

**USE OF DIFFERENT TEACHING STRATEGIES TO
STABILIZE LEARNING
OF THE UNIT 3 (DYNAMIC NATURE OF THE ENVIRONMENT)
IN GRADE 8 STUDENTS**

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With the introduction of new education reforms in Sri Lanka in 2007, a new competency based curriculum has been introduced. A new series of Teachers' Instructional Manuals were introduced and the teachers were given the responsibility to make all the students achieve the expected competency level at the end of the syllabus. However, as viewed by educationists, it has created a challenging situation today that all the students do not reach the essential competency level. The non effectiveness of the method given in the Teachers' Instructional Manual for some lessons and the other methodologies employed by the teachers may be the major problems in this regard.

The current study was designed to find out the effectiveness of using an integrated method to facilitate the teaching learning process of Unit 3, the Dynamic Nature of the Environment, of the grade 8 Science syllabus. The research was conducted in a semi urban school in Wattegama Education Zone in Kandy district using 60 students. From them two groups were formed as Experimental and control group, using a prior knowledge test. For the teaching learning process of experimental group different teaching strategies (Field visits, Laboratory experiments, Group activities, Drama, Videos, PowerPoint presentations, Discussions and Debate) were used, whilst the control group learned through the method given in the Teachers' Instructional Manual. Data were collected through assessments, comments of teachers and students and observations. Data obtained from the assessments were analyzed using 2 sample t-test.

The mean marks of continuous assessments for experimental group were 69.3, 56.6, 53.3, 72.3 and 69.9. For the control group it was 69.2, 56.3, 52.7, 72.0 and 69.2. The experimental group scored more in each assessment. However, a marked difference was not observed between the mean marks of the 2 groups. A posttest was given after 3 weeks without a prior notice. They had to answer the questions with the stabilized knowledge in them. The mean values of the posttest marks for the experimental group and control group respectively were 63.37 and 55.53. The P value was 0.037 (<0.050) indicating a significant difference between the two groups. The results revealed that the students in the experimental group have more stabilized knowledge of the learnt scientific concepts.

Findings of the research revealed that, application of different teaching strategies which gives hands on experience to students and which relate to their life helps stabilize scientific concepts.