EFFECTS OF PRESENTATION MODES OF COMPUTER ASSISTED INSTRUCTION (CAI) ON LEARNERS' ACQUISITION OF DESIGN SKILLS IN FINE ARTS.

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TITLE: Effects of Presentation Modes of Computer Assisted Instruction (CAI) on Learners' Acquisition of Design Skills in Fine Arts.

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Abstract

The study investigated the effectiveness of problem-solving, and drill and practice modes *of* Computer Assisted Instruction (CAI) on the acquisition of design skills in Fine Arts. It also examined learners' attitude towards the use of CAI in the teaching *of* Fine Arts. This was with a view to providing an intervention strategy for improving the performance of students in Fine Arts.

The pre-test post-test control group design was employed. The study population consisted of Junior Secondary School (class three) students in Ife Central Local Government. Three schools were purposively selected based on the availability of computers. Twenty students were randomly selected from each of the three schools to constitute two experimental groups and one control group. Two instruments titled "Questionnaire on Attitude to Computer Assisted Instruction"(QACAI) and "Graphic Tool Utility and Achievement Test"(GTUAT) were used for the study. The GTUAT had a test-retest reliability coefficient of 0.67 over an interval of two weeks while the QACAI yielded a split half reliability coefficient of 0.72. Data collected for the study were analysed using descriptive and analytical statistics.

The results showed a significant difference between the performance of students exposed to problem solving CAI package and those exposed to drill and practice CAI package ($t = 2.105$, $p < 0.05$). The problem solving CAI group ($X = 86.75$, $SD = 11.27$) performed better

than the drill and practice CAI group (X = 79,50, SD = 10.51). The results also showed a significant difference between the performance of learners exposed to drill and practice CAI package and those exposed to the conventional chalk-and-talk method (t= 7.79, $p<0.05$) The drill and practice CAI group (X = 79.50, SD = 10.50) performed better than the chalk-and-talk group (X = 52.50, SD = 11.41). Lastly, a significant difference was noted between the performance of learners in the problem solving CAI group and those exposed to the chalk-and-talk method (t = 9.54, $p<0.05$). The problem solving group (X = 86.75, SD = 11.27) performing better than the chalk-and-talk group (X = 52.50, SD = 11.41). The result also showed a significant difference between the pre test and post test attitudes of learners in the experimental groups to CAI. A comparison of the pre test and post test attitudes of learners in the drill and practice group to CAI showed a t value of 6.20 which was significant at 0.05 level while that of the problem solving group showed a significant t value of 5. 51 at 0.05 level.

It was concluded that both the problem solving and drill and practice modes of CAI were effective in improving the performance of students in Fine Arts and in developing a positive attitude towards computer assisted Instruction.

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