wall Template Chase in the maze and Matching Games During the Learning

Based on the results of the interview data, the researchers verified and validated aspects of implementing the chase word wall template in the maze and matching games when learning occurs in the classroom perception. The principal stated that implementing the word wall was new and made students not feel bored and enthusiastic in learning to learn. This statement is reinforced by the opinion of the class V teacher and fifth-grade students' representatives that implementing word walls in class will be more exciting and fun because students can learn while playing. Implementation of game-based learning is interactive and adaptive so that learning becomes more fun and can improve students' understanding of the material being taught ([Rashid et al., 2018](#)).

### The Difference Between Learning by Utilizing Word wall and Conventional Learning

Based on the interview data, the researcher verified and validated the different aspects of learning using word walls and conventional learning, namely the principal's perception that conventional learning is less fun and seems ordinary because it is only comfortable with books and blackboards while learning uses word wall templates. Make students more enthusiastic and eager to learn so that students can more easily understand the learning material. The student's statement was supported by the opinion of class V representatives that were previously learning seemed less exciting and boring because it used textbooks, notebooks, and blackboards while learning using word walls made learning more exciting and fun, and learning materials were easy to understand. The opinion of fifth-grade teachers stated that students were more enthusiastic about participating in learning in class by using word walls. Digital game-based learning makes students enthusiastic about participating in learning, so it is known that game-based learning is better than conventional learning, and students prefer game-based learning to traditional learning methods. ([Hwa, 2018](#); [Ding et al., 2017](#)).

### Obstacles in Word wall Implementation During Classroom Learning

Based on the results of the interview data, the researchers verified and validated the obstacle aspect when implementing word wall learning in the classroom is the perception that the principal stated that some students did not have gadgets and internet networks that are suddenly constrained. That matter confirmation by the opinion of the class V teacher and representatives of class V students that some students need personal gadgets and an internet connection that is constrained. Another opinion from the representative class V students is that avoiding the inner monsters maze chase game is challenging.

Supported by other opinions, the obstacle in digital learning is that some students need gadgets, and the internet is unstable, so the internet connection is slow and hinders learning (Abante, 2021; Khairunnisa & Ilmi, 2020).

### Digital Literacy of Students After the Implementation of Word wall Utilization in School

Based on the results of the interview data that the researchers verified and validated in terms of student literacy after implementing the use of word walls in schools, the principal's perception stated that students' digital literacy was good because they could operate digital media word wall templates in chasing games in mazes and matching games. This is reinforced by the opinion of the class V teacher and class V student representatives that students have good digital iteration skills because they are used to using digital technology so that students can participate in and operate digital learning by utilizing word wall templates for chasing in mazes and matching games. Rashid also emphasized that students' digital literacy is good because they indirectly gain knowledge and skills when playing digital-based learning (Rashid et al., 2018).

### Suggestions for Application of Future Learning

Based on the data from the interviews, the researcher verified and validated the suggestions for implementing further learning, namely the perception of the school principal, who stated the need for digital learning habituation every week, as well as guidance to students regarding other word wall templates so that they could be developed to be more creative, innovative, engaging, and challenging. This statement is strengthened by the opinion of representatives of class V students that there is a need for further digital learning habituation every week so students do not get bored quickly. The opinion of the fifth-grade teacher states the need for habituation, limitations, and directions for students in implementing digital learning in class. Other researchers also emphasized that in advanced learning, a game-based learning context is needed to support and optimize the learning process created as a learning support medium (Arifudin et al., 2020; Hwa, 2018)

## 4. CONCLUSION

Based on the research objectives and problems in the introduction, the researcher concluded that using the word wall as an interactive game-based learning media strengthens digital literacy, especially for elementary school students who can present new things in learning. Learning becomes very interesting, and easy to understand the material studied. Arouse the enthusiasm and enthusiasm of students in learning so that learning becomes more exciting and fun through learning while playing. Good digital student literacy is visible by the student's ability to process word walls in the game of chasing in the maze and the game reaching from the beginning to the end of the game; As for the subsequent learning suggestions, namely the need for habituation, direction, and limits for students in implementing digital learning in class. However, this research has research limitations, and there are obstacles, namely, some students need personal gadgets and internet networks that experience problems. This study suggests that researchers can redevelop other word wall templates in more innovative, creative, and challenging ways.

