

# TEACHING LITERACY USING BLENDED LEARNING SYSTEM DURING COVID-19 PANDEMIC: A CASE IN NORTH BALI BILINGUAL SCHOOL

R.K. Nasution<sup>1</sup>, N.N. Padmadewi<sup>2</sup>, L.G.R. Budiarta<sup>3</sup>

<sup>123</sup>English Language Education, Universitas Pendidikan Ganesha, Singaraja

e-mail: [nasutionrahul27@gmail.com](mailto:nasutionrahul27@gmail.com) , [nym.padmadewi@undiksha.ac.id](mailto:nym.padmadewi@undiksha.ac.id) , [rahayu.budiarta@undiksha.ac.id](mailto:rahayu.budiarta@undiksha.ac.id)

Literacy plays a vital role in helping children possess firm English knowledge foundations. The sudden learning alteration caused by the Covid-19 virus outbreak has become a challenge in teaching literacy. This case study described the literacy activities varieties implemented during blended learning and their effects on students' learning achievement at North Bali Bilingual School. This is a mixed-method study in which the primary data were collected through observation and students' achievement reports. The data were analyzed by classifying the literacy activities into three learning models: synchronous learning, learning package, and asynchronous learning. The data regarding students' learning achievement were analyzed quantitatively through descriptive and inferential statistics. The study reveals that twelve literacy activities are implemented during blended learning. The teaching-learning process and learning materials are accessible remotely through an online learning platform. The literacy activities also bring significant effects towards students' learning achievement.

**Keywords:** *Asynchronous; Blended learning; Literacy; Synchronous*

## 1. INTRODUCTION

In the twentieth century, English is one of the languages spoken globally in more than a half of the countries in the world (Rao, 2019). In Indonesia, the English language is a significant course to be taught at schools. It is given a prominent position in almost all Indonesian's life because it benefits them academically and non-academically. The English Language is taught to the students as a foreign language. It has been taught to elementary school students who are considered young learners since 2004 (Nufus, 2018). The importance to teach English during students' golden age is one of several reasons why English is taught for young learners.

The first thing that is commonly introduced in teaching young learners is literacy. Literacy is defined as a primary language skill and the ability to read and write. Based on the report published in 2008 by Carr-Hill & UNESCO Institute for Statistics., literacy is seen as a fundamental human right, whereas everyone needs to be capable of acquiring it. Literacy is considered a human right as it is something that humans need to possess to function as part of a society fully. Taking this into account, (Keefe & Copeland, 2011) suggest that literacy is an ability that involves capabilities to communicate, contact, interact, and develop meaning which includes reading, writing, and counting, making all people have the potency to empower themselves as humans.

Teaching literacy for young learners is highly recommended. The literacy makes children understand and contribute to this world (Liebeskind, Piotrowski, Lapierre, & Linebarger, 2014; Niklas & Schneider, 2013; Raikes et al., 2006, as cited in Frankel et al., 2016). It indicates that literacy plays a vital role in helping children have a firm foundation of English knowledge. The statement mentioned above is supported by an argument stated by (Apriani, 2016) we could not deny that people receive information by being literate. The sooner the better it is for young learners to be literate. Therefore, it is crucial to help young learners experience and develop literacy skills.

During the Covid-19 pandemic, which started in March 2020, all schools in Indonesia are obliged to conduct online learning until the pandemic is over. This obligation is made to decrease the possibility of Covid-19 transmission between teachers and students. The use of technological advancement in the teaching-learning process is the solution. Fortunately,

literacy can be done ubiquitously. As Apriani, 2016 stated, the development of information and communication technology (ICT) brings literacy to a new era known as digital literacy. Gadget and internet connection are two fundamental things required to conduct digital literacy. With gadgets and internet connections, digital literacy can be conducted regardless of time and place differences.

The urgency of developing literacy for Indonesian students is supported by several data proposed by (Wijayanti, 2020). The data reveal that 56% of 1.200 respondents who are Indonesian students reported do not like to read because they have been distracted by social media. The same research conducted by (Wijayanti, 2020) reported that 13% of the respondents are straight confirmed that they never read any books in a week. The low interest in literacy in Indonesia is one of the biggest challenges in the educational field. Furthermore, the sudden learning alteration from offline meetings to virtual meetings has become another challenge. Online learning is implemented during the Covid-19 pandemic as the solution to keep conducting teaching-and-learning activities. Now, it is even harder to teach literacy because the challenge increases along with changes in learning. Gillett-Swan, (2017) stated that one of the challenges of conducting online learning is the students' diverse ability and competency in using different forms of technology. Thus, teachers are expected to provide interactive and engaging online classes that ease the learning process to accomplish the learning objectives. Creating various activities to keep motivating the students during the learning process is considered as one of the solutions.

