



ANALYZING OF WEB-BLOG MEDIA IN LEARNING MATHEMATICS ON POST PANDEMIC COVID-19

Alfauzan Ramadhanny Simangunsong¹, Irvan²

^{1,2} Master of Mathematics Education, Postgraduate Program
Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia

¹ alfauzanrasi01@gmail.com ² irvan@umsu.ac.id

DOI : <http://dx.doi.org/10.30829/tar.v30i1.2497>

ARTICLE INFO

Article History

Received : May 8, 2023

Revised : June 13, 2023

Accepted : June 30, 2023

Keywords

Digital Learning Media,
Media Blogs,
Mathematics Learning,
Pandemic Learning ,

ABSTRACT

Pandemic has brought everyone to the highest climax in the development of learning innovations, including digital learning. The popularity of web digital learning applications and pages, video conferencing, digital quizzes, to audio-visual-based learning tools has brought civilization to various forms of learning. This study aims to analyze the implementation of the use of web-blog-based digital learning media in mathematics learning in junior high schools. This research was conducted in the first week of March 2023. This research used a qualitative method, with data collection techniques in the form of observation, interviews, and documentation studies. The researcher in this case functions as the main tool for collecting data with the main data collection techniques through interviews, explanations and documentation. The results of the analysis in research on the use of web-blogs in learning mathematics show that there is ease in strengthening concept understanding, learning that is flexible and can be accessed repeatedly, the time for giving material and assignments is concise, and motivating the use of gadgets positively. Other results show obstacles in the form of resource capabilities that have not been maximized, minimal availability of devices, limited internet access based on region and economic capacity, to limited abilities of students and educators in using digital media. The analysis above provides a description to educators in terms of selecting learning media when analyzing material in the preparation of lesson implementation plans, so that the use of web-blog media can be adjusted and varied according to resources and learning needs.

Introduction

In technology era, we can see that today's media are not limited to those that have one-way characteristics, in fact, there are many media today that are two-way and even common through various applications and are used to assist human life activities such as trading digitally chatting through pages. and social media groups, exchange information and knowledge, to use it in the learning process in schools (Zhong, 2020) . Prenky in (Lee, 2021) says that today's youth are a group of digital speakers. It has been proven that in this era, the younger generation's

understanding of the reality of everyday life can be achieved through mass media. In fact, we all have to realize that the biggest consumers of digital media are children who are still in school. (Saputra.S et al., 2015).

This social change has brought science and information and communication technology to become more sophisticated. To get this knowledge and information, of course we will not have any more difficulties, because all of that can be searched through the internet. One popular site address is a blog or weblog application . Through this blog we can create data, information, knowledge, even things that are useful . Especially when the world is hit by the COVID-19 pandemic (Jamila et al., 2021), all sectors of life are affected as well as education. From college level to elementary school (Goodrich et al., 2022). Indonesia is also one of the countries affected by the global pandemic, cases of Covid-19 continue to increase (Simangunsong et al., 2022) so strict public health social measures are implemented including wearing masks, limiting mobility and closing schools or businesses in the realm of the global economy (Ilmi et al., 2022) (Alshammary & Alhalafawy, 2023). During the pandemic, students studied online and used technology (Partono et al., 2021) The technology used is digital-based technology. There are many digital applications that support online learning (Nurhadi, 2020). Furthermore, the process also uses a learning model that supports and is effectively used. The online teaching and learning process that is carried out requires students to learn independently (Simangunsong, 2022).

One of the media used in digital-based learning is the Blog . Blog is an abbreviation of weblog which is a type of website developed and maintained by individuals using online software or hosted platforms that are very easy to use, space to write. Blogs feature instant online publication and invite the public to read and provide feedback (Solomon & Scrum, 2011). In general , a blog is a site that contains writings and aims to provide us with various information. This site can usually be accessed by all internet users according to the topic and purpose of the blog users (Herutomo, 2010). Blogs can be used as a digital-based learning media in the world of education. Because the blog itself can be created and accessed so easily, and can be presented with various variations according to what we want, and of course it can be in the form of learning material content.

