

Instructional Aids as a Tool for Effective Learning for High School Biology Students

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Abstract

The main purpose of this study is to investigate the effects of the use of instructional aids in biology teaching and learning. Furthermore, this study aims to compare the students' biology achievement between the students who received instructional aids and those who did not and to offer suggestions for improving biology teaching and learning for high school students in Myanmar. The design adopted in this study was pretest-posttest control group design, one of the true experimental designs. The data of the effectiveness and application of instructional aids were collected at two basic education high schools, No. (6) B.E.H.S Bago and No. (9) B.E.H.S Bago. The experimental groups were taught by using instructional aids. The control groups were taught by using the formal instruction. The participants were 120 Grade Ten students from the selected schools and they are also selected in random. In this study, the lesson plans that applied were based on 5 E's model proposed by Roger Bybee under the Biological Science Curriculum Study (BSCS) project. The instruments used in this study were pretest question and posttest question. Pretest question was achievement test based on the content area of chapter (5) protozoa and posttest question was also achievement test based on the content area of chapter (5) insects and earthworms. Independent samples "t" test was used to find the difference in the achievement of students who received instructional aids and those who did not. According to the results, the biology achievement of students who received instructional aids was significantly higher than that of students who did not. Thus, the results showed that using instructional aids had been proved to be quite effective in basic education high schools and it is believed that it can contribute to success in teaching and learning biology in Myanmar.

Key words: Instructional aids, Learning, Biology

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