# Learning by Doing in Teaching and Learning Object-Oriented Analysis and Design Approach to Software Development

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**ABSTRACT**
Learning by doing (LBD) have been indicated by many researchers to be predominantly used in engineering and computer science fields. This paper presents step-wise procedure on how learning by doing approach have been applied in teaching and learning object-oriented analysis and design approach in software development to Bachelor of Science students taking computer science and computer engineering. The approach covered requirement analysis and design phases of the software development life cycle. Students in groups had group case projects which solve the real life problems and actively were engaged to apply the methodology in developing a software up to the design phase. The outcome of the approach was the documentation of the designed case group software projects and findings of the survey on student's opinion and satisfaction in using the LBD approach. The survey showed that many students gained the knowledge to a big extent after the course. The majority of students were satisfied and wishing the approach to be applied in teaching and learning other courses. Students prefer the blended mode of learning by making use of lectures and mixed with practice like LBD.

Keywords: Object-Oriented Analysis and Design; Software Engineering; Learning by Doing; Active Learning.