## **ABSTRACT**

Jessika Maria Simanjuntak, IDN 4203141033. (2024). The Effect of Problem Based Learning Dalihan Na Tolu Model on Students' Collaboration and Critical Thinking on Excretory System Topic In SMA Negeri 1 Panombean Panei.

This study aims to determine the effect of Dalihan Na Tolu Problem Based Learning Model on collaboration skills and critical thinking skills on excretory system material in class XI SMA Negeri 1 Panombean Panei. This research method uses quasi experiment with pretest and postest control group design. The instrument used to see critical thinking skills is an essay test consisting of 10 questions and collaboration skills using an observation sheet. Data were analyzed by normality test, homogeneity test, and hypothesis test (t-test). Based on the results of the research on collaboration skills, the t-test results obtained a significance value of 0.001. The significance value of 0.001 <0.05 then Ha is accepted. Based on the results of research on critical thinking skills, the t test significance value is 0.020 or smaller than 0.05, so Ha is accepted. Thus there is a significant influence between the problembased learning model dalihan na tolu on collaboration skills and critical thinking skills of class XI students of SMA Negeri 1 Panombean Panei.

Keywords: Problem Based Learning Dalihan Natolu, Collaboration, Critical Thinking, Excretory System

