

**IMPROVEMENT OF PERFORMANCE OF STUDENTS THROUGH
AN ACTIVITY ORIENTED APPROACH TO TEACH ENZYMES FOR
G. C. E ADVANCED LEVEL BIOLOGY STUDENTS**

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ABSTRACT**IMPROVEMENT OF PERFORMANCE OF STUDENTS THROUGH
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The advanced level biology syllabus starts with the unit core biology and continues with the units, biodiversity, the functioning plant, the functioning animal, continuity of life, man and the environment, microbiology applied biology and basic statistic for biology. Now the world has become a global village. Hence to survive in this village every person should be a skillful employer. Therefore passive traditional teaching learning method has to be changed. The Education system should allow students to construct their knowledge by themselves. Students should have freedom to get knowledge through sensory perception and learning actively and effectively. This way the students would have competence for problem solving.

This study was carried out to examine whether activity oriented teaching learning method (A.O. method) would improve the understanding of the sub unit enzymes and enhance the achievement of students when compared to traditional lecture method (T.L. method). At the same time important facts related to the sub unit enzymes (section 1.5 in the Advanced Level Biology Syllabus) and a lesson, applications of enzymes that is not included in the syllabus were introduced. The specific objectives were:

- To determine problems of learning about enzymes from A/L students
- To determine problems of teaching about enzymes to A/L students.
- To determine prior knowledge of students on enzymes

- To design student oriented teaching learning methods
- To examine the improvement of achievement level

A sample of grade twelve biology students from three schools in the Kurunegala district was selected for the study.

Each biology class of those schools was divided into two equal groups for A.O. method and T.L. method. The two groups of students of A.O. method groups and T.L. method groups achieved similar results in the pre-test. Post test paper was used to examine the achievement of both groups of students who participated in A.O. method in teaching learning process and those who completed traditional lecture method respectively.

There was a significant difference of the average marks of post test of T.L. method groups and A.O. method groups. It was evident that the A.O. method group always obtained significantly higher marks compared to T. L. method groups and the p values of post test of three schools were lower (0.000) than confidence level (0.05). It was evident that hypothesis was rejected (H_0). There was a difference between two methods of teaching learning process.

The sub unit "Enzyme" (section 1.5) of A/L biology syllabus can be taught successfully through activity oriented method in teaching learning process and it enhances student's achievement.