ABSTRACT

Environmental Education (EE) is not a new concept. It has been defined in many ways by various people and has been implemented in school syllabi of many countries for years, though with mixed success. The success of any Environmental Education programme mainly depends on the curricula and teachers. The teacher education programmes paves the strong basis for the teacher related competencies in general and Environmental Education in particular. UNESCO in its Environmental Education Series 25 titled, ‘Strategies for the Training in Environmental Education (1987)’ pointed out that the goal of any teacher education effort or programme in Environmental Education should be to develop environmental education competencies. These competencies take the form of knowledge, behaviors and the skills which are necessary to effectively incorporate the environmental dimension in educational programmes.

Environmental Education considers multiple model for teaching and learning, as well as teachers’ own pedagogical content knowledge to form a unique blend of disciplinary knowledge combines with teachers’ knowledge about specific learning contexts. It was well acknowledged that direct experience with a concept or problem, followed by opportunities for observation, reflection and negotiation leading to further inquiry, presents the richest form of learning. Direct experiences with the environment, both individually and in group, is an important and vital way to learn environment. These opportunities must be provided for the students to be relevant, because they help provide students with deeper understanding of natural systems and impact human have on these systems. Direct experience then allows the students to take challenge regarding environmental problems and examine them critically. When students are given adequate time to reflect on their learning, they evaluate their own experiences against the experience of others. Central in this process is allowing students to negotiate among multiple perspectives or ideas about environmental problems. Negotiation involves actively seeking out differences in opinion and looking for common ideas or themes around specific issues.

The present study is about the effectiveness of an experience based approach to environmental education for secondary teacher education on the environmental knowledge and environmental responsible behavior. Issue based teaching learning
strategies were developed based on the Environmental Education curriculum prescribed by Calicut University, Kerala. The transactional materials developed were primarily focusing on the experience and reflection resulting into the conclusion regarding environment and environmental issues. The study was of quasi-experimental in nature with a non-randomized pre-test and post-test design, whereby the environmental education was transacted through an experience based approach to the experimental group student teachers for about one and half month and the control group was exposed to the conventional method of teaching. Two tools, namely environmental knowledge test and environmental responsible behavior test were developed and validated to collect the data.

Descriptive statistics were used to summarize the pre and post test scores. Cronbach’s Alpha and Kuder Richardson’s Alpha were used to establish internal reliability of the tools. ANOVA, ‘t’ test and ANCOVA were employed to test the various hypotheses.

It was found that the experience based approach to environmental education was effective in improving the environmental knowledge and environmental responsible behavior of student teachers. There was a significant difference in the environmental responsible behavior of student teachers who were having different levels of environmental knowledge, viz., high, average and low. It was found that majority of the experimental group student teachers had active participation, knowledge of action strategies and action competencies towards environment and environmental issues.

On the basis of the findings, it was concluded to highlight the importance of experience based approach to environmental education.