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Analysis of WhatsApp Groups Usage in Primary Schools during the Covid-19 Pandemic

Rahmaini 1

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Article Info	Abstract
Key words: Distance Learning; Learning Strategy; WhatsApp Group	In the Covid-19 pandemic, distance learning is used as a method of teaching rather than learning methodologies. This research aims to investigate the implementation of distance learning through WhatsApp Group (WAG) at Private Madrasah Ibtidaiyah in Bambel Kutacane, Southeast Aceh. This research uses a qualitative approach and gathered data by conducting in-depth interviews and documentation studies (field studies). The result of the research showed that distance learning carried out by madrasah using WAG is practised in three aspects, namely (1) learning, (2) assignment and (3) assessment. Even so, socialisation and debriefing are still needed for teachers to operate online learning effectively and efficiently, both through training organised by external and internal madrasas as well as the willingness of teachers to learn self-taught.
	Abstrak
Kata kunci: PembelajaranJarak Jauh; StrategiPembelajaran; WhatsAppGroup	Pembelajaran lazimnya diajarkan dengan menggunakan strategi belajar, namun di era covid-19, pembelajaran dilaksanakan dengan pola pembelajaran jarak jauh (PJJ). Penelitian ini bertujuan untuk menganalisa strategi PJJ via <i>WhatsApp Group (WAG)</i> di MIS Bambel Kutacane Aceh Tenggara. Penelitian ini menggunakan pendekatan kualitatif dengan <i>field research</i> (studi lapangan) melalui wawancara mendalam dan studi dokumentasi. Adapun temuan penelitian ini menunjukkan bahwa pembelajaran jarak jauh yang dilaksanakan oleh pihak madrasah menggunakan <i>WAG</i> dipraktikkan pada 3 (tiga) aspek yakni (1) pembelajaran; (2) penugasan dan (3) penilaian. Meskipun begitu, tetap dibutuhkan sosialisasi dan pembekalan bagi guru dalam melaksanakan pembelajaran <i>online</i> secara efektif dan efisien, baik melalui pelatihan yang diselenggarakan oleh eksternal dan internal madrasah maupun kemauan guru untuk belajar secara autodidak.

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INTRODUCTION

Interactions between students, teachers, and learning tools all play a role in the learning process. Learning techniques can be used successfully and efficiently to achieve the relationship that is exhibited in learning (Widjajanti, 2008; Junaidah, 2015). The school implements learning methodologies in normal circumstances, but this is not always the case, especially in the Covid-19 period. Learning strategies amid COVID-19 are thoroughly implemented with an online system (Fathurahman, 2020). Another term is known as distance learning (Simanjuntak & Kismartini, 2020). All learning devices and components are carried out through remote interaction using smartphones, laptops, netbooks, which have an internet connection. Thus, distance learning becomes an alternative pattern of learning strategies during the COVID-19 period (Sudrajat et al., 2020).

The community accepted the implementation of distance learning as an alternative to meeting educational needs during the COVID-19 pandemic (Soekarwati, 2006). Because children can get learn in a safe situation without being in a crowd and crowd. However, as the situation changes towards normalcy again, distance learning is considered not yet adequate to replace the face-to-face learning pattern as a whole. This is due to the anxiety of parents who watch their children do not concentrate on learning. They are more active in using smartphones to play rather than study. Children's time is more likely to be used to play than study (Purwanto et al., 2020; Assingkily & Miswar, 2020). Many children are found who be not good at reading, writing, and counting.

The government is trying to launch various learning programs amid COVID-19 (Tuwu, 2020; Lubis et al., 2020). These include online learning circulars, learning circulars by following health protocols (using masks, washing hands with soap or hand sanitiser and checking children's body temperature) and learning circulars by taking turns or taking turns (Firyal, 2020). Learning initiations issued through government policies are addressed by taking into account the state and situation of educational institutions (schools/madrasah) by the leaders (Simanjuntak & Kismartini, 2020). For example, private *madrasah ibtidaiyah* Bambel implements online learning as a whole amid the COVID-19 pandemic. This is based on the local government's policy of not allowing elementary school children to study face-to-face or in a shift system.

