

## **ABSTRACT**

**JUWITA KURNIA RAHAYU. 2023. THE INFLUENCE OF COGGLE-ASSISTED PROBLEM BASED LEARNING MODELS ON STUDENTS' PROBLEM SOLVING ABILITIES AND COLLABORATION ABILITY ON VIRUS MATERIAL.** (Experimental Study in Class X MIPA SMA Negeri 1 Cihaurbeuti Academic Year 2023/2024). Department of Biology Education, Faculty of Teacher Training and Education, Siliwangi University, Tasikmalaya.

*The aim of this research is to determine the effect of the Coggle-assisted problem based learning (PBL) model on the problem solving and collaboration abilities of virus material students in class X MIPA SMA N 1 Cihaurbeuti. This research was carried out in October 2023. The research method used was quasi-experimental with a non-equivalent posttest only control group design. The population in this study was all class X MIPA with a total of 248 students. The samples used were class X MIPA 1 as the control class and class X MIPA 3 as the experimental class with a total of 36 students each. The instruments used consist of a validated problem-solving ability instrument with 7 questions and a CSAT (Colaboration Self Assessment Tool) questionnaire instrument with 11 indicators. The data analysis technique used is ANCOVA test. Based on the research results, it can be concluded that there is an influence of using the Coggle-assisted problem based learning model on students' problem solving abilities with a significance of 0.000 and on collaboration abilities with a significance value of 0.019. Simultaneously, Coggle-assisted problem based learning influences students' problem solving and collaboration abilities with a significance value of 0.000.*

**Keywords: Problem Based Learning; Coggle; Problem solving skill; Collaboration Capabilities.**