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Thesis Title : A Comparative Study of Learning Achievement in the Digital Systems Laboratory Using a Logic Gate IC and a Programmable Array Logic IC
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Abstract

The experimental research project is a comparative study of learning achievement of students studying in the Digital System laboratory using a logic Gate IC and programmable array logic (PAL) IC.

The learning systems consisted of experimental lab sheets for eight tests using the Logic Gate IC and lab sheets for eight tests using the PAL IC. The lab sheets were distributed to two sample groups made up of 15 bachelor level Electronics engineering students in each group. The sample student consisted of year 2001, first semester students at South -East Asia University.

One group performed experiments in the Digital Systems Laboratory course using the Logic Gate IC and the other group performed experiments with the PAL IC. After completing the experiments, the students were tested for their knowledge acquisition. The marks were then subjected to statistical analysis and the results were summarized.

The finding of the research revealed that the learning achievement levels of the two groups were not statistically significant, as they at a level of 0.05.

(Total 210 pages)