



Blended Learning: Can It Be a Solution to Improve Digital Literacy and HOTS for PGSD Students in a Pandemic Situation?

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ABSTRAK

Pandemic Covid-19 di era revolusi industri 4.0 mentransformasi pembelajaran tradisional menjadi pembelajaran berbasis daring dengan diterapkannya pembelajaran jarak jauh (PJJ). Namun dalam pelaksanaannya masih menemukan beberapa kendala, seperti kemampuan literasi digital yang kurang. Salah satu solusi yang ditawarkan yaitu dengan blended learning yang mengombinasikan pembelajaran tradisional dengan pembelajaran daring agar dapat saling melengkapi kekurangan dari masing-masing metode pembelajaran. Tujuan dalam penelitian ini adalah untuk membuktikan ada tidaknya pengaruh blended learning terhadap peningkatan literasi digital dan HOTS mahasiswa PGSD. Metodologi yang digunakan adalah penelitian eksperimen dengan desain Pre-Experimental Design dengan model One-Group Pretest-Posttest Design. Sampel dalam penelitian ini adalah 55 mahasiswa PGSD. Instrumen yang digunakan berupa lembar angket literasi digital dan lembar tes HOTS. Teknik yang digunakan untuk menganalisis data yaitu statistik deskriptif kualitatif, kuantitatif, dan inferensial. Hasil uji paired sample t-test untuk pengaruh blended learning terhadap literasi digital dihasilkan nilai sig. (2-tailed) sebesar 0.000 lebih kecil dari α yaitu 0.05. Artinya blended learning berpengaruh terhadap kemampuan literasi digital mahasiswa. Hasil uji n-gain peningkatan literasi digital setelah menerapkan blended learning didapat n-gain sebesar 0,56 dengan kategori sedang serta hasil n-gain HOTS mahasiswa sebesar 0,55 juga dengan kategori sedang, sehingga dapat disimpulkan bahwa terdapat pengaruh blended learning terhadap peningkatan literasi digital dan HOTS mahasiswa.

ABSTRACT

The Covid-19 pandemic in the industrial revolution 4.0 era transformed traditional learning into bold-based learning through distance learning (PJJ). However, its implementation still encounters several obstacles, such as the lack of digital literacy skills. One of the solutions offered is blended learning, which combines traditional learning with learning to complement each learning method's shortcomings. The purpose of this study is to prove whether or not blended learning affects increasing digital literacy and HOTS of PGSD students. The methodology used is experimental research with Pre-Experimental Design with One-Group Pretest-Posttest Design model. The sample in this study was 55 PGSD students. The instruments used are digital literacy questionnaire sheets and HOTS test sheets. The technique used to analyze the data is descriptive qualitative, quantitative, and inferential statistics. Test Results Paired sample t-test produces sig values. (2-tailed) 0.000 is less than 0.05. It means that blended learning affects digital student literacy skills. The results of the n-gain test for increasing digital literacy after applying blended learning obtained n-gain of 0.56 in the medium category and the results of the student HOTS n-gain of 0.55 also in the medium category, so it can be said that there is an effect of blended learning on literacy improvement. Digital and student HOTS.

1. INTRODUCTION

The industrial revolution 4.0 encourages changes in education policy in Indonesia, one of which is distance learning programs. The characteristics of PJJ are open, independent learning, learning anywhere and anytime, and based on information and communication (Ali & Maksun, 2020; Costa et al., 2020; Prahmana et al., 2021). Based on these characteristics, the need for PJJ is also critical in overcoming the current Covid-19 pandemic. It helps the continuity of learning that cannot be carried out face-to-face simultaneously and in place (Bervell et al., 2020; Qazi et al., 2021; Rhim & Han, 2020). PJJ has evolved from a correspondent form of education to education through e-learning. E-learning is the use of telecommunications technology to convey information for education and training. Along with advances in information and communication technology, E-learning emerged as the 21st-century modern education paradigm (Goyal, 2012; Lase et al., 2021; Sadegi, 2019; Sari et al., 2020). Therefore, E-learning can be applied as a substitute for conventional learning because E-learning provides the advantage that it can improve social communication between students and between students and teachers (Abed, 2019; Kim &

