# The effectiveness of project – based learning (egg drop project) towards students' real world connection in learning physics

## Abstract

The purpose of this research was to seek the effectiveness of Project – Based Learning (PBL) (i.e., egg drop project) towards students' real world connection in learning physics. This research was conducted in Tuaran (Urban) and Kota Marudu (Rural) in Malaysia. A total of thirty- eight(38) form four students (i.e., 17 male and 21 female students) were used in the study. Data used in the study were collected using the Colorado Learning Attitude about Science Survey (CLASS) – real world connection Category. Respondents were required to response to the survey instrument based on a five point Likert scale before (presurvey) and after (post-survey) in the implementation of PBL. Data collected were analysed using Statistical Package for Social Science Version 20.0 for windows (SPSS) to compare the students' pre-survey and postsurvey responses. Wilcoxon signed ranks test results showed that real world connection of overall students for both schools in total, gender (i.e., male and female) andlocation(i.e., urban and rural) have positive significant difference in median values.In addition the second analysis which is the paired samples-t-test results showed that overall students for both schools in total, gender (i.e., male and female)and location (i.e., urban and rural) have positive significant difference in mean values as well. Therefore study revealed that through PBL-egg drop project, students could relate physics concepts; momentum, impulse and impulsive force into real life situations, engaged students' real world connection in learning physics and changed students' perception towards physics