Abstract

Technical and Vocational Education and Training (TVET) plays a critical role in developing skilled human capital necessary for economic growth and industrialization. In Kenya, the adoption of modular training under the Technical and Vocational Education and Training (TVET) Act of 2013 marked a shift towards a competencybased approach. Within the broader framework of Competency-Based Education and Training (CBET) and Vision 2030, modular training emphasizes skill acquisition as a central pathway through which trainees progressively attain industry-relevant competencies. However, despite these reforms, completion rates in National Polytechnics remain inconsistent. This study examined the influence of skill acquisition through modular training on trainees' completion rates in National Polytechnics in Kenya. Anchored on Production Function Theory, the study adopted a mixed-methods approach incorporating descriptive and correlational research designs. Quantitative data were collected using structured questionnaires and institutional records .Qualitative insights were obtained through key informant interviews. Quantitative data was analyzed using descriptive statistics, Pearson correlation and regression analysis, qualitative data was thematically analyzed. The findings revealed a statistically significant positive relationship between skill acquisition and trainees' completion rates ($r = 0.374$, $p < .001$). Regression analysis further indicated that skill acquisition significantly predicts completion rates, accounting for 13.96% ($R^2 = 0.140$) of the observed variation. The study concluded that skill acquisition through modular training enhances competency development and employability, which positively influences trainees' progression and completion. The study therefore recommends strengthening institutional mechanisms that integrate skill acquisition with clear qualification pathways, for competency acquisition and higher completion rates in national polytechnics.