

## THE INFLUENCE OF THE INQUIRY BASED LEARNING MODEL IN STUDENTS MATHEMATICS LEARNING: A META-ANALYSIS

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### **Abstract**

*The purpose of this study is to determine the reason for inquiry learning model for students' mathematics learning. This study is a meta-analysis study. The research data comes from 17 national and international journals published from 2015-2023. Data analysis in this study with the JSAP application. The inclusion criteria in this study are 1) research comes from journals or proceedings indexed by Scopus and SINTA; 2) The study has two experimental classes with inquiry-based learning models and conventional learning control classes; 3) journals or proceedings obtained from Google Scholar, AIP Proceedings, IOP Proceedings, Wiley, ERIC Journal and ScienceDirect. The results of the study concluded that the summary effect size or mean effect size value was 0.833 height criteria and values ( $Z = 9,061$ ;  $p < 0.001$ ). This finding explains that the inquiry-based learning model has a positive effect on students' mathematics learning compared to conventional models.*

**Keywords:** Inquiry based learning; Size effect; Mathematics Learning, Meta-analysis

### **INTRODUCTION**

Mathematics learning is a learning that requires students to think critically in learning (Muhammad et al., 2023; Hofer et al., 2023; Wardat, 2023). In addition, students' mathematics learning must have problem-solving skills in learning (Khatimah &, 2019; Bishara, 2016). Mathematics learning plays an important role in the development of technology and education (Lucky & Julyanti, 2023). Verawati et al., (2022) mathematics