## 5. REFERENCES

- Abante, A. S. (2021). A Comparative Analysis on the Challenges of Online Learning Modality and Modular Learning Modality: A Basis for Training Program. *International Journal of Multidisciplinary Research and Analysis*, 04(04), 463–476. <https://doi.org/10.47191/ijmra/v4-i4-17>.
- Anastasiadis, T., Lampropoulos, G., & Siakas, K. (2018). Digital Game-based Learning and Serious Games in Education. *International Journal of Advances in Scientific Research and Engineering (Ijasre)*, 4(12), 139–144. <https://doi.org/10.31695/IJASRE.2018.33016>.
- Arifudin, D., Sulistyaningsih, E., Adila Kautsar, I., Studi, P. S., & Informasi, T. (2020). Optimization of The Digital Game Based Learning Instructional Design (DGBL-ID) Method as Learning Support Media. *Jurnal Mantik*, 4(3), 2147–2154. <https://iocscience.org/ejournal/index.php/mantik>.
- Arsyad, A. (2015). Media pembelajaran. Jakarta: PT. Raja Grafindo.
- Cintia, N. I., Kristin, F., & Anugraheni, I. (2018). Penerapan Model Pembelajaran *Discovery Learning* Untuk Meningkatkan Kemampuan Berpikir Kreatif dan Hasil Belajar Siswa. *PERSPEKTIF Ilmu Pendidikan*, 32(1). <https://doi.org/10.21009/PIP.321.8>.
- Ding, D., Guan, C., & Yu, Y. (2017). Game-Based Learning in Tertiary Education: A New Learning Experience for the Generation Z. *International Journal of Information and Education Technology*, 7(2), 148–152. <https://doi.org/10.18178/ijiet.2017.7.2.857>.
- Fatahillah, A., N.T Wati, Y. F., & Susanto. (2017). Analisis Kesalahan Siswa Dalam Menyelesaikan Soal Cerita

- Matematika Berdasarkan Tahapan Newman Beserta Bentuk *Scaffolding* yang Diberikan. *KadikMA*, 8(1). <https://jurnal.unej.ac.id/index.php/kadikma/article/view/5229/3958>.
- Haven, T. L., & Grootel, L. Van. (2019). Preregistering Qualitative Research Preregistering Qualitative Research. *Accountability in Research*, 26(3), 229–244. <https://doi.org/10.1080/08989621.2019.1580147>.
- Hidayati, Y. M., & Septiani, T. (2015). Studi Kesiapan Guru Melaksanakan Kurikulum 2013 Dalam Pembelajaran Berbasis Tematik Integratif Di sekolah Dasar Se Kecamatan Colomadu Tahun Ajaran 2014/2015. *Jurnal Profesi Pendidikan Dasar*, 2, 49–58. <https://journals.ums.ac.id/index.php/ppd/article/download/1494/1036>.
- Huettig, F., & Pickering, M. J. (2019). Literacy Advantages Beyond Reading: Prediction of Spoken Language. *Trends in Cognitive Sciences*, 23(6), 464–475. <https://doi.org/10.1016/j.tics.2019.03.008>
- Hwa, S. P. (2018). Pedagogical change in mathematics learning: Harnessing the power of digital game-based learning. *Educational Technology and Society*, 21(4), 259–276. <https://www.jstor.org/stable/26511553>.
- Coordinating Ministry The Field of Human Development and Culture of the Republic of Indonesia (KEMENKO PMK), (2019).
- Khairunnisa, G. F., & Ilmi, Y. I. N. (2020). Media Pembelajaran Matematika Konkret Versus Digital: *Systematic Literature Review* di Era Revolusi Industri 4.0. *Jurnal Tadris Matematika*, 3(2). <https://dx.doi.org/10.21274/jtm.2020.3.2.131-140>.
- Maghfiroh, K. (2018). Penggunaan Media Word Wall Untuk Meningkatkan Hasil Belajar Matematika Pada Siswa Kelas IV MI Roudlotul Huda. *Jurnal Profesi Keguruan*, 64–70. <https://journal.unnes.ac.id/nju/index.php/jpk/article/view/13742/7791>.
- Maulidina, M., Susilaningsih, S., & Abidin, Z. (2018). Pengembangan *Game Based Learning* Berbasis Pendekatan Saintifik Pada Siswa Kelas Iv Sekolah Dasar. *JINOTEP (Jurnal Inovasi Dan Teknologi Pembelajaran) Kajian Dan Riset Dalam Teknologi Pembelajaran*, 4(2), 113–118. <https://doi.org/10.17977/um031v4i22018p113>.
- Mirnawati, L. B., & Fabriya, R. A. V. (2022). Penerapan Media Flipbook untuk Meningkatkan Literasi Membaca Siswa SD. *Jurnal Pemikiran Dan ...*, 10(1), 22–38. <https://ejournal.umm.ac.id/index.php/jp2sd/article/view/19837%0Ahttps://ejournal.umm.ac.id/index.php/jp2sd/article/download/19837/10884>.
- Mohajan, H. K. (2018). Qualitative Research Methodology in Social Sciences and Related Subjects. *Journal of Economic Development, Environment and People*, 7(1), 23. <https://doi.org/10.26458/jedep.v7i1.571>.
- Moleong, L. J. (2016). Metodologi Penelitian Kualitatif. *Bandung. PT. Remaja Rosdakarya*.
- Mutiani, Abbas, E. W., Syaharuddin, & Susanto, H. (2020). Membangun Komunitas Belajar Melalui *Lesson Study Model Transcript Based Learning Analysis*. *HISTORIA: Jurnal Pendidik Dan Peneliti Sejarah*, 3(2), 113–122. <https://doi.org/10.17509/historia.v3i2.23440>.
- Naila, I., Ridlwan, M., & Haq, M. A. (2021). Literasi Digital bagi Guru dan Siswa Sekolah Dasar: Analisis Konten dalam Pembelajaran. *Jurnal Review Pendidikan Dasar : Jurnal Kajian Pendidikan Dan Hasil Penelitian*, 7(2), 166–122. <https://doi.org/10.26740/jrpd.v7n2.p166-122>.
- Nassaji, H. (2015). Qualitative And Descriptive Research: Data Type Versus Data Analysis. *Language Teaching Research*, 19(2), 129–132. <https://doi.org/10.1177/1362168815572747>.
- Novitasari, Y., & Fauziddin, M. (2022). Analisis Literasi Digital Tenaga Pendidik pada Pendidikan Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(4), 3570–3577. <https://doi.org/10.31004/obsesi.v6i4.2333>.
- Nuri, L. N., Ulfa, E. M., Sari, A. F. P., Baryroh, F., & Wahyuni, S. (2022). Implementasi *Game Based Learning* untuk Meningkatkan Kemampuan Literasi dan Numerasi Siswa Sekolah Dasar. *Jurnal Basicedu*, 6. <https://jbasic.org/index.php/basicedu/article/view/3742/pdf>.
- Nurrita, T. (2018). Pengembangan Media Pembelajaran Untuk Meningkatkan Hasil Belajar Siswa. *MISYKAT: Jurnal Ilmu-Ilmu Al-Quran, Hadist, Syari'ah Dan Tarbiyah*, 3(1), 171. <https://doi.org/10.33511/misykat.v3n1.171>.
- Pangrazio, L., Godhe, A. L., & Ledesma, A. G. L. (2020). What Is Digital Literacy? A Comparative Review of Publications Across Three Language Contexts. *E-Learning and Digital Media*, 17(6), 442–459. <https://doi.org/10.1177/2042753020946291>.
- Pratama, L. D., & Setyaningrum, W. (2018). Game-Based Learning: The Effects on Student Cognitive and Affective Aspects. *Journal of Physics: Conference Series*, 1097(1). <https://doi.org/10.1088/1742-6596/1097/1/012123>.
- Putri, D. P. (2018). Pendidikan Karakter Pada Anak Sekolah Dasar di Era Digital. *AR-RIAYAH: Jurnal Pendidikan Dasar*, 2(1), 37. <https://doi.org/10.29240/jpd.v2i1.439>.



