



SUKMA: JURNAL PENDIDIKAN

ISSN: 2548-5105 (p), 2597-9590 (e)

Volume 2 Issue 1, Jan-Jun 2018, hlm. 93-119

<https://jurnalsukma.org/index.php/sukma/article/view/02104>

THE USE OF BLENDED LEARNING IN TEACHING ISLAMIC HISTORY The Case of the Eighth Grade of Sukma Bangsa School, Aceh

Adhi Lesmana; Basiran

Sukma Bangsa School, Bireuen, Aceh, Indonesia

email: adhilesmana@yahoo.com

Abstract

The article is intended to introduce blended learning methods at Sukma Bangsa School, Aceh. The purpose of this study is to demonstrate the effectiveness of blended learning method specifically in the study of Islamic history, which is one of the main topics in religion education lessons in the 8th grade at the three different locations of Sukma Bangsa School. The study uses quantitative methods and was carried out during the first semester of the school year 2015 -2016 in the three locations of Sukma Bangsa School. Research data was

obtained through the pre-test and the post-test that were conducted at the beginning of the research and the end of the research. The total number of students in this study was 142 students: 57 students from Bireuen, 34 students from Pidie, and 51 students from Lhokseumawe. The results of the study at the three different locations of Sukma Bangsa School show that although there was an increase in the average value and standard deviation, the statistics do not show a significant difference between the achievement of students in the blended learning method and in the face-to-face method. Therefore, an understanding of context by the teachers in the use of blended learning is needed to improve students' achievement results.

[Artikel ini dimaksudkan untuk lebih mengenalkan metode pengajaran blended learning di Sekolah Sukma Bangsa, Aceh. Tujuan dari penelitian ini adalah untuk menunjukkan adakah keefektifan metode blended learning secara khusus di materi Sejarah Islam yang merupakan salah satu topik utama dalam pelajaran pendidikan agama di kelas 8 di tiga lokasi Sekolah Sukma Bangsa. Studi ini menggunakan metode kuantitatif dan dilakukan di Sekolah Sukma Bangsa Bireuen, Pidie, dan Lhokseumawe pada semester ganjil tahun pelajaran 2015-2016. Data dalam penelitian ini diperoleh melalui hasil pre-test dan post-test yang dilakukan di awal sebelum penelitian dan menjelang akhir penelitian. Total siswa yang mengikuti penelitian ini sebanyak 142 siswa dengan rincian 57 siswa di Sukma Bangsa Bireuen, 34 siswa di Sukma Bangsa Pidie, dan 51 siswa di Sukma Bangsa Lhokseumawe. Hasil studi di tiga lokasi Sekolah Sukma Bangsa menunjukkan bahwa meskipun ada peningkatan nilai rata-rata dan standard deviasi namun secara statistik tidak menunjukkan perbedaan yang significant antara hasil pencapaian siswa di metode blended learning dan

di metode tatap muka. Oleh karena itu pemahaman guru secara kontekstual dalam penggunaan blended learning sangat dibutuhkan untuk meningkatkan hasil pencapaian siswa.]

Keywords: blended learning, face-to-face, e-learning, teaching method, Islamic history

A. Introduction

Blended learning as a learning method has been growing faster in the last several decades. It has appeared as a connecting bridge between a traditional method (face-to-face) and a longdistance method (e-learning). Roscoe (2012) claimed that students who used a blended learning method got better results than those who used a face-to-face in a political course. Kazu and Demirkol (2014) stated that a blended learning method produced a more positive effect on achievement in 12th grade biology lessons than a face-to-face method. It can be viewed by the increasing of the mean and the standard deviation from the post-test. Ziden's et al. (2011) study found that there were differences in science subject achievement between males and females in the use of blended learning. In general, males' achievement was higher than females, since male students were more comfortable using computers. In contrast, female students had difficulties working with computers (Shaw 1999, as cited by Ziden et al. 2011). In addition, Jong (2016) mentioned that the use of blended learning in understanding stoichiometry could help students understand earlier, for instance, through watching videos or downloading materials through the internet so then they can understand what they will learn. Hence, blended learning is an alternative to the traditional teaching method and could be included in Sukma Bangsa School.

Sukma Bangsa School was established in July 2006 and is located in three different regions, i.e., Bireuen, Pidie, and Lhokseumawe, in Aceh. In general, Sukma Bangsa School uses a traditional method in the learning process, both in science and

social studies. The face-to-face method is a common method and a mainstay for teachers in Sukma Bangsa school for delivery of learning material. In most cases, to avoid boredom, teachers sometimes insert video, presentation slides, or playing games into the class content. One of the subjects taught at Sukma Bangsa schools is Islamic Religion at all levels i.e. elementary and secondary school. Religion studies in the 8th grade include five main topics: Islamic jurisprudence (fiqh), faith (aqidah), Islamic history, morals, and how to read the Quran (tajwid). The five main topics have also many subtopics, for instance, the pillars of faith, the pillars of Islam, Islamic history, and Islamic culture. The subtopic Islamic history is usually taught in the 8th grade. Teachers who teach that subject have some difficulties to explain and to deliver it. As a result, students cannot understand well and are unsatisfied with the result. Besides, students easily forget what they have learned. However, the problem could be resolved if teachers understand another teaching method. In addition, teachers do not understand in depth the subject of Islamic history. For this reason, some students do not achieve the minimum score. It can be seen from the data of the school year 2015-2016 where the average value of the 8th grade in Islamic history was 50.22, while the male grade was on average 48.33 and female 53.21.

