ABSTRACT

Gina Silviana. 2016. Application of Explicit Instruction Model to Improve Generic Science Skills of Students on Biosafety Concept. Under guidance of Prof. Dr. H. Toto Sutarto Gani Utari, M. Pd., as first supervisor and Cita Tresnawati, S. Pd., M. Pd., as second supervisor.

This research entitled "Application of Explicit Instruction Model to Improve Generic Science Skills of Students on Biosafety Concept" which aims to determine the increasing in generic science skills of students on the biosafety concept using Explicit Instruction model. Method used in this research is Pre-Experimental Designs method with One-group pretest-posttest design research. Population of this research are high school students of X MIIA class in Kartika Bandung XIX-1 and sample is one class which is determined by Purposive Sampling technique. Instruments used in this research is multiple choice questions, observation sheets and performance assessment sheets. Generic science skills in this research include three indicators: direct observation, symbolic language and logical inference. From N-gain research results obtained is showed an increasing in generic science skills of students at 0.75 with high category increasing. Further hypothesis test by using t test obtained significant results for $t_{count} > t_{table}$, ie 39.935> 2.017. The result of observation sheet showed positive attitude towards learning that has been done for 82.22% of students scored affective A and 17.78% other students scored affective B. Performance assessment sheet results showed 86.67% of students get grades psychomotor A and 13.33% get B. This results show that the steps in learning of Explicit Instruction can improve generic science skills of students especially on biosafety concept.

Keywords: Explicit Instruction learning model, generic science skills, Biosafety.