



# Management of Blended Learning and Digital Skills and Their Influence on the Learning Independence of Vocational Students

Apriani Patabang<sup>1\*</sup>, Mesta Limbong<sup>2</sup>, Tarsicius Sunaryo<sup>3</sup> 

<sup>1,2,3</sup> Program Studi Administrasi Pendidikan Program Pascasarjana, Universitas Kristen Indonesia, Jakarta, Indonesia

## ARTICLE INFO

### Article history:

Received June 26, 2022

Accepted February 12, 2023

Available online April 25, 2023

### Kata Kunci:

Pembelajaran Campuran, Kecakapan Digital, Kemandirian Belajar.

### Keywords:

Blended Learning, Digital Skills, Learning Independence



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

Perubahan pelaksanaan pembelajaran akibat pandemi Covid 19 berdampak pada perubahan metode pembelajaran sehingga baik guru maupun peserta didik harus mampu menyesuaikan diri dengan kebijakan pembelajaran daring. Tujuan penelitian ini adalah untuk menganalisis pengaruh manajemen blended learning dan digital skills terhadap kemandirian belajar siswa. Jenis penelitian ini adalah penelitian *ex post facto* yaitu penelitian kausal komparatif. Populasi dalam penelitian ini yakni seluruh guru SMK, dengan jumlah sampel penelitian sebanyak 103 responden. Pengumpulan data dilakukan dengan membagikan instrumen berupa angket. Teknik analisis data yaitu korelasi dan regresi. Hasil analisis data menunjukkan bahwa model yaitu manajemen blended learning guru dan digital skills dapat menjelaskan variasi kemandirian belajar peserta didik. Nilai R square sebesar 0,589 menunjukkan bahwa model, yaitu X1 dan X2 dapat menjelaskan variasi pada Y sebesar 58,9%. Berdasarkan hasil tersebut maka dapat disimpulkan bahwa untuk meningkatkan kemandirian belajar maka guru harus melakukan manajemen blended learning secara optimal dan didukung oleh pengembangan keterampilan digital peserta didik. Implikasi penelitian ini dapat dijadikan sebagai bahan masukan, referensi dan wacana pada kemandirian belajar peserta didik tentang manajemen blended learning, dan digital skills peserta didik.

## ABSTRACT

Changes in the implementation of learning due to the Covid 19 pandemic impact learning methods, so teachers and students must be able to adapt to online learning policies. This study analyzed the effect of blended learning management and digital skills on student learning independence. This type of research is *ex post facto* research, namely comparative causal research. The population in this study were all vocational school teachers, with a total sample of 103 respondents. Data collection was carried out by distributing instruments in the form of questionnaires. Data analysis techniques are correlation and regression. The results of the data analysis show that the model, namely the teacher's blended learning management and digital skills, can explain variations in student learning independence. The R square value of 0.589 indicates that the model, namely X1 and X2, can explain the variation in Y of 58.9%. Based on these results, teachers must implement blended learning management optimally and be supported by developing students' digital skills to increase learning independence. The implications of this research can be used as input, reference, and discourse on students' independent learning about blended learning management and digital skills.

## 1. INTRODUCTION

Distance learning activities are one of the government's strategic policies to keep learning activities carried out amid the Covid-19 outbreak (Dewi, 2020; Narayani et al., 2021). The government took this policy with the consideration that schools are places that have the potential to cause large crowds, so there is a high risk of becoming a place for the spread of Covid-19 (Antara et al., 2022; Darmayanti & Abadi, 2021). Distance learning policies implemented online require students to study independently at home (Alfina, 2020; Anggianita et al., 2020). Direct interaction between educators and other students is limited in implementing distance learning. With digital technology developing, distance learning can occur well (Adi et al., 2021; Kusumaningrum & Wijayanto, 2020; Zhafira et al., 2020). They are implementing learning from the demands of students to have the initiative in exploring various learning resources to gain knowledge according to needs. In addition, online learning requires great responsibility, high self-discipline, and skills in utilizing learning resources (Andika & Hendri, 2021; Hidayat et al., 2020; Patimah & Sumartini, 2022). With these learning characteristics, online learning

\*Corresponding author.

E-mail addresses: [aprianipatabang24@guru.smk.belajar.id](mailto:aprianipatabang24@guru.smk.belajar.id) (Apriani Patabang)

requires students to learn independently.