Distance Learning patterns and strategies have become a new study that previous researchers have analysed. Among those relevant research discussed aspects of Cellular Phone Wap Technology Utilization (Purnama, 2009), e-learning system development (Cucus & Aprilinda, 2016), comparing online learning outcomes between one application (platforms) with other platforms (Kusuma & Hamidah, 2020), the effect of distance learning with the Google Class application on learning outcomes (Septantiningtyas, 2018), aspects of virtual learning (Munawaroh, 2005) educational aspects of character during distance learning (Purandina & Winaya, 2020: 270-290) design of Web-based German distance learning (Zamaludin et al., 2016) constructivist approach and development of teaching materials (Pribadi & Sjarif, 2010). Then, Ali (2013) research discusses interactive concepts in distance learning, Huda & Faiza (2019) research discusses aspects of System Design distance learning, and research by Alwan (2018) discusses aspects of e-book multimedia development.

From the relevant literature, it appears that the study of effective learning practices employed in distance learning during the Covid-19 era using WhatsApp Groups is an area that should be investigated (WAG). WhatsApp is a well-known application that many people use. WhatsApp is a well-known social networking platform that individuals of various ages and backgrounds use. The employment of Whatapp in the distribution of learning information during the COVID-19 pandemic will, of course, make it easier for parents, teachers, and students to get the information. Based on this, it is imperative to evaluate WhatsApp's ability to facilitate remote education.

METHODS

This research was conducted using qualitative methods. Qualitative methods are relevant because the researcher seeks to reveal in-depth the learning strategies at private *madrasah ibtidaiyah* Bambel and the institution's analysis of Distance Learning. Data collection was collected using interviews, observation and documentation studies. The research informants were three teachers at that school. Furthermore, the data were analysed by data reduction techniques, data presentation and concluding. Finally, triangulation techniques are carried out through crosschecking methods and data sources (Assingkily, 2021). Observing the description, a simple research flow scheme is shown as shown below:

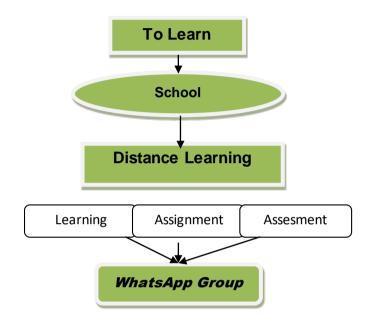


Figure 1. Research Flow

FINDINGS AND DISCUSSION

Learning Via WhatsApp Group

Distance Learning at private *madrasah ibtidaiyah* Bambel is carried out by using the WhatsApp application. According to HR, one of the students at the madrasah, the teachers created each learning group as media and tools to provide learning information to students. In line with the above, Sukrillah et al. (2017: 95-104) states that technological sophistication with various application features helps the online learning process, one of which is WhatsApp. This is due to the ease of communication and conveying messages via WAG (Narti, 2017; Utomo & Ubaidillah, 2018: 199-211). Teachers and students can exchange information in the form of images (photos), videos, and voice notes (voice notes) (Kholik, 2017; Sidiq, 2019).

According to RH, one of the teachers, implementing distance learning via WAG in the madrasah makes learning easier for students. Especially amid the current covid-19, limited access to face-to-face learning can be done with the WAG alternative. Mrs RH and other teachers also use WAG for the distance learning process at the madrasah. The formation of groups as communication media benefits the distance learning process amid the Covid-19 pandemic (Maryani, 2020). According to Aisyah (2018: 1-11), WAG positively impacts the distance learning process. It is just that it remains with a record under parental supervision and is carried out on a regular basis.

Supporting this opinion, Prajana (2017: 122-133) states that using WAG effectively and proportionally greatly helps the e-learning process by learning objectives. In fact, Indaryani &

Suliworo (2018) mentions that the use of WAG in the learning process can increase students' learning motivation.

