## ACTIVITY BASED LEARNING TO TEACH NATURAL AND MAN-MADE ENVIRONMENTS FOR 8<sup>TH</sup> GRADERS

## S. S. SENADHEERA

Postgraduate Institute of Science
University of Peradeniya
Peradeniya
Sri Lanka

Activity-based learning (ABL) is a student centered approach which follows the constructivist educational theory. But the teachers rarely practice ABL in the classroom due to various deficiencies that prevail in the system.

This study was conducted to investigate the effectiveness of ABL, the difficulties faced by the teachers and students in teaching -learning process and to prepare an activity guide with multiple modalities.

To carry out the study all the samples were selected from Wattegama Education Zone. To learn about teachers' perceptions 30 questionnaires were randomly distributed among the Science teachers and 10 Science teachers randomly selected were interviewed. To learn about students perceptions 40 questionnaires were distributed among 40 students of a randomly selected school. The first lesson of the grade 8 "Observe the environment as the scientist" was selected and an activity guide was prepared with 8 activities including 4 lessons, based on the results of the questionnaires and the interviews. Two schools were selected using mixer sampling and two classes from grade 8 were selected from each school as experimental and control groups. The experimental groups were taught the lessons using activity- based learning with the help of the prepared activity guide. The control groups were taught using lecture-based learning with the help of the teachers' instructional manual. Classroom observations, pre and post tests were conducted and the results analyzed in order to determine the effectiveness of activity- based learning.

Activity-based learning method enhanced the students' achievement level compared to the lecture-based learning. In comparison with the lecture-based learning, Student - student interactions and the teacher-students interactions were higher in activity-based learning. Moreover, the activities in the activity guide helped the students to attain a higher performance level.

The study reveals ABL is an effective teaching method to adopt in the Environmental Education lessons. The teachers and the students should be provided with the required facilities, while taking into account the desires and interests of the students. Moreover, school-based teacher development programs must be implemented to develop the capacity of the teachers, and to introduce them ABL. The teachers should be given necessary guidance continuously to improve the teaching - learning process.