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APPLICATION OF ACTIVE TEACHING LEARNING APPROACHES IN SCIENCE (ATLAS) FOR THE UNIT ON "MAN AND ENVIRONMENT" IN G.C.E ADVANCED LEVEL CHEMISTRY SYLLABUS

A PROJECT REPORT PRESENTED BY

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Equilibrium between the man and environment start breaking apart with the increase of population, consumption and industrial activities. These activities are now reached to a state where this planet will not be suitable for habitation unless mitigation actions are taken to alleviate various global environmental phenomena.

Education will play a major role to educate man about activities which are hazardous to environment and actions which are required to mitigate global environmental phenomena. This objective is achieved in our curriculum by introducing environmental education at various levels. However, the unit "Man and Environment" in our chemistry syllabus in G.C.E advanced level is vital as it is given to the student at a stage where they are at the verge of leaving to the society as responsible persons.

In order to assess the present teaching method and effectiveness of the unit on "Man and environment" in schools, a student survey, informal interviews and analysis of responses to past examination papers were used. According to the response received for the questionnaire, it was found that more than 60% of the teachers did not teach this unit in the school. Students had mainly sought assistance from their tuition masters to learn this unit. Even though teachers claimed that this unit is self-explanatory when they were interviewed, the analysis of G.C.E. (A/L) marks did not support that claim. The facility index for the questions on the unit "Man and environment" was very low indicating students' inability to understand this unit.

By considering importance and ineffective teaching process in the school, lesson notes for the unit "Man and Environment" was prepared using Active Teaching Learning Approaches in Science (ATLAS). This involves brainstorming, active listening, small group discussions, panel discussion, conference, debate, emphasizing activity and application of Information Communication Technology (ICT). The proposed techniques were used against traditional teaching process, in two schools. Based on the observations in the classes, five assessments given to both the groups three assertions were derived. These assertions discussed the effectiveness and successfulness of the proposed teaching technique over the traditional method. It was concluded that proposed method enhanced active learning by providing more opportunities for working together, provided opportunities for learning through interactions and motivated the students to be active in the learning process.