Online learning is not a new thing because online learning has been implemented in recent years. It's just that the COVID-19 outbreak that hit the earth today requires all educational institutions to carry out 100% online learning. This is what makes the use of WAG very helpful for teachers during COVID-19 as quoted from an interview that Mrs RH conveyed. She conveyed as a class V-A teacher at school Bambel below:

"If you study the online system or online, it's actually been around for a long time, ma'am. The proof is that we are no strangers to the word e-learning. As I recall, I used to send assignments to lecturers during college using e-mail, Mrs. Well, the difference now is that all levels must be online. In fact, up to the MI/SD level. That's why I feel helped by the existence of this WA, ma'am, if other applications are not proficient, ma'am."

In line with the interview excerpt above, Mrs NS, the V-B class teacher said:

"Learning at this time is a bit difficult for all of us, ma'am. Because, we can not face to face with students. But, for the sake of security, of course we follow the recommendations for online learning. If this is the case, like it or not, as a teacher, you are required to be able to use a smartphone to study online. Thankfully, WhatsApp, ma'am, so we can slowly communicate distance learning with students using WA. Because if I use something else, I can't, ma'am."

Based on the interview excerpt above, it is understood that learning via WhatsApp Group helps teachers to provide distance learning to students. According to Astini (2020: 13-25), the use of WAG is seen as easier to do than other online or online learning applications and media. Thus, it can be concluded that the use of WAG can be used as an alternative to distance learning patterns amid the current covid-19 pandemic. Therefore, learning using WAG implemented by the madrasah is a practical step to continue learning in the Covid-19 era for elementary age students. Thus, students still get "scientific intake", even though they are in the covid-19 pandemic.

Assignment Via WhatsApp Group (WAG)

WhatsApp Group (WAG) on distance learning has a positive impact and does not rule out the possibility of opposing sides. The positive impact is the continued learning process during the pandemic. However, the overall effectiveness of learning through WAG (100% without face-to-face) does not significantly affect students' cognitive, affective and psychomotor development (Assingkily & Mikyal, 2019:19-31).

One of the most prominent is the lack of creativity of educators in using WAG. This is evident from the learning activities provided by educators in the form of "only assignments" via WAG, then waiting for answers from students. The same thing was also complained by an educator at MIS Bambel, namely Mrs S. The following is an excerpt from her interview:

"...I, as an old teacher at this madrasa, feel helped by the presence of WAG, Mrs However, I have doubts about the answers to the students' assignments, Ms. It is possible that the tasks that I sent to the students were also carried out by their parents. So, this online system is a bit difficult, ma'am, and so what else, ma'am, the name is the Covid-19 disaster."

Based on the quote above, distance learning using WAG is not yet effective enough to provide knowledge transfer for students. In this regard, one of the students also conveyed his complaint during distance learning using WAG. The following is an excerpt from an interview with the student.

"...yes ma'am, it's hard to learn how to use this WAG, ma'am. Sometimes we even want to play games, but the teacher doesn't stop giving assignments. There are always assignments from the teacher, Mrs. Sometimes I feel dizzy, I also want to play games when there is an assignment from the teacher at school, Mom."

The interview excerpt above informs that distance learning using WAG is quite dull for students. Furthermore, this is due to "merely" assignments given by educators. Ideally, 100% online learning requires teacher creativity to invite students to feel the spirit in the learning process. Of course, if the assignments are stacked by each educator (teacher), students also feel the boredom of learning.

According to Pakpahan & Fitriani (2020: 30-36), the use of WAG should be maximised by every educator in this covid-19 era to sustain the education process for children. Furthermore, Fitri (2019: 151-166) said that teacher creativity is needed to transition from face-to-face learning to a fully online system. Because it is feared that children will experience boredom if they are given assignments continuously, so they do not become a solution for online learning, but instead make children's mentality and enthusiasm for learning decrease.

The essence of using WAG is as an alternative to ensure that students receive formal learning in the covid-19 pandemic. For this reason, things that make students bored and bored with a "stack of assignments" should be avoided by teachers. Likewise, there is a unique assignment at private *madrasah ibtidaiyah* Bambel via WAG. Students are asked to wear masks and follow health protocols when they want to upload assignments given by teachers at WAG.

