**ABSTRACT**

This study investigated the impact of technology on teaching and learning in senior secondary schools in Edo South Senatorial District, Edo State, Nigeria. The research was guided by four core objectives: to examine the availability and accessibility of technological resources, assess teacher preparedness and attitudes towards technology use, determine the impact of technology on student engagement and learning outcomes, and identify challenges to technology integration in schools. A descriptive survey design was employed, and data were collected from 100 respondents comprising students, teachers, and administrators across public and private schools using a structured questionnaire based on a five-point Likert scale. The findings revealed a significant gap in the availability and effective use of technology, especially in public schools. While some technological infrastructure exists, its use is hampered by lack of teacher training, insufficient support, and infrastructural limitations. Statistical analyses, including descriptive statistics and independent samples t-tests, showed no significant differences in most measured variables across school types and respondent categories. The study concluded that the presence of technology alone does not translate into improved educational outcomes without adequate infrastructure, teacher development, and strategic implementation. Recommendations include increased investment in ICT resources, mandatory teacher training, policy reforms, and the establishment of ICT monitoring systems. This research provides insights for policymakers, educators, and stakeholders on improving technology-driven education in secondary schools in Nigeria.