

**AN INVESTIGATION INTO THE DIFFICULTY LEVEL AND
DISCRIMINATING INDICES OF MULTIPLE CHOICE AND
SHORT- ANSWER MATHEMATICS ACHIEVEMENT TEST ITEMS
OF PRE-NCE STUDENTS OF FEDERAL COLLEGE OF
EDUCATION, ZARIA, NIGERIA**

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The difficulty level and discriminating indices between multiple-choice and short answer mathematics achievement test were investigated. A total of 130 students each were randomly selected from the population of Pre-NCE students of Federal College of Education, Zaria, Nigeria in the 2009/2010 and 2010/2011 academic session. The instrument used was the mathematics achievement test which consists of multiple-choice test items (MCT) and short-answer test item (SAT) with a reliability coefficient of 0.94 and 0.97 respectively. Data were analyzed using mean, standard deviation and student t-test. The study found out , among others that significant difference ($P < 0.05$) existed between the performance of students on MCT and SAT format. Also significant difference exist between the difficulty level of the test format and there was no significant difference ($P < 0.05$) in the discriminating indices of both test formats. The implication of the findings were highlighted and recommendation were made based on findings.