Chapter 9
Collaborative Learning Strategy and Students' Academic Performance in Mathematics and Computer Programming

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ABSTRACT

Humans are facing complex problems such as learning how to solve computational problems and academic failures. This research focused on the impact assessment of collaborative learning strategy on solving computational problems among students in Nigeria. A mixed research design was used and the population was 1600 senior secondary school students. A stratified random sampling method was used to select 240 SS III students for the study. The mathematics and computer programming performance tests instrument for data collection were validated by experts in educational measurement and evaluation. A reliability coefficient of 0.79 was obtained for the test instrument. The data collected were analysed using mean, standard deviations and multivariate analysis of covariance (MANCOVA) statistical tools. Findings revealed that the use of collaborative learning strategy was effective on student's academic performance in solving mathematical and programmatically based problems. Recommendations on students' learning activities were suggested for the enhancement of students' learning experiences.

DOI: 10.4018/978-1-7998-2385-8.ch009