

THE EFFECTIVENESS OF USING VIRTUALIZATION TECHNIQUES IN TEACHING AND LEARNING COMPUTER ORGANIZATION COURSE FOR INFORMATION TECHNOLOGY STUDENTS

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The general objective of this study was to know the effectiveness of using virtualization techniques in teaching and learning Computer Organization Course for Information Technology students. A virtualization is a perfect vehicle for operating-systems research and development. System development is done on the virtual machine, instead of on a physical machine and so does not disrupt normal system operation. In virtual machine software, multiple operating systems can run on a single computer. Sequential Exploratory design, in which the qualitative data was gathered first followed by the quantitative data, was used. The laboratory machine problems activities were performed using virtualization techniques and physical machine set-up. VMWare software was used for virtualization techniques; this simulated the said activity. Based on the results, the virtualization techniques were proven to be excellent in terms of level of understanding and skills. In terms of accuracy of solution the results were very satisfactory. The respondents observed that some of the laboratory activities were not accurate in output display. The recommendation was to use virtualization techniques first before physical machine set-up to avoid damage on computer and to minimize the errors.