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Sihyun Park, 2021; Satyawan et al., 2021). In addition, E-learning can improve students' conceptual understanding and be used as a learning innovation that can help lecturers and students use software learning management systems (Luckyardi & Rahman, 2021; Stojanović et al., 2021). However, based on findings in E-learning implementation, there are still many obstacles, namely students are not used to learning independently, difficulties in using the Learning Management System (LMS), unstable network resulting in many students being unable to continue classes, assignments, or exams. In addition, the need for an internet quota is greater if every meeting in lectures uses video conferencing (Hutauruk & Sidabutar, 2020; Ro'fah et al., 2020; Windhiyana, 2020). Other obstacles, the lack of interaction between lecturers and students or feedback in the learning process, the lack of direct experience gained through observations that require direct practice in the field are obstacles in online learning, the lack of facilities such as computers/laptops, and other technical problems, as well as the lack of direct experience. Obtained through observation that requires direct practice in the field becomes an obstacle in online learning (Abuhammad, 2020; Noer et al., 2021; Zalut et al., 2021).

The problem of distance learning and inadequate infrastructure, the absence of face-to-face activities during learning activities, make the teacher run out of time in explaining one material to students (Napsawati, 2020; Rigianti, 2020). In addition, psychological, affective, and cognitive aspects are also entirely influenced by online learning activities (Hutauruk & Sidabutar, 2020; Rigianti, 2020). Teachers applied learning strategies while online impact learning objectives and learning methods (Sobral, 2021; Yano et al., 2021). It requires teachers to be more creative in designing learning methods to achieve learning objectives (Mali & Lim, 2021; O'Connor, 2021; Wulandari et al., 2020; Yunita et al., 2021). In the context of face-to-face learning, the interaction between lecturers and students is essential. Therefore, in online learning, it is not only the readiness of lecturers, but another factor that cannot be ruled out is how students perceive online learning itself, which they had to do suddenly during the Covid-19 period (Hamid et al., 2020; Simamora, 2020). The condition of students and teachers who are not accustomed to using digital technology for the benefit of learning results in the condition of students who are not enthusiastic about learning because the learning process provided is less than optimal, and this is because teachers are less able to plan and implement online learning. It affects students' understanding (Alchamdani et al., 2020; Nugraha & Widiana, 2021). Meanwhile, according to data in the field, most internet users access social media as much as 97.4%. Entertainment content accessed by 96.8%. Furthermore, news content was accessed by 96.4%, education 93.8%, commercial 93.1%, and public services 91.6%. It shows that they are accustomed to using the internet, but access to educational content is still inferior to social media (Kurnia & Astuti, 2017).

Based on the description of the data above, the potential for using the internet as a learning tool is quite significant but has not been utilized optimally. One solution to balance government policies related to PJJ and problems in the field is to apply blended learning. Blended learning is a learning approach that combines direct (face-to-face) learning with online learning, from a combination of opposites but between the two that are complementary (Bervell & Arkorful, 2020; Prahmana et al., 2021; Wulandari et al., 2020). Through blended learning, students are allowed to take control of learning success independently, and lecturers can still deliver lecture material that requires face-to-face practice so that the quality of learning carried out is optimal (Baragash & Al-Samarraie, 2018; Dziuban et al., 2018; Galvis, 2018). One factor influencing the success of distance learning in the e-learning component in the application of blended learning is digital literacy ability (Hadiyanti et al., 2021; Latifah et al., 2019; Supriyadi et al., 2020). Blended learning will not run optimally if students' digital literacy skills are still low. Other factors that influence the success of learning are parental mediation and self-control (Hwang et al., 2020; Slovaček & Čosić, 2020; Tere et al., 2020). Parents and educational institutions are tasked with assisting and considering appropriate and safe digital media used in the learning process. In addition, the benefits for students who have high digital literacy will reduce the negative impact of using the internet (Helsper & Shamed, 2019; Purnama et al., 2021).

Another ability that students must develop as the next generation faces the industrial era 4.0 and at the same time as prospective teachers in elementary schools is the ability to think at a higher level. Higher-order thinking skills from primary education to master's education are still in the low category (Ichsan et al., 2019b, 2019a; Putranta & Supahar, 2019). It is because the knowledge of teachers about HOTS is still low. In addition, the low level of teacher knowledge on HOTS is also caused by the low ability of teachers to solve questions in the HOT category (Hamdi et al., 2018; Retnawati et al., 2018). Therefore, there is a need for learning that can provide solutions to the two problems that are happening during the pandemic, which is not only being able to improve digital literacy skills but also improving students' high-level thinking skills by implementing blended learning. Blended learning affects increasing HOTS. HOTS taught through blended learning is better than the conventional model. It shows that the application of

blended learning can be used as an alternative learning recommended for lecturers or other teaching staff to increase student HOTS (Abosalem, 2016; Sagala & Andriani, 2019; Yusuf et al., 2021).

