

Attitudes of Secondary School Students to the Basic Sciences in Selected Local Government Areas of Oyo state.

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Abstract:

This study examined the attitudes of Oyo State secondary school students to the basic sciences, namely, Physics, Chemistry and Biology and also the relationship between their attitudes and their achievements in these science subjects. Six hypotheses were generated for the study. The hypotheses were tested at 0.01 level of significance.

Four test instruments, namely, Test of Attitude to Science (T.A.S.), Physics Achievement Test (P.A.T.), Chemistry Achievement Test (C.A.T.) and Biology Achievement Test (B.A.T.) were used. All the achievement tests were constructed by the investigator while the attitude scale was a modified version of the New Hull Attitude Inventory by Ato and Wilkinson (1979). Both the face and content validities of the research instruments were carried out using forty secondary school teachers and three experts from the University of Ife. The reliabilities of the tests were found using the Splithalf technique. The Pearson's product moment correlation analysis followed by the Spearman-Brown technique yielded reliability coefficients of 0.90, 0.92, 0.94 and 0.96 for the attitude scale, physics achievement test, chemistry achievement test and biology achievement test respectively.

The sample for the study consists of one thousand six hundred secondary school form four students selected from forty secondary school spread over twelve out of the twenty-four local government areas of Oyo State. These students were selected into physics, chemistry and biology subject groups using simple randomization technique. Each student was exposed to two tests, namely, the attitude scale and one of the three achievement tests, depending on which subject group the student belongs to. All tests were administered by the investigator. The data collected were analysed using inferential statistics. The study showed, among other things, that the students possess a positive attitude to science and that their attitude scores can be used to predict their achievement into the basic sciences.

Keywords: Test of Attitude to Science (T.A.S.)/ Physics Achievement Test (P.A.T.)/ Chemistry Achievement Test (C.A.T.)/ Biology Achievement Test (B.A.T.)

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