

Increasing Self-Efficacy of Secondary School Students in Physics Using Mentoring Enhanced Strategy

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Abstract : The study determined how mentoring enhanced strategy can increase self-efficacy of secondary school students in physics in education zone C of Benue State, Nigeria. The study was guided by two research questions while two hypotheses were formulated and tested at 0.05 level of significance. The design of the study was the quasi-experimental, non-randomized, pre-test and post-test control groups. The population of the study consisted of 4,064 SS two physics students in the 94 schools in Education Zone C. The sample comprised 406 SS two physics students drawn from 10 schools using multi-stage sampling technique. The research instrument adapted and used for data collection was Students Self-Efficacy Scale (SSES). The research instrument was subjected to a reliability analysis using Cronbachs Alpha which yielded a reliability co-efficient of 0.84. Data collected were analyzed using descriptive statistics of mean and standard deviation to answer the research questions while inferential statistics of Analysis of Covariance (ANCOVA) was used to test the hypotheses. The findings revealed that students who were exposed to mentoring exhibited lower self-efficacy levels ($F_{1,405} = 2.751, P = 0.09 > 0.05$) than those students who were not exposed to mentoring. There was significant difference between male and female students' self-efficacy level ($F_{1,211} = 5.496, P = 0.02 < 0.05$). Based on these findings, it was recommended among others that longer duration of mentoring period should be encouraged when using the mentoring strategy for better enhancement of Self-efficacy of students.

Keywords : physics, self-efficacy, mentoring enhanced strategy, students

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