Here are some definitions of weblogs namely: (1) Weblogs or blogs are text documents, images, media objects and data that are arranged hierarchically and according to a certain chronology that can be viewed via an internet browser (eg internet explorer). (2) A blog is a periodic and regular publication of one's personal thoughts as well as web links. (3) Blog is a

journal provided on a web. The activity of updating a blog is called "blogging". A person who maintains a blog is called a "blogger". (4) A blog is a continuous journey, guided by a continuous and consistent logic. Topics and discussion in a blog are usually consistent with the main topics, for example politics, literature, music and so on. (6) Blog is a journal provided on the web. Blogs can be updated every day with an application provided by the provider. No special skills are needed to update or manage a blog. Posts in the blog are arranged regularly according to certain criteria, usually by setting the order of the date.

Blogs (Lee, 2021) The first is most likely the "What's New" page on the Mosaic browser created by Marc Andersen in 1993. If we still remember, Mosaic was the first browser before Internet Explorer even before Netscape. Then in January 1994 Justin Hall started his personal website "Justin's Home Page" which later changed to "Links from the Underground" which might be called a Blog (Arighi et al., 2019) first as we know it today. Until 1998, the number of existing blogs was still very small. This was because at that time special skills and knowledge were needed about website creation, HTML, and web hosting to create a Blog, so that only those working in the Internet field, System Administrators or Web Designers would create their own Blogs in their free time. Weblogs were popularized by blogger.com, which was owned by PyraLab which was later picked up by Google at the end of 2002. Since then there have been many applications dedicated to the development of blog writers, including learning (Sulasmi, 2018).

Talking about blogs that conceptually provide information through writing and images certainly has many advantages when compared to conventional learning media such as books. Although both concepts provide information through writing and images, blogs have features that conventional and digital books do not have. The blog will be stored neatly and all learning content can be continuously updated. Blogs can also be accessed anyone and anywhere (Sartono, 2016), can be shared via link. Learning content will be stored longer without fear of something being scattered because there is an archive feature (Sulistiyowati, 2011). In the blog, you can directly interact through the comment feature so that when used in learning if the blog author is a teacher, the learning will be more lively. So that the quality of learning content in the blog depends on the author in the blog. So it is recommended that if the teacher wants to use the blog as a learning medium, the teacher should be the one who makes the blog so that the learning content can be adjusted to the material and lesson implementation plan. Similarly, variations in blogs can also be adjusted based on the learning needs that will take place, because teachers can fill blogs with various learning materials (Rangkuti et al., 2019).

An in-depth study related to the discussion above makes us aware that the learning technology and innovation that we have today has reached its highest climax. However, there are still many who do not realize the importance of using technology in the learning process, the impact of which also directly touches the teaching of media literacy to students. We realize that technology has both positive and negative impacts. If we are not smart and wise in using this technology then it is very unfortunate. This research was carried out based on the views of researchers who see the phenomenon of the very rapid development of digital media, but there are still many cases which show that this technology has not been used wisely in everyday life or even in the learning process at school. So the researcher wants to see whether there are still many teachers who have not mastered the use of even the simplest learning media such as weblogs that can be accessed and made easily.

This analysis needs to be carried out in order to motivate teachers to be able to carry out digital-based education and teaching that is easy and cheap. In addition, this analysis is needed so that our thinking about the use of digital media is difficult to solve. Especially after the pandemic, which has introduced a lot of learning media, will after the schools reopen, the various learning media will be abandoned and all will return to conventional learning processes due to obstacles that have boomeranged in the application of digital-based learning media. Furthermore the analysis above provides a description to educators in terms of selecting learning media when analyzing material in the preparation of lesson implementation plans, so that the use of web-blog media can be adjusted and varied according to resources and learning needs.

