Development of a project-based learning approach in requirement engineering

ABSTRACT

Project failure is due to the lack of Requirement Engineering (RE) practice. The Industry needs to allocate another cost to send their employee for additional training before the employee can contribute to the job specification. It indicates that current practices of delivery mechanisms at the university fail to deliver graduates with employ ability skills. The objective of this research is to identify weaknesses in current practice of teaching Software Engineering undergraduate in Requirement Engineering. Additionally, this paper emphasized that Project Based Learning (PjBL) is a right method for delivery mechanisms to enhance Software Engineering undergraduate skills particularly in RE. The PjBL is a super set to Problem Based Learning, Individual-Collaborative Learning and Product-Based Learning. The intersection can strongly assist in the learning environment. Future work should be carried out to design the framework of PjBL, measuring the effectiveness of PjBL and the electronic Learning environment (eLIN) system as a supportive tools to make PjBL successful.

Keyword: Software engineering education; Project-based learning; Requirement engineering; Problem-based learning; Individual problem solving; Collaborative problem solving; Product-based learning