Contribution of Blended Learning with Learning Facilities with Improved Learning Achievements through the Motivation of Junior High School Students

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Abstract

This study conducted on junior high school students in the Larompong District of Luwu Regency analyses whether blended learning and learning facilities affect motivation in the Larompong District of Luwu Regency. To study whether blended learning, learning facilities, and motivation affect the learning achievements of junior high school students in Larompong District, Luwu Regency; and to analyze whether blended learning and learning facilities affect learning achievement through motivation. This research approach is quantitative with associative research types or examines causal relationships. This research was carried out at junior high schools in Larompong District, Luwu Regency, namely SATAP Lumaring State Junior High School, Larompong 1St State Junior High School, Rante Alang State Junior High School, Mulya Synergy Pesantren Junior High School, Tahfidz Al-Quran Nurut Tauhid Middle School, and Nur Elhaq Islamic Junior High School, with a total sample of 258 students from 730 students. Sample quantity determination technique with solving technique and sample withdrawal through Nonprobability Sampling technique. Data analysis techniques use path analysis as well as Sobel tests. Based on the study results, it was found that Blended learning and learning facilities had a positive and significant effect on students' learning motivation in junior high school in Larompong District, Luwu Regency. Furthermore, Blended learning, learning facilities, and student motivation in education also have a positive and significant effect on student learning achievement. Blended learning and learning facilities positively and significantly impact learning achievement through encouragement as an intervening variable in students.

Keywords

Blended Learning, Learning Facilities, Learning Motivation, and Learning Achievement.

1. Introduction

One reflection of the success of education can be seen in student learning achievements. In this case, the school as an educational institution must be able to produce outstanding students, where each student's accomplishments can be seen from the student's learning outcomes. Technological advances that several countries can utilize in building better education must also be used by Indonesia so that the national education system will be better and of better quality.

Motivation plays an important role that is a driving factor for students to show better learning achievements. A student who has a high motivation to study will diligently do all the assigned tasks (Cynthia et al., 2016). In addition, student achievement is also influenced by the learning model applied in schools, one of which is the blended learning model. Blended learning involves students in online education outside the classroom in students accessing material delivery. In contrast, at face-to-face meetings, students can ask questions about things that have not been understood during online learning (Ilyas et al., 2022).

On the other hand, the existence of adequate learning facilities in schools also contributes significantly to the improvement of student learning achievement; learning facilities but not maximized properly by teachers and students, in the end, will not have a positive influence on student learning outcomes (Mislia et al., 2021). In their research, (Umar et al., 2019) noted that the motivation of outstanding students who are presented with the Blended Learning learning model is better than students who are given conventional learning models. At the same time, (H Tamsah & Yusriadi, 2022) revealed that learning facilities would significantly affect students' learning motivation. However, there are differences in the research results conducted by (Tamsah et al., 2020). There is no positive and significant relationship between facilities and student learning achievements at SMP Negeri 1 Getasan.

Based on this fact, this study will examine these variables in their effect on children's learning achievements. Therefore, the researcher intends to conduct a study entitled "Contribution of Blended learning and learning facilities in improving learning achievement through motivation in junior high school students in Larompong District, Luwu Regency."

2. Literature Review

Thorne in (Moeliono & Soetoprawiro, 2020) reveals the definition of blended learning as "learning by describing an opportunity that integrates innovation and technological advantages in online learning with the interaction and participation of the advantages of face-to-face learning. (Vintarno et al., 2019) defines blended learning as a constructive approach. Blended learning by constructive approach (BLCA) consists of two terms, namely blended learning (mixed learning) and constructive approach (constructive approach). Some of the experts' definitions give the idea that blended learning combines face-to-face learning with online learning with the help of information and communication technology. Meanwhile, (AS et al., 2021) explains blended learning as learning that combines synchronous and asynchronous learning settings appropriately to achieve learning goals."

