ABSTRAK

Yossi Amanda, 1212050187, 2025. "Penerapan Model Pembelajaran *Project, Activity, Cooperative, Exercise* (PACE) dalam Meningkatkan Kemampuan Pemahaman dan *Self Efficacy* Matematis Siswa".

Kemampuan pemahaman matematis peserta didik masih perlu ditingkatkan serta *self efficacy* dapat mendukung pembelajaran matematika khususnya pada kemampuan pemahaman matematis. Tujuan penelitian ini adalah mengetahui proses pembelajaran menggunakan model PACE, peningkatan kemampuan pemahaman matematis peserta didik kelas PACE lebih baik dari konvensional, dan *self efficacy* matematis peserta didik setelah mengikuti pembelajaran PACE. Metode penelitian menggunakan kuasi eksperimen dengan *nonequivalent control group desain*. Populasi penelitian yaitu seluruh peserta didik kelas VIII salah satu SMPN di Bandung 2024/2025 terdiri dari sepuluh kelas dengan sampel sebanyak 2 kelas yang dipilih menggunakan teknik *purposive sampling*. Instrumen tes pemahaman matematis dengan validasi tinggi dan reliabilitas sedang. Teknik analisis data yang digunakan yaitu uji t dan analisis deskriptif pada proses pembelajaran serta *self efficacy*. Hasil penelitian: (1) proses pembelajaran model PACE menunjukkan keterlaksanaan aktivitas terpenuhi sangat baik, (2) peningkatan kemampuan pemahaman matematis peserta didik kelas PACE lebih baik dari konvensional, dan (3) *self efficacy* matematis peserta didik setelah mengikuti pembelajaran PACE menunjukkan tingkat *self efficacy* dengan kriteria cukup tinggi. Berdasarkan temuan penelitian, untuk menerapkan model pembelajaran PACE dapat memastikan terlebih dahulu peserta didik menguasai materi prasayarat. Adapun diharapkan lebih menumbuhkan keyakinan diri peserta didik dalam menyelsaikan tugas individu.

Kata kunci: PACE, pemahaman matematis, *self efficacy* matematis

ABSTRACT

Yossi Amanda, 1212050187, 2025. "*Implementation of the Project, Activity, Cooperative, and Exercise (PACE) Learning Model to Improve Students' Mathematical Understanding and Self Efficacy*".

Students' mathematical understanding ability still needs to be improved and self-efficacy can support mathematics learning, especially in mathematical understanding ability. The purpose of this study was to determine the learning process using the PACE model, the improvement of students' mathematical understanding ability in the PACE class better than conventional, and students' mathematical self-efficacy after participating in PACE learning. The research method used a quasi-experimental with a nonequivalent control group design. The study population was all eighth grade students of one of the SMPN in Bandung 2024/2025 consisting of ten classes with a sample of 2 classes selected using a purposive sampling technique. The mathematical understanding test instrument had high validation and moderate reliability. The data analysis technique used was the t-test and descriptive analysis on the learning process and self-efficacy. Research results: (1) the PACE model learning process shows that the implementation of activities is very well fulfilled, (2) the increase in mathematical understanding of PACE class students is better than conventional, and (3) the mathematical self-efficacy of students after participating in PACE learning shows a level of self-efficacy with quite high criteria. Based on research findings, to apply the PACE learning model, it is necessary to ensure that students have mastered the prerequisite material first. It is hoped that it will further increase students' self-confidence in completing individual tasks.

Keywords: PACE, mathematical understanding, mathematical self efficacy