

Motivation and Learning Achievement of Primary Students in Theme-Based Learning using Blended Learning Model

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Article Info

History Articles

Received:
June 2018
Accepted:
July 2018
Published:
December 2018

Keywords:

*blended learning,
learning motivation,
theme-based learning*

DOI

<https://doi.org/10.15294/jpe.v7i3.24225>

Abstract

The purpose of this research is to improve motivation and learning achievement of students in theme-based learning using blended learning model in primary schools. This type of research is mixed methods, with the design of embedded experimental models. The mixed methods model consist of three phase. They are pre-intervention, during an intervention, and after intervention. Those phase pre-intervention, interviews with the class teacher, surveys, given the motivation questionnaire, and pre-tests. Then the intervention of theme-based learning using a blended learning model, observation for learning. Then the after-intervention, given the post-test, motivation questionnaire and response after learning implementation. To gain the quantitative data to strengthen the quantitative data the student's response, then focus group discussion (FGD) was implemented. Final interpretation of the data based on quantitative and qualitative data. Data were analyzed using the Wilcoxon Rank and triangulated whit the quantitative. The sample of the study was 113. The data collection was conducted by questionnaire, interviews, and documentation. Results of this study was an increase in motivation and learning achievement significantly. This is evident by the analysis of statistical tests obtained an average increase of 56.50 learning motivation and learning achievement at 57.00. Base on the data analysis can be concluded is an improvment increase in motivation and learning achievement of students after following theme-based learning using blended learning. Students were also responding very well to the learning. Thus the theme-based learning using a blended learning model in primary schools are very effective and recommended for in primary schools especially upper-grade students.

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[p-ISSN 2252-6404](#)

[e-ISSN 2502-4515](#)

INTRODUCTION

Motivation to learn in this study is the motivation of students to learn when of theme-based learning using blended learning model. Sardiman (2016) defines motivation as the driving force that has been manifested in the form of behavior. The driving force is contained in a person to perform certain activities so as to achieve a goal (Makawimbang, 2013; Prastowo, 2013; Sumantri, 2016). Motivation is not only important in achieving the goal, but also a very important factor in determining a person's behavior (Hammer, 2011). So motivation is the driving force for a person to perform activities that have a purpose and as a determinant of an individuals behavior.

According to McClelland (198) people has three types of motivation. They are motivation for achievement, for power, and for making friends. McClelland describes the characteristics of a person that shows high achievement motivation, namely: (1) prefer to do a task that has a moderate level of difficulty; (2) desire to be

the best (persistence); (3) like to work with personal responsibility; (4) need feedback; and, (5) creative-innovative in doing a task or job.

Data analysis from the interviews wich have been conducted with the fourth-grade teacher at SDN 1 Kalikoa and SDN 1 Kertawinangun in Cirebon reveals several problems related to the motivation of students. The problem were students who interest in smartphone games, but they were less motivated to learn. It is proved by procrastinate behavior in doing the tasks. While this is their interest in smartphone games have not been directed to learning.

Researchers conducted a survey of media ownership smartphone and internet usage to 59 students SDN 1 Kalikoa. The survey showed that 88% of students are already using a smartphone to access the Internet, it is a potential that can be used by teachers to increase motivation to learn by utilizing their favorite smartphone into learning. The survey results can be seen in Figure 1, below.

