ABSTRACT

Arzila Nurshafara, 2021. "Meta-Analysis Of The Effect Of The Predict Observe Explain (POE) Learning Model On Students' Physics Learning Outcomes"

The POE learning model is the main choice in overcoming problems in physics learning, so many similar studies on the POE learning model have been conducted by previous researchers. The results of previous studies show that there is a significant effect of the application of the POE learning model on physics learning. Therefore, this study will re-analyze by collecting statistical data from previous studies using effect size measurements on the effect of the POE learning model. The appropriate method to conduct this research is to use the meta-analysis method.

The type of research that be used is meta-analysis research. This study aims to review previous research based on a quantitative approach by analyzing quantitative data from the results of previous studies to accept or reject the hypotheses proposed in these studies. Through several meta-analysis procedures, namely, determining research themes, determining relevant research, coding the literature, calculating effect sizes, calculating summary effects, and making interpretations, conclusions from analysis results, and reporting.

From the results of the meta-analysis conducted based on aspects of assessment of learning outcomes, educational unit level, and regional units, it was found that: (1) the Predict Observe Explain learning model has a great effect on cognitive aspects and affective aspects with summary effects of 0.995 and 1.011, (2) The Predict Observe Explain learning model is very effectively applied at the junior high school and senior high school levels with summary effects of 1,066 and 0.911, and (3) the use of the Predict Observe Explain learning model has a very high effect on the Sumatera region with a summary effect of 1.240.

Keywords: *Meta-Analysis, Predict Observe Explain Model Learning, Learning Outcomes*