Learning independence is an individuals' desire, initiative, and sense of responsibility to seek sources and learning methods without any orders or coercion from other parties (Paseleng et al., 2022; Uki & Ilham, 2020). Learning independence possessed by children can be seen from their search for learning, such as being able to plan and choose their learning activities; having initiative and self-motivation to learn without limits with various learning resources; having a high responsibility in carrying out learning activities; they are critical, logical, and open to all possibilities; have high self-confidence (Hidayat et al., 2020; Muhammad, 2020; Woi & Prihatni, 2019). It is indicated by several characteristics, including high self-confidence, which will generate confidence in students in their ability to solve various problems in learning (Hidayat et al., 2020; Saputra et al., 2021). The learning independence of students can be influenced by several factors, including motivation, study space, facilities and infrastructure, time availability, economic conditions, and skills in utilizing digital devices (Hakiki & Sundayana, 2022; Patimah & Sumartini, 2022). Learning independence possessed by students will be able to arouse students' curiosity and critical thinking skills, be able to make decisions, be innovative, and be confident (Ningtiyas & Surjanti, 2021; Tsaniyah et al., 2019; Wiriani, 2021).

It's just that the reality on the ground shows that the online learning process and social restriction policies have hurt students, especially in carrying out independent learning (Juwandi & Widyana, 2019; Patimah & Sumartini, 2022). The low control of teachers and parents can prevent students from being unable to follow the rhythm of learning to the fullest. Very limited interaction between teachers and students and between the students causes low enthusiasm for independent learning (Arista et al., 2022; Ningtiyas & Surjanti, 2021). The motivation that is usually obtained in face-to-face learning needs to be improved. In addition, the limited facilities and infrastructure that support learning can hinder independent learning. It aligns with the observations and interviews conducted at SMKs in North Toraja Regency. The observations and interviews show that children cannot learn optimally in the online learning process. In addition, students also prefer to play games compared to looking for learning resources on the internet. It shows that the learning independence possessed by students still needs to be higher, so it impacts low student learning outcomes.

Recognizing the importance of student learning independence, the teacher must seek a learning method relevant to current conditions (Nuritha & Tsurayya, 2021). One suitable learning method is to combine online learning with face-to-face learning, known as the blended learning method (Aritonang & Safitri, 2021; Nurafni & Putri, 2021). Blended learning has several advantages, such as flexibility, cost efficiency, and interaction (Abdullah, 2018; Jumaini et al., 2021). Furthermore, implementing blended learning can be adapted to the conditions of students so that, in practice, educators must design learning management (Nugroho, 2021; Susanti & Prameswari, 2020). Forms of management that teachers must carry out include planning well-based blended learning; at the stage of blended learning-based learning activities, the teacher must be able to share time and subject matter to be discussed at face-to-face and online meetings; learning management carried out by the teacher at the evaluation stage, the teacher provides an assessment or assessment, either an assessment of attitudes, knowledge, or assessment of skills that are by the characteristics of blended learning; in the final stage, the teacher can carry out management in the form of developing blended learning methods, for example carrying out learning activities with hybrid learning methods (Kurniawati et al., 2019; Noval & Nuryani, 2020; Suhairi & Santi, 2021).

Implementing learning using the blended learning method will be more effective if accompanied by digital or digital skills. Digital Skills enable students to identify, collect information, analyze a problem, and find solutions to these problems freely (Nirmalasari et al., 2022; Nyikes, 2018; Rusmana, 2020; Sabilah et al., 2021). Digital skills are especially useful in current conditions because they can save time and costs and obtain information quickly (Laar et al., 2020; Sriyanto, 2021). However, there still needs to be a gap in digital skills among students. From the aspect of geographical location, children who live in urban areas tend to have good digital skills with the support of available facilities and infrastructure. On the other hand, children in rural areas experience limited facilities and infrastructure, for example, the limited availability of internet access (Asmuni, 2020; Widikasih et al., 2021). In addition, students also need guidance, especially in terms of safety and ethics in utilizing digital technology.

