ABSTRACT

His research was based on the background of 21st century skills, namely regarding students' critical thinking skills. The learning approach used in this study used the Guided Inquiry Laboratory model based on Blended Learning as a step to improve critical thinking skills. 21st Century skills were not yet fully applied in schools, and science literacy skills were still low in Indonesia. This study aims to determine whether the Guided Inquiry Laboratory model based on Blended Learning can improve students' critical thinking skills on Transport Membrane material in Pasundan 1 Cimahi High School. This study used a Pre-Experimental method. Data from this study were obtained with Pretest and Posttest and student questionnaire responses and observations of the implementation of the Guided Inquiry Laboratory model based on Blended Learning by teachers and students. The instruments in this study were 12 essay questions. The data from this study were then analyzed using the SPSS software application version 20.0 for windows through the normality test with the Shapiro-Wilk statistical test, then homogeneity testing was performed with the Levene test after which the hypothesis test was tested using paired sample t test. Based on the analysis of hypothetical data from the pretest and posttest using paired sample t test values obtained 0.000 in other words less than 0.05 which means that $H_1$ was accepted. This shows that the implementation of learning using the Guided Inquiry Laboratory model based on Blended Learning can improve students' critical thinking skills. Critical thinking skills of students from the results of the posttest also increased, this is indicated by the average N-Gain included in the medium category with a percentage of 0.59. The results of the questionnaire responses of students to learning using the Guided Inquiry Laboratory model based on Blended Learning get responses in both categories with an average percentage of 74%. So that the implementation of the Guided Inquiry Laboratory model based on Blended Learning can be considered for used in the learning process at school.

Keywords: Critical Thinking, Guided Inquiry Laboratory, Blended Learning, Membrane Transport.