



JURNAL BASICEDU

Volume 5 Nomor 5 Tahun 2021 Halaman 4299 - 4305

Research & Learning in Elementary Education

<https://jbasic.org/index.php/basicedu>



What Kind of Learning Media do You Want? Need Analysis on Elementary School Online Learning

Gatot Margisal Utomo^{1✉}, Bramianto Setiawan², Reza Rachmatdullah³, Vina Iasha⁴

Department of Physical Education, Universitas PGRI Adi Buana, Indonesia¹

Department of Elementary Education Teacher, Universitas PGRI Adi Buana, Indonesia²

SD Pondok Bambu 06 Jakarta, Indonesia³

E-mail: gatotmargisalutomo@unipasby.ac.id¹, sbramianto@unipasby.ac.id², vina.iasha@gmail.com³

Abstrak

Penelitian pendahuluan ini dilakukan untuk mencari informasi media pembelajaran yang diinginkan guru dan siswa dalam pembelajaran online. Metode penelitian deskriptif kualitatif diterapkan dalam penelitian ini. Penelitian dilakukan pada bulan Agustus 2021. Penelitian dilakukan di sebuah sekolah dasar baik di perkotaan maupun pedesaan. Sebanyak 105 orang diwawancarai di sekolah tersebut, termasuk guru dan siswa. Teknik pengumpulan data dilakukan melalui survei dengan menggunakan *google form* yang dibagi menjadi 2 formulir, yaitu formulir untuk guru dan siswa. Temuan survei guru menunjukkan bahwa media pembelajaran diperlukan untuk memberikan gambaran realistis tentang fenomena dalam pembelajaran online kepada siswa. Dengan menyediakan media pembelajaran yang interaktif, siswa merasa akan lebih mudah memahami materi dari pada hanya dijelaskan atau diberikan tugas. Di sisi lain, hasil angket siswa juga menunjukkan bahwa mereka menginginkan media pembelajaran dalam proses pembelajaran online. media pembelajaran yang dapat menyampaikan topik sehingga siswa dapat melihat fenomena tersebut.

Kata Kunci: pembelajaran online, media pembelajaran, sekolah dasar.

Abstract

This preliminary research was conducted to find information on learning media that teachers and students want in online learning. The qualitative descriptive research method is applied in this study. The study was conducted in August 2021. The study was conducted in an elementary school in both urban and rural areas. A total of 105 people were interviewed at the school, including teachers and students. The data collection technique was carried out through a survey using a google questionnaire form which was divided into 2 forms, namely forms for teachers and students. The findings of the teacher survey indicate that learning media is needed to provide students with a realistic picture of phenomena in online learning. By providing interactive learning media, students feel it will be easier to understand the material than just being explained or given assignments. On the other hand, the results of student questionnaires also indicate that they want learning media in the online learning process. learning media that can convey the topic so that students can see the phenomenon.

Keywords: online learning, learning media, elementary school.

Copyright (c) 2021 Gatot Margisal Utomo, Bramianto Setiawan,
Reza Rachmatdullah, Vina Iasha

✉ Corresponding author :

Email : gatotmargisalutomo@unipasby.ac.id

DOI : <https://doi.org/10.31004/basicedu.v5i5.1468>

ISSN 2580-3735 (Media Cetak)

ISSN 2580-1147 (Media Online)

Jurnal Basicedu Vol 5 No 5 Tahun 2021
p-ISSN 2580-3735 e-ISSN 2580-1147

INTRODUCTION

Until now, all nations across the world have been affected by the covid-19 epidemic, including Indonesia. To anticipate the spread of the Covid-19 virus, the learning process continued to employ online-based learning (Bramianto Setiawan et al., 2020). Online learning is a type of alternative learning that makes use of the internet to help students learn (Irmada & Yatri, 2021). Online Learning may be done without face-to-face interaction by leveraging the complexity of today's technological gadgets, such as notebooks, tablets, and smartphones. However, some issues occur in online learning, when learning is carried out with a lack of creativity, resulting in a decrease in student interest in learning (Morgan, 2020).

Several studies have shown that there are negative impacts caused by online learning during the COVID-19 pandemic. The findings of Hammerstein et. al. demonstrated a significant negative effect of school closures on student achievement especially among younger students and students from families with low socioeconomic status due to limitations in accessing interactive learning media (Hammerstein et al., 2021). The findings of Clark et al. show that not all online education is equal: students who were given online lessons recorded by higher-quality external teachers had higher test scores than those whose lessons were recorded by teachers from their schools. The educational benefits of distance learning were the same for both rural and urban students, but the test performance of students who used computers for online education was better than those who used smartphones (Clark et al., 2021).

