

THE EFFECTS OF PROJECT-BASED LEARNING ON THE ENVIRONMENTAL LITERACY OF PRE-SERVICE TEACHERS IN MALAYSIA: THE COGNITIVE COMPONENT

Nazifah Shaik Ismail, Turiman Suandi , Azizi Muda & Noriati Abd Rashid

ABSTRACT

The study is aimed at investigating the effects of project based learning instructional approach on the cognitive component of the environmental literacy of pre-service teachers from the Institute of Teacher Education Malaysia. Participants were 131 pre-service teachers registered under the post-graduate level teacher preparation programme for university graduates. A quantitative quasi-experimental nonequivalent control group design with pre-test and post-test design was employed. The experimental group was exposed to fifteen-week environmental education course through the method of project-based learning while the strategies specified by the existing syllabus were used with the control group. The data were collected using environmental literacy survey which was administered before and immediately after the environmental education course. Analysis using MANOVA and t- test showed that use of project based learning instructional method significantly enhances the trainees' cognitive component of environmental literacy. The experimental group significantly outperformed the control group on all subscales.

Keywords: environmental education, environmental literacy, project based learning