Based on the observations and interviews during this study with the Islamic history teachers in the Junior High School of Sukma Bangsa, we found that teachers are still using the traditional method in the learning process, where teachers only speak in front of the class and are also still using paper to give homework or an exam to students. Even though Sukma Bangsa School has good facilities, for instance, the internet, a multimedia room, and a computer laboratory, teachers and students are not using it optimally. Therefore, our study will focus on the effect of blended learning use in the 8th grade in three different locations of Sukma Bangsa School.

Blended learning as a teaching method has a positive effect on the learning process. It can be assumed that it would increase students' attainment and students' achievement. As the limita-

tions of the study, the focus will be on the three questions. First, what are the differences in students' achievement in the understanding of Islamic history in the use of a blended learning method in the 8th grade at the three different locations of Sukma Bangsa School? Second, what are the differences in students' achievement in the understanding of Islamic history between males and females in the use of a blended learning method and a face-to-face method in the 8th grade at the three different locations of Sukma Bangsa School? Third, what are the perceptions of students and teachers in the understanding of Islamic history in the use of a blended learning method and a face to face method in the 8th grade at the three different locations of Sukma Bangsa School?

The main objective of the study is to improve the quality of teaching in the Sukma Bangsa Schools. There are indications in the earlier studies that blended learning might be one solution for improving classroom instruction. Hence, the specific objectives of this study are as follows: First, to examine the different effects in students' achievement in the use of blended learning method and traditional method with regard to Islamic history in the three different locations of Sukma Bangsa School. Second, to determine the different effect of blended learning method in students' achievement between males and females with regard to Islamic history in the three different locations of Sukma Bangsa School. Third, to obtain teachers' and students' perceptions of the use of blended learning method with regard to Islamic history in the three different locations of Sukma Bangsa School.

B. Theoretical Roots of Blended Learning

The term blended learning has been used in the design of education, and some may seem unsure about the term. Some people are still questioning when they hear about blended, "what is being blended?". Some scholars have given a general meaning of the term or developed a definition which is close each other in meaning. Heinze and Procter (2006) stated that blend means

a mix, together to enhance to be better or a formula to make a harmony or engaging. Whereas learning has a common meaning related to “learn”, while learning has a general meaning connoted to that is learned, thereby at a glance implying learning pattern containing mixing elements, or a merger between one pattern with another pattern. Correspondingly, Mosa (2006) mentioned that blended learning mixes two elements, classroom lesson, and online learning.

Blended learning has a various definition from the expert. Mortera (2006) said that blended learning is a teaching method integrating between face-to-face and distance learning. Kanuka, Brooks, and Saranchuck (2009) stated blended learning can minimize a limit on time, place, and situation but there has a good interaction between teachers and students. Thorne (2003) mentioned blended learning as a new innovation and a new solution in the learning process to develop human ability using technology through online learning with keeping their interaction and participation as well as face-to-face. According to Graham et al. (2005), blended learning has two types in the learning process such as, the traditional environment used in a rural area and learning distributed environment which grow up in a row with a new technology allowing expansion and distributed communication and interaction. In addition, Bhonk and Graham (2006) explained that blended learning is a combination of two models teaching and learning namely traditional learning system and distributed learning system which stressed the central role of technology in blended learning.

Blended Learning is designed for students who need a face-to-face learning in addition to web-based learning. With the blend of learning methods, teachers and students can meet directly through online learning that can be accessed anytime, anywhere 24 hours a day, 7 days a week. With the application of blended learning students are expected to understand the material better and be more active in participating in learning, so that it can improve students learning outcomes. Online learning or e-learning in blended learning can be an extension of the tradi-

tional classroom lesson using face-to-face learning. Using blended learning with combining face-to-face and e-learning needs willingness from teacher and student to achieve the goals. Driscoll and Carliner (2009) mentioned that using blended learning can integrate or merge a learning program in a different format to reach the general purpose. For teachers, they must prepare extra before the delivery of the learning material. In addition to uploading learning material in moodle, teachers must have a pedagogical skill to liven up the learning the process in face-to-face and online/distance learning. Rusman (2009) expressed blended learning is a combination of various approaches, so teachers must be able to combine two or more methods of approach in learning to achieve the objectives of the learning process. One of the examples is a combination of web-based learning approach and face-to-face simultaneously.