Wati et.al explain that online learning needed practical learning media. So that the needs analysis to develop the learning media according to the needs of learning media during the COVID-19 pandemic (Wati et al., 2020). Nurhikmah et al. also explain that online learning needs to develop blended-based learning media for Biology subjects to improve students' self-learning skills and explore their skills personally (Nurhikmah et al., 2018). In addition, Putri et. al also explained that there were several challenges and obstacles experienced by students, teachers, and parents in online learning. The challenges related to students are limited communication and socialization between students so it requires good creativity from the teacher to overcome these problems (Putri et al., 2020).

Various efforts have been conducted to make the online learning process interesting, such as providing appropriate learning methods and models (Sari et al., 2020) and creating interactive learning media (Iasha et al., 2020). One of the effective methods to make online learning more engaging is to include interactive learning media. Learning media itself is anything that can be used to convey messages or information in the teaching and learning process so that it can stimulate students' attention and interest in learning. Therefore, this preliminary study was conducted to find information on learning media that teachers and students want in online learning during the COVID-19 pandemic, especially for schools both in cities and regions.

METHOD

Research Design

The qualitative descriptive research method was applied in this study. Qualitative descriptive research is a descriptively stated research approach that uses qualitative data. This form of qualitative descriptive study is frequently employed to investigate social phenomena, events, or conditions (Creswell & Creswell, 2017). The research was carried out in August 2021. The investigation was conducted at an elementary school in the urban area (Jakarta and Bandung) and the rural area (Bojonegoro and Blora). This research was declared successful if the majority of respondents needed a learning media that can show a concrete phenomenon in online learning during the COVID-19 pandemic.

Participant

A total of 105 people were interviewed at the school, including teachers and students. The demographics of these participants are shown in Table 1.

Tabel 1. Participant demographics (*n* =105)

	Type	Frequency	Percentage (%)
Gender	Male	39	37.14
	Female	66	62.86
Role	Teachers	26	24.76
	Students	79	75.24
Region	Urban Area	58	55.24
	Rural Area	47	44.76

Data Collected and Data Analysis

The data collection technique was carried out through a survey using a google form questionnaire which was divided into 2 forms, namely a form for teachers and students. The questionnaire was consisting of five statement items both teachers’ and students’ questionnaire forms. The data analysis technique used was descriptive qualitative by analyzing and summarizing the data that had been collected to provide an overview of the conditions and situations that occur in the field.

RESULT AND DISCUSSION

Based on the results of research conducted in August 2021, 26 data were obtained from the teacher's questionnaire which is shown in table 2.

Table 2. Teacher response results in the analysis of learning media needs in online learning

Statement	Response (%)			
	4	3	2	1
In online learning activities in elementary schools, in addition to strategies, methods, and approaches, interactive media are needed that display realistic phenomena	38.46	61.54	0	0
The learning media used during online learning is still considered not optimal so that students feel bored in online learning activities	11.54	57.69	23.08	7.69
Teachers have difficulty building problem-solving concepts in the online learning process because the source of teacher learning activities is abstract	11.54	42.31	38.46	7.69
Teachers experience limitations in developing interactive multimedia type learning media due to the lack of information and training provided	15.38	50	26.92	7.69
Teachers need to provide Augmented Reality media that can present phenomena realistically	42.31	57.69	0	0

4 = strongly Agree; 3 = Agree; 2 = Disagree; 1 = Strongly Disagree

Based on table 2 it can be seen that 38.46% of teachers strongly agree and 61.54% agree that in addition to methods and approaches in learning, interactive media are needed to support the learning process. The addition of interactive media in the learning process could increase student learning motivation, especially in online learning which has many limitations. This is in line with the findings of Puspitarini et. al., who found

that including interactive media in the learning process might boost student motivation (Puspitarini & Hanif, 2019). Furthermore, Saputri et. al. claimed that offering interactive media throughout the learning process might boost students' learning motivation (Saputri et al., 2018).

In the second statement, the majority of teachers believe that the learning media utilized during online learning is still deemed inadequate, causing students to become bored while participating in online learning activities. This is also described in Wijaya et. al. research's which found that the learning media available at the time isn't optimal for online learning (Wijaya et al., 2020). In addition, Sutarto et. al. also reported that so that students do not get bored in online learning, learning media must be made simple and attractive (Sutarto et al., 2020).

In the third statement, most teachers also agree that they have difficulty building problem-solving concepts in the online learning process because the sources of teacher learning activities are abstract. Teachers in online learning face situations when they cannot provide examples of actual learning, forcing students to imagine each phenomenon itself (Gillis & Krull, 2020). Abstract learning makes it harder for teachers to describe a learning subject (Kim, 2020; Rosnaeni & Prastowo, 2021).