Assessment Via WhatsApp Group (WAG)

Assessment is an essential aspect of the learning process. The assessment stage will display a benchmark for learning success. Students' abilities in cognitive, affective and psychomotor aspects are measured and assessed in this stage. For this reason, the assessment stage is essential in the learning process. According to Rahmawati & Gajewski (2018), assessment is very urgent as the most effective means of measuring the level of learning achievement. In line with this opinion, Abdullah (2015) termed the assessment of learning outcomes as a benchmark to ensure the quality of teachers and students during the learning process in a periodic or certain time.

In the covid-19 pandemic, assessment is also one of the essential objects that must be carried out through the online system. The learning assessment carried out by the private *madrasah ibtidiyah* Bambel was using the WhatsApp Group (WAG). This is by the following statement from the V-A MIS Bambel class teacher:

"... assessment that I do to students is a bit hampered ma'am. In terms of knowledge, maybe I can check from the answers and assignments that I gave, for skills, I can check from the way students make videos and others. However, to assess students' learning attitudes, I see the students' willingness to do assignments. So the assessment is not complete, ma'am. Actually, what I am also surprised about, Ma'am, is that some students usually don't stand out, but when they study online they stand out. I'm worried that his parents will answer the tasks that I gave Mrs. That's why I gave an assessment, I checked their report cards last semester and asked other teachers, ma'am."

The interview excerpt above shows that switching assessments to the online system makes it difficult for teachers to complete students' assessments. In this regard, Salim (2017) mentions that online or online assessments have certain obstacles, such as adjusting subject codes, slow internet connections, and school operations that are not ready to transition from the conventional system to entirely online. The online assessment system is undoubtedly unavoidable because it is an alternative assessment in the Covid-19 era. Even so, more mature readiness is needed for school and madrasah institutions in equipping teachers. Furthermore, Sudiyanto et al. (2016) explained that current technological sophistication should be used as a learning innovation, including online report cards as evidence of student assessment.

The online system assessment via WAG carried out by the private *madrasah ibtidaiyah* Bambel has a solution and responsive effort by the madrasa in paying to pay. Likewise, teachers' readiness, socialisation, and debriefing of online learning materials will become separate homework in the future to provide complete assessments to students even in emergency learning situations and conditions such as the Covid-19 pandemic.

CONCLUSION

WhatsApp Group can be used as an alternative to online learning during the Covid-19 period. Even so, socialisation and debriefing are still needed for teachers to operate online learning effectively and efficiently, both through training by external and internal madrasas and the willingness of teachers to learn self-taught. This research can become a complete concept of implementing the distance learning strategy amid the Covid-19 pandemic in the aspects of learning, assignments and assessments, as well as being an appealing material for further researchers who discuss similar themes. This is because the researcher admits that there are still many aspects that need to be investigated in implementing distance learning strategies, starting from the impact received by students (cognitive, affective, psychomotor) to its effect on the development of elementary-age children.

