

Abstract

The purpose of this article is to determine the influence of teachers' educational levels on the use of digital devices in Nakuru County, Kenya. The article aims to address the critical knowledge gap in the use of digital devices in teaching Agriculture, while accounting for instructors' educational levels. Despite the policy focus, the implementation and awareness of digital tools among Agriculture teachers remain notably subdued in many institutions, according to previous studies. The study was conducted among a population of 698 Agriculture teachers in Nakuru County, from which a sample of 168 was selected using a multi-stage sampling design. Reliability was confirmed via pilot testing involving 35 teachers in Nyandarua County, giving a Cronbach's alpha coefficient of 0.963. Using a cross-sectional survey design, the research analysed data from 140 completed questionnaires through SPSS Version 29. The Kruskal-Wallis H test revealed that educational qualification was a significant predictor of digital device use ($H(3) = 8.862, p = 0.031$). Post-hoc analysis using the Mann-Whitney U test confirmed that teachers with a Master's degree reported significantly higher digital device usage than those with an Undergraduate degree ($p = 0.003$), while differences in digital device usage across all other educational qualifications were non-significant. The study concludes that academic qualifications significantly influence the adoption of digital devices. The recommendation underscores the need to enhance digital infrastructure and strategically reinforce in-service training focused on pedagogical applications.