Teachers agree in the fourth statement that they are limited in producing interactive multimedia-type learning material owing to a lack of information and training, particularly in the rural area. This is in accordance with the findings of Setiawan et. al., who found that teacher in rural regions has trouble to create interactive learning media owing to a lack of resources in the area (Bramianto Setiawan & Iasha, 2020). but some teachers, especially in urban areas, do not experience difficulties because they get better than teachers in rural areas.

In the last statement, the teacher also agrees that they need to provide Augmented Reality media that can realistically present phenomena during online learning. Augmented Reality media that can realistically display phenomena can improve student learning outcomes (Laurens et al., 2017). In addition, Augmented Reality media can also improve problem-solving skills (Ulandari et al., 2019), self-efficacy (Nursasi, 2019), and critical thinking skills (Tan et al., 2020).

In addition to distributing questionnaires to teachers, to analyze the needs of learning media during online learning, questionnaire sheets were also distributed to students. The 79 data were obtained from the student's questionnaire which is shown in table 3.

Table 3. The Result of students' response in the analysis of learning media needs in online learning

Statement	Response (%)	Response Description
The learning process that takes place in the classroom with the help of the teacher	40.51	Explaining/lecture
	11.39	Asking me and my friends to discuss
	48.10	Others (direct assignments, using interactive media)
Desired media in learning process	12.66	E-Book
	22.78	Picture
	64.56	Interactive learning media
Interactive multimedia that displays phenomena realistically makes it easier to understand the material	87.34	Yes
	12.66	No
The learning process is already using a smartphone	63.29	Yes
	36.71	No
Parental permission regarding the use of cellphones for study	98.73	Allow
	1.27	Does not allow

In online learning, there are several ways that teachers do to teach the material to students. The results of student responses showed that 40.51% of students stated that the teacher used the lecture method in the learning process. Then 48.10% thought that the teacher gave assignments or learning media in the learning process and the rest the teacher asked the students to discuss with their friends. In online learning, there are indeed various limitations, especially in rural areas so that teachers only give assignments to students in the learning process. This is in line with the research results of Setiawan et.al. where in rural areas, teachers teach by giving assignments through Whatsapp groups (Bramianto Setiawan & Iasha, 2020). Inversely proportionate to urban areas where Microsoft teams have been used to enable instructors to educate using lecture and discussion approaches (Wuryandani et al., 2021).

In the second statement, students prefer interactive media in the learning process. This is because, at elementary school, students can better understand the material if the learning process is carried out using interactive media which can be in the form of videos, Augmented reality, Virtual Reality, or games that display examples of real objects compared to having to learn alone using books (Fitriana et al., 2021; Saputri et al., 2018). Furthermore, because students can envision through images, the use of pictures as a learning medium may offer an overview of the topic. This is in line with the findings of Pinem et. al., who found that adding picture media to the classroom can increase student learning outcomes (Pinem et al., 2018).

In the third statement, students agree that interactive multimedia that displays phenomena realistically can make it easier for them to understand the material. Elementary school kids, according to Piaget's theory, are more in the concrete operational stage, thus the learning media utilized must be able to represent concrete or realistic items (Juwantara, 2019). However, because online learning limits teacher-student connection, teachers are unable to give actual learning media (Yustitia et al., 2021). Therefore, augmented reality or virtual reality is a medium that can be used in online learning because this application can bring students into a virtual world that displays material realistically (Bourguet et al., 2020; Liou et al., 2017).

During the covid-19 epidemic, the learning method was shifted from offline to online, resulting in greater use of laptops, PCs, and smartphones in the learning process (Hermanto & Srimulyani, 2021). This is by the fourth statement where students have used smartphones as learning tools because they are simpler and easier to carry. This is in accordance with the fourth statement where students have used smartphones as learning tools because they are simpler and easier to carry (B Setiawan et al., 2017). In addition, parents have also allowed students to use smartphones because the learning process can only be done through these tools (Ferri et al., 2020).

CONCLUSION

Research on the analysis of learning media needs in online learning during the COVID-19 pandemic has been successfully carried out. The findings of the teacher's survey suggest that learning media is required to give students a realistic image of the phenomena in online learning. By providing interactive learning media, students feel it will be easier to understand the material than just being explained or given assignments. On the other hand, the results of the student questionnaire also showed that they wanted a learning media in the online learning process. Learning media that can genuinely convey the topic so that students may see the phenomena. The results of this study can also provide an illustration that in online learning teachers can develop learning media that can display phenomena realistically such as based on Augmented Reality or Virtual Reality.