The facilities are inseparable from the needs around us; We will always need these facilities to achieve our desired goals. Facilities are an essential means in teaching and learning activities, smoothly or not a learning process, greatly influenced by the completeness of existing facilities (Jr. et al., 2014). This facility directly or indirectly affects the character of a student. According to (Moreno et al., 2021), learning facilities are "the state of the school where learning is located that affects the success rate of learning. Learning facilities are facilities and infrastructure used to support school learning activities to achieve student success rates."

Learning achievement can be interpreted as the level of student linkage in the teaching and learning process because of the evaluation carried out by the teacher. "According to (Arfan et al., 2021), learning achievement is the level of success of students or students in the form of scores obtained from test results regarding a certain number of subject matters. According to the Great Dictionary of Indonesian learning achievements: Mastery of knowledge or skills developed by the subject is usually indicated by teachers' test scores. This opinion is also in line with (Dwiyanti et al., 2021) in (Sakkir et al., 2021), suggesting that learning achievement is a person's assignment of specific knowledge or skills in a subject usually obtained by test scores or numbers given by teachers. "

Some experts express their views on the motivation of learning: (Dharma et al., 2021) stated that motivation could be interpreted as an effort so that someone can finish his work with passion because there are goals to be achieved. According to Yusuf et al., (2021), learning motivation is a psychic driving force from within a person to do learning activities and add skills, experience." (Umar et al., 2021) states that "humans have different motivations depending on the many factors such as personality, ambition, education, and age. Motivation is a change in energy in a person characterized by the onset of affective or feelings and reactions to achieve goals."

Blended learning has a positive and significant effect on the learning motivation of junior high school students in the Larompong District, Luwu Regency; Learning facilities have a positive and significant effect on the learning motivation of junior high school students in the Larompong District, Luwu Regency; Blended learning has a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency; Learning facilities have a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency; Motivation has a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency; Blended learning has a positive and significant effect on learning achievement through motivation as an intervening variable in junior high school students in Larompong District, Luwu Regency; Learning facilities have a positive and significant effect on

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learning achievement through motivation as an intervening variable in junior high school students in Larompong District, Luwu Regency

3. Methods

In this study, researchers used associative research types or causal relationships in which independent variables (affected) and dependent variables (fake) and the presence of intervening variables. This research was carried out at junior high schools in Larompong District, Luwu Regency, namely SATAP Lumaring State Junior High School, Larompong 1St State Junior High School, Rante Alang State Junior High School, Mulya Synergy Pesantren Junior High School, Tahfidz Al-Quran Nurut Tauhid Middle School, and Nur Elhaq Islamic Junior High School. The population in this study is a junior high school in Larompong District, Luwu Regency, which amounts to 730 students. The sample size of respondents using the Slovin formula at the level of error of 5%. So, the total sample is as many as 258 students.

This study's data collection techniques were carried out in two ways, namely through questionnaires and documentation. This study uses the Likert scale (score 1 to 5) to prepare the questionnaire. The data analysis technique used in research is to use path analysis. Furthermore, the research hypothesis test uses a partial *test (t-test)* in this study. According to (Ilyas et al., 2022), "The partial test (t-test) itself is a step to test whether there are hypotheses that can affect or not independent variables to dependent variables. It can be said that the variable has a significant effect if the direction of influence between variables has a considerable value smaller than 0.05 with a confidence level of 95%."

4. Results and Discussion

In the analysis of the path in this study will be obtained structural equations so that there are two regression tests whose results are each shown in the following Table 1.

Coefficients									
	Unstandardized Coefficients		Standardized Coefficients						
Model	В	Std. Error	Beta	t	Sig.				
1 (Constant)	9.520	1.520		6.265	.000				
Blended Learning (X1)	.267	.054	.288	4.919	.000				
Facilities for study (X2)	.245	.055	.261	4.458	.000				

Table 1. Results of the First Equation Path Analysis

Based on these equations, it can be interpreted that: The blended learning variable (X1) coefficient of 0.288 means that if blended learning increases by one unit, learning motivation (Y1) will increase by 0.288 but assuming that other free variables are of fixed or constant value. The variable coefficient value of learning facilities (X2) of 0.261 means that if the learning facility increases by one unit, the motivation of learning (Y1) will increase by 0.261 but assuming that other free variables are fixed or fixed constant values (Table 2).

