

## **ABSTRACT**

**Hilma Dewi Rustiwa 2023. *Implementation of the Ethno-edugames (fortification) application to improve the mastery of concepts of Biology. Supervisor I : Dr. Iwan Setia Kurniawan, M.Pd. Supervisor II : Dr. Riandi, M.Si.***

*Mastery of concepts can strengthen intellectual abilities and help students solve problems and lead to meaningful learning. Local wisdom has the potential to develop in various fields, especially in the field of education. Local wisdom is a characteristic of the region which is full of culture and characteristics of daily community life. Indonesia has a wealth of different local cultures in each region. The specific purpose of this study is to determine the results of the implementation of the Ethno-edugames (fortification) application to improve mastery of the concepts of high school students. The research method used is quasi-experimental with non-equivalent control group design. This research was conducted at biology using experimental classes and control classes, each class totaling 30 students. With data collection techniques using pretest and posttest as many as 25 questions and questionnaires to support data. The results of the research obtained are the implementation of ethno-edugames (fortification) applications in the learning activities of grade X students ecosystem material can increase students' mastery of concepts, with the results of calculating N-gain in the experimental class with an average of 0.72 with the high category, while the control class with an average of 0.53 with the medium category. Based on the results of the t test conducted with the help of SPSS 25 obtained Sig (2-tailed) results of  $0.047 < 0.05$ ,  $H_a$  was accepted. The results of student responses to the ethno-edugames application (fortification) received a positive response because it reached a percentage with a very good category.*

**Keywords :** *Mastery of concepts, local wisdom, ethno-edugames application (fortification), pretest, posttest.*