Research Methods

This study uses a qualitative descriptive method (Harian et al., 2021). According to Bogdan and Taylor in (Moleong, 2013) said that qualitative research is a research procedure that produces descriptive data (Winda & Dafit, 2021) in the form of written or oral expressions of society and observable behavior (Corbin & Strauss, 2014) (Berg, 2009; Boyatzis, 1998; Braun & Clarke, 2006; Creswell, 2007; Patton, 1990). This study aims to describe the results of an analysis of the use of blog learning media after the Covid-19 pandemic through narrative (Stahl & King, 2020).

This research was conducted in the first week of March 2023 by conducting interviews with 5 (five) mathematics teachers in junior high schools. To facilitate data and information acquisition, researchers developed research instruments using data collection techniques in the

form of observation, interviews, and documentation studies (Azmi et al., 2020). The researcher serves as the main tool for data collection. The main data collection technique is through interviews, explanations and documentation. The questions posed to informants were (1) self-identity (2) use of blog media in learning mathematics (3) ease or constraints in using blogs when teaching.

Table 1. Informant Profiles

No	Code	Initials	Age	Work
1	A1	TH	27 yrs	Teacher
2	A2	SH	44 yrs	Teacher
3	A3	NU	25 yrs	Teacher
4	A4	RAL	29 yrs	Teacher
5	A5	EH	51 yrs	Teacher

Furthermore, to facilitate this research, the constraints that are used as research references are the table of constraints on the use of digital-based media put forward by (Muharmi, 2022) there are at least 7 (seven) things that become references (as shown in table 2).

Table 2. Obstacles to Using Digital Learning Media

No	Constraint
1	Many students do not have supporting devices (mobile phones/computers/laptops) to access the internet for online learning purposes.
2	Limitations of quotas and internet data packages owned by students hinder the learning process of students during online learning.
3	Lack of insight and ability of students and families in using the internet for learning.
4	Limited network and internet access for certain areas that impede the online learning process for students.
5	Limited ability of teachers to develop digital teaching materials.
6	Limited ability of teachers to use the internet for online learning and access to learning resources.

7 Limitations of teachers in the development and use of ICT-based learning media

(Muharmi, 2022)

The constraints stated by (Muharmi, 2022) the reference will later be used as the main material in finding information related to the analysis of constraints on the implementation of blog learning media in learning mathematics so the analysis is valid (Elo et al., 2014). The data analysis technique in this study is to use the interactive model Miles and Huberman in (Sugiyono, 2014). Data analysis activities include data reduction, data presentation and drawing conclusions or verification. This study uses triangulation which is used to triangulate methods and sources by checking interview notes, field notes, surveys, and documentation notes from various data. And as for testing the validity of the data, researchers used the triangulation technique as stated by Wiliam in (Sugiyono, 2014)that the triangulation technique is used to examine data from various sources by sharing ways and times.

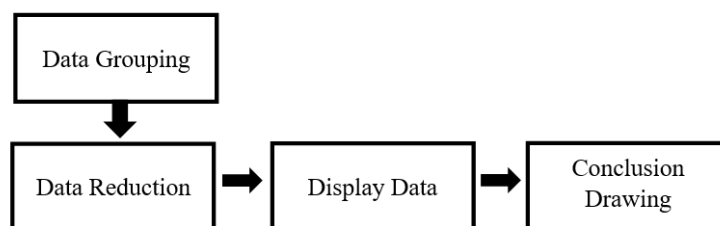


Figure 1. Research Flow

Results

Analysis of the use of blog learning media can be seen based on table 3 below. Table 3 shows that 100% of all informants have used blog media in teaching mathematics. That means the blog has been used in the teaching and learning process of mathematics.

