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Thesis Title : Developing Graphic and Audio Computer Assisted
Instruction Program on Logic Gate
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Abstract

The purpose of this research was to develop Computer Assisted Instruction(C.A.I.)Programs on Logic Gate by using graphic and sound reinforcement presentation, for the course 4151703. : Digital Electronics 1

The sample group is 30 first year diploma student, which study Electronics program at Udonrthani Teachers College, selected by using basic test and learning achievement.

The research instruments were the C.A.I. and achievement test, on AND GATE, OR GATE, NOT GATE, NAND GATE and NOR GATE. After being developed these C.A.I. programs and achievement test, were then put into an experimental process for an efficiency analysis at Udonrthani Teachers College, which the sample group of 30 electronics students. The data collected from the experiment were used for the C.A.I. efficiency analysis and learning achievement.

The result of this research revealed that the C.A.I. efficiency was 90.67/90.17 which was at the efficiency based on the 90/90 criterion. The learning achievement by using the C.A.I. was significantly increased at the $\alpha = 0.01$