Previous studies have revealed that blended learning methods can significantly increase student motivation and learning outcomes (Abroto et al., 2021). Other studies reveal a significant influence between 21st-century digital skills on personal entrepreneurial effectiveness competencies and entrepreneurial academic competencies both directly and mediated by entrepreneurship education (Rusmana, 2020). Further research revealed differences in student outcomes between Blended Learning and conventional learning methods (Aritonang & Safitri, 2021). Based on some of the results of these studies, the application of blended learning methods and digital skills positively influences learning

outcomes and student learning motivation. No previous studies analyzed how students' digital skills were utilized and the management of blended learning carried out by teachers in supporting independent learning during a pandemic. So this research is focused on this study to analyze the effect of blended learning management and digital skills on learning independence for students of State Vocational Schools in North Toraja Regency. Knowing the well-blended learning management carried out by the teacher and the good digital skills of students, it is hoped that it can support learning independence.

## 2. METHOD

This research is a type of ex post facto research, namely comparative causal research, where researchers try to find causal relationships in certain events, which in this study is a causal relationship between blended learning management and digital skills on student learning independence. This research was conducted at State Vocational Schools in North Toraja Regency. Instrument trials were conducted on 17 respondents to teachers not part of the sample. The population in this study were all State Vocational School teachers in North Toraja Regency. The sample was teachers who taught at North Toraja 1st Vocational School, North Toraja 2nd Vocational School, and North Toraja 3rd Vocational School as many as 103 respondents. Researchers collected data by distributing instruments in questionnaires directly to respondents by visiting the sample schools. The instrument is a statement that has alternative answers as follows: Always (5), Often (4), Sometimes (3), Rarely (2), and Never (1).

The instrument for student learning independence in this study has four indicators, students have initiative, have high responsibility, self-discipline, and have good self-control. The blended learning management instrument consists of four indicators: the teacher manages the planning, implementing, evaluating learning, and managing the development of blended learning. At the same time, the digital skills instrument consists of five indicators, namely Information Digital Skills, Digital Communication Intelligence (Communication Digital Skills), Collaboration (Collaboration Digital Skills), Creative (Creative Digital Skills), and Problem-solving skills. The method used in analyzing the data is correlation and regression analysis. The variables consist of blended learning management (X1), digital skills (X2), and independent learning (Y). T-test (partial test) to determine the significance of the role partially between the independent variables on the dependent variable by assuming that the other independent variables are considered constant. The F test determines the effect of all the independent variables in the model simultaneously (simultaneously) on the dependent variable.

## 3. RESULT AND DISCUSSION

### Result

This research was conducted in three public vocational schools within the scope of North Toraja Regency: North Toraja 1st Vocational School, North Toraja 2nd Vocational School, and North Toraja 3rd Vocational School. The research results on aspects of learning independence, blended learning management, and digital skills descriptively can be seen in [Table 1](#).

**Table 1.** The Results of the Descriptive Analysis of Learning Independence, Blended Learning Management, and Digital Skills

Description	Independence	Blended	Digital Skills
N	103	103	103
Mean	3.50	4.15	3.78
Range	2.00	2.91	2.96
Std. Deviation	0.47	0.54	0.61
Maximum	4.53	5.00	4.96
Minimum	2.52	2.09	2.00

Based on the data in [Table 1](#), SMKN Students in North Toraja have very good learning independence, with an average score of 3.50. There were 72 respondents, or 70%, who stated that students had to learn independence in the "High" category as depicted from the highest graph, and 18 other respondents, or 17%, stated that students who had to learn independence were in the "Very High" category and 13 other respondents who stated that the learning independence of students was in the "moderate" category. In the management aspect of blended learning, it presents data on the frequency of teachers with blended learning management skills in the "very high" category of 68 teachers or 66%. At the same time, 32 other teachers, or 31%, are in the "high" category. And three other teachers, or 3%, are in the "moderate" category. Whereas in the digital skills aspect of students, the results obtained were 32

respondents, or 31%, who were in the "Very High" category. Meanwhile, 55 respondents, or 53%, were in the "High" category. As for those in the "Medium" category, there were 16% or 16 respondents, and no respondents were in the "Low" category. Furthermore, to determine the effect of blended learning management (X1) and digital skills (X2) on the independence variable (Y) in this study, the researchers conducted multiple regression analyses. The results of the regression analysis can be seen in [Table 2](#).