Higher Order Thinking Skills or higher-order thinking skills are a higher way of thinking compared to memorizing facts, presenting facts, or implementing rules, formulas, and procedures (Nugroho, 2018; Pratama & Retnawati, 2018). HOTS is part of the cognitive domain in Bloom's revised taxonomy, which consists of the ability to analyze (C4), evaluate (C5), and create (C6). With the ability to think in these areas, students are directed to think critically, creatively, solve problems, and make conclusions. Someone with high-order thinking skills must analyze, connect, parse and interpret problems to obtain new solutions or ideas (Saraswati & Agustika, 2020; Yusoff & Seman, 2018). Thus, through HOTS, students are expected to learn new things and be able to apply them in new situations. Previous research stated that these abilities are indeed very much needed for the younger generation to face the Industry 4.0 era, which has uncertain work dynamics (Adnan et al., 2020; Ivanov et al., 2019; Kuper, 2020). An environment with various types of problems and backgrounds requires students to be easy to adapt so that HOTS has an essential role in life. Based on this explanation, the purpose of this study is to prove whether there is an effect of blended learning on increasing digital literacy and High Order Thinking Skill students of PGSD STKIP NU Indramayu.

2. METHOD

The methodology used in this research is the experimental method. Experimental research methods can be interpreted as research methods used to find the effect of specific treatments on others under controlled conditions. Based on this opinion, it can be understood that experimental research is always carried out by giving treatment to research subjects and then seeing the effect of the treatment (Sugiyono, 2018). This research design uses Pre-Experimental Design with a One-Group Pretest-Posttest Design model. The design was chosen because there was a pretest before being given treatment. So that the results of the treatment could be known more accurately because it could be compared with the situation before being given treatment. The procedure carried out in this study was the first time a pretest was conducted using HOTS indicator questions to measure students' high order thinking abilities before being given treatment and a pretest questionnaire to measure students' initial digital literacy skills, then the application of blended learning in PGSD student learning in mathematics problem-solving courses. At the end of learning, students are given a post-test to measure their high order thinking ability after applying blended learning and a post-test questionnaire to measure the final ability of students' digital literacy. This research was conducted at STKIP NU Indramayu with a sample of 55 students from the PGSD Study Program who took mathematics problem-solving courses. Sampling using purposive sampling technique, namely determining respondents to be used as samples based on specific criteria.

Data collection techniques used are test and questionnaire methods. The instrument is in the form of a HOTS test question sheet that contains indicators for analyzing and evaluating and a digital literacy questionnaire. The instrument has been tested and passed the analysis stages such as validity, reliability, level of difficulty, and discriminating power of questions. The test questions on the test instrument were 20 essay questions with $n = 87$ and $r_{table} = 0.213$. From the validity test results, 17 questions were obtained with valid categories, and 3 were not valid. While the reliability test results obtained the value of $r_{11} = 0.80$, this means that the level of reliability is categorized as high. Meanwhile, from the results of the difficulty level test, there were 2 questions in the difficult category, 11 questions in the medium category, and 7 in the difficult category. The discriminatory test results were obtained as many as 16 questions in the good category, 3 questions in the good category, and 1 in the very good category. Based on the results of the data analysis, it can be decided that of the 20 questions that have been tested, 17 questions can be used as research instruments. While the digital literacy questionnaire consists of 30 questions with $n = 87$ and $r_{table} = 0.213$. After testing the instrument for validity and reliability, the results obtained are 3 invalid questions and the value of $r_{11} = 0.75$ in the high category. Based on the results of the analysis of the validity and reliability tests, it can be decided that there are 27 questions in the digital literacy questionnaire used in this study. The digital literacy assessment questionnaire grid contains 7 aspects of the assessment which can be seen in Table 1.