Table 2. Second Equation Path Analysis Results

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	6.475	1.614		4.011	.000
Blended Learning (X1)	.138	.056	.140	2.459	.015
Facilities for Study (X2)	.162	.056	.163	2.881	.004
Motivation for Study (Y1)	.432	.062	.406	6.984	.000

Based on Table 2. in model II of the analysis of pathways for the influence of blended learning, learning facilities, and learning motivation on the learning achievements of junior high school students in Larompong District, Luwu Regency, shown in the following path equation: Y2 = 0.140X1 + 0.163X2 + 0.406Y1 + e2

Based on these equations, it can be interpreted that: The blended learning variable (X1) coefficient of 0.140 means that if blended learning increases by one unit, learning achievement (Y2) will increase by 0.140 but assuming that other free variables are fixed or constant values; The variable coefficient value of learning facilities (X2) of 0.163 means that if the learning facility increases by one unit, learning achievement (Y2) will increase by 0.163 but assuming that other free variables are fixed or constant values; The value of the learning motivation variable coefficient (X2) of 0.406 means that if the reason for learning increases by one unit, then learning achievement (Y2) will increase by 0.406 but assuming that other free variables are fixed or constant values. Meanwhile, the results of hypothesis testing can be summarized in the following Table 3:

No	Path Influence	Coefficient	Tcount	Sig.	Conclusion
1	Blended Learning => Motivation for Study	0,288	4,919	0,000	Significant
2	Facilities for Study => Motivation for Study	0,261	4,458	0,000	Significant
3	Blended Learning => Learning Outcomes	0,140	2,459	0,015	Significant
4	Facilities for Study => Learning Outcomes	0,163	2,881	0,004	Significant
5	Motivation for Study => Learning Outcomes	0,406	6,984	0,000	Significant
6	Blended Learning => Motivation => Learning Outcomes	0,288 x 0,406 = 0,117	4,135	0,000	Significant
7	Facilities for Study => Motivation for Study => Learning Outcomes	0,261 x 0,406 = 0,106	3,842	0,000	Significant

Table 3. Hypothesis Test Results

This research hypothesis is: Blended learning has a positive and significant effect on the learning motivation of junior high school students in the Larompong District, Luwu Regency. The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. The findings obtained a calculated weight of 4,919 at a significance of 0.000. The value of the importance of the blended learning variable is 0.000 smaller than 0.05 (0,000 < 0.05). And the coefficient of the positive value path is 0.288. The hypothesis is accepted, which means Blended learning has a positive and significant influence on the learning motivation of junior high school students in the Larompong District, Luwu Regency. Researchers have previously acknowledged that blended learning methods will increase students' learning motivation, including (Mislia et al., 2021), who stated in their research that blended learning models promote the cause of student achievement. Better than students who are offered, conventional learning models. Then in a study conducted by (H Tamsah & Yusriadi, 2022), when blended learning is applied in schools, this is proven to increase students' motivation in education, including students who look more excited, pay full attention to the material taught, and seriously in learning. (Hasmin Tamsah et al., 2020) also found that the better the application of Blended Learning, the higher the motivation to learn.

This research hypothesis is learning facilities have a positive and significant effect on the learning motivation of junior high school students in the Larompong District, Luwu Regency. The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. They are guided by the findings of this study which obtained a calculated weight of 4,458 at a significance of 0.000. where the value of the importance of the variable volume of learning facilities of 0.000 is smaller than 0.05 (0,000 < 0.05). And the coefficient of the path is positively valued at 0.261, so the hypothesis is accepted, which means Learning facilities have a positive and significant effect on the learning motivation of junior high school students in the Larompong District, Luwu Regency. Researchers have previously acknowledged that learning facilities will be able to increase students' learning motivation, including (Fatmawati et al., 2021), where the findings prove school facilities have a significant effect on student motivation. It is also supported by (Asfar et al., 2021) that learning facilities consisting of space indicators,