**Table 2. Results of Multiple Linear Regression Analysis X1 and X2 against Y**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.485	0.256		1.898	0.061
1 Teacher blended learning management	0.433	0.061	0.495	7.063	0.000
Digital Skills	0.323	0.054	0.419	5.968	0.000

Based on the data in [Table 2](#) above, it is known that the significance value of the Blended Learning Management variable (X1) is  $0.000 < 0.05$ , and  $t \text{ count } 7,063 > t \text{ table } 1.984$ , so it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted. It means that there is a significant influence of the blended learning management variable carried out by the teacher on the learning independence of students at State Vocational High Schools in North Toraja, with a large influence of 43.3%. The digital skills variable obtained a significance value of  $0.000 < 0.05$ , and  $t \text{ count } 7,063 > t \text{ table } 1.984$ , so it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted. It means there is a significant influence of the digital skills variable on the participants' learning independence, with a large influence of 32.3%.

The results of the F test analysis of blended learning management variables (X1) and digital skills (X2) on student learning independence (Y) obtained a significance value of  $0.000 < 0.05$  and a calculated F value of  $71,605 > F \text{ table } 3.09$ , so it can be concluded that  $H_0$  rejected and  $H_1$  accepted, which means that the model, namely the teacher's blended learning management (X1) and digital skills (X2) can explain variations in student learning independence (Y). The R square value of 0.589 indicates that the model, namely X1 and X2, can explain the variation in Y of 58.9%.

**Discussion**

Based on the results of the data analysis that has been carried out, several findings were obtained in this study, including the first finding, indicating that the descriptive analysis of student learning independence shows the results of 72% of 103 teacher respondents assessing student learning independence in the "high" category, 17% in the very high category, and 11% in the medium category. The data shows that most students have independence in carrying out learning activities. This independence is shown through initiative, responsibility, discipline, and self-control ([Alfina, 2020](#); [Anggianita et al., 2020](#)). This situation directly impacted learning policies during the pandemic, which did not allow face-to-face learning. Online learning methods cause teacher interaction with students to be very low, so students must learn independently and be disciplined ([Antara et al., 2022](#); [Darmayanti & Abadi, 2021](#)). The discipline of the students can be observed from their learning activities in completing the assigned tasks on time ([Andika & Hendri, 2021](#); [Hidayat et al., 2020](#)). Furthermore, the descriptive analysis of the blended learning management variable data shows that vocational school teachers in North Toraja have implemented blended learning management well to achieve the learning objectives. Blended learning management as integrated learning between face-to-face and online learning that teachers have carried out includes learning planning, implementation, evaluation, and learning development activities ([Abdullah, 2018](#); [Jumaini et al., 2021](#)).

The second finding shows that the digital skills variable in descriptive analysis shows that 53% of teachers give the "high" category and 31% give the "very high" category. This data provides information that students ability among public vocational schools in North Toraja is very skilled at utilizing digital technology. These digital skills are seen in students' skills in using digital devices for learning, communicating digitally, collaborating digitally, developing creativity by creating digital content, and solving problems related to their digital technology ([Laar et al., 2020](#); [Sriyanto, 2021](#)). In the online learning process, digital skills can be used to share messages, share files containing subject matter. Digital technology can connect the communication process between students and teachers through voice calls, video calls, and instant messages ([Nirmalasari et al., 2022](#); [Nyikes, 2018](#)). Group assignments given by the teacher can be done collaboratively through cyberspace. They create digital content with their skills, such as making videos of their learning activities and sharing them through social media ([Rusmana, 2020](#); [Sabilah et al., 2021](#)). It can hone students' creativity so they are more confident and have lots of time and

space to be creative. It's just that the results of this study also showed that in the problem-solving aspect, some students scored lower than the average ability of other students. Some students experience difficulties installing, setting up, and utilizing the applications used in learning activities. The uneven condition of students causes this. Some students from underprivileged families are just learning to use or don't even have digital devices. Thus, the teacher must be able to solve the difficulties students face. Teachers must be able to guide students who have difficulty using digital technology or invite other students to help each other (Patimah & Sumartini, 2022).

