

Active Learning Based on Science Experiments to Improve Scientific Literacy

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Abstract : In this study, active learning based on simple science experiments was developed in a university class of the freshman, in order to improve their scientific literacy. Through the active learning based on simple experiments of generation of cloud in a plastic bottle, students increased the interest in the global atmospheric problem and were able to discuss and find solutions about this problem positively from various viewpoints of the science technology, the politics, the economy, the diplomacy and the relations among nations. The results of their questionnaires and free descriptions of this class indicate that they improve the scientific literacy and motivations of other classroom lectures to acquire knowledge. It is thus suggested that the science experiment is strong tool to improve their intellectual curiosity rapidly and the connections that link the impression of science experiment and their interest of the social problem is very important to enhance their learning effect in this education.

Keywords : active learning, scientific literacy, simple scientific experiment, university education

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