APPLICATION OF AUTHENTIC ASSESSMENT IN JUNIOR SECONDARY SCHOOL BIOLOGY IN SRI LANKA: AN ILLUSTRATIVE STUDY ON DIVERSITY OF PLANTS LESSON IN GRADE 9 SYLLABUS

M. K. K. Weerawansa

Postgraduate Institute of Science, University of Peradeniya, Peradeniya, Sri Lanka

In the context of interest in teaching learning process, the assessments have become more important today. Authentic assessment (AA) has been introduced as a form of assessment for promoting students active learning oppose to many conventional assessments (CA). The research was carried out to investigate the application of AA in Sri Lankan school biology for grade 9 students. The research was planned to examine the effects of using authentic instructional and assessment method oppose to the conventional method of teaching and assessment in learner achievement of the expected learning outcomes, the higher order learning skills and to find out whether there is loss of learning content when using new method.

Two parallel classes of grade 9 from the same school in Kandy area were selected and a selected biology lesson from the science syllabus was taught to both classes using authentic instructional method and conventional method separately. Same pre tests and post tests were given for both classes in order to compare their subject knowledge prior and post to the experiment. Classroom observations, personal discussions with teachers and students were also taken throughout the study period. Collected data was analyzed using qualitative and quantitative mixed method.

Authentic instructional method gave new experience for the teacher and students. It enhanced students' active participation throughout the lesson and gave many opportunities to increase students' higher order thinking skills. Authentic method also gave the opportunity to teacher to analyze students' progress and skills while the teaching process is carried on whereas conventional method needs a separate time for assessment. In the authentic instructional method teachers use a set of pre planned scaling list called "rubrics" to measure students' skills and level of achievement. In contrast, students in conventional group were passive learners and did not get the opportunity to activate their skills. It is also obvious that students are motivated to do something if the target is more familiar and authentic. Overall the results of the study reveal that the authentic teaching and assessment method is successful to apply for conceptual understanding of Plant Diversity lesson as well as soft skill development in 9th graders. Other than advantages, there are some barriers to overcome to achieve effective authentic instructional and assessment method.