Several studies have proved that using a blended learning system effectively develops students' literacy. The first study was conducted by (Humaira & Asbah, 2019), aiming at investigating the use of blended learning techniques and their effectiveness in teaching reading for the second grade of senior high school students. It was a quasi-experimental study, taking two classes as the samples; one as the control group and the other as the experimental group. The results showed that students in the experimental group who were taught using blended learning obtained higher mean scores in the reading test, indicating that blended learning was practical. Besides, descriptive quantitative research was also conducted by (Syakur et al., 2020) to analyze the effectiveness of blended learning on websites on students' ability to read English. It took 65 students as the sample, and the data were collected through a questionnaire. The results demonstrated that most of the students, with a percentage of 81.99%, agreed that blended learning was effective in teaching English reading. (Rombot et al., 2020) also conducted an experimental study to describe elementary school students' reading comprehension improvement when being taught using blended learning. The results showed that the student's average score for the post-test was higher, indicating that blended learning could improve the students' reading comprehension. Further discussions reported that blended learning encourages the students to be more enthusiastic and content in learning.

North Bali Bilingual School implements a blended learning system to help students with various skills in using technology forms. Two learning modes applied in North Bali Bilingual School are asynchronous and synchronous learning. Asynchronous learning is the type of online learning that gives the learners chance to access learning materials anytime and anywhere (Jose & Abidin, 2016), for instance, online learning through discussion forums, blogs, Google Docs, and e-mails. In North Bali Bilingual School, the learning management system used is Schoology, and home-based weekly projects are given regularly. Moreover, synchronous learning is an online learning type that allows students and teachers to interact in real-time through an online platform (Perveen, 2016). The current online platform used is Zoom Meeting. A blended learning system allows students to have more chances to experience interactive learning literacy processes from different activities, which is helpful to create a positive learning atmosphere.

According to the aforementioned explanation, North Bali Bilingual School has implemented blended learning for teaching and learning activities. This case study aimed to discuss the variety of literacy activities and students' learning achievement after the literacy activities are implemented at North Bali Bilingual School through blended learning activities.

## 2. RESEARCH METHOD

This study is conducted using an embedded mixed-method design that combines both qualitative and quantitative analysis. Mixed-method is research where the researcher conducts the process of data collection and data analysis using both qualitative and quantitative methods within a study (J. W. Creswell et al., 2004). The qualitative analysis is used to describe how a blended learning system is implemented in teaching literacy at North Bali Bilingual School. In contrast, quantitative data and analysis are used to describe students' learning achievement after the blended learning system in teaching literacy is implemented.

The subject used in this study is the first-grade students of North Bali Bilingual School. Those students are selected because they are currently experiencing the situation of learning literacy with a blended learning system. All participants have the same chance and experience of learning literacy with all activities carried out in a blended learning system. The selected students are non-native speakers of English (EFL students).

The useable instrument in collecting data that helps the writer gain a comprehensive report of a situation is observation (Creswell, 2012). This study applied the non-participant observation type in which the researcher was not involved or gave no participation in the research setting. Observation sheets are the main instrument used to discover literacy activities carried out by students according to the actual literacy activities provided in the *Schoology*, and the real classroom-literacy activities. The data are collected by entering the school's learning management system (LMS), then listing the literacy activities implemented. The data are analyzed by classifying the activities into three modes; synchronous learning, learning package, and asynchronous learning. The teacher as a respondent classifies each literacy activity with its mode of blended learning system used by giving a sign in the provided column.

The data regarding students' learning improvement were collected through students' achievement reports, particularly the report in the middle-semester and final-semester 2022. The data were calculated using descriptive statistics and inferential statistics. Descriptive statistics were used to obtain the score of mean, median, mode, variance, range and standard deviation of the test results. Then, the comparison of the scores in the middle-semester and final-semester reports were calculated to measure the significance effect. Meanwhile, inferential analysis was used to obtain the result of normality, homogeneity, and t-test result.

A normality test was carried out to verify the normality of the data contribution after determining the samples. Kolmogorov-Smirnov was used to test the normality of the data. The data is valued normal distributed if the value is more than 0.05. The students' initial scores were used in the normality test. Furthermore, an independent T-test was used to quantify the middle semester and final-semester report. It is also used to investigate the significant effect on students' learning achievement after implementing a blended learning system in teaching literacy.

