

ABSTRAK

Isni Fajriawati Januari, 1212050080, 2026, “Penerapan Model Pembelajaran *Peer Tutoring Cooperative Learning* (PTCL) Terhadap Peningkatan Kemampuan Komputasional dan *Self Confidence* Siswa”

Kemampuan komputasional dan *self confidence* memiliki peran penting dalam pembelajaran matematika. Salah satu alternatif untuk meningkatkan kemampuan komputasional dan *self confidence* yaitu dengan menerapkan model pembelajaran *Peer Tutoring Cooperative Learning* (PTCL). Tujuan penelitian ini untuk mengetahui lintasan pembelajaran model pembelajaran PTCL serta menganalisis peningkatan kemampuan komputasional dan *self confidence* peserta didik yang memperoleh pembelajaran dengan model pembelajaran PTCL dibandingkan pembelajaran konvensional. Metode penelitian yang digunakan adalah kuasi eksperimen dengan populasi seluruh peserta didik kelas X Jurusan Teknologi Farmasi pada salah satu SMK Negeri di Kota Bandung tahun ajaran 2025/2026 dan sampel terdiri dari satu kelas eksperimen dan satu kelas kontrol yang dipilih melalui *cluster sampling*. Instrumen penelitian meliputi tes kemampuan komputasional yang telah memenuhi kriteria validitas dan reliabilitas tinggi, serta dilengkapi angket *self confidence* dan lembar observasi lintasan pembelajaran yang telah divalidasi ahli. Data diolah menggunakan uji t' dan uji statistik deskriptif. Hasil penelitian menunjukkan bahwa lintasan proses pembelajaran berada pada kategori sangat baik, serta terdapat perbedaan peningkatan kemampuan komputasional dan *self confidence* peserta didik kelas eksperimen dengan peserta didik kelas kontrol secara signifikan. Berdasarkan temuan tersebut, model pembelajaran PTCL dapat dijadikan sebagai alternatif model dalam pembelajaran matematika.

Kata kunci: *Peer Tutoring Cooperative Learning*, Komputasional, *Self Confidence*.

ABSTRACT

Isni Fajriawati Januari, 1212050080, 2026, "The Application of Peer Tutoring Cooperative Learning (PTCL) Learning Model to Improve Computational Ability and Students' Self Confidence"

Computational ability and self-confidence play an important role in learning mathematics. One of the alternatives to improve computational ability and self-confidence is by implementing the Peer Tutoring Cooperative Learning (PTCL) learning model. The purpose of this research is to find out the learning trajectory of the PTCL learning model as well as analyze the improvement in computational skills and self-confidence of learners who acquire learning with the PTCL learning model compared to conventional learning. The research method used is a quasi-experimental with a population of all students in class X of the Department of Pharmaceutical Technology at one of the State Vocational Schools in Bandung City for the 2025/2026 school year and the sample consists of one experimental class and one control class selected through cluster sampling. Research instruments include computational ability tests that have met the validity and reliability criteria, as well as self-confidence questionnaires and learning trajectory observation sheets that have been validated by experts. Data is processed using t-test and descriptive statistical test. The research results show that the trajectory of the learning process is in the very good category, and there is a significant difference in the increase in computational ability and self-confidence of experimental class students with control class students. Based on these findings, the PTCL learning model can be used as an alternative model in mathematics learning.

Keywords: Peer Tutoring Cooperative Learning, Computational, Self Confidence.