

Physics students' acceptance of PBL online in terms of learning outcomes

Abstract

The objective of this paper is to explore students' acceptance in terms of learning outcome towards problem-based learning online (PBL online) that was used in a physics course. A cohort of physics students (N=30) from the School of Science and Technology of Universiti Malaysia Sabah were involved in this study during Semester II, Session 2008/2009 academic year. The student had experienced the PBL learning activities via online learning environment by using the Learning Management System (LMS) provided by the university. The LMS acts as the main medium to support their full learning process including their assessment throughout the semester. Three main themes focused in this study as learning outcome were: students' knowledge, skills and application of knowledge and skills; communication; and independent learning. Data were collected using a well established survey of five points of Likert scale from strongly disagree to strongly agree level that filled by students after they finished with the intervention. The findings came up with a very positive feedback where all of the statements showed significant different (with $p^* < 0.05$ for the binomial test, based on Z approximation, and also for the Independent sample t-test) where students were strongly agree with the PBL online's learning outcome. Thus, the outcome reflects that student were really engaged and managed to apply all particular skills measured that been created from PBL online.