

# **APPLICATION OF AUTHENTIC ASSESSMENT IN JUNIOR SECONDARY SCHOOL PHYSICS IN SRI LANKA: AN ILLUSTRATIVE STUDY GRADE 11 DOMESTIC ELECTRIC CIRCUIT**

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Sri Lankan education is heavily examination oriented and classroom instruction and assessment system it is examination oriented and follows conventional instruction and assessment methods. Therefore the need to revisit the curriculum and modify the assessment systems related to the real world is much felt and pointed out by many recent reports. The aim of this study, to implement authentic assessment in junior secondary Physics education and to make recommendations based on our key findings.

The purpose of this research study is to examine the possibility and advantage of applying authentic assessment in Grade 11 Junior Secondary level general science curriculum in Physics. With these objectives the research study with comparable group's authentic instruction and assessment was compared with the conventional instructional system. The study examined authentic learner achievement of the higher order learning outcomes and examined any loss of contents due to authentic learning methods as the teachers claimed.

This is an experimental study employed a mix of qualitative and quantitative research methods. An instructional unit was selected from the grade 11 science curriculums 'The effect and uses of current electricity' within this unit selected a sub unit 'Domestic electric circuit'. Two groups (experimental and control) of eleven graders from 1AB Boys' School in Jaffna district were selected. A Pre-test was administered to both groups to identify the achievement levels of students. Then the control group class was conducted conventional teaching method and the experimental group was given authentic instruction by the same teacher. After the authentic learning, a posttest was administered to both groups. While doing both conventional and authentic learning classrooms were observed by the researcher. Compare the difference between mean score of pretests, posttest and higher order thinking test. According to the results authentic group learning achievement was significantly better in performance than the conventional group. Furthermore the observational data analysis demonstrated that the students of the authentic learning group demonstrated better orientation to real life situations and the 21st century skills such as collaboration, communication and higher order thinking.