Correlation Motivation and Learning Outcomes on Application Simas Eric

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Abstract. The purpose of this study was to determine the correlation between motivation and learning outcomes of students in the application of Simas Eric. The method used is a correlational study. There were 30 respondents in class XI MIA MAN 1 Pekanbaru who participated in this study. The research data obtained directly from the sample using questionnaires and cognitive ability test instrument. Data analysis was performed using SPSS 16.0. The findings indicate that students have the motivation and learning outcomes are high on the application of Simas Eric. This indicates a positive and significant correlation between motivation and learning outcomes of students in the application of Simas Eric.

Keyword Motivation, Learning Outcomes, Simas Eric

1. Introduction

The success of a country comes from the quality of human resources and high berintelektual. All that can be realized with a quality education. UNESCO confirms that "*education is a key to social, economic, and environment development, and is Also a key in the creation of learning societies and Achieving a sustainable future*" (Chen, Nasongkhla, & Donaldson, 2015).

Educational success is determined from learning, learning outcomes required to increase student motivation. Student motivation arises independently or controlled. Students independently motivated to engage in learning, learning behavior there by choice or volition students themselves. Instead, the student's motivation arising from controlled, behavioral study is largely driven by feelings of depression that can come from the students themselves in the form of feelings of shame, pride, guilt, or external pressure such as hope, reward and punishment (Gert Vanthournout, et al, 2012).

There was a decline in the student's motivation to learn. According to the theory SEF (Stage Enviroment Fit), decreased motivation as a result of a mismatch between the teens to develop the needs and opportunities presented by the school environment (Vsvolod Scherrer and Franzis Preckel, 2018). On this occasion Law No. 20 of 2003 concerning National Education System states that early age education is an effort to guide children from birth to six years old through the provision of educational stimuli in order to help growth, physical and spiritual development; therefore children have readiness to enter further education (Chairilsyah et al., 2019).

Ericka Darmawan, et al (2017), Motivation to learn is intrinsic motivating factor that becomes an engine for a person to continue learning.Motivation is found in the ideals or aspirations of learners. Ideals or aspirations is expected that the students can learn and understand the purpose of learning and be able to self-actualize themselves (Risa Triarisanti and Pupung Purnawarman, 2019). (Hadriana, 2019) The teacher can provide services to students without having face to face meeting. In addition, teachers and students can obtain information or learning materials from various sources of cyberspace

with the help of computers or the internet. Furthermore, teachers and students can search, explore, analyze, and exchange information effectively and efficiently.

Asifa Rehman and Kamal Haider (2013), states that improved student learning outcomes by motivating them. In Triarisanti Risa research and Pupung Purnawarman (2019), stating that the intrinsic factors (interest, motivation, and confidence) and ekstrensik factors (teachers, curriculum) affect learning outcomes. (Yenita, 2019) By using computer-based learning media students directly interact with the computer individually, so that what particular students experience will be different from what is experienced by other students. This ability will accommodate students with the heterogeneous ability to learn in a different climate of effective learning which is individualized by computer-based learning media.

In research Arsad Bahri and Aloysius Duran Corebima (2015) states that students who have the motivation to learn will heed the lessons, reading the material so they are biased to understand the content and use different learning strategies are supported. In addition, students will also be involved in learning, curiosity, finding relevant sources to discuss a particular topic, and accomplish a given task. (Sakinah, 2019) Joblessness does not only occur in high school graduates or below but also occurs in tertiary education graduates. Even though, many scholars in Indonesia should be able to reduce unemployment, considering that the students ought to have more skills after graduating from college. It should have been able to create employment for jobless.

In research Zimmerman (in Charles Gbollie and Harriett Pearl Keamu, 2017) emphasizes that there is a need to understand the evolving pedagogical way students develop the ability and motivation to manage their own learning. Zimmerman believes that when students monitor their response and associate the results with their strategies, teaching them to be independent, and they showed increased self-efficacy, greater intrinsic motivation and academic achievement is higher.

