

**AN APPLICATION OF AUTHENTIC ASSESSMENT IN JUNIOR  
SECONDARY SCHOOL MATHEMATICS IN SRI LANKA:  
A COMPARATIVE STUDY ON AUTHENTIC TYPE OF LEARNING  
AND CONVENTIONAL TYPE OF LEARNING ON “AREA” AND  
“VOLUME” IN GRADE 11 MATHEMATICS**

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This dissertation examined the effect of using authentic instruction and assessment method oppose to conventional method of teaching and assessment in learner achievement of the expected learning outcomes, the higher order learning outcomes such as problem solving, critical thinking, metacognition and soft skills, and whether there is any loss of learning content in using **Authentic instruction** and assessing method as the teachers claim.

Quantitative and qualitative data collection techniques like pretest, posttest, Rubrics, observation protocols etc., were employed in data collection from two comparable samples of 50 students from Grade 11 of a coed school a focus group discussion with the staff of the same school was conducted and gathered data on the views of the teachers having on the current assessment system.

The two instructional strategies one after the other (Conventional and Authentic) was carried out by the same teacher taking the necessary controls. Comparability for the groups were tested with pre-test score analysis. Learning outcomes were assessed and analyzed using post test scores and the observation protocol was done using the rubric to gather the qualitative data.

The result indicates that the authentic instruction and assessment was significantly better than the conventional instruction and assessment methods in the student achievement of all learning outcomes, moreover, the Higher Order Thinking Abilities and the 21<sup>st</sup> century learning outcomes. Beside there was loss of content due to use of authentic instruction over conventional methods as many of the teachers generally claim.