

## **ABSTRACT**

**Siti Fatimah. 2020. Remind Ability to Think Critically through the Application of Blended Learning in the Framework of Tpack in the Immune System Material. Supervised by Dr. Carton, M.Pd., M.T. and Drs. Nia Nurdiani, M.Si.**

Based on the objectives in this study, namely to measure the critical thinking skills of students on the subject of the immune system in learning using the blended learning method as a component of TPACK. Critical thinking is one of the development of abilities in the cognitive domain of students, the attitude of wanting to think carefully, logically, and thoroughly on a problem that is being explained in learning. This study used a Pre-Experimental method and the design used was the One Group Pretest-Posttest Design. The population that will be observed is class XI MIPA 4 in SMAN 12 Bandung, amounting to 36 students. The type of test instrument used in this study was 25 multiple choice questions in the form of pretest and posttest, while the non-test data used a questionnaire response to blended learning within the TPACK framework. Based on research data before the learning process through the pretest value, the critical thinking ability is still low with an average of 45.56, the low score is 16 and the highest score is 60. While after being given treatment, the learning outcomes of students increase can be seen from the posttest result data, namely shows an average value of 88.78 with the lowest value of 36 and the highest value of 100. The results of calculations and statistical analysis show that Gain or a very significant increase ( $\alpha = 0.05$ ) with an average gain of 43.22 and category N-Gain with the number of students as many as 36 people, consisting of 24 students (36.6%) experienced an increase with high criteria, 11 students (30.5%) with moderate criteria, and 1 student (2.7%) with low criteria. In addition, the highest criteria are with an N-gain value of 1.00 and the lowest N-gain value of 0.11. The results of the student response questionnaire obtained a positive average of 82.78% and a negative average of 17.22%, this indicates that the application of the blended learning method within the TPACK framework can improve the results of critical thinking skills and student learning outcomes.

**Keywords: Critical thinking, Students, Blended Learning, Immune System**