REFERENCES

Bourguet, M.-L., Wang, X., Ran, Y., Zhou, Z., Zhang, Y., & Romero-Gonzalez, M. (2020). Virtual And

- 4304 *What Kind of Learning Media do You Want? Need Analysis on Elementary School Online Learning – Gatot Margisal Utomo, Bramianto Setiawan, Reza Rachmatdullah, Vina Iasha*
DOI: <https://doi.org/10.31004/basicedu.v5i5.1468>
- Augmented Reality For Teaching Materials Science: A Students As Partners And As Producers Project. *2020 IEEE International Conference On Teaching, Assessment, And Learning For Engineering (TALE)*, 452–459.
- Clark, A. E., Nong, H., Zhu, H., & Zhu, R. (2021). Compensating For Academic Loss: Online Learning And Student Performance During The COVID-19 Pandemic. *China Economic Review*, 68, 101629.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches*. Sage Publications.
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online Learning And Emergency Remote Teaching: Opportunities And Challenges In Emergency Situations. *Societies*, 10(4), 86.
- Fitriana, L., Hendriyanto, A., Sahara, S., & Akbar, F. N. (2021). Digital Literacy: The Need For Technology-Based Learning Media In The Revolutionary Era 4.0 For Elementary School Children. *International Journal Of Progressive Sciences And Technologies*, 26(1), 194–200.
- Gillis, A., & Krull, L. M. (2020). <? Covid19?> COVID-19 Remote Learning Transition In Spring 2020: Class Structures, Student Perceptions, And Inequality In College Courses. *Teaching Sociology*, 48(4), 283–299.
- Hammerstein, S., König, C., Dreisörner, T., & Frey, A. (2021). *Effects Of COVID-19-Related School Closures On Student Achievement—A Systematic Review*.
- Hermanto, Y. B., & Srimulyani, V. A. (2021). The Challenges Of Online Learning During The Covid-19 Pandemic. *Jurnal Pendidikan Dan Pengajaran*, 54(1), 46–57.
- Iasha, V., Al Ghozali, M. I., Supena, A., Wahyudiana, E., Setiawan, B., & Auliaty, Y. (2020). The Traditional Games Effect On Improving Students Working Memory Capacity In Primary Schools. *Proceedings Of The 4th International Conference On Learning Innovation And Quality Education*, 1–5.
- Irmada, F., & Yatri, I. (2021). Keefektifan Pembelajaran Online Melalui Zoom Meeting Di Masa Pandemi Bagi Mahasiswa. *Jurnal Basicedu*, 5(4), 2423–2429.
- Juwantara, R. A. (2019). Analisis Teori Perkembangan Kognitif Piaget Pada Tahap Anak Usia Operasional Konkret 7-12 Tahun Dalam Pembelajaran Matematika. *Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 9(1), 27–34.
- Kim, J. (2020). Learning And Teaching Online During Covid-19: Experiences Of Student Teachers In An Early Childhood Education Practicum. *International Journal Of Early Childhood*, 52(2), 145–158.
- Laurens, T., Batlolona, F. A., Batlolona, J. R., & Leasa, M. (2017). How Does Realistic Mathematics Education (RME) Improve Students' Mathematics Cognitive Achievement? *Eurasia Journal Of Mathematics, Science And Technology Education*, 14(2), 569–578.
- Liou, H.-H., Yang, S. J. H., Chen, S. Y., & Tarng, W. (2017). The Influences Of The 2D Image-Based Augmented Reality And Virtual Reality On Student Learning. *Journal Of Educational Technology & Society*, 20(3), 110–121.
- Morgan, H. (2020). Best Practices For Implementing Remote Learning During A Pandemic. *The Clearing House: A Journal Of Educational Strategies, Issues And Ideas*, 93(3), 135–141.
- Nurhikmah, H., Tahmir, S., Junda, M., & Bena, B. A. N. (2018). Blended Learning Media In Biology Classroom. *Journal Of Physics: Conference Series*, 1028(1), 12027.
- Nursasi, A. Y. (2019). Utilization Of Interactive Educational Media In Improving Self Efficacy Of Lung Tuberculosis Patients: Systematic Literature Review. *Enfermeria Clinica*, 29, 101–105.
- Pinem, R. U. B., Riyanto, Y., & Nasution, N. (2018). *The Effect Of Treffinger Assisted Media Images Model On Students' Activities And Outcomes Of Fourth Grade Elementary School Students*.
- Puspitarini, Y. D., & Hanif, M. (2019). Using Learning Media To Increase Learning Motivation In Elementary School. *Anatolian Journal Of Education*, 4(2), 53–60.