The third finding shows that based on the results of the t-test analysis, blended learning management has a significant effect on student learning independence. Generating independent learning from each learner requires a very planned and systematic strategy. Teachers can organize learning with the blended learning method very well. Even though this method is implemented in online learning, the teachers are quite responsive. Teachers can design good learning, organize learning, and conduct assessments appropriate to students' circumstances and conditions. Good learning planning starts with preparing lesson plans using a blended learning model and choosing learning media that are appropriate to the material and conditions of students (Aritonang & Safitri, 2021; Nurafni & Putri, 2021). With this plan, the teacher is more focused on carrying out each stage of the implementation of learning, has more control over the subject matter, and is more responsive to any problems that arise in learning activities. The process of implementing learning can be carried out by the teacher with an online, blended learning model through the stages of distributing subject matter through the WhatsApp group application or Google Classroom, presenting the material briefly, and providing opportunities for students to discuss the problems given, as well as providing an assessment that includes aspects cognitive in the form of student worksheets collected through the application used (Abdullah, 2018; Jumaini et al., 2021). Skills assessment is carried out through products students produce, such as creating digital content or other products that students at home do. Attitude assessment is carried out through the involvement of students in learning activities or the accuracy of completing assignments according to a predetermined time (Nugroho, 2021; Susanti & Prameswari, 2020).

The fourth finding shows that students' digital skills have a significant effect on students' learning independence. As generation Z, which was born and grew up with the development of digital technology, they are very familiar with the use of this technology in various fields of life. With their digital skills, they have few obstacles in online learning (Rusmana, 2020; Sabilah et al., 2021). Even with this method, they can learn according to their circumstances. They can access various learning resources from their device independently with little guidance from the teacher (Laar et al., 2020; Syahid et al., 2022). Various applications that are available free of charge support their creativity in creating digital content related to their studies, for example, creating tutorials for making a product. The ease of sharing content allows them to collaborate in solving a problem or creating content either as an assignment given by the teacher or on their initiative (Astuti, 2021; Fathurrahmani et al., 2021; Gunawan & Hazwardy, 2020). They can also find colleagues with the same talent to share ideas and creativity without being limited to one school but on a wider scale.

The results obtained in this study align with previous research results, which also revealed that the application of blended learning methods could significantly increase student motivation and learning outcomes (Abroto et al., 2021). Other studies reveal a significant influence between 21st-century digital skills on personal entrepreneurial effectiveness competencies and entrepreneurial academic competencies both directly and mediated by entrepreneurship education (Rusmana, 2020). Further research revealed differences in student outcomes between Blended Learning and conventional learning methods (Aritonang & Safitri, 2021). Based on some of the results of these studies, the application of blended learning methods and digital skills positively influences learning outcomes and student learning motivation.

#### 4. CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that the teacher's blended learning management has a positive effect on student learning independence. Blended learning management will generate interest and motivate students to learn independently. Besides that, digital skills also positively affect student learning independence. They will be more flexible in accessing various learning resources.

#### 5. REFERENCES

- Abdullah, W. (2018). Model Blended Learning dalam Meningkatkan Efektifitas Pembelajaran. *Fikrotuna*, 7(1), 855-866. <https://doi.org/10.32806/jf.v7i1.3169>.

