Project Based Learning (PjBL) practices at Politeknik Kota Bharu, Malaysia.

ABSTRACT

This study explores the utilization of Project-based Learning module in the subject of project development for the Mechanical Engineering students at Politeknik Kota Bharu. This study focuses on the development of the PjBL module based on socio-constructivist approach. The objective of this study is to explore the influence of the utilization of the PjBL module on students’ meta-cognition, motivation and self regulation. Result shows that the overall engineering students reported higher level of motivation, self confidence and self regulation throughout the process. The PjBL also enhances the cognitive and critical thinking in engineering problem solving among students. The use of PjBL module enables students to plan their project easily, work collaboratively with peers with minimal supervision from supervisors or lecturers and successfully complete their project on time. The positive feedback from this study may be used by management to further apply this PjBL concept across disciplines and departments.

Keyword: Project based learning; Polytechnic; Engineering; Practices.