Problem-based learning assessment vs. conventional assessment in a physics course: a preliminary findings

Abstract

The study is essentially an exploratory analysis, which sets out to obtain pattern of Problem-Based Learning assessment (PBLa) and Conventional assessment (Ca) that has been carried out in Faculty of Science and Natural Resources, Universiti Malaysia Sabah. The main objective of this paper is to scrutiny on how PBLa and Ca might contribute to students’ performance that leads to their final grade in total. A physics course (Waves and Optic, SF10603) has been chosen since it involved two lectures that thought the course for seven weeks each. Data was gathered from three (3) consecutive different batches of students who registered for the course. The course is offer in every second semester in each session (i.e., 2011/2012 (n=34); 2012/2013 (n=60); and 2013/2014 (n=54)). For the first seven weeks student has been exposed with PBLa approach where it is one of the students-centered learning method. The second part of the seven weeks, another lecturer took over. Students were undergone Ca of teaching and learning activities since then. The data analysis carried out a pattern where PBLa approach showed a positive consistency in students’ achievement compare to its counterparts. This paper also discussed type of assessments that carried out in PBLa and conventional approach.