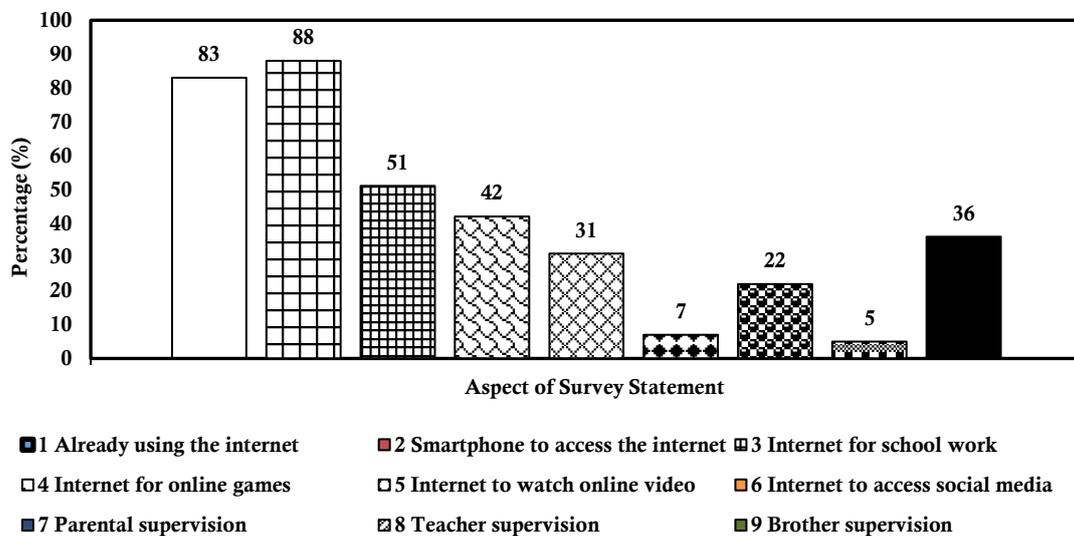


Figure 1. Survey Charts Smartphone Ownership and Use of Internet

Noting the above conditions, the teacher can take the opportunity to access the Internet on their favorite learning activities. Thus, the learning process becomes quality and the quality of education has increased (Isnaeni, et al. 2015). According to Ellianawati, et al. (2012), provide

flexibility to study according to the demand, is able to provide the motivation to learn independently. Pay attention penchant for their students are expected to be interested and interest in learning so that raised their motivation and learning achievement.

To implement the learning by utilizing the Internet, teachers can combine face-to-face learning with e-learning (offline or online). Combine face to face learning with e-learning referred to as blended learning (Dwiyogo, 2016; Thorne, 2003; Wang, et al. 2016), Thus, teachers can integrate theme-based using blended learning model in primary schools.

Research conducted Dwiyogo (2016); Husamah (2014), (2015); Kuswidyanarko, et al. (2017); Latif, et al. (2013); Latifah, et al. (2011); Sjukur (2012); Sulistiani, et al. (2016); Sharif (2012); Wardono, et al. (2015); Yulia (2017) stated motivation and learning achievement of students increased learning blended learning, especially when learning online. Meanwhile, according to Arndt (2016); Bintoro, et al. (2015); Chauhan (2016); Setiawan, et al. (2015); Subali, et al. (2017) argues that learning using interactive digital media effectively to improve learning achievement and motivation of students.

Learning to use e-learning technology is the main attraction for students, and this ensures their increased motivation to learn Alfath, et al. (2013); Safitri, et al. (2014). According to Suhartono (2017) implementation of blended learning has advantages for teachers that is, teachers can create learning activities that are engaging, interactive, diverse and meaningful by utilizing various media. Noting the above results, the researchers decided to use technology such as smartphones and media whit online and offline learning to improve their learning motivation.

METHODS

This type of research is mixed methods, with the design of embedded experimental models.

