ABSTRAK

Diva Nur Rianti Arsyi, 1212050049, 2025, "Penerapan Model Pembelajaran *Problem Based Learning* Berbantuan *Digital Math Comic* untuk Meningkatkan Kemampuan Pemahaman Konsep Matematis Siswa"

Penelitian ini dilatarbelakangi oleh kemampuan pemahaman konsep matematis siswa yang masih perlu ditingkatkan, didukung dari hasil studi pendahuluan. Model *Problem Based Learning* (PBL) berbantuan *Digital Math Comic* menjadi alternatif untuk meningkatkan kemampuan pemahaman konsep matematis. Tujuan dari penelitian ini untuk mengetahui: (a) Sintaks kegiatan pembelajaran, (b) Peningkatan kemampuan pemahaman konsep matematis siswa dengan model PBL berbantuan *Digital Math Comic*, (c) Peningkatan kemampuan pemahaman konsep matematis siswa dengan pembelajaran konvensional, (d) Peningkatan kemampuan pemahaman konsep matematis siswa dengan model PBL berbantuan *Digital Math Comic* lebih baik dibandingkan siswa dengan pembelajaran konvensional. Penelitian ini menggunakan metode kuasi eksperimen dengan instrumen tes berupa tes kemampuan pemahaman konsep matematis dan instrumen non tes berupa lembar observasi keterlaksanaan aktivitas guru dan siswa serta dokumentasi. Hasil dari penelitian ini yaitu: (a) Sintaks kegiatan pembelajaran dikategorikan sangat baik, (b) Peningkatan kemampuan pemahaman konsep matematis siswa dengan model PBL berbantuan *Digital Math Comic* berada pada kriteria tinggi, (c) Peningkatan kemampuan pemahaman konsep matematis siswa dengan pembelajaran konvensional berada pada kriteria sedang, (d) Peningkatan kemampuan pemahaman konsep matematis siswa dengan model PBL berbantuan *Digital Math Comic* lebih baik dibandingkan siswa dengan pembelajaran konvensional.

Kata kunci: *Digital Math Comic,* Kemampuan Pemahaman Konsep Matematis, *Problem Based Learnin*g.

ABSTRACT

Diva Nur Rianti Arsyi, 1212050049, 2025, *"Application of Problem Based Learning Model assisted by Digital Math Comic to Improve Students' Mathematical Concept Understanding Ability"*

This study is motivated by the ability to understand the mathematical concepts of students who still need to be improved, supported by the results of the preliminary study. The Problem Based Learning (PBL) model assisted by Digital Math Comic is an alternative to improve the ability to understand mathematical concepts. The purpose of this research is to find out: (a) Syntax of learning activities, (b) Improvement of students' mathematical concept understanding ability with PBL model assisted by Digital Math Comic, (c) Improvement of students' mathematical concept understanding ability with conventional learning, (d) Improvement of students' mathematical concept understanding ability with PBL model assisted by Digital Math Comic is better than students with conventional learning. This study used quasi-experimental method with test instruments in the form of mathematical concept understanding ability tests and non-test instruments in the form of observation sheets of teacher and student activity implementation and documentation. The results of this study are: (a) The syntax of learning activities is categorized as very good, (b) The improvement of students' mathematical concept understanding ability with PBL model assisted by Digital Math Comic is on high criteria, (c) The improvement of students' mathematical concept understanding ability with conventional learning is on medium criteria, (d) The improvement of students' mathematical concept understanding ability with PBL model assisted by Digital Math Comic is better than students with conventional learning.

Keywords: *Digital Math Comic, Mathematical Concept Understanding Ability, Problem Based Learning*.