

EFFECTIVENESS OF USING DOCUMENTARIES IN TEACHING ENVIRONMENTAL BIOLOGY FOR G.C.E. A/L BIOLOGICAL SCIENCE STUDENTS IN THE BATTICALOA EDUCATION ZONE, SRI LANKA

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As future decision-makers, the students should be provided with knowledge, skills and attitudes to involve them in environmental protection and sustainable development. This study investigated the effectiveness of using documentaries in teaching Environmental Biology for G.C.E (A/L) Biological Science students in the Batticaloa Education Zone in Sri Lanka. The objectives of the study are to determine the level of environmental knowledge, attitudes and practices and investigate the effectiveness of using documentaries in teaching Environmental Biology. Eighty students of Grade 13 from three schools were selected. Pre- and post-test papers were used to test knowledge, and a structured questionnaire was used to test their attitudes and practices. Documentaries were prepared as teaching aids for two subsections of unit eight for the experimental group. The control group was taught using the traditional lecture method. The data were analysed using descriptive statistics, Mann-Whitney, Wilcoxon signed ranks tests and Pearson correlation in SPSS. Pre-test marks revealed (39.1 ± 1.1) a low level of knowledge in Environmental Biology among the student sample. In the pre-test, the mean percentage score of students' environmental attitudes and environmentally friendly practices were 57.9 ± 1.8 and 58.3 ± 1.8 , respectively. In the post-test, the students of the experimental group scored higher (77.6 ± 1.9) than the control group (55.7 ± 1.4). The knowledge gained by female students was higher than male students. The knowledge on Environmental Biology was not correlated with students' attitudes on the environment ($r = 0.00$) but showed a low positive correlation with environmental practices. However, environmental attitudes and practices showed a high positive correlation ($r = 0.83$). The study concluded that documentaries could be an effective tool in teaching Environmental Biology lessons at G.C.E (A/L) to enhance students' knowledge of the subject.

Keywords: Attitudes, Documentaries, Environmental Biology, Knowledge, Practices