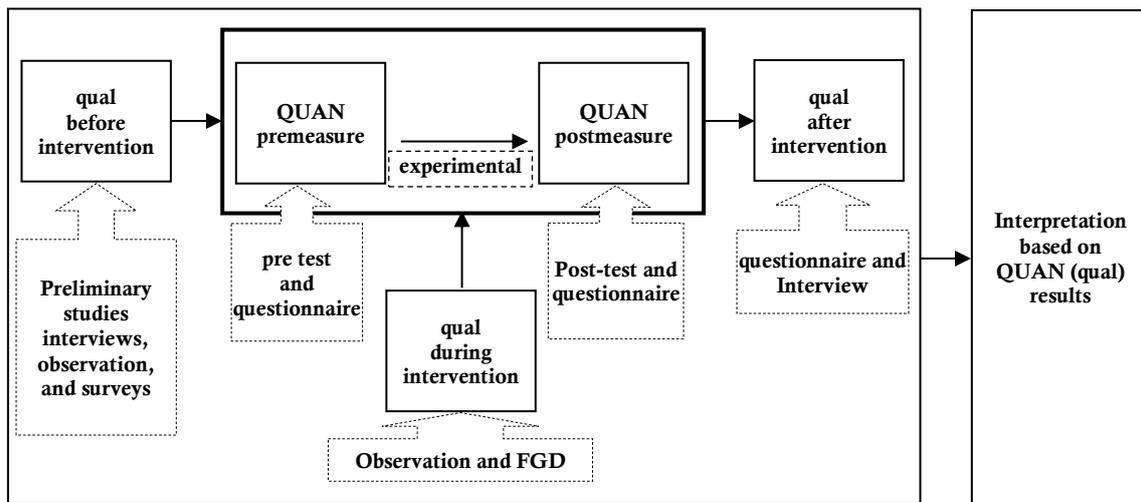


Figure 2. Diagram Embedded Experimental Model (Creswell & Clark, 2007)

The mixed methods model consist of three phase. They are pre-intervention, during an intervention, and after intervention. The phase of pre-intervention, interviews with the class teacher, surveys, given the motivation questionnaire, and pre-tests were conducted to gain qualitative data. The theme-based learning using a blended learning model, observation for learning was implemented to intervene the learning. Then the after-intervention phase, the

students were given the post-test, motivation questionnaire and response after learning implementation. To gain the quantitative data as well as to strengthen the quantitative data from the student's response, then focus group discussion (FGD) was implemented. Final interpretation of the data based on quantitative and qualitative data. Data were analyzed using the Wilcoxon Rank and triangulated whit the quantitative.

The variables in this study consisted of independent variables that theme-based learning using blended learning, and the dependent variable is a motivation and achievement of students. The population in this study are all the fourth grade of primary school in Cirebon, namely research samples of students fourth-grade SDN 1 Kalikoa and SDN 1 Kertawinangun. The sample selection was done by using purposive sampling with particular considerations. The sample of the study was 113 students.

Research procedure includes three stages namely: planning, implementation, and the inference. The hypothesis of this study is the increased motivation and achievement of students after learning of theme-based learning using blended learning. The data collection technique using the questionnaire, survey sheets, sheet questionnaires, sheet motivation questionnaire, observation sheets, focus group discussion (FGD) comsation guides with students and learning implementation response questionnaire sheet. Indicators used learning motivation is based on the theory McClelland motivation consists of five indicators developed into 20 statement. To get the response data of learners towards theme-based learning using blended learning model researchers used indicator of the success of blended learning by Dwiyogo (2016), among others of which is a blended learning can increase the motivation and achievement to learn.

Data analysis technique used is the technique of quantitative and qualitative analysis. Quantitative data analysis techniques include the validity of the test is given by formula Product Moment correlation, reliability testing is measured by using the formula Alpha Crombach and Wilcoxon Rank. Qualitative data analysis techniques include data reduction, data presentation, drawing conclusions, and verification. Reduction of data obtained from interviews, questionnaires, documentation is reduced by way of summarizing, selecting, and focus on the data in accordance with the purpose of research. Presentation of data is done after the data was reduced. Data obtained from interviews, questionnaires, documentation is presented in the

form of notes, narrative descriptions, tables, charts, graphs, flowcharts, and so forth. Data that has been reduced and the present, the researchers then used to make conclusions.

RESULTS AND DISCUSSION

Motivation of Students

Data analysis on the learning motivation aspects of students through thematic learning based on blended learning models was done using statistical tests. But, based on the pre-requisite test obtained information that the resulting data is not normally distributed; therefore the statistical test used is non-parametric of Wilcoxon Rank test.

Wilcoxon Rank test results have Asymp. Sig. (2-tailed) is 0.000 which means that less than the critical limit of the research is 0.05, then H_a is accepted. This means that there is a difference between initial motivation and final motivation. The difference in positive ranks shows the final motivation score is greater than the initial motivation score with Sum of Rank 6328.00 and Mean Rank 56.50. From the data analysis, it can be concluded that there has been an improvement in students' learning motivation after applying thematic learning based on a blended learning model.