- Abroto, A., Maemonah, M., & Ayu, N. P. (2021). Pengaruh Metode Blended Learning Dalam Meningkatkan Motivasi dan Hasil Belajar Siswa Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 3(5), 1993–2000. <https://doi.org/10.31004/edukatif.v3i5.703>.
- Adi, N. N. S., Oka, D. N., & Wati, N. M. S. (2021). Dampak Positif dan Negatif Pembelajaran Jarak Jauh di Masa Pandemi Covid-19. *Jurnal Imiah Pendidikan Dan Pembelajaran*, 5(1), 43. <https://doi.org/10.23887/jipp.v5i1.32803>.
- Alfina, O. (2020). Penerapan LMS-Google Classroom Dalam Pembelajaran Daring Selama Pandemi Covid-19. *Majalah Ilmiah METHODODA*, 10(1), 38–46. <https://doi.org/10.46880/methoda.Vol10No1.pp38-46>.
- Andika, R., & Hendri, S. (2021). Evaluasi Pembelajaran Daring Mahasiswa pada Mata Kuliah Pembelajaran Matematika di SD. *Jurnal Pedagogi Dan Pembelajaran*, 4(3), 458. <https://doi.org/10.23887/jp2.v4i3.39828>.
- Anggianita, S., Yusnira, Y., & Rizal, M. S. (2020). Persepsi Guru terhadap Pembelajaran Daring di Sekolah Dasar Negeri 013 Kumantan. *Journal of Education Research*, 1(2), 177–182. <https://doi.org/10.37985/joe.v1i2.18>.
- Antara, P. A., Udayani, N. W. M., Suryani, G. A. T. A., PS, K. M. K. A., & Lestari, N. W. (2022). Pembelajaran Daring Anak Usia Dini dengan Orang Tua Ter-PHK. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(4), 2896–2909. <https://doi.org/10.31004/obsesi.v6i4.1623>.
- Arista, M., Sadjiarto, A., & Santoso, T. N. B. (2022). Pengaruh Motivasi Belajar dan Teman Sebaya terhadap Kemandirian Belajar Pelajaran Ekonomi pada Pembelajaran Daring di Masa Pandemi. *Jurnal Basicedu*, 6(4), 7334–7344. <https://doi.org/10.31004/basicedu.v6i4.3499>.
- Aritonang, I., & Safitri, I. (2021). Pengaruh Blended Learning Terhadap Peningkatan Literasi Matematika Siswa. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 5(1), 735–743. <https://doi.org/10.31004/cendekia.v5i1.555>.
- Asmuni, A. (2020). Problematika Pembelajaran Daring di Masa Pandemi Covid-19 dan Solusi Pemecahannya. *Jurnal Paedagogy*, 7(4), 281. <https://doi.org/10.33394/jp.v7i4.2941>.
- Astuti, D. (2021). Penerapan Digital Skill oleh Guru dalam Menunjang Pembelajaran Daring di Masa Pandemi. *Skula: Jurnal Pendidikan Profesi Guru Madrasah*, 1(1), 107–114. <http://202.162.210.184/index.php/skula/article/view/11>.
- Darmayanti, N. K., & Abadi, I. B. S. (2021). Pengembangan Media Pembelajaran Daring Komik Virtual dalam Muatan Materi Gagasan Pokok dan Gagasan Pendukung Bahasa Indonesia. *Mimbar PGSD Undiksha*, 9(1), 170. <https://doi.org/10.23887/jjpsgd.v9i1.32481>.
- Dewi, W. A. F. (2020). Dampak Covid-19 Terhadap Implementasi Pembelajaran Daring Di Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 2(1), 55–61. <https://doi.org/10.31004/edukatif.v2i1.89>.
- Fathurrahmani, Herpendi, & Hafidz, K. A. (2021). Pentingnya Memiliki Digital Skills Di Masa Pandemi Covid-19. *Jurnal Widya Laksmi (Jurnal Pengabdian Kepada Masyarakat)*, 1(2), 83–90. <https://jurnalwidyalaksmi.com/index.php/jwl/article/view/17>.
- Gunawan, A., & Hazwardy, D. (2020). Pelatihan Digital Entrepreneurship untuk Mewujudkan Generasi Milenial Berjiwa Wirausaha. *Abdimas Dewantara*, 3(1), 81. <https://doi.org/10.30738/ad.v3i1.4311>.
- Hakiki, S. N., & Sundayana, R. (2022). Kemampuan Komunikasi Matematis pada Materi Kubus dan Balok Berdasarkan Kemandirian Belajar Siswa. *Plusminus: Jurnal Pendidikan Matematika*, 2(1), 101–110. <https://doi.org/10.31980/plusminus.v2i1.1582>.
- Hidayat, D. R., Rohaya, A., Nadine, F., & Ramadhan, H. (2020). Kemandirian Belajar Peserta Didik Dalam Pembelajaran Daring Pada Masa Pandemi Covid -19. *Perspektif Ilmu Pendidikan*, 34(2), 147–154. <https://doi.org/10.21009/PIP.342.9>.
- Jumaini, J., Hertin, H. H., Nisfiyati, M., & Ibrahim, M. (2021). Penerapan Metode Pembelajaran Blended Learning dalam Meningkatkan Pemahaman Konsep Hasil Belajar Siswa: Sebuah Meta - Analisis. *Al Khawarizmi: Jurnal Pendidikan Dan Pembelajaran Matematika*, 5(1), 48. <https://doi.org/10.22373/jppm.v5i1.9805>.
- Juwandi, J., & Widyana, R. (2019). Pengaruh kemandirian belajar terhadap pemanfaatan internet sebagai sumber belajar. *Jurnal Spirits*, 10(1), 49. <https://doi.org/10.30738/spirits.v10i1.6536>.
- Kurniawati, M., Santanapurba, H., & Kusumawati, E. (2019). Penerapan Blended Learning Menggunakan Model Flipped Classroom Berbantuan Google Classroom Dalam Pembelajaran Matematika SMP. *EDU-MAT: Jurnal Pendidikan Matematika*, 7(1). <https://doi.org/10.20527/edumat.v7i1.6827>.
- Kusumaningrum, B., & Wijayanto, Z. (2020). Apakah Pembelajaran Matematika Secara Daring Efektif? (Studi Kasus pada Pembelajaran Selama Masa Pandemi Covid-19). *Jurnal Matematika Kreatif-Inovatif*, 11(2), 136–142. <https://doi.org/10.15294/kreano.v11i2.25029>.
- Laar, E. van, van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2020). Determinants of 21st-Century

