

Paradigm Shifts in Computer Adaptive Testing in Nigeria in Terms of Simulated Evidences

Jumoke Iyabode Oladele¹, Musa Adekunle Ayanwale² and Henry Olumuyiwa Owolabi³

^{1,3}Faculty of Education, University of Ilorin, Ilorin, Nigeria

E-mail: ¹<oladele.ji@unilorin.edu.ng>, ³<henryowo@unilorin.edu.ng

²Educational Foundations, Kampala International University, Kampala, Uganda

E-mail: adekunle.ayanwale@kiu.ac.ug

KEYWORDS Computer Adaptive Testing (CAT). Computer-Based Tests. Educational Assessment. Item Response Theory (IRT). Simulation

ABSTRACT Computer and Information Technology have permeated all areas of students' assessment with the aid of Computer-Based Test (CBT). Despite the laudable progress made with CBT, Computerised Adaptive Tests (CAT) is an emerging paradigm in educational assessment with the potentials for greater precision in determining examinees ability level. This study is a simulated CAT assessment with a focus on item selection criteria as a core function. Finding of the study revealed that a-Stratification with b-Blocking item selection method was a preferred method for CAT with a higher SEE, optimal item usage and lesser item exposure rates. Adopting CAT was recommended to guarantee accurate ability placement required for high-stakes testing and leading to improvement in educational assessments. This strengthens the need for high-stakes assessments paradigm shifts from CBT to CAT.