In designing blended learning teachers should set the teaching materials that qualified to organize distance learning method, for instance, to prepare teaching materials that can be learned by the students, teaching materials that can be learned in face-to-face meeting, and teaching materials that can be learned through the internet. By preparing three conditions above, at least teachers will understand how to convey the teaching material and how students will accept it well including teaching materials that must be learned or managed by students or other supporting teaching materials. Teachers also must understand both hardware and software that will be used in blended learning. In addition, teachers should set criteria for students' assessment in blended learning. The criteria appointed is based on how long students will do the assignment and the level of difficulties. As the criteria deals about learning, teachers should have a standard evaluation in blended learning method.

Two theories of blended-learning need to be recognized here: Cognitive theory and constructive theory. *Cognitive Theory*. The emergence of cognitive theory heavily influenced by behaviorist thinking primarily of research by Albert Bandura. Schunk (1996, 118) found that people can learn or perform actions just

by looking at what others are doing. Wiryokusumo (2009) stated that cognitive theory arose from the view of many researchers to various limitations in the theory of behaviorism because they consider that behaviorism cannot effectively solve the problem of how people think. *Constructive Theory*. Gruber & Voneche (1977) as cited by Applefield et al. (2000) stated that the term constructivist is commonly known from the view of Piaget. Constructivist theory is a theory that arose from the result of deep thinking of cognitive theory because of the widening of the cognitive perspective (Pritchard 2013, 17). Constructivist theory is based on an idea that people create knowledge based on what he/she sees and feels (Al-Huneidi and Schreurs 2011). However, Schunk (1996, 229) explained that the constructivist, seen from the perspective of psychology and philosophy, will create human thinking based on what he/she learned and understood.

1. Elements of Blended Learning

Face-to-face. The traditional method of learning or conventional method or face-to-face method is a meeting between teachers and students physically in a classroom used before technology came (Singh et al. 2009, 1-7). Teachers will stand up in front of the class and students sit on their chair. This method is a common method that teachers used and called teacher-centered. Consequently, teachers need more pedagogical skill in this method. The face-to-face method places teachers as main knowledge or teacher-centered and put students as passive knowledge receivers. Students' knowledge will depend on teachers. Vice versa, some students who have a good understanding to receive lesson felt unsatisfied. Most students will find curiosity hampered or delayed because of the teaching process centered on teachers. Hence, learning as the main learning function will be disturbed.

E-Learning. E-learning is consisted of two parts, namely 'E' which stands for 'electronic' and 'learning'. E-learning means learning with the help of electronic devices. Tafiardi (2005), Ibrahim and Suhardiman (2014) mentioned in its implementa-

tion, e-learning using audio components, video or computer device or a combination. In other words, e-learning is a learning which in practice is supported by technological services such as telephone, audio, videotapes, satellite transmissions or computer. Horton (2000) claimed that e-learning is an activity of web-based learning which can be accessed from the Internet. This is not much different with Brown (2003) who simply said that e-learning is a learning activity that utilizes a network (Internet, LAN, WAN) as a delivery method, interaction, and the features supported by various other forms of learning services.

2. Design of The Study

This study is a quantitative research using an experimental approach. According to Sugiyono (2010, 72), an experimental research can be interpreted as the research methods used to find a specific treatment effect compared to the other with a predetermined condition. In this experimental study, the researchers control or manipulate the group treated and measure the effect of the treatment. In all experimental studies, participants were divided into two groups, the first group is the group that receive a treatment (experimental group) and the second group does not receive any treatment (control group). The results of the research or the bound variable measured by tests or instruments that produce a quantitative data (Lodico et al. 2010, 28-29).

In this study, an experimental model was used the pre-test and the post-test. Both groups (the experimental group and the control group) were tested early before the experimental performed to measure the initial state (O1). After that, the experimental group was given treatment (X), while the control group was untreated. Then both groups were re-tested (post-test = O2) after treatment completed. The post-test was used to see the differences in learning outcomes between the experimental group and the control group through a t-test.

In this study we distinguish variables as follows: First, an independent variable. The independent variable is a variable

that affects dependent variable. It happens because of the changes or the emergence of the dependent variable. The independent variable in this study is teaching method and it is divided into: an experimental group: using blended learning method (X1), and a control group: using face-to-face method (X2). Second, a dependent variable. The dependent variable is a variable that is affected or changed due to the independent variables. In this study, the dependent variable is students' achievement (Y). Besides that, there is a controlled variable, meaning as a variable that is used as a treatment analysis material in experiment conducted such as, teacher, time, and classroom conditions

Population and Sample. The total population of the students in Sukma Bangsa Bireuen is 57 students (30 males and 27 females), the total population of students in Sukma Bangsa Pidie is 34 students (9 males and 25 females), and the total population of students in Sukma Bangsa Lhokseumawe is 51 students (25 males and 26 females). Before implementing an experimental class, students in the three different locations follow the pre-test, which aims to map the students' ability in Islamic history. The pre-test and other academic data, such as the report in the second semester of the religion lesson when they were in the 7th grade, become the basis to determine the experimental group and the control group. Study participants were selected randomly and used the multi-stage sampling technique. This is a technique to control the differences that may arise between experimental research participants. By using this technique, researchers believe that we can get the heterogeneous participants with different backgrounds and experience evenly distributed between the two groups of the research.

