Development of Science Learning Devices oriented Pedagogy for Sustainability to Grow Enviromental Literacy of Junior High School Students in Forming Caring Attitudes to the Environment.

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ABSTRACT

Attitudes and actions toward environmental literacy can be instilled through the development of learning that it focused in pedagogy for sustainability. This learning emphasizes information seeking, digging, discussing, investigating, planning actions that are beneficial to the environment and not negatively affecting in future generations.

The long-term goal of this research is the growing and habituation of caring environmental characters that grow through pedagogy for sustainability. The objectives of this research are 1) to find the characteristic of pedagogy for sustainability learning devicethat developed to cultivate environmental literacy; 2) to produce pedagogy for sustainability planning that has been validated and qualified to be tested in school. This researchused Research and Development model that is developed by Borg and Gall model (1983: 775). Data collection techniques thatused in this study were assessment of pedagogy for sustainability learning device products instruments (lesson plan, worksheet, media), environmental literacy observation, environmental literacy test and questionnaire to find attitudes in environmental literacy. The data were be analyzed descriptively qualitative and quantitative.

This research succeeded in developing science learning device based on pedagogy for sustainability that has been validated by experts with very good category. The developed learning devices have characteristics that have pedagogy for sustainability and the potential to cultivate environmental literacy. The pedagogy for sustainability components in learning tools are: (1) system thinking and understanding of interconnectedness, (2) longterm, foresighted reasoning, and strategizing, (3) stakeholder engangement and group collaboration, (4) action orientation and change- agent skills.

Keywords: learning devices of science, pedagogy for sustainability, environmental literacy