- Skills and 21st-Century Digital Skills for Workers: A Systematic Literature Review. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244019900176>.
- Muhammad, I. (2020). Pengaruh Perkuliahan Daring Terhadap Kemandirian Belajar Mahasiswa Prodi Pendidikan Matematika Universitas Malikussaleh. *Jurnal Ilmiah Pendidikan Matematika Al Qalasaki*, 4(1), 24–30. <https://doi.org/10.32505/qalasaki.v4i1.1567>.
- Narayani, K. D., Jayanta, I. N. L., & Mahadewi, L. P. P. (2021). Pola Asuh Orang Tua dan Disiplin Belajar Daring Terhadap Hasil Belajar di Masa New Normal. *Jurnal Pedagogi Dan Pembelajaran*, 4(3), 393. <https://doi.org/10.23887/jp2.v4i2.37184>.
- Ningtiyas, P. W., & Surjanti, J. (2021). Pengaruh Motivasi Belajar dan Kemandirian Belajar Peserta Didik Terhadap Hasil Belajar Ekonomi Pada Pembelajaran Daring Dimasa Covid-19. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1660–1668. <https://doi.org/10.31004/edukatif.v3i4.630>.
- Nirmalasari, E., Weni, M., Ramadhania, N., & Amelia, R. (2022). Pemanfaatan Teknologi Media Pembelajaran Oleh Guru Di SDIT Bunayya Pada Masa Pandemi Covid-19. *Jurnal Pendidikan Dakwa*, 2(1), 1–13. <https://ejournal.yasin-alsys.org/index.php/anwarul/article/view/202>.
- Noval, A., & Nuryani, K. (2020). Manajemen Pembelajaran Berbasis Blended Learning pada Masa Pandemi Covid-19 (Studi Kasus di MAS YPP Jamanis Parigi dan MAN 1 Pangandaran). *Jurnal Isema : Islamic Educational Management*, 5(2), 201–220. <https://doi.org/10.15575/ISEMA.V5I2.10509>.
- Nugroho, R. (2021). Penerapan Metode Blended Learning Dalam Pembelajaran Pai Pada Era New Normal. *As-Salam: Jurnal Studi Hukum Islam & Pendidikan*, 10(1), 17–30. <https://doi.org/10.51226/assalam.v10i1.200>.
- Nurafni, N., & Putri, H. P. (2021). Pengaruh Media Pembelajaran PowerPoint Interaktif terhadap Hasil Belajar IPS Siswa Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 3538–3543. <https://doi.org/10.31004/edukatif.v3i6.986>
- Nuritha, C., & Tsurayya, A. (2021). Pengembangan Video Pembelajaran Berbantuan Geogebra untuk Meningkatkan Kemandirian Belajar Siswa. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 5(1), 48–64. <https://doi.org/10.31004/cendekia.v5i1.430>.
- Nyikes, Z. (2018). Contemporary Digital Competency Review. *Interdisciplinary Description of Complex Systems*, 16(1), 124–131. <https://doi.org/10.7906/indecs.16.1.9>.
- Paseleng, M. C., Kusuma, D., & Sanoto, H. (2022). Analisis Kemandirian Belajar Mahasiswa Dalam Pembelajaran Berbasis Moodle Pada Flearn UKSW. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 12(3), 267–273. <https://doi.org/10.24246/j.js.2022.v12.i3.p267-273>.
- Patimah, E., & Sumartini, S. (2022). Kemandirian Belajar Peserta Didik Pada Pembelajaran Daring: Literature Review. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 993–1005. <https://doi.org/10.31004/edukatif.v4i1.1970>.