The study was conducted in Sukma Bangsa School in the three different locations: Junior High School of Sukma Bangsa Bireuen Aceh, Junior High School of Sukma Bangsa Pidie Aceh, and Junior High School of Sukma Bangsa Lhokseumawe Aceh. Researchers selected the students of the 8th grade in the first semester of the school year 2016-2017. The Researchers did the

research and retrieved the data in the three different locations, starting from the first week of September until the last week in October 2016 with the following details of research: at the Sukma Bangsa Bireuen began in the first week of September and ended in the first week of October 2016, while in Sukma Lhokseumawe and Pidie the research began in the last week of September and ended in October 2016.

In this study, the instruments that used in the research process of data collection were: pre-test and post-test. The pre-test was conducted before the learning began and was given to the experimental group and the control group with the same instrument. While, the post-test was conducted in the last meeting when all the indicators were already delivered by the teachers. In other words, the post-test is given to students after being given treatment of a sample group. Besides using the pre-test and the post-test instruments, researchers also used the instrument of class observations and interviews with teachers and students at the end of the research. The data obtained from the observation and interview were only used to support the obtained results taken from the main instrument, both in the pre-test and the post-test.

An interview with students and teachers was conducted to get an opinion about blended learning process. Interview in this study was conducted twice. First, during the research in the class room to get the early students' and teachers' perception in the use of blended learning method and to find out difficulties encountered when they used e-learning, to observe the improvement process in reducing the problems that may arise and to encounter the implementation of blended learning after the post-test. The second stage of the interview was conducted after the post-test. It was done to complete the information about overall perception of students and teachers during the use of blended learning.

On the validity of the test, an instrument is valid if it is able to measure what is desirable and can reveal the data vari-

ables properly (Arikunto 2006, 168). A valid test for a particular purpose or a specific decision making, it may not be valid for the other purpose of decision-making. So, the validity of the test should be linked to the specific goals or decision-making. For instance, the admission tests in the high school must be linked to the test and it can reflect students' achievements for the future. In relation to this, the instrument reliability test was intended to determine the degree of permanence of a measuring instrument, meaning that the instrument is said to be reliable if used repeatedly against the same object, and it will produce the same results. A valid test is usually reliable, but not all that reliable tests were valid (Arikunto 2006).

As we know that the data collection is an important activity for research, and it will determine the success or failure of a study. In this study, researchers used two main sources, a primary data, and a secondary data. At the primary data, researchers used a pre-test (before the research was executed or before the treatment of the experimental class) and a post-test (after research completed or after the treatment and the provision of material has been communicated well to all students). The pre-test and the post-test were performed for both groups (the experimental group and the control group) and the data were collected and analyzed using SPSS version 23. The data gathered from the pre-test and the post-test were presented using descriptive and inferential statistics. The descriptive analysis was used to learn the effects of blended learning method applied in Islamic history of the 8th grade to find the mean and the standard deviation. The t-test and the correlation were used to probe the relationship between the effect of the use of blended learning method in teaching and learning on students' achievement.

The secondary data used in this research was to support the primary data such as documentations, observations, and interviews. In this study, the documentation obtained from the archives of the teacher or a homeroom on students' achievement in the final test of the second semester of the school year 2015-2016. The observations were made when the experimental

group (using blended learning) taken place, with the aim to find out how teachers perform using an e-learning method combined with a face-to-face method. On the other hand, researchers also observed the activities and students' participation following Islamic historical materials using a blended learning. In the end of the study, researchers also interviewed teachers and students from the experimental group and the control group about their experiences using a blended learning method and a face-to-face method in Islamic history.

As we know, the data analysis is an important thing to do in a research. The data analysis is usually performed after all required data is complete and valid then later become the basis for problem solver that being studied. To analyze the data, researchers required a sharpness and accuracy tool to provide accurate analytical as a conclusion. If the analysis tool used inappropriately, it will give bad effect to the conclusions and for its use will adversely affect the implementation of findings study. Therefore, the understanding of using appropriate analytical tools desperately needed by researchers and the results of the study will be justified scientifically.

Based on the type of analysis, inferential statistics are divided into 2 types, correlation analysis and comparative analysis. Muhson (2013) stated that the correlation analysis is an analysis conducted to find the relationship or influences between two variables or more while the comparison analysis is an analysis that aims to compare between two conditions or more, and the analysis depends on the data type scale and the number of population. Paired sample t-test or also commonly called a repeated measures design is a paired two-sample test. The sample test is to compare results before and after a treatment. In this study, researchers wanted to measure the students' achievement in Islamic history before the applying of blended learning method, and we will re-measure it after implementing blended learning method in the experimental group. The results achievement of the experimental group will be compared with the control group who did not get a treatment. A measuring instrument

was used to view the results of students' achievement in the both groups, based on the pre-test and the post-test. Therefore, in this study, researchers observed the classes to see the differences in students' achievement between the experimental and the control group in general.