Gasco et al. (2014), motivation plays an important role in learning because it explains the academic performance. The nature of motivation and use learning strategies in the classroom to be important in improving student learning outcomes. Therefore, teachers must be creative to determine the model of learning can increase students' motivation to increase maximum learning results can be achieved. (Diarni, 2018) Learning achievement is always associated with student learning outcomes. Learning achievement is a benchmark to know the success of students in the learning process at a certain time and expressed in the form of value. Students who have high learning achievement can be said that he has succeeded in learning. Learning achievement is a blend of ability, soft skills, interests, talents, facilities, motivation, the ability of educators, attention, study habits, and also learning environment are interconnected and affect the pattern behavior of every student.

Ericka Darmawan, et al (2018) stated that the implementation of Curriculum 2013, which centered on the students (student centered) and positioned students as subjects of active learning, students are required to be independent. One alternative solution by applying the model Simas Eric, is a model that helps teachers to train students to learn planning, monitoring the learning process, and evaluate learning outcomes. In the application of the model Simas Eric students working together in small groups to understand and solve the problems and opportunities for students to engage in dialogue.

Simas Eric is an innovative learning that emphasizes student centered learning through fun learning activities. The focus of Simas Eric lies in the concepts and core principles of a discipline of study, involving learners in problem solving tasks and activities meaningful to another, allowing learners to work autonomously to construct their own knowledge. This model is able to discipline students in reading and understanding the material to be taught, so that the learning model that has been designed for learning activities can be accomplished (Ericka Darmawan, et al, 2015).

Simas Eric included in cooperative learning model that enables students to communicate in groups. Communicating about the problems associated learning materials allow the process of self-regulation to prepare students understand a subject.

Phase model of Simas Eric namely *Skimming* (quick review of material), *Mind mapping* (create mind maps), *Questioning* (asking high-level questions (*why* and *how*)), *Exploring* (examining these issues to answer questions), *Writing* (write answer a quick question), and *communicating* (communicate collaboratively on mindmap results, questions and answers) (Ericka Darmawan, et al, 2016).

2. Methodology

This study uses a correlational. Correlation is defined as a relationship between two or more variables. The independent variables (X) in this research is the students' motivation on the application of Simas Eric, while student learning outcomes in the application of Simas Eric is the dependent variable (Y). Design This study design is shown in Figure 1

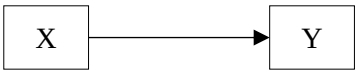

Figure 1. Study design

This study was conducted in MAN 1 Pekanbaru with a sample of 30 respondents use application Simas Eric. The calculation of the data in the study used statistical analysis to determine the correlation motivation and learning outcomes on the application of Simas Eric. Instrument used in data collection was a questionnaire to measure student motivation and tests to assess student learning outcomes in the application of Simas Eric. This instrument consists of 36 items 11-item questionnaire motivation and cognitive sciences.

3. Result and Discussion

The collected data were analyzed descriptively to two domains of learning; learning motivation and learning outcomes in the application of Simas Eric. Descriptive analysis for the two domains of learning shown in Table 1.

Table 1. Descriptive analysis of motivation and results student learning

Descriptive product	Motivation Learning (ML)	Learning Outcomes (LO)
Jumalah Sample (N)	30	30
The average score ()$\overline{X}$	3.2	79.9
The correlation coefficient (r)	0.68	0.68
coefficient of determination (R / r 2)	46%	46%
Regression coefficient	+20.584	+20.584
Significance	4.8	4.8

Table 1 shows that the average score of student motivation on the application of Simas Eric categorized as high ($\bar{X}$= 3.2). Meanwhile, the data of student learning outcomes have the same tendency with the data on the application of student motivation Simas Eric. Based on the average value of student learning outcomes ($\bar{X}$=79.9), learning outcomes are in the high category.

Comparison of the average value for the two spheres of learning in this study; motivation to learn (ML) and learning outcomes (LO) on the application of Simas Eric can be seen in Figure 2.

