

Impact of Teaching Strategies: Demonstration and Lecture Strategies and Impact of Teacher Effect on Academic Achievement in Engineering Education

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ABSTRACT This study investigated the impact of Teaching Strategies and Teacher Effect on students' academic achievement in engineering education. Two different Teaching Strategies, one with demonstration strategy using working models and the other with lecture strategy were adopted. Experimental research design was used with the independent variables being Teaching Strategies and Teacher Effect and the dependent variable was Academic Achievement. Two-way ANOVA showed that the main effects of Teaching Strategies and Teacher Effect were significant. Demonstration strategy was found to be significantly better than lecture strategy. Teacher-B (more experienced) was found to be significantly better than Teacher-A with regard to students' academic achievement. Significant interaction effect was seen only with regard to lecture strategy with Teacher-B being better than Teacher-A. It was established from the findings that the demonstration strategy had produced significantly better academic achievement among engineering students independent of Teacher Effect. This study carries significant implications for improving the quality of engineering education.