

The Effectiveness of A Computer-Assisted Instruction Software for Learning & Testing Music Elements For Non-Music Majors

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The purpose of this research is to study the effects of Traditional Instruction (TI) plus Computer-Assisted Instruction (CAI) versus TI alone in college-level students' attitude and performance in the learning of musical elements for music appreciation subject, by written pre-post test and comparing both groups, as well as the effects of CAI for the treatment group. Utilizing the experimental design, 71 respondents from a Malaysian college were randomly assigned: Treatment (N=27) and Control (N=44). For the four-week period, both group attended 2-hourly traditional lecture and tutorial weekly. During the tutorial sessions, the Treatment Group was instructed to use the self-developed Music Element CD-ROM program (MECD) while the Control Group was assigned using Traditional Instruction (TI). Before and after the 4-week treatment, the written Music Elements (MET) Pre-Post tests were administered for all students. In addition, the treatment group was asked to complete a questionnaire for measuring Attitudes towards the CAI Program (ATTCAI). *Paired sample t-test* results indicated that both groups did show significant improvement in MET posttest. Although the treatment group obtained marginally higher mean scores, both groups' pre-post test and gain scores however showed no significant improvements. Nevertheless, positive feedback was constant for the ATTCAI survey where the treatment group enjoyed learning with the CAI program. In conclusion, although TI plus CAI format did not demonstrate significant improvement in students' performance, CAI motivated students to learn more interactively and enhance better understanding in learning the music elements.

Keywords: educational technology, computer-assisted instruction (CAI), multimedia, music appreciation, attitude