The researchers also used the null hypothesis, if there were no effects, relationships, or differences condition between before and after a treatment. The alternate hypothesis was also used if there was an effect, relationships, or differences condition before and after a treatment. Gravetter & Wallnau (2016, 356) stated "The alternative hypothesis states that there is a treatment effect that causes the scores in one treatment condition to be systematically higher (or lower) than the scores in the other condition. In symbols, $H_1: \mu_D \neq 0$ ". Gravetter & Wallnau (2016) also stated formula used in a paired sample t-test: To find out the effect or differences in students' achievement in Islamic history after a treatment used the limit value of 0.05. The limit value of 0.05 is similarly with the criteria for rejecting the null hypothesis. The hypothesis was tested by the t-test as a basis of conclusions, discussions, and recommendations.

C. Results and Discussions

The authors conducted an experimental study based on three important questions. Therefore, the main results of this study also refer to the following three questions; First, what are the differences in students' achievement in the understanding of Islamic history in the use of a blended learning method in the 8th grade at the three different locations of Sukma Bangsa School? Second, what are the differences in students' achievement in the understanding of Islamic history between males and females in the use of a blended learning method and a face-to-face method in the 8th grade at the three different locations of Sukma Bangsa School? Third, what are the perceptions of students and teachers in the understanding of Islamic history in the use of a blended learning method and a face-to-face method in the 8th grade at the three different locations of Sukma Bangsa School? *Figure 1* shows

the difference in post test score between the experimental class and the control class. The students in the experimental group had higher post-test scores ($M = 54.00, SD = 12.520$) than those in the control group ($M = 50.17, SD = 16.872$). Despite the differences in the mean from both groups, the t-test calculation states that the t value (55) = $0.970, p > 0.05$. This result indicates that there was no significant difference between the students' achievement who used blended learning method and face-to-face method.

Figure 2 shows that the students in the experimental group had similar post-test scores ($M = 54.29, SD = 8.130$) within the control group ($M = 54.29, SD = 11.213$). Despite the differences in the standard deviation from both groups, the t-test calculation states that the t value (32) = $0.000, p > 0.05$. This finding indicates that there was no significant difference between the students' achievement who used blended learning method and face-to-face method.

From the *Figure 3*, students in the experimental group had higher post-test scores ($M = 53.62, SD = 16.425$) than those in the control group ($M = 50.96, SD = 19.671$). Despite the differences in the mean from both groups, the t-test calculation states that the t value (47) = $0.516, p > 0.05$. This finding indicates that there was no significant difference between the students' achievement who used blended learning method and face-to-face method.

The achievement of the post-test scores in the experimental group shows better result rather than the control group even

Group	N	Mean	Std. Deviation	T	Df	Sig
Experimental Group	28	54.00	12.520	.970	55	.336
Control Group	29	50.17	16.872			

Figure 1. The comparison of students' achievements in post-test session between the Experimental Group and the Control Group of Sukma Bangsa Bireuen

Group	N	Mean	Std. De- viation	T	Df	Sig
Experimental Group	17	54.29	8.130	.000	32	1.000
Control Group	17	54.29	11.213			

Figure 2. The comparison of students' achievements in post-test session between the Experimental Group and the Control Group of Sukma Bangsa Pidie

Group	N	Mean	Std. De- viation	T	Df	Sig
Experimental Group	26	53.62	16.425	.516	47	.609
Control Group	23	50.96	19.671			

Figure 3. The comparison of students' achievements in post-test session between the Experimental Group and the Control Group of Sukma Bangsa Lhokseumawe

though there has different in the mean value of both groups, while the result is the same as shown in Sukma Pidie School. However, in the t-test statistical analysis the difference and similarity of the mean values did not show significant differences at the 0.05 level limit. Thus, based on the statistical test results showed that there was no significantly different between students (students' achievement) in the experimental group and those in the control group. Therefore, it can be concluded that the blended learning method is not recommended to use in Islamic history subject at Sukma Bangsa School. These results support previous studies conducted by Tosun (2015) which stated that the use of blended learning method does not give positive impact in enhancing teacher's vocabulary ability in the result of the post-test.

Group	N	Mean	Std. Deviation	T	Df	Sig
Male	14	51.93	14.296	-0.872	26	.391
Female	14	56.07	10.579			

Figure 4. The post-test score based on gender in the experimental group of Sukma Bangsa Bireuen

Kennedy and McCallister (2000) found that there was no significant difference between the approach of e-learning, face-to-face and blended learning to improve student achievement results. Similarly, Lim, Morris, and Kupritz (2014), Hameed et al. (2008), Lim and Yoon (2008) found that there was no significant difference between a blended learning and an e-learning to improve students' achievement, but the results were different with several other studies. Al-Zahrani (2008), Korkmaz, and Karakus (2009), Al-Qahtani and Higgins (2013), and Kazu and Demirkol (2014) stated that the achievement of students with the use of blended learning is better than the traditional method or face-to-face method. In addition, Jang and Hong (2016) claimed that there was no statistically significant difference in the satisfaction of nursing students, although satisfaction scores increased slightly. The reason why there was no significant difference in satisfaction scores between the two groups is most of the students who participated in the study was easy learning through lectures and they did not fully adapt to blended learning. Hence, it is necessary to provide education using blended learning methods in a sustained process.