## 3. FINDINGS AND DISCUSSION

### Findings

#### Literacy Activities

Observation is conducted through North Bali Bilingual School's learning management system to gain data about literacy activities carried out by the first-grade student of the related school. The literacy activities found are divided into three modes of learning: synchronous learning, learning packages, and asynchronous learning, as written in Table 1.

Table 1. Literacy Activities and Its Modes of Learning

No	Literacy Activities	Modes of Learning Using Blended Learning System					
		Asynchronous Learning (Schoology)		Learning Packages		Synchronous Learning (Zoom)	
		Yes	No	Yes	No	Yes	No
1	Reading bilingual books borrowed at school			✓			
2.	Reading English books from virtual library	✓					
3.	Reading Indonesian books from virtual library	✓					
4.	Reading English online-stories through websites	✓					
5.	Reading book of the week.	✓					
6.	Read aloud video activity	✓				✓	
7.	Learning through video	✓					
8	Learning through field trip video	✓					
9.	Quizzes	✓					
10.	Story telling session	✓				✓	
11.	Reading aloud through zoom meeting					✓	
12.	Phonic exercise	✓		✓		✓	

Source: Data analysis of January 2022 SPSS Version 23

### Literacy Activities in Synchronous Mode of Learning

According to the observation, four literacy activities are conducted through synchronous learning: reading aloud video activity, storytelling session, reading aloud through zoom, and phonics exercise.

Many videos are provided in the learning management system in reading aloud video activity. The videos are completed by sound and text. They are helpful for the students to imitate the voice they heard while reading aloud the story's text. The videos are colorful and suitable for young learners. This activity is conducted when the teacher intends to introduce vocabulary and teaching reading for young learners through an interactive way.

Storytelling helps young learners learn how to pay attention and listen to the person talking. Moreover, it is good to be done safely through a learning management system during this Covid-19 pandemic. The teacher does this activity when students are joining the zoom meeting session. The teacher delivers storytelling to raise up the good atmosphere of the classroom and help young learners be cheered up in following the learning process conducted.

When learning activity is conducted through zoom meeting, the teacher provides the reading activity. It helps students to be literate. The teacher used the share-screen feature to share a story and guide the students to read it together. The subtitle is provided, and the story's audio is also available. With subtitles, audio, and teacher who demonstrates how to read certain words first, young learners are fully guided. This activity is fun for young learners because they are asked to read loudly, making the atmosphere feel alive by the students' loud voices.

The last literacy activity conducted is a phonetic exercise. It is implemented in those three learning modes. However, in synchronous mode, phonic exercise is conducted through zoom meeting. Students are taught how to read letters with different sounds and pronunciations. This is the primary step that will lead to the success of reading English text in the future. Once they can read the word correctly, they will also be able to comprehend the

meaning.

### **Literacy Activities in Learning Package**

Learning package is defined as the activity conducted as a series of learning processes. The learning package needs to be accomplished weekly by the students. Two literacy activities are carried out by first-grade students, namely reading bilingual books borrowed at school and phonic exercises.

Reading bilingual books is a daily activity for students before pandemic where the students came to school and borrowed books. This activity is conducted through NBBS's learning management system during this pandemic. The books are classified into English and Indonesian books, and many books are available in each type.

Phonic exercise is conducted because several words in English are not read as they are written due to the existence of silent letters in words, and some words are pronounced the same but differ in meaning (homophone). Young learners are acquiring the language step by step, starting from being introduced to the alphabet until they can form proper sentences later. This phonic exercise is sometimes included in the weekly package. This is homework for students, so they have practice time of writing at home. This is actually a popular activity that has been used in most schools. Phonic exercise helps young learners be able to write starts from the beginning of writing skill, which forms the alphabet according to the lines of dots. When all dots are connected and form several alphabets, in would later form a word. In this way, young learners are not only taught the way to write but also introduced how to form an alphabet as how it is supposed to be.

### **Literacy Activities in Asynchronous Learning**

Asynchronous learning is the type of online learning that gives students access to the provided materials anytime and anywhere (Jose & Abidin, 2016). Asynchronous learning is well-known as an online learning activity conducted through online discussion forums like Schoology and Google Classroom. There are ten literacy activities carried out by first-grade students of North Bali Bilingual School; 1) reading English books from the virtual library, 2) reading Indonesian books from the virtual library, 3) reading English online stories through websites, 4) reading books of the week, 5) read aloud video activity, 6) learning through video, 7) learning through field trip video, 8) quizzes, 9) storytelling session, 10) phonic exercise.