REFERENCES

- Abdullah, Ramli. (2015). "Urgensi Penilaian Hasil Belajar Berbasis Kelas Mata Pelajaran IPS di Madrasah Tsanawiyah" *Lantanida Journal*, *3*(2). <u>http://dx.doi.org/10.22373/lj.v3i2.1657</u>.
- Aisyah, Siti. (2018). "Pengaruh Pemanfaatan *WhatsApp* Terhadap Interaksi Anak dan Orang Tua Peserta Didik SMPN 10 Pontianak" *Jurnal Pendidikan dan Pembelajaran Khatulistiwa*, 7(5): 1-11. <u>https://jurnal.untan.ac.id/index.php/jpdpb/article/view/25638</u>.
- Afifah, Dian Septi Nur. (2012). "Interaksi Belajar Matematika Siswa dalam Pembelajaran Kooperatif Tipe STAD" *Pedagogia: Jurnal Pendidikan, 1*(2). <u>https://doi.org/10.21070/pedagogia.v1i2.37</u>.
- Ali, Irsan Taufik. (2013). "Implementasi Konsep Interaktifitas pada Sistem Pembelajaran Jarak Jauh Berbasis Web Multimedia" *Jurnal Sains dan Teknologi, 12*(1). <u>http://dx.doi.org/10.31258/jst.v12.n1.p%25p</u>.
- Alwan, Muhammad. (2018). "Pengembangan Multimedia E-Book 3D Berbasis Mobile Learning untuk Mata Pelajaran Geografi SMA Guna Mendukung Pembelajaran Jarak Jauh" *At-Tadbir: Jurnal Manajemen Pendidikan Islam, 2*(1). <u>https://doi.org/10.3454/at-tadbir.v1i2.3009</u>.
- Assingkily, Muhammad Shaleh & Mikyal Hardiyati. (2019). "Analisis Perkembangan Sosial-Emosional Tercapai dan Tidak Tercapai Siswa Usia Dasar" *Al-Aulad: Journal of Islamic Primary Education*, 2(2): 19-31. <u>https://doi.org/10.15575/al-aulad.v2i2.5210</u>.
- Assingkily, Muhammad Shaleh & Miswar. (2020). "Urgensitas Pendidikan Akhlak Bagi Anak Usia Dasar (Studi Era Darurat Covid 19)" *Jurnal Bunayya*, 1(1): 53-68. <u>http://jurnal.stit-al-ittihadiyahlabura.ac.id/index.php/bunayya/article/view/62</u>.
- Assingkily, Muhammad Shaleh. (2021). Penelitian Tindakan Kelas (Meneliti dan Membenahi Pendidikan dari Kelas). Medan: CV. Pusdikra Mitra Jaya.
- Astini, Ni Komang Suni. (2020). "Pemanfaatan Teknologi Informasi dalam Pembelajaran Tingkat Sekolah Dasar pada Masa Pandemi Covid-19" *Lampuhyang, 11*(2): 13-25. <u>http://e-journal.stkip-amlapura.ac.id/index.php/jurnallampuhyang/article/view/194</u>.
- Cucus, Ahmad & Yuthsi Aprilinda. (2016). "Pengembangan E-Learning Berbasis Multimedia untuk Efektivitas Pembelajaran Jarak Jauh" *Explore: Jurnal Sistem Informasi dan Telematika* (*Telekomunikasi, Multimedia dan Informatika*), 7(2). http://dx.doi.org/10.36448/jsit.v7i2.765.
- Fathurahman, Arif. (2020). "Analisis Perubahan Sistem Pembelajaran Siswa Madrasah Aliyah Negeri (MAN) 1 Pesawaran Akibat Pandemi Covid-19" *Narasi: Jurnal Literasi, Media & Budaya*, 1(1). <u>http://journals.itb.ac.id/index.php/narasi/article/view/14455</u>.
- Firyal, Rifa Afiva. (2020). "Pembelajaran Daring dan Kebijakan New Normal Pemerintah" *LawArXiv Papers*. <u>https://osf.io/preprints/lawarxiv/yt6qs/</u>.
- Fitri, Nur Laila. (2019). "Pemanfaatan Grup *WhatsApp* sebagai Media Informasi Proses Belajar Anak di KB Permata Bunda" *Al-Hikmah: Indonesian Journal of Early Childhood Islamic Education,* 3(2): 151-166. <u>http://journal.iaialhikmahtuban.ac.id/index.php/ijecie/article/view/80/67</u>.