Table 3. Use of Blogs in Learning

No.	Informant	Use of Blogs	
		Once	Never
1	TH	✓	-
2	SH	✓	-
3	NU	✓	-
4	RAL	✓	-
5	EH	✓	-

The results of interviews between researchers and informants regarding the use of digital learning media blogs show descriptive and varied answers. Informant A1 (TH) said that the use of blogs is considered as a medium for increasing understanding in the concept of learning mathematics, aka clarifying information (Permansah & Murwaningsih, 2018). The use of blogs has convenience where learning becomes more flexible, and more interesting. Nevertheless, the learning process using blogs also has constraints which lie in the availability of the internet, because not all students have these facilities. There are also other obstacles, namely the IT skills of each student are different, and the learning process is considered to be longer than usual .

Furthermore, informant A2 (SH) With this blog , he can send a summary of the material along with the exercises that students will do. Basically, the convenience he gets is that all students can access it anywhere and anytime. But there is a little obstacle because in his school environment signal quality is inadequate. This makes students lazy to open recommended blogs, especially if they only read blog content. They think that learning material is sufficient to be conveyed in class or even material is presented using learning videos only , and exercises are carried out directly. Informant A3 (NU) stated that the use of blogs facilitates the provision of assignment learning materials to students. In my opinion, the use of blogs makes it easier for us to teach mathematics. Through blog media, teachers can receive information and exchange ideas with both blog writers and other blog readers regarding learning material. However, the obstacle to using blogs in the learning process is that not all blogs contain systematic content. So that the selection of content must really be done besides that there are still students who are in the middle to lower economic strength who don't have a device .

Informant A4 (RAL) explained the use of blogs in learning mathematics makes it easier for students to find information related to learning material. The use of blogs makes it easy for educators because they can be accessed at any time. educators can also see and explain to students about mathematics learning material and can provide motivation and alternatives to students to increase student achievement and motivation in learning. However, educators must realize together that educators must always improve their digital skills and must also create interesting content or writing and pictures on blogs that they want to publish . Furthermore, the constraints on using digital-based media such as this blog are expensive and make students sometimes complain because of internet costs. Nonetheless, the use of blogs according to informant A4 (RAL) is very convenient and more effective because students now prefer to play with gadgets according to the current student's character .

Informant A5 (EH) used blogs as a medium for learning mathematics, starting with online learning during the pandemic. Online media such as this blog make it easier for educators in the process of teaching mathematics. Where teaching materials can be viewed repeatedly and have flexibility of place and time. However, there are several obstacles that are of concern, including not all students have digital-based learning devices, limited network and internet costs, and when learning online using blogs, educators often have difficulty communicating directly with students so that educators have difficulty carrying out understanding analysis in learning mathematics .

Discussion

The study in the analysis of the use of digital media in this blog provides an understanding that the adjustment of characteristics and resources based on the learning environment is very important so that the learning process using digital-based media can have a maximum impact on the continuity of achieving the goals of learning mathematics. Observation of teaching materials, selection of teaching media, use of teaching methods and strategies are very important in supporting the continuity of mathematics learning, especially digital-based mathematics learning. The information on the convenience and constraints conveyed based on the interview above becomes a reflection and study material to improve implementation standards and digital-based mathematics learning processes. So that learning mathematics can motivate students to learn to use the technology they have, in addition to adjusting cultural characteristics in the technological era is very important, not least in learning mathematics.

Analysis of the use of blogs in learning mathematics based on the results of interviews with the five informants above, we can see the convenience and constraints put forward by the informants of this study as material for a broader study. Further discussion was put forward by informant A1 (TH) who explained that the ease of using blogs was seen from its function to strengthen students' understanding of the material, while the constraints raised by informant A1 (TH) showed the suitability of the constraints on using digital media to the third point put forward by (Muharmi, 2022) namely about the lack of insight and ability of students and families to use the internet for learning.

