Students' participation in group production of instructional resources for teaching technical drawing: Academic achievement and interest reflections

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Abstract: This study investigated the effect that students' participation in the production of instructional resources for teaching has on the achievement of Nigerian students in Technical Drawing. A pre-test, post-test, non-equivalent control group, quasi-experimental research design was adopted. 139 students constituted the subjects in the experimental group and 113 students constituted the subjects in the control group for the study. Four research questions and four null hypotheses, guided the study. Technical Drawing Achievement Test (TDAT) and Technical Drawing Interest Inventory (TDII) served as data collection instruments. The TDAT and TDII were trial-tested to determine their reliability coefficient via Pearson Product Moment Correlation Coefficient formula and Cronbach Alpha respectively. Derived mean Coefficient and ANCOVA was used to answer research questions and hypotheses. The study revealed that the mean achievement and interest scores of students who participated in the production of instructional resources were higher than the mean achievement and interest scores of students who did not participate in the instructional resources production. Consequently, researchers recommended that teachers should always involve students in groupwork – production of instructional resources for teaching technical drawing in order to stimulate students' interest for better academic achievement.

Keywords: achievement; improvisation; interest; instructional resources; technical drawing; groupwork; group work

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