The Use of Computers in Improving the Academic Performance of Students in Mathematics

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Abstract : This research work focuses on the use of computers in improving the academic performance of students in mathematics in Benin City, Edo State. To guide this study, two research questions were raised, and two corresponding hypotheses were formulated. A total of one hundred and twenty (120) respondents were randomly selected from four schools in the city (60 boys and 60 girls). The instrument employed for the collation of data for the study was the multiple-choice test items on geometry (MCTIOG), drawn from past senior school certificate examinations (SSCE) questions. The instrument was validated by an expert in mathematics and measurement and evaluation. The data obtained from the pre and post-test were analysed using the mean, standard deviation, and T-test. The study revealed a non-significant difference between the experimental and control group in the pre-test, and the two groups were found to be the same before treatment began. The study also revealed that the experimental group performed better than the control group. One can, therefore, conclude that the use of computers for mathematics instruction has improved the performance of students in Geometry. Therefore, the hypothesis was rejected. The study finally revealed that there was no significant difference between the boys and girls taught mathematics using a computer. Therefore, the hypothesis which states there will be no significant difference in the performance of boys and girls taught mathematics using the computer was not rejected. Consequent upon the findings of this study, a number of recommendations were postulated that would enhance the performance of teachers in the use of computer-aided instruction.
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