- Rusmana, D. (2020). Pengaruh Keterampilan Digital Abad 21 Pada Pendidikan Kewirausahaan Untuk Meningkatkan Kompetensi Kewirausahaan Peserta Didik Smk. *Jurnal Ekonomi Pendidikan Dan Kewirausahaan*, 8(1), 17. <https://doi.org/10.26740/jepk.v8n1.p17-32>.
- Sabilah, J., Nurfandi Riyanti, S., & Saputra, N. (2021). Kesiapan Kerja Generasi Milenial di DKI Jakarta Raya: Pengaruh Kecerdasan Emosional dan Keterampilan Digital. *Jurnal Akuntansi, Keuangan, Dan Manajemen*, 2(3), 225–242. <https://doi.org/10.35912/jakman.v2i3.379>.
- Saputra, R. M. A., Hariyadi, A., & Sarjono, S. (2021). Pengaruh Motivasi Dan Efikasi Diri Terhadap Kemandirian Belajar Sistem Daring Pada Siswa Kelas XII IPS SMA Negeri Kedungadem Bojonegoro. *Jurnal Educatio FKIP UNMA*, 7(3), 840–847. <https://doi.org/10.31949/educatio.v7i3.1268>.
- Sriyanto, B. (2021). Meningkatkan Keterampilan 4c dengan Literasi Digital di SMP Negeri 1 Sidoharjo. *Jurnal Didaktika Pendidikan Dasar*, 5(1), 125–142. <https://doi.org/10.26811/didaktika.v5i1.291>.
- Suhairi, S., & Santi, J. (2021). Model Manajemen Pembelajaran Blended Learning pada Masa Pandemi Covid-19. *Syntax Literate ; Jurnal Ilmiah Indonesia*, 6(4), 1977. <https://doi.org/10.36418/syntax-literate.v6i4.2472>.
- Susanti, D. I., & Prameswari, J. Y. (2020). Adaptasi Blended Learning di Masa Pandemi COVID-19 untuk Pembelajaran Bahasa Inggris di Sekolah Dasar. *Lingua Susastra*, 1(2), 50–61. <https://doi.org/10.24036/ls.v1i2.8>.
- Syahid, A. A., Hernawan, A. H., & Dewi, L. (2022). Analisis Kompetensi Digital Guru Sekolah Dasar. *Jurnal Basicedu*, 6(3), 4600–4611. <https://doi.org/10.31004/basicedu.v6i3.2909>.
- Tsaniyah, S. F., Ayu, H. D., & Pratiwi, H. Y. (2019). Pengaruh Model Blended Learning menggunakan Schoology Terhadap Prestasi Belajar ditinjau Dari Kemandirian Belajar Siswa. *Rainstek : Jurnal Terapan Sains & Teknologi*, 1(1), 71–77. <https://doi.org/10.21067/jtst.v1i1.3236>.
- Uki, F., & Ilham, A. (2020). Pengaruh Kemandirian Belajar Siswa Terhadap Prestasi Belajar di SDN 03 Limboto Barat Kabupaten Gorontalo. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 6(1), 89.

- <https://doi.org/10.37905/aksara.6.1.89-95.2020>.
- Widikasih, P. A., Widiana, I. W., & Margunayasa, I. G. (2021). Online Learning Problems for Elementary School Students. *Journal of Education Research and Evaluation*, 5(3), 1–10. <https://doi.org/10.23887/jere.v5i3.34254>.
- Wiriani, W. T. (2021). Pengaruh Kemandirian Belajar Terhadap Hasil Belajar Siswa Pada Pembelajaran Online. *Jurnal Ilmiah Matematika Realistik*, 2(1), 57–63. <https://doi.org/10.33365/ji-mr.v2i1.436>.
- Woi, M. F., & Prihatni, Y. (2019). Hubungan antara kemandirian belajar dengan hasil belajar matematika. *Teacher in Educational Research*, 1(1), 1. <https://doi.org/10.33292/ter.v1i1.3>.
- Zhafira, N. H., Ertika, Y., & Chairiyaton, C. (2020). Persepsi Mahasiswa Terhadap Perkuliahan Daring Sebagai Sarana Pembelajaran. *Jurnal Bisnis Dan Kajian Strategi Manajemen*, 4(1). <https://doi.org/10.35308/jbkan.v4i1.1981>.