Analysis of further information provided by informant A2 (SH) shows the ease of use of blogs which can be accessed anytime and anywhere. However, the obstacles put forward by informant A2 (SH) show the obstacles put forward by the fourth point in the article (Muharmi, 2022) which are related to network limitations and internet access in certain areas which impede

the online learning process for students (Sahelatua, 2018). So that the analysis of this problem can be considered using online media in the process of needs analysis and selection of learning media in the pre-learning process.

Interviews with informant A3 (NU) provide information that the use of blogs can assist educators in summarizing learning time when assignments to students take place. Nevertheless, the constraints conveyed by informant A3 (NU) indicate that there are still many students who do not have a device as a supporting device for accessing the internet for learning purposes. This is in accordance with the constraints put forward by (Muharmi, 2022) in the first point. In addition, informant A3 (NU) also reminded the importance of selecting learning content by educators so that learning can run smoothly by innovating and being creative (Arikarani & Amirudin, 2021).

Informant A4 (RAL) based on interviews provided information that the use of blogs in learning can motivate students to be smart in using their devices and motivate increased learning outcomes (Abdillah et al., 2017). Even though the obstacles in using blogs as learning media are considered expensive due to limited quotas and internet data packages owned by students, this hinders the smooth learning process. This is in accordance with obstacle number two put forward by (Muharmi, 2022) in his article. Furthermore, views regarding the constraints of online learning are also in accordance with the constraint information submitted by informant A4 (RAL) regarding the limited ability of educators in developing digital teaching materials, the limited ability of educators to use the internet and use of resources, to the limitations of educators in developing and using media-based learning. ICT. These obstacles were stated by informants by reminding educators to continue to improve their abilities, as well as innovate and develop digital-based media so that the fifth, sixth and seventh obstacles in (Muharmi, 2022) can be overcome.

Further discussion and discussion is based on information from informant A5 (EH) which shows that blog learning media can be accessed repeatedly and flexibly in access anywhere and anytime. However, the obstacles stated by informant A5 were complex, starting from many students who did not have devices, difficult internet access due to network and costs, to class control that was not optimal regarding students' understanding of the material provided. This provides insight as study material in the use of digital and ICT-based learning media which not all of its utilization has been implemented by educators (Lestari, 2015).

Based on the discussion and details above, it can be stated that learning using blog media needs to pay attention to various things. A good blog is one that contains structured learning

content in the form of writing and images that contain learning information that will be discussed in teaching and learning activities. The material is uploaded correctly in accordance with the procedures in the blog so that the material can be reviewed anywhere and anytime. Blogs that are characterized by writing and images will be easy for teachers and students to use as learning media if the content is directly designed by educators by adjusting the resources and learning materials taught. Especially after the pandemic, the use of blogs is still very relevant to be used for varied mathematics learning. Through many strategies such as material selection, resource analysis, designing learning activities, preparing tools and good learning implementation plans, the obstacles to using blogs as learning media can be overcome.

Conclusion

Analysis of the use of web-blogs in mathematics learning after the COVID-19 pandemic provides a description that its use as a learning medium still needs to be evaluated so that learning becomes more optimal. Even though analysis and results of interviews conducted with five informants provide information that digital learning using blogs has been carried out by informants, the ease of learning using blog media put forward by informants includes strengthening understanding of concepts and material, flexible learning, summarizing assignment time, motivating students in the use of devices in a positive direction, to teaching materials that can be accessed repeatedly. While the obstacles in digital learning using blogs include resource capabilities that are not optimal. Starting from the availability of devices, limited internet access based on region and economic capacity, to the limited ability of students and educators in the use of digital media. So this makes the selection of material, the learning content loaded and the preparation of tools and learning plans so important.