The students are required to reading English and Indonesian books from the virtual library. Various English and Indonesian books' titles, stories, and themes are provided. Many book options are given so the students can freely select the book. All books are colorful and completed by eye-catching animations to attract young learners' learning interests. Besides, being a Bilingual School does not make this school only focus on improving students' English language ability and abandon the use of Indonesian language. The current school keeps promoting the use of Indonesian language, while teaching English for their students. It is proven by their effort to conduct Indonesian language-based literacy activities.

Reading through the website is another literacy activity. After accessing the reading website menu on Schoology, the students will be directed to three websites such as *storylineonline.net*, *magickeys.com*, and *childrenslibrary.org*. The formal learning process is mostly done by delivering the information about the current topic to the students without bringing any story. That is why this literacy activity exists to provide a learning experience by reading a story. The students have their chance to read the story either by themselves or by following the storyteller. All stories are colorful and suit young learners. The stories are classified into three levels: young children, older children, and young adults. Some story updates are available on the websites, so the students have many English stories reference to read.

The next activity is reading books of the week. It is divided into two types: book review from teachers and book review from students. The book review from the teacher is divided into two types: date and title. Meanwhile, the book review from students is provided by title. In each type of reviewed book, the students could find several students who help them be literate.

Read aloud video activity helps the students to be literate with several benefits it has. Read aloud video activity gives a chance to young learners to read the stories they watch or read, which is commonly hard to be found during the learning process in the classroom. This activity helps young learners to recognize how words are pronounced in a way that could cheer them up. Second of all, this activity provides students the experience of listening to the pronunciation of the words while being read by the storyteller. It helps young learners to recognize how words are pronounced. The read-aloud video activity is divided into two; the first is provided in Indonesia, and the second is provided in English for all grades. This aligns with the school's purpose to promote bilingual language use.

Literacy is also taught by learning through video. Video is a well-known media used in the most teaching-learning activity. The use of digital video is undeniable in both virtual and in-person meetings. Some studies prove that using a clip or video helps the students recall their memory. Therefore, it is beneficial to use in helping students to be literate. The video consists of colorful animation that is attractive for young learners. By then, this literacy activity is conducted through Schoology, so there is no time limitation for students to access it. Learning through video is conducted in several ways like showing video on zoom, and watching videos provided in the virtual library. This is a big chance for young learners to be literate.

The students also learn through field trip videos. Field trips are popular activities that give students a chance to learn about certain things in actual form. It is difficult to conduct field trips during the Covid-19 pandemic. Luckily, North Bali Bilingual School sees an opportunity to conduct online- field trips for students. It benefits students to get know about other countries' environment, geography, culture, and many things related to its country, which is hardly found during the learning process. This world is vast, and there is nothing wrong with introducing this world to young learners. It could help them be motivated to learn more, so they could travel or explore more. The imagination they have could motivate them to learn. Therefore, it is good to conduct this activity for young learners who need to explore many things.

Moreover, a quiz is also given to develop the students' literacy. A quiz for first-grade students is conducted through Schoology by uploading the link. The teacher in a word wall has prepared the quiz. This activity helps young learners gain more vocabulary and help them remember the topic they have learned.

Storytelling is also another activity implemented. It is undeniable that storytelling suits most young learners because of the use of colorful picture, characters, and story that relates to young learners' imagination. The difference between storytelling sessions in the synchronous and asynchronous learning mode is how the students carry it out. In the synchronous learning mode, storytelling is done with the teacher's help as the reader and with limited time. However, storytelling activity in the asynchronous learning model gives students the chance to access the stories provided anytime and anywhere. The stories are uploaded on Schoology, so it accessible as long as the students enroll in the course.

The last literacy activity in the asynchronous learning mode carried out by first-grade students of NBBS is phonic exercise. It is conducted through Schoology. Studies have proved that phonic exercise helps young learners improve their reading and writing skills. Gaining vocabulary (words) with their sound helps young learners build their literacy skills gradually. Phonic exercise in asynchronous mode of learning is conducted as a weekly package so the students can take time to do the exercise.

### **Students Learning Achievement**

Several analyses were conducted before analyzing the students' scores collected using a t-test. Twenty-one students' middle and final semester reports scores were analyzed on this current research. The data is provided in Table 2.

