Effectiveness of Computer-Supported Cooperative Learning Strategies in Learning Physics

By

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Abstract

This study investigated the impact of varied types of instructional delivery strategies in computer-supported cooperative learning (STAD, Jigsaw II, and TAI) and independent Computer Assisted Instruction (CAI) settings on senior secondary students' performance in physics. It also examined if the performance of the students would vary with gender and academic ability levels. Participants were 167 senior secondary II physics students drawn from four intact classes in Minna, Niger State, Nigeria. Computer-Assisted Instruction Package (CAIP) developed specifically on equilibrium of forces and simple harmonic motion was used as treatment material. Analysis of Covariance and Scheffe test were used for data analysis. Findings indicated that learning in computer-supported STAD and Jigsaw settings enhanced students' performance in physics. Similarly, students' academic levels had significant influence on their performance; however, students' gender had no influence on their performance. This study strengthens the using CAI in cooperative settings and this has implications for the successful integration computer in instruction.

Keywords: *Computer-supported cooperative learning, Computer assisted instruction, Physics, Nigeria, Secondary schools*