

Reconstruction of Learning Tools Through the Integration of Local Wisdom to Optimize Literacy of Junior High School Students as Embodiments of Cultural Character in Science Learning

by Purwanti Widhy HAtsuti, Wita Setianingsih, Putri Anjarsari

ABSTRACT

Local wisdom in Yogyakarta is very diverse, it is to be integrated in the science learning process to develop the scientific literacy, which needed in 21st century learning. This research is to produce learning tools based on local wisdom to enhance the students' scientific literacy. This study used the Plomp's Model with several phases namely 1) analysis, 2) Design, 3) Development, 4) Evaluation and 5) Implementation. The instruments used in this research were validation questionnaire of product and instrument for measure of scientific literacy. The result showed that (1) identification local wisdom in Yogyakarta which used in science learning and accordance with topic environmental pollution was utilizing waste batik as a result of the process of making batik in Yogyakarta, (2) learning toolkit based local wisdom have been produced namely lesson plans and students' worksheet with excellent category of both, and (3) integrating local wisdom in science learning that was develop scientific literacy in very good category. It indicates that learning tools based on local wisdom was effective to use in science learning to develop scientific literacy.

Kata Kunci: local wisdom. integrated, science literacy