information media, and books significantly affect students' learning motivation. In this case, "Learning facilities make it easier for students to solve problems that arise while studying and understanding the lessons or tasks given by teachers. For example, a student does a task given by the teacher, while the student lacks or does not have a supportive learning facility to do the task, which may hinder the achievement. Conversely, if students have complete learning facilities, then the teacher's tasks can be done well and on time because there is motivation to complete them on time (Nilmawiah et al., 2021)."

This research hypothesis is: Blended learning has a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency. The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. Guided by the findings of this study, a calculated weight of 2,459 was obtained at a significance of 0.015. where the value of the importance of the blended learning variable of 0.015 was smaller than 0.05 (0.015 < 0.05). And the positive value path coefficient of 0.140 so that the hypothesis is accepted, which means blended learning has a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency. Researchers have previously acknowledged that blended learning methods will be able to improve students' learning achievements, including (Saleh et al., 2021), who stated in their research that "Students with high independence, who follow blended learning will always compete to show the best results. It will come down to optimal learning performance." Then, (G. B. Ilyas et al., 2021) revealed that "the achievements of learning mathematics students presented with the Blended learning model have differences with students presented with conventional learning models." Hence, blended learning is one of the determinants of student learning achievement in school.

This research hypothesis is learning facilities have a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency. The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. They are guided by the findings of this study which obtained a calculation value of 2,881 at a significance of 0.004, where the matter of the variable importance of learning facilities of 0.004 is smaller than 0.05 (0.004 < 0.05). And the coefficient of the path is positively valued at 0.163, so the hypothesis is accepted, which means that learning facilities have a positive and significant effect on the learning achievements of junior high school students in Larompong District, Luwu Regency. Researchers have previously acknowledged that learning facilities will be able to improve students' learning achievements, (S. Z. A. B. T. Bin Tahir & Umanailo, 2019). The findings prove that adequate learning facilities are needed to obtain exemplary learning achievements. It can be put to good use in learning by students. Then research by (S. Z. Bin Tahir et al., 2020) found that "learning facilities as one of the external factors that affect students' learning achievement in economics subjects. Learning facilities including complete learning facilities and infrastructure and by the needs of students also contribute to student learning achievements".

This research hypothesis is learning motivation has a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency. The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. They are guided by the findings of this study which obtained a numeracy value of 6,984 at a significance of 0.000. Where the significance value of the learning motivation variable is 0.000 smaller than 0.05 (0.000 < 0.05). And the coefficient of the positive value path is 0.406. The hypothesis is accepted, which means that learning motivation has a positive and significant effect on the learning achievements of junior high school students in the Larompong District, Luwu Regency. Researchers have previously acknowledged that learning motivation will improve students' learning achievement, including (Fatgehipon & Bin-Tahir, 2019) that "learning motivation as one of the factors from within students influences student learning achievement. Students who have high learning motivation are more enthusiastic and diligent in learning, so the learning achievements achieved are also high. Conversely, students whose learning motivation is low are less diligent, and earnest in learning impacts their low learning outcomes" Then, research by (S. Z. Bin Tahir & Rinantanti, 2016) found that learning motivation has a strong relationship or correlation to learning achievement. Hypothesis testing on indirect influence refers to the results of a soil test, as outlined by each of the following Figure 1:

Proceedings of the First Australian International Conference on Industrial Engineering and Operations Management, Sydney, Australia, December 20-22, 2022

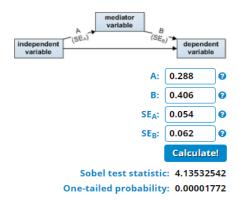


Figure 1. The Influence of Blended Learning on Learning Achievement through Student Learning Motivation

