

DEVELOPMENT OF LEARNING SCIENCE USING WEBBED MODEL BASED ON LOCAL POTENTIAL “PULAU KEMBANG” WITH DISCOVERY LEARNING MODEL TO IMPROVE ECOLOGICAL LITERACY AND SCIENTIFIC ATTITUDE

by Insih Wilujeng dan Desy Purwasih

ABSTRACT

Learning instructional plays an essential role in achieving learning objectives and preparing students when they return to society. Therefore, it is necessary to develop integrated science learning tools by integrating local potential. In addition, learning needs to use an appropriate learning model to improve students' competence, whether cognitive, affective or psychomotor. The study aim to (1) produce the science learning instructional integrated webbed model based on local potential “Pulau Kembang” that feasibility for use, (2) produce the science learning instructional integrated webbed model based on local potential “Pulau Kembang” that practicality for use, (3) produce the science learning instructional integrated webbed model based on local potential “Pulau Kembang” that effective to use enhance ecological literacy and scientific attitude.

The research is a Research and Development (R&D) using the Borg and Gall development stage which consists of 10 stages. The development stage starts from (1) research and information collection, (2) planning, (3) develop preliminary form of product, (4) preliminary field testing, (5) main product revision, (6) main field testing, (7) operational product revision, (8) operational field testing, (9) final product revision, and (10) dissemination and implementation of field testing, final product revision, and dissemination and implementation. The feasibility test was carried out by four lecturers and one practice science teacher. The research was conducted at Public Junior High School 1 Banjarmasin. The subject of the limited trial was class VII H with a one group pretestposttest design. The field trial subjects were class VII G as control class, VII F as experimental class 1 and VII D as experimental class 2 with a pretest-posttest control group design. The instruments used in data collection were product validation sheets, Ecological Literacy test questions and scientific attitude questionnaires. The feasibility and practicality data analysis was carried out using the Rasch Model program. The results of the product effectiveness test from Ecological Literacy data and scientific attitude questionnaires were analyzed using the MANOVA test.

The results showed that the webbed integrated science learning model based on the local potential of Kembang Island was feasible constructively and empirically to improve the ability of Ecological Literacy and scientific attitudes of students. The webbed integrated science learning device model based on the local potential of Kembang Island with the Discovery Learning model to improve the ability of Ecological Literacy and practical scientific attitude is used in learning. The webbed integration model of science learning tools based on the local potential of Kembang Island with the Discovery Learning model is effective for increasing the ability of Ecological Literacy but not effective for increasing the ability of Scientific Attitudes. The results of the research carried out are then disseminated by way of publication in national journals, international journals, conference proceedings, and published books with ISBN.

Kata Kunci: *Ecological Literacy, Scientific Attitude, Science Learning Instructional, Webbed Model, Discovery Learning, Local Potential*