- Rashid, N. A. B. M., Salleh, S. B. M., & Noor, N. B. M. (2018). The Role Of Game Elements in Improving Jawi Skills Through a Mobile Game "G-Jawi." *International Journal of Interactive Mobile Technologies*, 12(7), 20–30. <https://doi.org/10.3991/ijim.v12i7.9636>.
- Rijali, A. (2018). Analisis Data Kualitatif Ahmad Rijali UIN Antasari Banjarmasin. *Jurnal Alhadharah*, 17(33), 81–95. <http://jurnal.uin-antasari.ac.id/index.php/alhadharah/article/view/2374/1691>.
- Safitri, I., Pasaribu, R., Simamora, S. S., & Lubis, K. (2019). The Effectiveness Of Android Application As A Student Aid Tool In Understanding Physics Project Assignments. *Jurnal Pendidikan IPA Indonesia*, 8(4), 512–520. <https://doi.org/10.15294/jpii.v8i4.19433>.
- Sari, R. P., Tussyantari, N. B., & Suswandari, M. (2021). Dampak Pembelajaran Daring Bagi Siswa Sekolah Dasar Selama Pandemi Covid-19. *Jurnal Ilmiah Kependidikan*, 2(1), 915. <https://doi.org/10.37478/jpm.v2i1.732>.
- Setiawan, B., Pramulia, P., Kusmaharti, D., Juniarto, T., & Wardani, I. S. (2021). Peningkatan Kompetensi Guru Sekolah Dasar dalam Pengembangan Media Pembelajaran Daring di SDN Margorejo I Kota Surabaya. *Jurnal Pengabdian Dan Pemberdayaan Masyarakat*. <https://doi.org/10.31331/manggali.v1i1.1547>.
- Setiawan, F. (2019). Pengembangan Media Delima (Denah Lingkungan Rumah) Pada Subtema Bermain Di Lingkungan Rumah Untuk Sekolah Dasar. *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar (JP2SD)*, 7(2), 151–156.
- Setyaningsih, R., Abdullah, A., Prihantoro, E., & Hustinawaty, H. (2019). Model Penguatan Literasi Digital Melalui Pemanfaatan E-Learning. *Jurnal ASPIKOM*, 3(6), 1200. <https://doi.org/10.24329/aspikom.v3i6.333>.
- Trybus, J. (2015). *Game-Based Learning: What it is, Why it Works, and Where it's Going*. New Media Institute.