This research hypothesis is: Blended learning has a positive and significant effect on learning achievement through motivation as an intervening variable in junior high school students in Larompong District, Luwu Regency. The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. They are guided by the findings of this study which obtained a calculation value of 4,135 at a significance of 0.000, where the significance value of the blended learning variable of 0.000 is smaller than 0.05 (0.000 < 0.05). And the coefficient of the indirect path is positively valued at 0.117. The hypothesis is accepted, which means Blended learning has a positive and significant effect on learning achievement through motivation as an intervening variable in junior high school students in Larompong District, Luwu Regency. The results of this study have implications for the importance of increasing students' learning motivation, as this can be an alternative to problem-solving in improving students' learning achievement in school. Blended learning methods, in this case, will not only have a direct effect on improving learning achievement but can also be seen in indirect effects through motivation as an intervening variable. The fact in the field can be seen that the cause of students is relatively high in learning is indicated by the increased interest of students always to learn. In addition, most students revealed that they always pay attention to the learning materials delivered by the teacher in the classroom and show reactions (ask the teacher) in the learning process in the school when there is a material that students less understand. Therefore, student learning motivation is important for junior high schools in Larompong District, Luwu Regency, to maximize learning achievements influenced by blended learning methods in the learning process in schools.

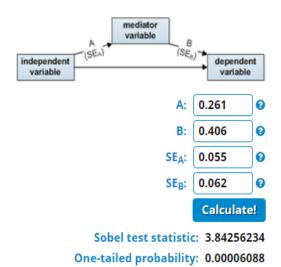


Figure 2. The Influence of Learning Facilities on Learning Achievement through Student Learning Motivation

This research hypothesis is that learning facilities positively and significantly affect learning achievement through motivation as an intervening variable in junior high school students in Larompong District (Figure 2), Luwu Regency.

The hypothesis acceptance criterion is if the influence between variables has a significant value smaller than 0.05 with a confidence level of 95%. They are guided by the findings of this study which obtained a calculation value of 3,842 at a significance of 0.000. where the matter of the variable importance of the learning facility of 0.000 is smaller than 0.05 (0.000 < 0.05). And the coefficient of the indirect path is positively valued at 0.106, so the hypothesis is accepted, which means learning facilities have a positive and significant effect on learning achievement through motivation as an intervening variable in junior high school students in Larompong District, Luwu Regency. The findings of this study have implications that students' learning achievements in schools can be directly influenced by learning facilities and indirectly mediated by high motivation in learning. This learning motivation factor needs to be a concern for the school. Where (A'yun et al., 2017) revealed that "through learning motivation, passion and passion in learning students will be encouraged, as well as the existence of learning facilities that if available completely then the spirit in learning will also arise itself. The existence of good learning facilities in supporting learning activities can foster the motivation for students to learn. Through this learning motivation, students will be more excited in learning so that it will affect good learning achievements as well."

5. Conclusion

Experience in the performance of village midwives has more influence on the variable experience. The indicator of long work (X1.1) is an average of 4.50. The respondents' characteristics found that midwives with a working period of fewer than two years are 19.23%. The frequency of $15 \le 4 \le 6$ years of 33.33% or a frequency of 26, and ≥ 6 years of 47.43% or a frequency of 37. Training on the performance of village midwives has a negligible influence on midwife performance with greater t-count compared to t-table (8,440 \ge 1,995) and P= 0.040 \ge 0.05 with a coefficient value of 0, 312, the coefficient indicates that the better and higher the level of midwife training, the better and higher the resulting performance.

The work environment on the performance of village midwives has a more significant number than the t-table (7699 \geq 1,995) and P = 0.00 \leq 0.05 with a coefficient value of 0.915. The coefficient can show that the more adequate the work environment, the better the midwives' quality and performance results. Dominant variables to midwife performance evidenced by the work environment symbolized as X3 directly impacting midwives showing t-count must have a more significant number than t-table (7699 \geq 1,995) and P = 0.00 \leq 0.05 with a coefficient value of 0.915. The coefficient can show that the more adequate the work environment, the better the midwives' quality and performance results.

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