Table 1. Digital Iteration Assessment Instrument Grid

No.	Aspects	Statement Number	
		Positive	Negative
1.	Information literacy	1, 2, 3, 4,	5
2.	Digital Scholarship	6, 8,	7, 9, 10, 11
3.	Learning Skill	12	13

No.	Aspects	Statement Number	
		Positive	Negative
4.	<i>ICT Literacy</i>	14, 15, 16, 17, 18	-
5.	Privacy management	19, 21	20, 22
6.	<i>Communication and Collaboration</i>	23, 24, 25	-
7.	<i>Media Literacy</i>	-	26, 27

(Stella et al., 2017)

Data analysis to determine the improvement of students' high order thinking and digital literacy skills using the N-gain test. Gain is normalized as a measure of change when the same test is used to measure students' understanding at the beginning and the end of learning (Coletta & Steinert, 2020). Meanwhile, to test the hypothesis regarding the influence of blended learning on the digital literacy skills of PGSD students, the paired sample t-test with SPSS 22 was used. This test was carried out after passing the prerequisite test, namely the data normality test. The hypotheses in this study are H_a (there is a significant difference in STKIP NU Indramayu students) and H_o (there is no significant difference in the digital literacy abilities of STKIP NU Indramayu students). In making decisions on the paired sample t-test based on the test criteria, H_o is accepted if the lower is negative and the upper is positive, or sig. (2-tailed) is greater than the significance level (α) used, which is 0.05. It means that there is no significant difference in STKIP NU Indramayu students (Sundayana, 2020).

3. RESULT AND DISCUSSION

Result

Blended learning will be tested using the n-gain test. The test results for increasing the digital literacy of PGSD STKIP NU Indramayu students were classically analyzed using the N-gain test taken from the pretest and post-test digital literacy questionnaires. The results of the N-gain digital literacy test analysis on 55 PGSD students can be seen from the average pretest score of 72, increasing to 107 the average value of the post-test results. Thus, the value of N-gain has increased by 0.56 in the medium category. It shows that the application of blended learning in learning can improve the digital literacy of PGSD STKIP NU Indramayu students. Meanwhile, the test results for increasing student digital literacy in each aspect of the assessment are presented in full. There are seven aspects of digital literacy assessment. Aspects of the assessment include (1) information literacy, (2) digital scholarship, (3) learning skills, (4) ICT literacy, (5) privacy management, (6) communication and collaboration, (7) and media literacy. The increase value obtained from the results of the n-gain test for each aspect is 0.61; 0.57; 0.54; 0.49; 0.60; 0.56; and 0.43. All improvements that occur in each aspect are included in the moderate category. As for testing the research hypothesis regarding the presence or absence of a significant influence between digital literacy skills before and after the application of blended learning in learning, using the paired sample t-test, however, before doing the data normality test first, this is done to determine whether the data is normally distributed or not. If the data is normally distributed, then the data analysis uses parametric statistics. If not, then use non-parametric statistics. So it can be concluded that the data normality test is a prerequisite test that must be carried out before determining the type of statistics to be applied. Based on the results of data analysis, the value of sig. of 0.200 is more significant than which is 0.05. It can be concluded that the data is usually distributed. So to test the research hypothesis regarding whether there is a significant effect between students' digital literacy skills before and after applying blended learning, parametric statistics are used with paired sample t-test using the SPSS 22 application.

Paired sample t-test with the lower value being negative and the upper part also having a negative value and a sig value. (2-tailed) of 0.000 is less than 0.05. It can be concluded that it means H_o is rejected and H_a is accepted. There is a significant difference between students' digital literacy skills before and after implementing blended learning. Thus, blended learning affects students' digital literacy skills. The HOTS value of students has increased by 0.55 in the medium category. It shows that the application of blended learning can increase student HOTS. The recapitulation of the n-gain results is based on the two indicators tested, namely the analyzing indicator with an n-gain value of 0.65, which is in the medium category, and the evaluating indicator obtaining n-gain of 0.41 in the medium category. It means that the high order thinking ability of PGSD STKIP NU Indramayu students has increased in two HOTS indicators, namely analyzing and evaluating indicators.