- Huda, Yasdinul & Delsina Faiza. (2019). "Desain Sistem Pembelajaran Jarak Jauh Berbasis Smart Classroom Menggunakan Layanan Live Video Webcasting" *Jurnal Teknologi Informasi dan Pendidikan*, 12(1). <u>https://doi.org/10.24036/tip.v12i1.173</u>.
- Indaryani, Eka & Dwi Suliworo. (2018). "Dampak Pemanfaatan *WhatsApp* dalam Meningkatkan Motivasi Belajar Siswa Pada Pelajaran Fisika" *Prosiding Seminar Nasional Quantum*, 25(1). http://seminar.uad.ac.id/index.php/quantum/article/view/229/185.
- Junaidah. (2015). "Strategi Pembelajaran dalam Perspektif Islam" *Al-Tadzkiyyah: Jurnal Pendidikan Islam, 6*(1). <u>https://doi.org/10.24042/atjpi.v6i1.1488</u>.
- Kholik, Cecep Abdul. (2017). "Pemanfaatan Teknologi Informasi dan Komunikasi untuk Meningkatkan Pendidikan di Indonesia" *Syntax Literate: Jurnal Ilmiah Indonesia*, 2(6). <u>http://www.jurnal.syntaxliterate.co.id/index.php/syntax-literate/article/view/130</u>.
- Kusuma, Jaka Wijaya & Hamidah. (2020). "Perbandingan Hasil Belajar Matematika dengan Penggunaan Platform WhatsApp Group dan Webinar Zoom dalam Pembelajaran Jarak Jauh pada Masa Pandemi Covid 19" *JIPMat: Jurnal Ilmiah Pendidikan Matematika*, 5(1). https://doi.org/10.26877/jipmat.v5i1.5942.
- Lubis, Rahmat Rifai, et.al. (2020). "Pembelajaran Al-Quran Era Covid-19: Tinjauan Metode dan Tujuannya pada Masyarakat di Kutacane Aceh Tenggara" *Kuttab: Jurnal Ilmu Pendidikan Islam, 4*(2). <u>http://journalfai.unisla.ac.id/index.php/kuttab/article/view/275</u>.
- Maryani, Kristiana. (2020). "Penilaian dan Pelaporan Perkembangan Anak Saat Pembelajaran di Rumah Masa Pandemi Covid-19" *Murhum: Jurnal Pendidikan Anak Usia Dini, 1*(1). <u>https://doi.org/10.37985/murhum.v1i1.4</u>.
- Munawaroh, Isniatun. (2005). "Virtual Learning dalam Pembelajaran Jarak Jauh" *Majalah Ilmiah Pembelajaran, 2*(1). <u>https://www.neliti.com/publications/220000/virtual-learning-dalam-pembelajaran-jarak-jauh</u>.
- Narti, Sri. (2017). "Pemanfaatan *WhatsApp* Sebagai Media Komunikasi Dosen dengan Mahasiswa Bimbingan Skripsi (Studi Analisis Deskriptif pada Mahasiswa Ilmu Komunikasi Bimbingan Skripsi Universitas Dehasen Bengkulu Tahun 2016)" *Professional: Jurnal Komunikasi dan Administrasi Publik, 4*(1). <u>https://doi.org/10.37676/professional.v4i1.448</u>.
- Pakpahan, Roida & Yuni Fitriani. (2020). "Analisa Pemanfaatan Teknologi Informasi dalam Pembelajaran Jarak Jauh di Tengah Pandemi Virus Corona Covid-19" JISAMAR: Journal of Information System, Applied, Management, Accounting and Research, 4(2): 30-36. http://journal.stmikjavakarta.ac.id/index.php/jisamar/article/view/181.
- Prajana, Andika. (2017). "Pemanfaatan Aplikasi *WhatsApp* dalam Media Pembelajaran di UIN Ar-Raniry Banda Aceh" *Cyberspace: Jurnal Pendidikan Teknologi Informasi, 1*(2):122-133.
- Pribadi, Benny A & Edy Sjarif. (2010). "Pendekatan Konstrutivistik dan Pengembangan Bahan Ajar pada Sistem Pendidikan Jarak Jauh" *Jurnal Pendidikan Terbuka dan Jarak Jauh, 11*(2). <u>http://jurnal.ut.ac.id/index.php/jptjj/article/view/461</u>.
- Purandina, I Putu Yoga & I Made Astra Winaya. (2020). "Pendidikan Karakter di Lingkungan Keluarga Selama Pembelajaran Jarak Jauh pada Masa Pandemi Covid-19" *Cetta: Jurnal Ilmu Pendidikan*, 3(2): 270-290. <u>https://doi.org/10.37329/cetta.v3i2.454</u>.
- Purnama, Bambang Eka. (2009). "Pemanfaatan Teknologi Wap Telepon Seluler untuk Media Pembelajaran Jarak Jauh" *Journal Speed: Sentra Penelitian Engineering & Edukasi*, 1(3). <u>http://dx.doi.org/10.3112/speed.v1i3.1355</u>.
- Purwanto, Agus, *et.al.* (2020). "Studi Eksploratif Dampak Pandemi Covid-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar" *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1). <u>https://ummaspul.e-journal.id/Edupsycouns/article/view/397</u>.
- Rahmawati, Laili Etika & Dawid Michal Gajewski. (2018). "Urgensi Penilaian dalam Pembelajaran BIPA" *Publikasi Ilmiah*. <u>http://hdl.handle.net/11617/9904</u>.
- Salim, Mohammad Agus. (2017). "Pengembangan Aplikasi Penilaian Ujian Essay Berbasis Online Menggunakan Algoritma Nazief dan Adriani dengan Metode Cosine Similarity" *IT-Edu: Jurnal Information Technology and Education, 2*(1). <u>https://jurnalmahasiswa.unesa.ac.id/index.php/it-edu/article/view/21338</u>.
- Septantiningtyas, Niken. (2018). "Pengaruh Pembelajaran Jarak Jauh dengan Aplikasi Google Class Terhadap Hasil Belajar Mahasiswa" *Edureligia: Jurnal Pendidikan Agama Islam, 2*(2). <u>https://doi.org/10.33650/edureligia.v2i2.714</u>.