Table 2. Students' Middle and Final Semester Score

Name	Middle Semester Score	Final Semester Score
Student 1	80	85
Student 2	80	85
Student 3	80	85
Student 4	80	85
Student 5	70	75
Student 6	70	80
Student 7	70	80
Student 8	80	85
Student 9	70	80
Student 10	70	80
Student 11	70	80
Student 12	70	80
Student 13	70	75
Student 14	70	75
Student 15	70	75
Student 16	80	85
Student 17	80	80
Student 18	80	85
Student 19	80	80
Student 20	80	85
Student 21	80	85

Source: Data analysis of January 2022 SPSS Version 23

### Descriptive Statistic Analysis Result

The data in Table 2 were analyzed by using IBM Statistics 23. The IBM Statistics was used to identify the mean, median, mode, range, variance, sum, max, min, and the standard deviation from the first-grade students' middle and final semester scores report. The data are presented in Table 3.

Table 3. Case Processing Summary Data

Category	Cases						
	Valid		Missing		Total		
	N	Percent	N	Percent	N	Percent	
Value							
	Middle-Semester	21	100.0%	0	0.0%	21	100.0%
	Final-Semester	21	100.0%	0	0.0%	21	100.0%

Source: Data analysis of January 2022 SPSS Version 23

The data in Table 3 describe that middle-semester and final-semester participant valid number of samples were 21. It means none of the sample is missing. Since all of the data samples were valid, the descriptive statistics analysis was conducted. The result of the descriptive statistical analysis can be seen in Table 4.

Table 4. Descriptive Statistics of Students' Middle and Final Semester Scores

	Middle Semester	Final Semester
Valid	21	21
Missing	0	0
Mean	75.24	81.19
Median	80.00	80.00
Mode	80	85
Std. Deviation	5.118	3.842
Variance	26.190	14.762
Range	10	10
Minimum	70	75
Maximum	80	85
Sum	1580	1705

Source: Data analysis of January 2022 SPSS Version 23

Table 4 revealed the descriptive statistical analysis result of middle and final semester scores. Learning literacy using blended learning system affects students learning achievement due to the increase of the mean score from 75.24 to 81.19. The median score of the middle and final semester scores report is 80.00. It means that the middle number of both score reports are considered good. The next index is mode. According to the table above, the middle semester mode was 80.00, while the final semester mode was 85.00. It means the students' mode was increased 5.00 which indicates that learning literacy using blended learning system is affecting students' learning achievement.

To see the variation of the data around the median and mean, the standard deviation of middle-semester and final-semester scores report are analyzed. The data showed that the standard deviation for middle semester is 5.118, and the standard deviation for final semester is 3.842. Lower standard deviation indicates that the data point tends to be close to the mean. However, it does not indicate any bad effect happened. It revealed that the spread of the sample scores in the data distribution is close with the mean. Standard deviation is the root of the variance. That is why the data on table 4 revealed the lower variance from middle semester to final semester. The variance of middle semester report was 26.190, meanwhile it was 14.762 on the final semester report.

The next index to be discussed is range. This index showed that there is different in the range of middle-semester, and final-semester report. Both report's range was 10, which mean the distance between the lowest and the highest score on both test is same. However, the minimum score between middle-semester and final-semester is increased, from 70 to 75. It implies that the students are able to achieved higher score as the minimum score reported. Similar to the minimum score, the maximum also increased from 80 in the middle-semester to 85 in the final-semester. Regarding the increase of minimum and maximum score, learning literacy using blended learning system positively affects students' learning achievement by helping them to obtain higher score. Lastly, the sum value of the score also increased from 1580 to 1705. Conclusively, the first-grade students of North Bali Bilingual School's learning achievements are increased after the implementing literacy through blended learning system.

### Inferential Statistic Analysis

Inferential statistical analysis was used to gain the final result. Paired *t*-test was used to compare the data of middle and final-semester scores report on sample group. Two analyses were conducted, such as normality and homogeneity test. The normality and homogeneity test result were categorized as normally distributed if the significance value is above 0.05. In reverse, when the significance value (.Sig) is lower or less than 0.05, it means that the data was not distributed normally.

### The Result of Normality Test

Table 5. Normality Test Result

Category		Kolmogorov – Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Value	Middle-Semester	.348	21	.000	.640	21	.000
	Final-Semester	.268	21	.000	.791	21	.000

Source: Data analysis of January 2022 SPSS Version 23

Table 5 shows that the significant value for middle-semester and final-semester is 0.00, which means the p-value is smaller than 0.05. Then, at the 5% level of significance, from the collected data, it can be concluded that the distributions of students' middle-semester and final-semester scores report are not normally distributed.

### The Result of Homogeneity Test

The middle-semester and final-semester values were also analyzed using the



homogeneity test to determine the homogeneous of the data. If the result is greater than = 0.05, it is categorized as homogeneous. SPSS Statistics Program with Levene statistic was used to test the middle-semester and final-semester values. The result is presented as follows.