Discussion

After applying blended learning, there was an increase in the digital literacy skills of PGSD students. The increase in digital literacy after the application of blended learning is also shown in other studies. Most

of the students' digital literacy increased significantly, around 10% to 20% (Vonti & Rahmah, 2019). Digital literacy is the ability to know and use various digital information to solve the problems at hand (Beck et al., 2021; Sukarno & Widdah, 2020). Digital literacy skills are used to utilize the technology used in learning effectively, so students need to have a certain level of digital literacy (Falloon, 2020; Huseyin et al., 2015). Digital literacy for learning is more than just knowing how to operate technology—but also having the correct information management, critical thinking skills, and proper online behavior. It can be said that digital literacy is a prerequisite for students to be effective in learning using blended learning methods and vice versa (Tang & Chaw, 2016).

The findings in this study are that blended learning has a positive impact on increasing students' digital literacy. It is marked by the changing views of students towards digital technology and its use in learning. If students use digital technology only for entertainment purposes such as playing games, social media and watching movies, now students are starting to get used to learning by utilizing technology. It provides a broad view of the knowledge gained because students can search from various sources on the internet (Laksana, 2020; Lynch et al., 2021; Mershad & Wakim, 2018). Previously, students had difficulties using learning applications such as Schoology and Google Classroom, but in the end, students became accustomed to using these learning applications. Blended learning opens up vast opportunities for lecturers to vary the learning approach used in order to create a learning experience that is appropriate and can involve students on various platforms and technologies (Prahmana et al., 2021; Wulandari et al., 2020). Blended learning provides convenience and flexibility. In blended learning on an online component, learning can combine text, images, audio, and video to offer an immersive learning experience (Bervell & Arkorful, 2020; Mcguinness & Fulton, 2019). The use of digital systems to support blended learning in educational institutions impacts the growth of digitally literate students and can operate adequately and innovatively in the context of technology in student life. Digital literacy provides an individual's awareness, attitude, and ability to utilize digital tools and facilities to identify appropriately, access, manage, integrate, evaluate, analyze and synthesize digital resources, build new knowledge, create media expressions, and communicate with others. To enable constructive social relationships (Beck et al., 2021; Darlis & Sari, 2020).

All aspects of student digital literacy assessment after the n-gain test have increased in the medium category. Students before applying blended learning are also accustomed to finding information or learning resources on the internet to support lecture assignments. However, prior to the application of blended learning, students were satisfied with only finding one source of information and using it as the only source of learning regardless of whether the source was reliable or not. It results in errors in retrieving information from accurate and reliable sources. With the increase in information and digital literacy, these errors can be minimized because students can find reliable sources of information that can support lectures. Information literacy must be understood as more than just applying routine procedures but as a task related to information skills (Falloon, 2020; Huseyin et al., 2015; Supriyadi et al., 2020). Information literate individuals can recognize and understand their need for information, know the information in their environment, know how to engage the information, and use the information they find to solve problems or fulfill their information needs (Kivunja, 2013; Yevelson & Bronstein, 2018). The advantage of having digital knowledge of the information is that students can understand when and why the information is needed. Students who know about information literacy understand when and why they need information, where to find it, evaluate it, and use and communicate it ethically and legally. Students have a moderate level of information literacy skills because they can find and access information, evaluate and use information ethically and legally (Anunobi & Udem, 2015).

The success of learning using the blended learning method is strongly influenced by the ability of students to use digital technology or their literacy skills (Bervell & Arkorful, 2020; Prahmana et al., 2021; Wulandari et al., 2020). The application of the blended learning method involves the use of digital technology to conduct learning (Baragash & Al-Samarraie, 2018; Effendi & Hendriyani, 2020). On the other hand, digital literacy skills can be improved by applying the blended learning method. In planning or delivering lectures using the blended learning method, lecturers need first to know students' digital literacy levels. If some students have low digital literacy scores, additional exercises and tutorials can help students improve their digital literacy skills because these will affect each other (Beck et al., 2021; Tang & Chaw, 2016). Students' digital literacy abilities in virtual learning influence mastery of concepts or student learning outcomes (Falloon, 2020; Sukarno & Widdah, 2020). The application of blended learning in improving students' HOTS is better than conventional methods and e-learning. HOTS of students in the group using the blended learning method is better than conventional methods and e-learning. The group that uses blended learning has a broader concept in solving analytical problems than the other groups. Based on this fact, blended learning can expand students' concepts and foster creative ways of thinking (Baragash & Al-Samarraie, 2018; Effendi & Hendriyani, 2020; Yaniawati, 2013). In addition, blended

learning is more influential in improving creative and practical thinking skills than conventional learning (Bervell et al., 2020; Yustina et al., 2020).

