

Comparative Study of Computer Assisted Instruction and Conventional Method in Attaining and Retaining Mathematical Concepts

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Abstract : This empirical study was aimed to compare the effectiveness of Computer Assisted Instruction (CAI) and Conventional Method (CM) in attaining and retaining mathematical concepts. Instructional and measuring tools were developed for five units of Matrix Algebra, two of Calculus and five of Numerical Analysis. Reliability and validity of these tools were also examined in pilot study. Ninety undergraduates participated in this study. Pre-test - post-test equivalent - groups research design was used. SPSS v.16 was used for data analysis. Findings supported CAI as better mode of instruction for attainment and retention of basic mathematical concepts. Administrators should motivate faculty members to develop Computer Assisted Instructional Material (CAIM) in mathematics for higher education.

Keywords : attainment, CAI, CAIM, conventional method, retention

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