Table 6. Homogeneity Test Analysis

Levene Statistic	df1	df2	Sig.
17.021	1	40	.000

Source: Data analysis of January 2022 SPSS Version 23

Table 6 shows that the significance level of the count of the middle-semester and final-semester values is 0.000. Because the significance level of the count is smaller than 0.05, it implies that the population variance is not homogeneous.

### The Result of T-Test

After analyzing the data through normality and homogeneity test, paired t-test was conducted to know the significant effect of the middle and final-semester report. Paired t-test was used because the subject of this research is using one class design. The result of t-test analysis can be seen in Table 7.

Table 7. T-test Result  
 Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Middle & Final	42	.559	.000

Source: Data analysis of January 2022 SPSS Version 23

Based on the qualification, the null hypothesis is accepted if there is no significant difference between middle-semester and final-semester report scores when learning literacy using blended learning system. Meanwhile, the null hypothesis is rejected when there is significant difference between the middle, and final semester report. The data in Table 6 shows that the significance is 0.000 which is lower than 0.05. It implies that the null hypothesis is rejected because the  $T_{observed}$  is smaller than the critical value and the alternative hypothesis is accepted.

### Hypothesis Testing

The research hypothesis aimed to investigate the significant effect on students' learning achievements who were taught literacy using blended learning system at North Bali Bilingual School. It was used to determine the difference of students' learning achievement after learning literacy using blended learning system. The hypothesis proposed in this study are: 1)  $H_0$  : There is no significant effect on students' learning achievement after learning literacy using blended learning system ( $N_1 = N_2$ ) ; 2)  $H_a$  : There is significant effect on students' learning achievement after learning literacy using blended learning system ( $N_1 > N_2$ ).

Table 8. Paired T-test Result

	Mean	Paired Differences					t	df	Sig. (2-tailed)
		Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1 Middle & Final	76.714	5.124	.791	75.117	78.311	97.022	41	.000	

Source: Data analysis of January 2022 SPSS Version 23

From the paired *t*-test result on Table 8, it presents that the value of Sig. (2-tailed) is 0.000. It indicates that *t*-value was lower than the significant alpha ( $\alpha = 0.05$ ), which means that the null hypothesis ( $H_0$ ) was rejected while the alternative hypothesis was accepted. Conclusively, since the alternative hypothesis is accepted, there is a significant effect on students' learning achievement after learning literacy using blended learning system ( $N_1 > N_2$ ).

## Discussion

The implementation of blended learning system in literacy activities carried out by first-grade students in North Bali Bilingual School has been running the whole semester. In detail, blended learning system has been implemented in teaching literacy from July to December. Further discussions regarding the research findings is conveyed in this part.

Twelve literacy activities are carried out by first grade students of North Bali Bilingual School. Those literacy activities are divided into three learning modes, such as asynchronous, learning package, and synchronous learning. They are divided into three parts as a form of implementing a blended learning system in that school. It is in line with the previous study conducted by Kintu et al., 2017 who argued that a blended learning system consists of both face-and-face meetings using technology advancement in its teaching and learning method. It means the implementation of blended learning system in North Bali Bilingual School is in accordance with the theory stated. It is proved by several literacy activities carried out by the first-grade students in the learning package learning mode. On the first day of the week, the students will come to take their learning package. Then, they visit the school at the end of the week to submit their homework. During the week, the students learn through several platforms like Schoology and Zoom. Due to the regulation made by the Indonesian Government, a face-to-face meeting is only allowed to be conducted virtually to prevent the transmission of the Covid-19 virus among students and teachers. Nevertheless, North Bali Bilingual School is successful in conducting various literacy activities using a blended learning system that can be seen by several traditional and technology-based methods of learning applied at school.

Further discussion about literacy activities that carried out by first-grade students of North Bali Bilingual School is about the modes of learning conducted. During the Covid-19 pandemic all schools are obliged to conduct online learning. According to Shahabadi & Uplane, 2015, online learning has two types such as asynchronous learning, and synchronous learning. Looking up to the findings above, we know that the literacy activities carried out through online learning consist of both asynchronous and synchronous learning. Asynchronous learning allows the students to access provided materials anytime and anywhere (Jose & Abidin, 2016). In implementing asynchronous learning, the first-grade students are given access to the school's learning management system in Schoology, which is accessible anywhere and anytime. It means North Bali Bilingual School is successful in conducting asynchronous learning as one of learning modes applied to implement a blended learning system.