Referece

- Abdillah, R., Joyoatmojo, S., & Noviani, L. (2017). Pemanfaatan Blog Sebagai Media Pembelajaran dalam Meningkatkan Prestasi Belajar Siswa. *Pendidikan Ekonomi, FKIP Universitas Sebelas Maret*, 3(1), 1–21. <https://jurnal.uns.ac.id/>
- Alshammary, F. M., & Alhalafawy, W. S. (2023). Digital Platforms and the Improvement of Learning Outcomes: Evidence Extracted from Meta-Analysis. *Sustainability*, 15(2), 1305. <https://doi.org/10.3390/su15021305>
- Arighi, H., Purwanto, I., & Ardiansyah, A. N. (2019). Implementasi Penggunaan Blog Sebagai

- Media Pembelajaran Ekonomi. *Social Science Education Journal*, 6(2), 121–125.
- Arikarani, Y., & Amirudin, M. F. (2021). Pemanfaatan Media Dan Teknologi Digital Dalam Mengatasi Masalah Pembelajaran Dimasa Pandemi. *Edification*, 14(1), 93–116.
- Azmi, F., Syafaruddin, & Khairuddin. (2020). Innovation of Manajement in Improving Islamic Education Learning Quality at MAN 2 Model Medan. *Jurnal Tarbiyah*, 27(2), 75–92.
- Berg, B. (2009). *Qualitative Research Methods for the Social Sciences*. Bacon.
- Boyatzis, R. (1998). *Transforming Qualitative Information, Thematic Analysis and Code Development*. Sage Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3. <https://doi.org/10.1191/1478088706qp063oa>
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory: Vol. null* (4th ed. (ed.)).
- Creswell, J. (2007). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Sage Publications.
- Elo, S., Kääriäinen, M., Kanste, O., & Pölkki, T. (2014). Qualitative Content Analysis : A Focus on Trustworthiness. *Sage Open*, 4(1), 1–10. <https://doi.org/10.1177/2158244014522633>
- Goodrich, J. M., Hebert, M., & Namkung, J. M. (2022). Impacts of the COVID-19 Pandemic on Elementary School Teachers' Practices and Perceptions Across the Spring and Fall 2020 Semesters. *Frontiers in Education*, 6. <https://doi.org/10.3389/feduc.2021.793285>
- Harian, M. P. P., Sari, I. P., & Bara, I. H. B. (2021). Android-Based Financial Statement Persentation Model. *Jurnal Tarbiyah*, 28(2), 1–16.
- Herutomo, A. (2010). *Conquering Web 2.0*. PT Elex Media Komputindo.
- Ilmi, M., Makmuri, M., & Wiraningsih, E. D. (2022). the Effect of the Online-Based M-Apos Model on Mathematics Problem-Solving Ability Reviewed From Student'S Self-Esteem. *Jurnal Tarbiyah*, 29(1), 1. <https://doi.org/10.30829/tar.v29i1.1266>
- Jamila, Ahdar, & Natsir, E. (2021). Problematika Guru dan Siswa dalam Proses Pembelajaran Daring pada Masa Pandemi Covid-19 di UPTD SMP Negeri 1 Parepare. *L Ma' Arief: Jurnal Pendidikan Sosial Dan Budaya*, 3(2), 101–110.

