ABSTRACT

Raden Ainan Nabila, 2019 **IMPROVEMENT OF HIGH SCHOOL STUDENTS COGNITIVE SYSTEM IN BIODIVERSITY SUBJECT USING SPIDER WEBBED LEARNING.** First mentor: Dr. H. Uus Toharudin, M.Pd. and Second mentor: Dr. rer. nat. Adi Rahmat, M. Si.

The purpose of this research is to find out whether Spider Webbed Learning can improve the cognitive system of high school students on biodiversity subject. The subjects in this study were 22 students of Class X MIPA in National High School Bandung. The method used in this research is pre-experimental with one group pretest-posttest design. The parameter measured in this study is the achievement of student's cognitive systems. The instrument used in the study was in the form of multiple choice questions and essays with 32 questions consisting of 23 multiple choice questions and 9 essay questions. As a result of this study N-Gain, students cognitive systems are all already having high criteria; however, if seen, the average acquisition of N-Gain is best at the Comprehension level of 0.78, then Analyzing with an average of 0.77, then Knowledge Utilization with an average of 0.74, and the last Retrieval with an average of 0.72. This shows that the application of Spider Webbed Learning has succeeded in increasing the ability of High Order Thinking Skills (HOTS) high school students.

Key Word: Cognitive System, Spider Webbed Learning