Another mode of learning that exists is the synchronous mode. Synchronous learning refers to the opposite of asynchronous learning, which allows the students and teacher to interact in real-time by online platform (Perveen, 2016). Based on the data collected, literacy activities in synchronous learning mode are conducted through zoom (virtual meeting). The teacher is able to conduct a class where the students may participate in a real time through zoom meeting. By then, it is clear that the teacher successfully conducts literacy activities in synchronous mode as the theory delivered by Perveen, 2016.

There is one more mode of learning conducted in teaching literacy using blended learning system at North Bali Bilingual School which has not been discussed yet. It is learning package. Learning package used both asynchronous and synchronous mode of learning. The students are given a package consisting of weekly lessons and students' worksheets. They will learn how the meeting is scheduled from Schoology and Zoom Meeting. They can access the weekly lesson through Schoology. Then, during zoom meeting, the teacher checks how the students' progress in a week.

The last point about literacy activities carried out by first-grade students of North Bali Bilingual School is the overall review of its implementation based on the data collected.

(Zhonggen, 2015) defined blended learning system as a combination of learning in which students and teachers need to meet each other face-to-face with online learning conducted remotely by using technology. Then, the data collected revealed that North Bali Bilingual School has conducted face-to-face meetings from zoom meeting due to the Covid-19 pandemic and conducted online learning through Schoology. Online learning through Schoology even includes accessible web and pages for students to learn. The data taken by observation reveals that the implementation of a blended learning system in North Bali Bilingual School has some advantages as previous studies conducted by the experts. The advantages brought are: 1) teaching and learning process can be conducted remotely through online learning platform or learning management system (LMS), 2) learning materials can be presented and accessed online. As explained previously, those advantages are obviously seen by successfully conducting both asynchronous and synchronous learning. The writer concludes that North Bali Bilingual School successfully conducts a blended learning system.

Regarding the students' learning achievement after learning literacy through blended learning system, the analysis results prove that learning literacy using blended learning system positively affects students' learning achievement. It means learning literacy using blended learning system brings advantages for students' learning experience. It is proved by the increase of students' mean score, minimum score, maximum score, the sum, and the t-test analysis.

The mean score of students' learning achievement is increased. It went from 75.24 on the middle-semester report to 81.19 on the final-semester report. Next, both median score of students' learning achievement reports were on 80.00. It means the students were able to kept good performance. This positive effect found is supported by the increase of the mode from 80 to 85. It means the score which has the most frequency on middle-semester was 80. Then, it is increased to 85 as the score with the largest frequency on final-semester. It means the students are not only able to perform higher score and set that as a score with the largest frequency

In reverse, the standard deviation and variance were decreased. However, it does not indicate any bad effect happened after learning literacy using blended learning system. Lower standard deviation indicates that the spread of the sample scores in the data distribution is close with the mean. Meanwhile the decrease of variance indicates that as the mean of the difference in the final semester is lower than the mean of the difference in the middle semester. However, it does not indicate any bad effect because the range of middle semester and final semester has no different. Both, middle-semester and final semester's range are 10. It means there is no bigger gap found between students' highest and lowest score on both middle and final-semester report. Furthermore, it does not negatively affect students learning achievement because the students' minimum, maximum, and sum are increased.

The minimum score on middle-semester report was 70, then the minimum score on final-semester report was 75. It means the students are success to reach higher score in the minimum score reported. Furthermore, the students' maximum score was also increased. Middle-semester maximum score was 80, and it increased to 85 as the maximum score of final-semester report. Last, the sum of students learning achievements are also increased. The sum of middle-semester was 1.580, and the sum of final-semester was 1.705. It is obvious that students learning achievement sum score are increased by 125. As the conclusion, it is good to keep conducting literacy activities for first-grade students by using blended learning system. It is proven that learning literacy using blended learning system positively affects students' learning achievement. It helps them to perform higher and better scores.

#### **4. CONCLUSION AND SUGGESTIONS**

North Bali Bilingual School used three various learning modes; synchronous learning, learning package, and asynchronous learning, to support the literacy implementation. Each mode is conducted with different literacy activities. Synchronous learning is conducted through reading aloud video activity, storytelling session, reading aloud through zoom, and

phonic exercise. Unlike synchronous mode, two literacy activities are carried out through learning package mode: reading bilingual books borrowed at school and phonic exercise. The last learning mode, asynchronous, consists of ten literacy activities, including reading English books from the virtual library, reading Indonesian books from the virtual library, reading English online stories through websites, reading a book of the week, reading aloud video activity, learning through video, learning through field trip video, quizzes, storytelling session, and phonic exercise. The teaching-learning process and materials are accessible remotely through an online learning platform. Hence, North Bali Bilingual School has sustainably implemented and supported the literacy activities. The literacy activities applied at this school also brings positive effects on students' learning achievement. The data analysis proved that learning literacy through blended learning system can increase students' literacy.

