

# THE EFFECTIVENESS OF PROJECT – BASED LEARNING (EGG DROP PROJECT) TOWARDS STUDENTS' PERCEPTION IN LEARNING PHYSICS

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## ABSTRACT

This research was taken place in one selected school at Tuaran and Kota Marudu Districts and was carried out on 38 Form 4 Science students. Quantitative data were collected via The Colorado Learning Attitude about Science Survey (CLASS) - personal interest, sense making and effort, real world connection and problem solving general category before and after Project - Based Learning (PBL). Gathered data were analysed using Statistical Package for Social Science Version 20.0 for windows (SPSS) to compare the students' pre-survey and post-survey responses by using Wilcoxon Signed Ranks Tests and Paired Samples-t-test. Both tests results showed that students in each perspective have statistically significant difference after PBL for each CLASS – category.

**KEYWORDS** Personal Interest, Sense Making and Effort, Real World Connection, Problem Solving Perception

## INTRODUCTION

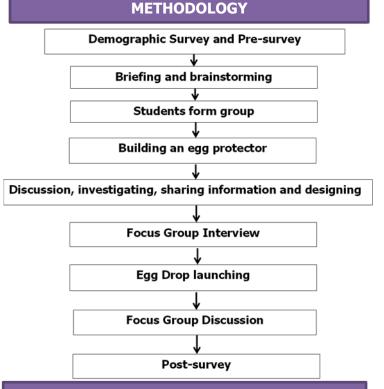
Hands on activities for physics in everyday life course give a positive effect towards students' personal interest, sense making and effort, real world connection and problem solving (Harlow, Landau & Bailey, 2013). PBL serves with real world projects that connect students with daily life situations that help students to achieve high standards in education (Emanuel, Joyner, Bradby, Creech & Bottoms, 1998).

## PUBLICATIONS

- 1. Jeffry J.R. & Fauziah, S. (2016). The Students' Perception of Problem Solving Through Stem Project-Based Learning (Egg Drop Project). *Asia Pacific Journal of Educators and Education*
- 2. Jeffry J.R. & Fauziah, S. (2016). Students' Personal Interest towards Project Based Learning
- Juan, J., Jr, R., & Sulaiman, F. (2016). The Effectiveness of Project – Based Learning (Egg Drop Project) Towards Students ' Real World Connection in Learning Physics, 5(8), 1–6.
- Juan, J., Jr, R., & Sulaiman, F. (2016). Students' Sense Making and Effort towards Project – Based Learning in Learning Physics, (IJER)

#### REFERENCES

- Harlow, J. J. B., Landau, R., & Bailey, D. C. (2014). The Effects of Physics Breadth Courses on Student Attitudes about Science, *70*(1), 7–10.
- 2. Emanuel, Joyner ,Bradby, Creech & Bottoms (1998). Working Together to Change Practice and Accelerate Student Learning



#### **RESULTS AND FINDINGS**

Category	z -	t-	р-	Results and
	value	value	value	Findings
Personal	-4.45	6.14	0.00*	Have
Interest				significant
				difference
Sense	-3.70	9.04	0.00*	Have
Making and				significant
Effort				difference
Real world	-5.06	8.95	0.00*	Have
Connection				significant
				difference
Problem	-5.04	8.42	0.00*	Have
Solving				significant
Perception				difference

#### CONCLUSION

Through PBL – egg drop project, students can relate physics concepts; momentum, impulse and impulsive force into real life situations.

