

**EFFECTS OF AUTOMATED TECHNICAL DRAWING COMPUTER ASSISTED
DRAFTING TECHNIQUE ON STUDENTS' ACADEMIC ACHIEVEMENT,
INTEREST AND GENDER IN TECHNICAL DRAWING**

¹T. C. OGBUANYA & ²ANIEDI D. USORO

¹Department of Vocational and Teacher Education, University of Nigeria, Nsukka, Nigeria

²Department of Vocational Education, University of Uyo, Uyo, Nigeria

ABSTRACT

The study sought to determine the Effects of Automated Technical Drawing Computer Assisted Drafting (AUTOTEDRACAD) technique on Students' Academic Achievement, Interest a Gender in Technical Drawing. Three research questions and three null hypotheses guided the study. A quasi experimental design was adopted. The population of the study was 2319 Technical year two students in eleven Technical Colleges in Akwa Ibom State, Nigeria. Simple random sampling technique was employed to select 240 students from four colleges to determine the experimental and control group. The instrument used to collect the data was Technical Drawing Achievement Test (TDAT) and Technical Drawing Interest Inventory (TDIV) constructed by researchers and validated by three experts from the Department of Vocational Education University of Nigeria Nsukka, Automated Technical Drawing Computer Assisted Drafting (AUTOTEDRACAD) lesson plan produced into software and conventional lesson plan were the instrument for treatment of the experimental and control group. The research questions were analyzed using, mean and standard deviation, while analysis of covariance (ANCOVA) was used to test the hypotheses at .05 level of significance. The study among other things, found out that there is significant difference in academic achievement and interest of students' taught with AUTOTEDRACAD Technique. The result also showed that there was no significant difference in the performance of boy and girls taught with AUTOTEDRACAD Technique. It was recommended that Technical Teachers should employ AUTOTEDRACAD technique as it enhances academic achievement, interest, and close the gender gap available with other method of teaching.

KEYWORDS: AUTOTEDRACAD TECHNIQUE - Sequential Instruction, Surface Modeling, Problem Solving, and Competency-Based Evaluation