- Sidiq, Ricu. (2019). "Pemanfaatan *WhatsApp Group* dalam Pengimplementasian Nilai-nilai Karakter Pancasila pada Era Disrupsi" *Puteri Hijau: Jurnal Pendidikan Sejarah, 4*(2). https://doi.org/10.24114/ph.v4i2.16304.
- Simanjuntak, Sri Yunita & Kismartini. (2020). "Respon Pendidikan Dasar Terhadap Kebijakan Pembelajaran Jarak Jauh Selama Pandemi Covid-19 di Jawa Tengah" *Jurnal Ilmiah Wahana Pendidikan*, 6(3). <u>https://doi.org/10.5281/zenodo.3960169</u>.
- Soekartawi. (2006). "Blended E-Learning: Alternatif Model Pembelajaran Jarak Jauh di Indonesia" Seminar Nasional Aplikasi Teknologi Informasi. https://journal.uii.ac.id/Snati/article/view/1461.
- Sudiyanto, Galih, et.al. (2016). "Implementasi Penilaian Autentik Kurikulum 2013 pada Rapor Online di SMK Negeri 6 Malang" Jurnal Dinamika Vokasional Teknik Mesin, 1(1). https://doi.org/10.21831/dinamika.v1i1.11457.
- Sudrajat, Tatang, *et.al.* (2020). "Inovasi Kurikulum dan Pembelajaran pada Masa Pandemi Covid-19" *Jurnal Ilmiah Wahana Pendidikan*, 6(3). <u>https://doi.org/10.5281/zenodo.3960178</u>.
- Sukrillah, A. *et.al.* (2017). "Pemanfaatan Media Sosial Melalui *WhatsApp Group* FEI Sebagai Sarana Komunikasi" *Jurnal Komunikatio, 3*(2). 95-104. <u>file:///C:/Windows/system32/config/systemprofile/Downloads/919-2519-1-PB.pdf</u>.
- Tuwu, Darmin. (2020). "Kebijakan Pemerintah dalam Penanganan Pandemi Covid-19" *Journal Publicuho*, *3*(2). <u>http://dx.doi.org/10.35817/jpu.v3i2.12535</u>.
- Utomo, Supri Wahyudi & Moh. Ubaidillah. (2018). "Pemanfaatan Aplikasi *WhatsApp* pada Pembelajaran Berbasis Masalah untuk Mata Kuliah Akuntansi Internasional di Universitas PGRI Madiun" *Kwangsan, 6*(2): 199-211. <u>https://dx.doi.org/10.31800/jtp.kw.v6n2.p199-211</u>.
- Widjajanti, Djamilah Bondan. (2008). "Strategi Pembelajaran Kolaboratif Berbasis Masalah" Semnas Matematika dan Pendidikan Matematika. <u>https://eprints.uny.ac.id/6910/1/P-8%20Pendidikan%20(Djamilah).pdf</u>.
- Zamaludin, Isyal, *et.al.* (2016). "Perancangan Pembelajaran Jarak Jauh (E-Learning) Bahasa Jerman Berbasis WEB" *Prosisko: Jurnal Pengembangan Riset dan Observasi Sistem Komputer*, 3(2). <u>https://e-jurnal.lppmunsera.org/index.php/PROSISKO/article/view/19</u>.