In terms of the constraints in preparing strategies to conduct literacy activities using blended learning system, the teachers should keep their motivation in conducting classes. It is necessary to stay motivated because implementing blended learning system requires varies teacher's role, and ability to conduct both traditional and online learning. The implementation of blended learning system in teaching literacy for first-grade students brings advantages for students. Therefore, it is recommended for the teachers to be able to keep their willingness in conducting blended learning system to create meaningful learning for students.

## REFERENCES

- Apriani, E. (2016). A New Literacy: The Role of Technology to Develop Student's Character. In *Journal of Islamic Education* (Vol. 21, Issue 1). <http://jurnal.radenfatah.ac.id/index.php/tadib>
- Carr-Hill, R. A. (Roy A. ), & UNESCO Institute for Statistics. (2008). *International literacy statistics: a review of concepts, methodology and current data*. UNESCO Institute for Statistics.
- Creswell, J. (2012). *Educational Research Planning, Conducting and Evaluating Quantitative and Qualitative Research*.
- Creswell, J. W., Fetters, M. D., & Ivankova, N. v. (2004). Designing a mixed methods study in primary care. *Annals of Family Medicine*, 2(1), 7–12. <https://doi.org/10.1370/afm.104>
- Frankel, K. K., Becker, B. L. C., Rowe, M. W., & Pearson, P. D. (2016). From "What is Reading?" to What is Literacy? *Journal of Education*, 196(3), 7–17. <https://doi.org/10.1177/002205741619600303>
- Gillett-Swan, J. (2017). The Challenges of Online Learning: Supporting and Engaging the Isolated Learner. *Journal of Learning Design*, 10(1), 20. <https://doi.org/10.5204/jld.v9i3.293>
- Humaira, H., & Asbah, A. (2019). Investigating the Effect of Blended Learning Activity in Teaching Reading at Second Grade Senior High School. *Linguistics and Elt Journal*, 6(1), 30. <https://doi.org/10.31764/leltj.v11i1.745>
- Jose, J., & Abidin, M. J. Z. (2016). A Pedagogical Perspective on Promoting English as a Foreign Language Writing through Online Forum Discussions. *English Language Teaching*, 9(2), 84. <https://doi.org/10.5539/elt.v9n2p84>
- Keefe, E. B., & Copeland, S. R. (2011). What is literacy? the power of a definition. *Research and Practice for Persons with Severe Disabilities*, 36(3–4), 92–99. <https://doi.org/10.2511/027494811800824507>
- Kintu, M. J., Zhu, C., & Kagambe, E. (2017). Blended learning effectiveness: the relationship between student characteristics, design features and outcomes. *International Journal of Educational Technology in Higher Education*, 14(1). <https://doi.org/10.1186/s41239-017-0043-4>
- Nufus, T. Z. (2018). *Teaching English to Young Learners in Indonesia (Pros and Cons)*.

<https://jurnal.umj.ac.id/index.php/ELIF>

- Perveen, A. (2016). Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan. *Open Praxis*, 8(1). <https://doi.org/10.5944/openpraxis.8.1.212>
- Rao, P. S. (2019). The importance of english in the modern era. *Asian Journal of Multidimensional Research (AJMR)*, 8(1), 7. <https://doi.org/10.5958/2278-4853.2019.00001.6>
- Rombot, O., Boeriswati, E., & Suparman, M. A. (2020). Improving Reading Comprehension Skills of International Elementary School Students through Blended Learning. *Al Ibtida: Jurnal Pendidikan Guru MI*, 7(1), 56. <https://doi.org/10.24235/al.ibtida.snj.v7i1.6045>
- Shahabadi, M. M., & Uplane, M. (2015). Synchronous and Asynchronous e-learning Styles and Academic Performance of e-learners. *Procedia - Social and Behavioral Sciences*, 176, 129–138. <https://doi.org/10.1016/j.sbspro.2015.01.453>
- Syakur, Abd., Fanani, Z., & Ahmadi, R. (2020). The Effectiveness of Reading English Learning Process Based on Blended Learning through “Absyak” Website Media in Higher Education. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(2), 763–772. <https://doi.org/10.33258/birle.v3i2.927>
- Wijayanti, S. H. (2020). *Indonesian Students’ Reading Literacy*.
- Zhonggen, Y. (2015). Blended learning over two decades. *International Journal of Information and Communication Technology Education*, 11(3), 1–19. <https://doi.org/10.4018/IJICTE.2015070101>