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Role of teacher in implementing school-based assessment modalities through a unit plan in grade ten mathematics class

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School-Based Assessments (SBA) were introduced in 1998 with the expectation of improving the learning outcomes and assessment process in the Sri Lankan system of education. It is however believed that teachers use SBA as an alternative way of testing students at the end of the units, and overall implementation and performance of SBA has not reached its expected level. This study was designed to explore the existing situation in the practice of SBA in the teaching-learning process of mathematics.

A questionnaire was used to identify the barriers in implementing SBA as perceived by teachers. Sixty-two teachers in mathematics from the Gampola Education Zone participated in the study. A lesson plan was designed for the unit 'Area of Plane Figures' in Grade 10 mathematics. It was designed to overcome the problems that teachers encountered in practicing SBA and their misinterpretation of the learning-teaching process. This unit plan was subsequently implemented in two schools each with two parallel classes for grade 10. One class each was considered as the experimental group and the other as the control group. Regular teachers taught the lesson using the designed plan to the experiment class and in their own ways of teaching to the control class. Activities of both classes were observed during the sessions. Students in both classes were also tested using the same question paper at the end of the teaching sessions. Conceptual changes about SBA of teachers who implemented the unit plan were identified through interviews.

It is revealed that circulars and instructions issued were not effective to uplift the conceptual understanding of teachers about SBA. The students are more enthusiastic and active when SBA modalities are included in the learning process. Seventy-one percent and 44% of students respectively from the experimental class and the control class achieved marks equal to or above 60%, indicating that using SBA modalities are more effective in the learning outcome. The study recommends the process of small groups of teachers working together to plan units with various modalities to be implemented in their respective classes as more effective than conducting normal training workshops based on SBA.