As shown in *Figure 4*, male students who were in the experimental group had lower posttest scores ($M = 51.93$, $SD = 14.296$) than female students ($M = 56.07$, $SD = 10.579$). Although it appears differences between the mean of both sexes, but the t-test calculation shows that the value of $t(26) = -0.872$, $p > 0.05$. It can be concluded that there was no significant difference

Group	N	Mean	Std. De- viation	T	Df	Sig
Male	4	60.25	8.057	1.787	15	.811
Female	13	52.46	7.512			

Figure 5. The post-test score based on gender in the experimental group of Sukma Bangsa Pidie

Group	N	Mean	Std. De- viation	T	Df	Sig
Experimental Group	13	47.31	12.010	-2.085	24	.048
Control Group	13	59.92	18.209			

Figure 6. The post-test score based on gender in the experimental group of Sukma Bangsa Lhokseumawe

between boys and girls in the mean value of the post-test in the experimental group.

Figure 5 shows that male students who were in the experimental group had higher posttest scores ($M = 60.25$, $SD = 8.057$) than female students ($M = 54.26$, $SD = 7.512$). Although, it appears differences between the mean of both sexes, but the t-test calculation shows that the value of $t(15) = 1.787$, $p > 0.05$. It can be concluded that there was no significant difference between boys and girls in the mean value of the post-test in the experimental group.

From the *Figure 6*, male students who were in the experimental group had lower post test scores ($M = 47.31$, $SD = 12.010$) than female students ($M = 59.92$, $SD = 18.209$). Although it appears differences between the mean of both sexes, but the t-test calculation shows that the value of $t(24) = -2.085$, $p < 0.05$. It can be concluded that there was significant difference between

boys and girls in the mean value of the post-test in the experimental group.

The different results of the post-test scores between males and females in the experimental group shows that there were no significant results on the level limit of 0.05 level. Moreover, it can be concluded that there is no significant difference between males and females in the achievement of Islamic history in the use of blended learning method. These findings are similar to the study conducted by Kazu and Demirkol (2014), who revealed that the academic achievement grade average in a biology course of the experimental and the control group did not have significant difference depending on gender, and these statistical results are also supported by Adidoye (2015), as he found that there was no significant difference between the results of the achievement of boys and girls in geography lessons in the learning approach using a blended learning method and a face-to-face method. In addition, these results also confirmed the study conducted by Baer and Baer (2005) as cited by Adidoye (2015) that students' achievement result does not exist in gender.

However, despite the use of blended learning methods showed that there were no significant results in students' achievement on Islamic history subject, blended learning method is an interesting new method for teachers who teach Islamic history subject. Based on the interview after the research, it can be said that teachers feel that the blended learning help them, for instance, to save and upload all the Islamic history material. They can give automatically scores using Moodle (in particular to the multiple-choice questions) and can monitor student activity in the use of e-learning, such as, monitoring and engaging in discussion forums. The students tend to be more active and feel happy to follow the lessons using blended learning, as they can receive material in face-to-face to the maximum, they can also access course materials delivered through e-learning which is equipped with various additional references and a variety of video and comes with quizzes or practice questions to gauge their understanding of the material that has been given.

Finally, this research has been carried out in junior high school, then a similar study can conduct at the level of other levels of schools. The author suggests that further studies discuss the effects of blended learning on student motivation and student achievement on the exact subjects, such as mathematics. And the author also hopes to explore the blended learning model in more details and depth in order to further the current theoretical and practical knowledge of blended learning in senior high schools. It is also intended that issues that impact the lack of online dialogue be explored in future case studies. And based on interviews with students and teachers on the research that has been conducted, the author can state that the students did not take advantage of learning sessions online to the maximum, this happened because they did not master the use of ICT is well, therefore, students of high school students deserve selected as the object for further research. While the exact subjects are taught using blended learning methods would be interesting to be as well, because the material was always taught with traditional methods in many schools in Aceh province generally and in Bireuen district in particular.

D. Conclusions and Recommendations

Based on the t-statistic results showed that there was no significantly different between students in the experimental group and those in the control group. Therefore, it can be concluded that the blended learning method is not recommended to use in Islamic history subject at Sukma Bangsa School. The result supported with Kennedy and Mc Callister's (2000) study as cited by Al-Qahtani and Higgins (2003) that there was no significant difference in the results of students' achievement between face-to-face, e-learning, and blended learning. In contrast, a study was conducted by Roscoe (2012) and Kazu and Demirkol (2014) stated that a blended learning method can help students to increase their achievement rather than a face-to-face method.

