

PROBLEM BASED EXPERIMENTS AND VHDL: TOOL IN ENHANCING STUDENTS' EFFICACY ON DIGITAL LOGIC DESIGN

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Recent technology advancements have led to enhanced usage of digital systems in all engineering disciplines and have also created the need of in-depth knowledge of digital circuits among students. Teaching method and content restructuring in Digital Logic course is necessary to ensure that students develop required competencies and to prepare them for a significant design experience in complex problems/systems. This research investigated the effects of problem based experiments and utilization of VHDL into laboratory activities for Digital Logic Design courses. This paper proved positive effects on students' performance in areas of problem solving and analytical skills, experimentation and system design ability and proficiency in the use of modern tools.