<https://ejurnal.iainpare.ac.id/index.php/ALMAARIEF/article/view/2346>

- Lee, J. H. (2021). The effects of media literacy-based activities on writing skills in the EFL classroom. *International Journal of Learning, Teaching and Educational Research*, 20(11), 288–305. <https://doi.org/10.26803/ijlter.20.11.16>
- Lestari, S. (2015). Faktor-Faktor Yang Mempengaruhi Pemanfaatan Tik Oleh Guru. *Jurnal Kwangsan*, 3(2), 121. <https://doi.org/10.31800/jurnalkwangsan.v3i2.29>
- Moleong, L. J. (2013). *Metode Penelitian Kualitatif*. PT Remaja Rosdakarya.
- Muharmi, T. (2022). Constraints of Virtually Using Digital-Based Learning Media for Early Childhood Education Teachers. *International Journal Reglement & Society (IJRS)*, 3(2), 154–158. <http://www.jurnal.bundamedia grup.co.id/index.php/ijrs/article/view/233>
- Nurhadi, N. (2020). Blended Learning dan Aplikasinya di Era New Normal Pandemi Covid-19. *Agriekstensi*, 19(2), 121–128.
- Partono, P., Wardhani, H. N., Setyowati, N. I., Tsalitsa, A., & Putri, S. N. (2021). Strategi Meningkatkan Kompetensi 4C (Critical Thinking, Creativity, Communication, & Collaborative). *Jurnal Penelitian Ilmu Pendidikan*, 14(1), 41–52. <https://doi.org/10.21831/jpipip.v14i1.35810>
- Patton, M. (1990). *Qualitative Research and Evaluation Methods*. Sage Publications.
- Permansah, S., & Murwaningsih, T. (2018). Media Pembelajaran Digital: Kajian Literatur Tentang Dampak Penggunaan Media Pembelajaran Digital di SMK. *Prosiding Seminar Nasional Pendidikan Administrasi Perkantoran*, 3(2), 75. <https://jurnal.uns.ac.id/snpap/article/view/27906>
- Rangkuti, N. A., Lubis, F., Handayani, T., & Sigalingging, D. L. (2019). Blog Sebagai Media Pembelajaran Pada Mata Pelajaran Bahasa Indonesia. *Prosiding Seminar Nasional PBSI II Tahun 2019*, 155–160.
- Sahelatua, L. V. dan M. (2018). Kendala guru memanfaatkan media It dalam pembelajaran di Sdn 1 Pagar Air Aceh Besar. *Ilmiah Pendidikan Guru Sekolah Dasar*, 3(2), 131–140. <http://www.jim.unsyiah.ac.id/pgsd/article/download/8579/3601>
- Saputra, S. J., Adiprasetio, J., & Kusmayadi, I. M. (2015). Pentingnya Literasi Media. *Jurnal Pengabdian Kepada Masyarakat*, 2(3), 1–3.

<https://jurnal.unpad.ac.id/pkm/article/view/19903/9564>

- Sartono. (2016). Pemanfaatan Blog Sebagai Media Pembelajaran Alternatif di Sekolah. *Transformatika*, 12(4), 120–134.
- Simangunsong, A. R. (2022). *Strategi Pembelajaran Matematika Pasca Pandemi: Skenario Mengajar Masa Kini dan Nanti*. K- Media.
- Simangunsong, A. R., Rakhmawati, F., & Nuh, M. (2022). Pengembangan Strategi Blended Learning Berbasis Contextual Teaching and Learning. *Axiom: Jurnal Pendidikan Dan Matematika*, 11(2), 137–151.
- Solomon, G., & Scrum, I. (2011). *Web 2.0 Panduan Bagi Para Pendidik*. PT Index.
- Stahl, B. N. A., & King, J. R. (2020). Understanding and Using Trustworthiness in Qualitative Research. *Journal of Developmental Education*, 44(1), 26–28.
- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Sulasmianti, N. (2018). Pemanfaatan Blog Sebagai Media Pembelajaran. *Jurnal Teknodik*, 22(2), 143–158. <https://doi.org/10.32550/teknodik.v0i0.365>
- Sulistiyowati, E. (2011). Peran Blog Sebagai Media Pembelajaran Di Madrasah Ibtidaiyah. *Al-Bidayah*, 3(2), 223–236.
- Winda, R., & Dafit, F. (2021). Analisis Kesulitan Guru dalam Penggunaan Media Pembelajaran Online di Sekolah Dasar. *Jurnal Pedagogi Dan Pembelajaran*, 4(2), 211. <https://doi.org/10.23887/jp2.v4i2.38941>
- Zhong, M. (2020). an Implication Study of Social Media Literacy At School. *WACANA: Jurnal Ilmiah Ilmu Komunikasi*, 19(1), 1. <https://doi.org/10.32509/wacana.v19i1.908>