Moreover, it can be concluded that there is no significant

difference between males and females in the achievement of Islamic history in the use of blended learning method, especially in Sukma Bireuen and Sukma Pidie. This result is in line with Adidoeye (2015) which stated that there was no significant difference achievement between boys and girls in geography lessons. However, the results obtained in Sukma Lhokseumawe School showed that female students had higher scores than male students. These results contrast with the study conducted by Ziden et al. (2011) which stated that the male students more comfortable when working with computers.

However, despite the use of blended learning methods which shows that there are no significant results in students' achievement on Islamic history subject, blended learning method is an interesting new method for teachers teaching this subject. Based on the interview, it can be said that teachers feel that the blended learning help them, for instance, to save and upload all the Islamic history material, teachers can give automatically scores using moodle (in particular to the multiple choice questions), teachers can monitor student activity in the use of e-learning, such as, monitoring and engaging in discussion forums. Likewise, students feel that blended learning method is a new thing where they can download course material any time and ask teachers through discussion forums, even when they were at home. The interview results from the perception of students and teachers support with what was said by Kanuka, Brooks, & Saranchuk (2009) that blended learning method minimizes the limitations of time, space, and situation.

Some difficulties were also faced in this study both from teachers, students, and the existing conditions. Obstacles were in the implementation of blended learning as follows: teachers were not familiar using a computer and online systems, so that e-learning sessions were not maximal. Moreover, they have a lack of classroom management and pedagogy. The ability of pedagogy will be a benchmark in the learning process in accordance with the expected results. In addition, problems faced by students in the implementation of blended learning is a lack of interest

in reading the material that has been uploaded by teachers in moodle.

The implementation of blended learning in this study was also influenced by geographical environment, culture and cultural communities around Sukma Bangsa School. Sukma Bangsa Bireuen and Sukma Bangsa Lhokseumawe can be said more easily to get an information as they locate in urban areas, while Sukma Pidie School is far from urban areas. This condition indirectly gives effect to the internet connection forestalling the teachers and students at Sukma Pidie School for conducting the research. Based on the conclusions above, some recommendations as follows:

- 1) In applying blended learning, teachers should have good computer skills and good pedagogy. When teachers face Moodle in the e-learning sessions, they can understand the menus and can manage both sessions (face-to-face and e-learning).
- 2) Teachers' pedagogy skills should be empowering through teachers' training, seminars, and discussion forums with experts. These activities should be facilitated by the local education department or school.
- 3) Computer training is needed to improve teachers' skills, so teachers understand computer well.
- 4) Blended learning method should be notified to all teachers with training and seminars, so that teachers are more familiar with the blended learning.
- 5) An operator/instructor who had mastered in the use of e-learning to help teachers when working with e-learning is needed.
- 6) Good infrastructures, a technology, and the internet are needed when schools want to implement the blended learning method in the learning process.
- 7) Study on the implementation of blended learning should be done in long period, for instance, in two semesters of the

school year.

- 8) This study took place for 3 months in the first semester of the school year 2016-2017. Further research on the effect of blended learning should be done by using teachers who have good pedagogy ability, literate using computer, and with long time period. Teachers for further research should be able to manage the class well, both in a face-to-face and e-learning sessions.

BIBLIOGRAPHY

- Adidoeye, J. A. 2015. *The Effect of Blended Learning Instructional Approach on Secondary School Students Academic Achievement in Geography in Akure, Ondo State, Nigeria.*
- Al-Huneidi. A. & Schreurs. J. 2011. "Constructivism Based Blended Learning in Higher Education." In *World Summit on Knowledge Society*. Berlin and Heidelberg: Springer.
- Al-Qahtani. A. A. & Higgins. S. E. 2013. "Effects of Traditional Blended and e-Learning on Students' Achievement in Higher Education." *Journal of Computer Assisted Learning* 29 (3): 220-234.
- Al-Zahrani. A. J. 2008. "Designing and Implementing Interactive Computer Software for Educational Technology Course to Measure Its Impact on the Academic Achievement of Teacher College's Students at Albaha Zone." Unpublished Dissertation. Saudi Arabia: University of Umm Al-Qura.
- Applefield. J. M. Huber. R. & Moallem. M. 2000. "Constructivism in Theory and Practice: Toward a Better Understanding." *The High School Journal* 84 (2): 35-53.
- Arikunto, P. Dan Suharsimi. 2006. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta.
- Brown, T. H. 2003. "The Role of M-Learning in the Future of E-Learning in Africa." *Paper Presented at 21st ICDE World Conference*. <http://www.tml.tkk.fi/opinnot>.
- Bonk. C. J. & Graham. C. R. 2006. *The Handbook of Blended Learning*. San Francisco. CA: Pfeiffer.
- Driscoll, M. and Carliner, S. 2009. "Who's Creating the E-Learning." *Michael Allen's 2009 E-Learning Annual*.
- Graham, C. R., Allen, S. And Ure, D. 2005. *Benefits and Challenges of Blended Learning Environments*.
- Gravetter, F. J. And Wallnau, L. B. 2016. *Statistics for The Behavioral*

Sciences. Cengage Learning.