Table 1. Average Score of Final Questionnaire on Motivation

	N	Min	Max	Mean	Std. deviation
Score	113	63	100	85.48	8.841
Valid N (listwise)	113				

Based on Table 1, the average gain score of 85.48 is higher than 81.25. This shows that the learning motivation of students on average is in the very high motivation category.

The results of data analysis in Figure 3 show an increase in all indicators, especially in the fifth indicator, an increase of 25%. The fifth indicator is a creative-innovative statement in performing a task or job. This fact shows an increase in creativity and innovative students especially in terms of Internet usage or online learning. Based on these data it can be concluded that there is an increase in learning motivation of

students after following thematic learning based on blended learning models, especially those that occur during online learning.

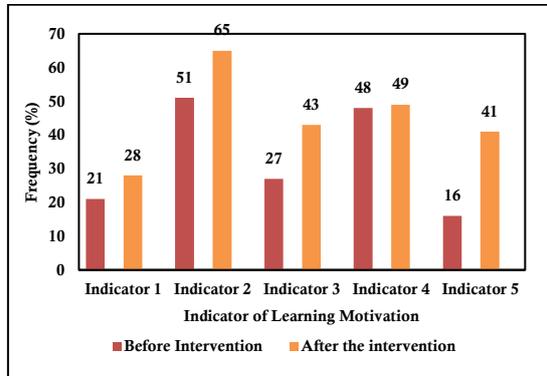


Figure 3. Response Graph Strongly Agree from Students

Student Learning Outcomes

The data analysis of pre-test and post-test of learners in theme-based learning using blended learning model is done by using statistical test. Based on the pre-requisite test the data obtained showed no normal distribution, and then the statistical test used is non parametric test Wilcoxon Rank.

The results of this test show Asymp. Sig. (2-tailed) that is 0.000 lower than the critical limits of the research is 0.05, and then Ha is accepted. This means there is a difference between pre test and post test. Positive Ranks shows pre test value greater than post test value with Sum of Rank 6441.00 and Mean Rank 57.00. From this analysis data can be concluded the happening of the improvement of student learning outcomes after obtaining theme-based learning using blended learning model.

The results of data analysis based on process assessment are presented in Figure 4 and Figure 5.

Figure 4 shows the lowest average score found in the SBdP subject material of 70.22; while the highest value is found in the Social Studies subject matter which is 83.86. Overall, the average score of the class obtained 76.33 or greater than the standard minimum score of completeness of 63.

Based on the data in Figure 5, it is found that the lowest value is in the subject of science

lesson that is 80.92; while the highest value is in the subject matter of citizenship is 88.60. Overall it is seen that the value on the psychomotor aspect was obtained on average 85.19 which exceeded the minimum completeness criterion that is 63.

