

ABSTRAK

Lusy Hardianti, 1222050079, 2026. “Penerapan Model Flipped Classroom dengan Microlearning Berbasis Short video untuk Meningkatkan Kemampuan Pemahaman Konsep dan Self-efficacy Matematis Peserta Didik”.

Kemampuan pemahaman konsep matematis dan *self-efficacy* matematis peserta didik masih perlu ditingkatkan sehingga diperlukan model pembelajaran yang mampu mengembangkan aspek kognitif dan afektif secara bersamaan. Penelitian ini bertujuan mengetahui keterlaksanaan pembelajaran menggunakan model *Flipped Classroom* dengan *microlearning* berbasis *short video*, menganalisis perbedaan peningkatan kemampuan pemahaman konsep matematis dibandingkan pembelajaran konvensional, mengetahui tingkat *self-efficacy* matematis peserta didik, serta mendeskripsikan keterkaitan antara kemampuan pemahaman konsep matematis dan *self-efficacy*. Penelitian menggunakan pendekatan kuantitatif dengan metode kuasi eksperimen dan desain *Nonequivalent Pretest-Posttest Control Group Design*. Sampel ditentukan melalui *cluster random sampling*, yaitu kelas X DPIB 5 sebagai kelas eksperimen dan X DPIB 4 sebagai kelas kontrol di SMK Negeri 6 Bandung Tahun Ajaran 2025/2026. Instrumen penelitian meliputi tes kemampuan pemahaman konsep matematis, angket *self-efficacy*, dan lembar observasi. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran berada pada kategori sangat baik, peningkatan kemampuan pemahaman konsep matematis peserta didik pada kelas eksperimen lebih tinggi secara signifikan dibandingkan kelas kontrol, *self-efficacy* matematis berada pada kategori cukup tinggi, serta hasil uji korelasi menunjukkan bahwa tidak terdapat hubungan yang signifikan antara kemampuan pemahaman konsep matematis dan *self-efficacy* matematis peserta didik. Model *Flipped Classroom* dengan *microlearning* berbasis *short video* efektif digunakan sebagai alternatif pembelajaran matematika.

Kata Kunci: *flipped classroom*, *microlearning*, *short video*, pemahaman konsep matematis, *self-efficacy*.

ABSTRACT

Lusy Hardianti, 1222050079, 2026. “The Application of the Flipped Classroom Model with Short-Video-Based Microlearning to Improve Students’ Conceptual Understanding and Mathematical Self-efficacy.”

Students’ mathematical conceptual understanding and mathematical self-efficacy still need to be improved; therefore, a learning model that can develop both cognitive and affective aspects simultaneously is required. This study aims to examine the implementation of learning using the Flipped Classroom model with short-video-based microlearning, analyze differences in improvements in mathematical conceptual understanding compared to conventional learning, determine students’ levels of mathematical self-efficacy, and describe the relationship between mathematical conceptual understanding and self-efficacy. The study employed a quantitative approach using a quasi-experimental method and a Nonequivalent Pretest-Posttest Control Group Design. The sample was selected through cluster random sampling, specifically Class X DPIB 5 as the experimental class and Class X DPIB 4 as the control class at SMK Negeri 6 Bandung during the 2025/2026 academic year. The research instruments included a test of mathematical conceptual understanding, a self-efficacy questionnaire, and an observation sheet. The research results show that the implementation of instruction fell into the “very good” category; the improvement in students’ ability to understand mathematical concepts in the experimental class was significantly higher than in the control class; mathematical self-efficacy fell into the “fairly high” category; and the correlation test results showed that there was no significant relationship between students’ ability to understand mathematical concepts and their mathematical self-efficacy. The Flipped Classroom model with short-video-based microlearning is effective as an alternative method for teaching mathematics.

Keywords: *flipped classroom, microlearning, short video, mathematical conceptual understanding, self-efficacy.*