- Hameed, S., Badii, A. And Cullen, A. J. 2008. "Effective E-Learning Integration with Traditional Learning in A Blended Learning Environment" in *European and Mediterranean Conference on Information Systems*.
- Heinze, A. And Procter, C. T. 2006. "Online Communication and Information Technology Education." *Journal of Information Technology Education* 5: 235-249.
- Horton, W. K. 2000. *Designing Web-Based Training: How to Teach Anyone Anything Anywhere Anytime*. New York: Wiley.
- Ibrahim, D. S. And Suhardiman, S. P. 2014. "Pengaruh Penggunaan E-Learning Terhadap Motivasi dan Prestasi Belajar Matematika Siswa SD Negeri Tahunan Yogyakarta." *Jurnal Prima Edukasia* 2 (1): 66-79.
- Jang, H. J. and Hong, S. Y. 2016. "Effect of Blended Learning in Nursing Education." *Learning* 11 (5).
- Jong, J. P. 2016. "The Effect of a Blended Collaborative Learning Environment in A Small Private Online Course (SPOC): A Comparison with A Lecture Course." *Journal of Baltic Science Education* 15 (2).
- Kanuka, H., Brooks, C. and Saranchuck, N. 2009. "Flexible Learning and Cost-Effective Mass Offerings." Paper Presented at "Improving University Teaching (IUT) Conference." Vancouver.
- Kazu, I. Y. and Demirkol, M. 2014. "Effect of Blended Learning Environment Model on High School Students' Academic Achievement." *TOJET: The Turkish Online Journal of Educational Technology* 13 (1).
- Kennedy, R. L. and Mccallister, C. J. 2000. *Basic Statistics Via the Internet*. Chicago.
- Korkmaz, Ö. And Karakus, U. 2009. "The Impact of Blended Learning Model on Student Attitudes Towards Geography Course and Their Critical Thinking Dispositions and Levels." *TOJET: The Turkish Online Journal of Educational Technology* 8 (4).

- Lim, D. H. and Yoon, S. W. 2008. "Team Learning and Collaboration Between Online and Blended Learner Groups." *Performance Improvement Quarterly* 21 (3): 59-72.
- Lim, D. H., Morris, M. L. and Kupritz, V. W. 2014. "Online Vs. Blended Learning: Differences in Instructional Outcomes and Learner Satisfaction".
- Lodico, M. G., Spaulding, D. T. and Voegtle, K. H. 2010. *Methods in Educational Research: From Theory to Practice*. John Wiley & Sons.
- Mortera-Gutiérrez, F. 2006. "Faculty Best Practices Using Blended Learning in E-Learning and Face-to-Face Instruction." *International Journal on ELearning* 5 (3): 313.
- Mosa, E. 2006. *Puntoedu: A Blended E-Learning Model*.
- Pritchard, A. 2013. *Ways of Learning: Learning Theories and Learning Styles in The Classroom*. New York: Routledge.
- Roscoe, D. D. 2012. "Comparing Student Outcomes in Blended and Face-To-Face Courses." *Journal of Political Science Education*. 8 (1): 1-19.
- Rusman. 2009. *Teknologi Informasi dan Komunikasi Dalam Pembelajaran Pedoman Bagi Guru*. Bandung: Universitas Pendidikan Indonesia.
- Schunk, D. H. 1996. *Learning Theories*. New Jersey: Prentice Hall Inc.
- Singh, Ashutosh Kumar and Yusoff, Mohd Amaluddin and Oo, Naing Win. 2009. *A Comparative Study between Traditional Learning and E-Learning*, in T & L Centre, CSM (ed.), *Teaching and Learning Open Forum 2009, Jul 16 2009*, pp. 1-7. Miri, Sarawak: CSM, Sarawak.
- Sugiyono, D. 2010. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Jakarta: Penerbit Alfabeta.
- Tafiardi. 2005. *Meningkatkan Mutu Pendidikan Melalui E-Learning*.
- Thorne, K. 2003. *Blended Learning: How to Integrate Online & Traditional Learning*. Kogan Page Publishers.
- Tosun, S. 2015. "The Effects of Blended Learning on EFL Students'

Vocabulary Enhancement.” *Procedia-Social and Behavioral Sciences*. 199: 641-647.

Wiryokusumo, I. 2009. *Behaviorisme. Kognivisme. Dan Konstruktivisme: Teori Belajar Dan Implikasinya Terhadap Pembelajaran*.

Ziden, A. A., Ismail, I., Spian, R. And Kumutha, K. 2011. “The Effects of ICT Use in Teaching and Learning on Students’ Achievement in Science Subject in A Primary School in Malaysia.” *Malaysia Journal of Distance Education* 13 (2): 19-32.