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EFFECTIVENESS OF VIDEO - BASED INSTRUCTIONAL STRATEGIES ON SENIOR SECONDARY SCHOOL STUDENTS' ACHIEVEMENTS IN PRACTICAL PHYSICS IN LAGOS STATE, NIGERIA

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The dominant system of instruction in teaching practical Physics is the conventional method of demonstrating experiments in Nigeria senior secondary schools, which had promoted teacher-centered instruction. Thus, this study is initiated to solve the prolonged persistent problem of teacher-centered instruction to student centered instruction. Therefore, this study was designed and conducted to determine the effectiveness of Video - Based Instructional Strategies on Senior Secondary School Students' Achievements in Practical Physics in Lagos state, Nigeria. A non-randomized pre-test, post-test control group quasi-experimental research design was adopted for the study. A sample of 315 Senior Secondary Two (SSII) physics students, drawn by both purposive and simple random sampling techniques from six co-educational schools in Educational district III was used for the study. Three validated research instruments: Practical Physics Achievement Test (PPAT) ($r = 0.71$ using KR - 20); Practical Skill Rating Scale (PSRS) ($r = 0.89$ using Scott Pi) were used to collect data for the study. Students in the experimental group followed the demonstration of the experiment using Video- based method while those in the control group followed the demonstration of the experiment using the conventional method. The data collected were analyzed using Analysis of Covariance (ANCOVA) and Estimated Marginal Means at 0.05 level of significance. The students in the experimental group (Video based) instructional strategies had a higher mean in both the achievement and acquisition of practical skills than their counterparts did in the control group (Conventional) instructional strategy. Hence, this study recommend the use of video - based instructional strategies in teaching physics practical for better achievement for secondary school physics students.

Apply to be considered for a student award (Yes / No)?

NO

Level for award (Hons, MSc, PhD, N/A)?

NIL

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