Another finding in this study is that students' activeness during face-to-face learning in the blended learning method increases. It is evidenced by the increasing number of students who actively ask about materials that have not been understood during online learning or when giving assignments in the blended learning method. Another factor that causes this to happen is that students are actively looking for material from various sources on the internet. It develops a curiosity about the material being studied. Blended learning stimulates more interactive learning, emphasizes active learning, and provides students with thinking and experiential learning for students (Dhawan, 2020; Prahmana et al., 2021; Siregar & Manurung, 2020). Students are given allowed actively involved in the learning process. Students are given the allowed knowledge, use software, and share other experiences. In this study was found that blended learning helps students show creativity to produce intereexciting activities. In addition, blended learning is also an also students' HOTS abilities (Thambu et al., 2021). The application of blended learning is also seen as being able to improve mathematical literacy. In addition, by using questions with the HOTS indicator and students being able to improve their learning outcomes, students can also increase their learning motivation (Widana, 2017).

Higher-order thinking skills (HOTS) are essential aspects of education because higher-order thinking skills include problem-solving skills, critical thinking, creative thinking, and decision-making abilities (Nugraheni et al., 2021; Prahmana et al., 2021). Students who can think logically mean that these students can think critically in solving questions with the HOTS indicator (Putranta & Supahar, 2019; Sagala & Andriani, 2019). The use of HOTS-based questions has also been shown to improve students' critical thinking skills skills (Abosalem, 2016; Sidiq et al., 2021). In critical thinking, students use knowledge and experience to analyze new things, such as comparing or identifying strengths and weaknesses in making decisions. In this study, students were trained to analyze and use the information contained in the problem to be used as a guide in solving mathematical problems. Therefore, students with higher-order thinking skills tend to be more successful in solving a problem. Students with high HOTS tend to have high GPAs in learning mathematics, while those with low HOTS tend to have low GPAs (Tanujaya et al., 2017). Generally, the results of this study still show a value in the medium category. Several obstacles are still encountered in the application of blended learning, such as limitations in the facilities and infrastructure used. Of course, it will not be easy to access learning. Signal constraints, an unsupportive learning environment, and poor communication between teachers and students are the main factors constraining the implementation of blended learning (Ellianawati et al., 2021). In addition, essential factors in the application of blended learning are student background and learning design. The background of students, such as technological stuttering, will be an obstacle in learning. It requires direct guidance from the lecturer. Using technology must be maximized by both students and teachers so that independent learning can also be appropriately applied. Dependence on the internet and internet media also has a harmful impact if not addressed wisely by both lecturers and students (Kintu et al., 2017).

The implication of this study is to prove the effectiveness of the application of blended learning on increasing digital literacy skills and higher-order thinking skills in PGSD STKIP NU Indramayu students in learning during the pandemic. It aims to help to learn problems that occur during the pandemic to be an alternative solution that educators can use. In this case, it is related to the use of learning methods and the outcomes resulting from selecting appropriate learning methods. The limitations in this study are related to the network and fluctuating conditions of Covid cases, resulting in blended learning in the face-to-face component having to adapt to existing conditions. In addition, increasing HOTS requires more training and adequate learning resources to stimulate students' higher-order thinking skills to optimize their improvement. The impact of the results of this study is that it is suggested that blended learning can be widely used for learning activities in the classroom. So it can be said that blended learning can be applied as alternative learning that can improve students' digital literacy and higher-order thinking skills. However, further research is still needed to complete the results of this study. So this learning measures the skills of analyzing and evaluating and can arrive at the measurement of creative skills (C6).

4. CONCLUSION

The application of blended learning has an effect on increasing digital literacy and HOTS for students of PGSD STKIP NU Indramayu. The increase in student digital literacy occurs in all aspects with a moderate category. Aspects of the digital literacy assessment tested include information literacy, digital scholarship, learning skills, ICT literacy, privacy management, communication and collaboration, and media literacy. In addition, it was also found that there was an increase in students' higher order thinking skills (HOTS) based on two indicators, namely analyzing and evaluating skills, each in the medium category.

Therefore, blended learning can be used as an alternative learning solution to improve digital literacy and student HOTS in a pandemic situation.

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