- 4305 *What Kind of Learning Media do You Want? Need Analysis on Elementary School Online Learning – Gatot Margisal Utomo, Bramianto Setiawan, Reza Rachmatdullah, Vina Iasha*
DOI: <https://doi.org/10.31004/basicedu.v5i5.1468>
- Putri, R. S., Purwanto, A., Pramono, R., Asbari, M., Wijayanti, L. M., & Hyun, C. C. (2020). Impact Of The COVID-19 Pandemic On Online Home Learning: An Explorative Study Of Primary Schools In Indonesia. *International Journal Of Advanced Science And Technology*, 29(5), 4809–4818.
- Rosnaeni, R., & Prastowo, A. (2021). Kendala Implementasi Pembelajaran Daring Di Sekolah Dasar Pada Masa Pandemi Covid -19 : Kasus Di SDN 24 Macanang Kabupaten Bone. *Jurnal Basicedu*, 5(5), 1683–3000.
- Saputri, D. Y., RUKAYAH, R., & INDRIAYU, M. (2018). Need Assessment Of Interactive Multimedia Based On Game In Elementary School: A Challenge Into Learning In 21st Century. *International Journal Of Educational Research Review*, 3(3), 1–8.
- Sari, Y., Luvita, R. D., Cahyaningtyas, A. P., Iasha, V., & Setiawan, B. (2020). Pengaruh Metode Pembelajaran Struktural Analitik Sitentik Terhadap Kemampuan Menulis Permulaan Di Sekolah Dasar. *Jurnal Basicedu*, 4(4), 1125–1133.
- Setiawan, B, Septianto, R., Suhendra, D., & Iskandar, F. (2017). Measurement Of 3-Axis Magnetic Fields Induced By Current Wires Using A Smartphone In Magnetostatics Experiments. *Physics Education*, 52(6), 065011. <https://doi.org/10.1088/1361-6552/Aa83e3>
- Setiawan, Bramianto, & Iasha, V. (2020). Covid-19 Pandemic: The Influence Of Full-Online Learning For Elementary School In Rural Areas. *Jpsd (Jurnal Pendidikan Sekolah Dasar)*, 6(2), 114–123.
- Setiawan, Bramianto, Rachmatdullah, R., & Iasha, V. (2020). Problem-Solving Method: The Effectiveness Of The Pre-Service Elementary Education Teacher Activeness In The Concept Of Physics Content. *Jurnal Basicedu*, 4(4), 1074–1083.
- Sutarto, S., Sari, D. P., & Fathurrochman, I. (2020). Teacher Strategies In Online Learning To Increase Students’ Interest In Learning During COVID-19 Pandemic. *Jurnal Konseling Dan Pendidikan*, 8(3), 129–137.
- Tan, S., Zou, L., Wijaya, T. T., & Dewi, N. S. S. (2020). Improving Student Creative Thinking Ability With Problem Based Learning Approach Using Hawgent Dynamic Mathematics Software. *Journal On Education*, 2(4), 303–312.
- Ulandari, L., Amry, Z., & Saragih, S. (2019). Development Of Learning Materials Based On Realistic Mathematics Education Approach To Improve Students’ Mathematical Problem Solving Ability And Self-Efficacy. *International Electronic Journal Of Mathematics Education*, 14(2), 375–383.
- Wati, I. W. K., Sari, A. S., & Setyaningsih, R. (2020). Media Need Analysis Of Learning Practicum In The Covid-19 Pandemic. *VANOS Journal Of Mechanical Engineering Education*, 5(2).
- Wijaya, T. T., Zhou, Y., Purnama, A., & Hermita, N. (2020). Indonesian Students’ Learning Attitude Towards Online Learning During The Coronavirus Pandemic. *Psychology, Evaluation, And Technology In Educational Research*, 3(1), 17–25.
- Wuryandani, W., Zubaidah, E., Herwin, H., & Jhon, W. (2021). Online Learning In Primary School During Covid-19 Pandemic: How Does It Look Like? *Journal Of Education Research And Evaluation*, 5(3).
- Yustitia, V., Fanny, A. M., Kusmaharti, D., & Setiawan, B. (2021). Aplikasi Pembelajaran Tematik Berbasis TIK: PPM Bagi Guru SD Hang Tuah X Sedati. *Manggali; Vol 1 No 2 (2021): Manggalido - 10.31331/Manggali.V1i2.1692* . [Http://E-Journal.Ivet.Ac.Id/Index.Php/Manggali/Article/View/1692](http://E-Journal.Ivet.Ac.Id/Index.Php/Manggali/Article/View/1692)