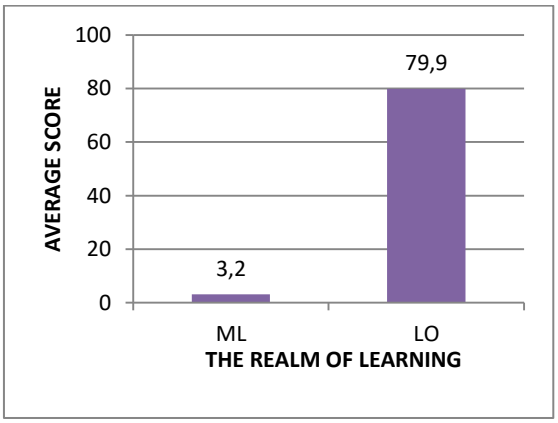

Figure 2. Average score of motivation and results student learning

A bar graph in Figure 2 shows the students have a good motivation with categories that affect student learning outcomes also shows that student learning outcomes at the high category.

Techniques to determine the correlation of motivation and student learning outcomes in the application of Simas Eric using product moment correlation technique. In this study, the variable is motivation (X) and student learning outcomes (Y). The correlation coefficient is a number that indicates the level of correlation between the independent variables (independent) and dependent variable (dependent). The correlation coefficient was calculated using the formula Pearson Product Moment.

From the analysis, the correlation coefficient between motivation and learning outcomes of students in the application of Eric Simas at 0.68, meaning that the correlation between the two variables have a strong relationship. This indicates a positive correlation between motivation and learning outcomes of students in the application of Simas Eric.

The coefficient of determination was 46%, the contribution of motivation variable influence on student learning outcomes in the application of Simas Eric by 46%. For global warming material using Simas Eric more effective and enjoyable. This means that 54% of student learning outcomes on global warming material is determined by other factors not measured in the study.

From regression analysis, obtained by linear regression defined in equation (1).

y = 13.379 + 20.584 x ..... (1)

a = 13.379 meaningful if motivation score is ignored, then the learning outcomes of students at 13.379 and b = 20.584 motivation increases significantly if score one point, then the learning outcomes of students will be increased by 20.584 as shown in Figure 3.

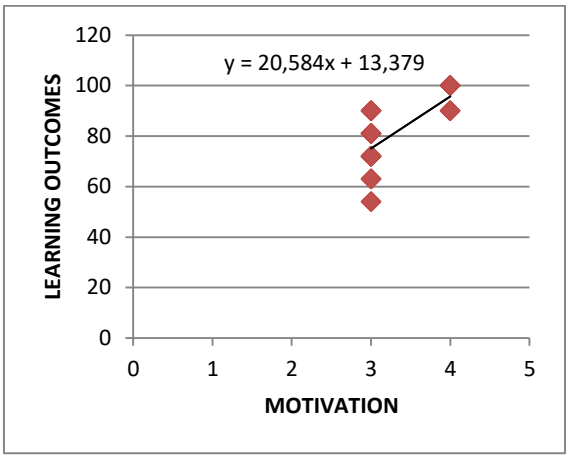

Figure 3. Increased motivation and results Students learn

Results of the analysis showed that the regression coefficient is positive, it means there is a positive correlation between motivation and learning outcomes of students in the application of Simas Eric. Increasing motivation then increasing student learning outcomes in the application of Simas Eric. Thus, the regression equation shows the motivation has a positive influence with student learning outcomes in the application of Simas Eric.

Motivation regression coefficient value of 20.584, which means that any increase in motivation by 1 unit will improve student learning outcomes in the application of Simas Eric at 20.584. The regression coefficient of X by +20.584 states that each additional motivation will improve student learning outcomes in the application of Simas Eric.

Based on the results of the significance test calculations showed that the t value variable students' motivation by 4.8 while the value of t table at a significance level of 10% is 1.313. Because the value of t arithmetic ≥ t table (1,313 ≥ 4.8), then there is a significant correlation between motivation and learning outcomes of students in the application of Simas Eric.

4. Conclusion

This study shows that the positive and significant correlation between motivation and student learning outcomes in the application of Simas Eric.

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