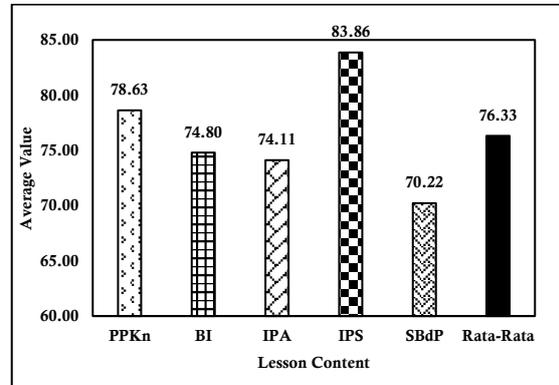


Figure 4. Average Score of Cognitive Aspect

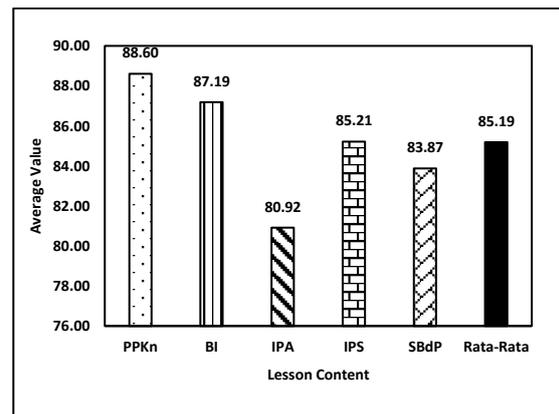


Figure 5. Average Score of Psychomotor Aspect

Based on the data analysis, it can be concluded that there has been a significant increase in cognitive and psychomotor domains which means that there is an increase in learning outcomes of students after experiencing thematic learning based on blended learning.

Student Response on Theme-Based Learning using Blended Learning Model

Student responses on thematic learning based on blended learning model as a whole are positive. This can be seen from the student's response questionnaire data supported by the results of observational data analysis and FGD activities. The following response data are presented in Figures 6 and 7.

Figure 6, shows the response of students who are very satisfied with learning reaches 65.49% percentage. Figure 7, obtained 65% of students respond to the second indicator. This means learners judge that the thematic learning based on the blended learning model can improve their learning motivation. Furthermore, there were 83% of students who responded positively to the seventh indicator. This means that students judged that the theme-based learning using blended learning model can improve their learning outcomes. There are 67% of students who rated that the learning was easy to apply.

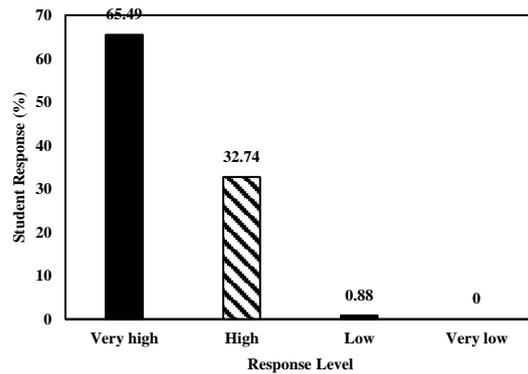


Figure 6. Graph of Student's Response

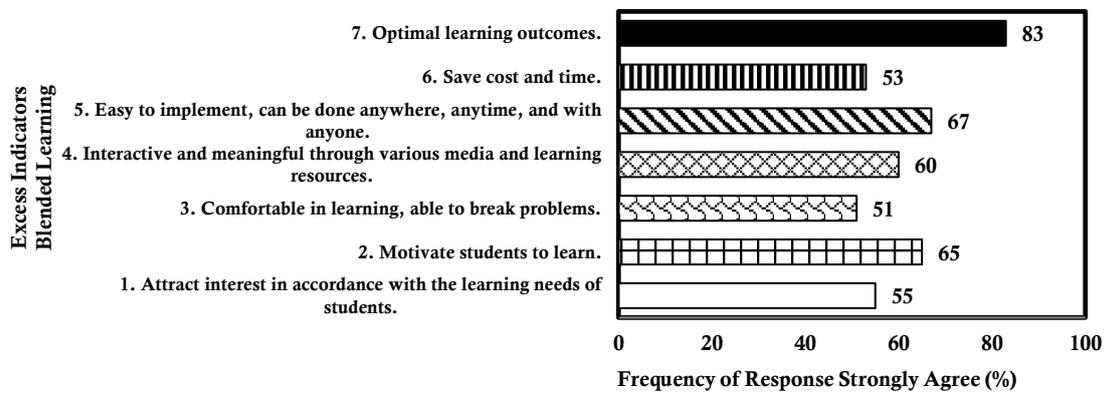


Figure 7. Graph of Students' Response of Strongly Agree

The information data in the FGD supports this acquisition that they are interested in online learning while using interactive media and video-learning activities. Based on the results of the data analysis, it can be concluded that students respond very well to thematic learning based on blended learning model in primary school.

CONCLUSION

Based on the results of research and discussion that has been presented it can be concluded that there is an increase in motivation and learning outcomes of students after experiencing thematic learning based on blended learning model.

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