ABSTRAK

Khairunnisa Febrianti, 1222050074, 2026, "Penerapan Pembelajaran Visual, Auditori, dan Kinestetik (VAK) Berbantuan Wordwall untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis dan *Self Efficacy* Siswa"

Kemampuan pemecahan masalah matematis dan *self efficacy* merupakan dua aspek penting yang mendukung keberhasilan pembelajaran matematika. Penelitian ini bertujuan untuk mendeskripsikan desain pembelajaran, keterlaksanaan pembelajaran, peningkatan kemampuan pemecahan masalah matematis, pencapaian kemampuan pemecahan masalah matematis berdasarkan gender, serta perbedaan *self efficacy* siswa sebelum dan sesudah mengikuti pembelajaran menggunakan model Visual, Auditori, dan Kinestetik (VAK) berbantuan Wordwall. Penelitian menggunakan pendekatan kuantitatif dengan metode kuasi eksperimen dan desain *Nonequivalent Control Group Design* yang melibatkan tiga kelas, yaitu kelas eksperimen I (VAK berbantuan Wordwall), kelas eksperimen II (VAK), dan kelas kontrol (pembelajaran konvensional). Instrumen penelitian meliputi tes kemampuan pemecahan masalah matematis, angket *self efficacy*, dan lembar observasi keterlaksanaan pembelajaran. Analisis data dilakukan menggunakan uji normalitas, homogenitas, N-Gain, *One Way ANOVA*, uji lanjut *Tukey HSD*, *ANOVA* dua jalur, dan *paired sample t-test*. Hasil penelitian menunjukkan bahwa pembelajaran VAK berbantuan *Wordwall* terlaksana dengan kategori sangat baik, peningkatan kemampuan pemecahan masalah matematis menunjukkan perbedaan yang signifikan antarkelompok pembelajaran, pencapaian kemampuan pemecahan masalah matematis berbeda berdasarkan model pembelajaran dan gender, serta *self efficacy* siswa mengalami peningkatan setelah mengikuti pembelajaran VAK berbantuan Wordwall.

Kata Kunci: Kemampuan Pemecahan Masalah Matematis, *self efficacy,* Model Pembelajaran Visual, Auditori, dan Kinestetik (VAK), Wordwall

ABSTRACK

Khairunnisa Febrianti, 1222050074, 2026, "*The Implementation of Visual, Auditory, and Kinesthetic (VAK) Learning Assisted by Wordwall to Improve Students' Mathematical Problem-Solving Ability and Self-Efficacy*"

Mathematical problem-solving ability and self-efficacy are two essential aspects that support successful mathematics learning. This study aimed to describe the instructional design, the implementation of learning, the improvement of students' mathematical problem-solving ability, the achievement of mathematical problem-solving ability based on gender, and the differences in students' self-efficacy before and after participating in Visual, Auditory, and Kinesthetic (VAK) learning assisted by Wordwall. This study employed a quantitative approach using a quasi-experimental method with a Nonequivalent Control Group Design involving three classes: Experimental Class I (VAK assisted by Wordwall), Experimental Class II (VAK), and the Control Class (conventional learning). The research instruments consisted of a mathematical problem-solving test, a self-efficacy questionnaire, and observation sheets for learning implementation. The data were analyzed using the normality test, homogeneity test, normalized gain (N-Gain), One-Way ANOVA, Tukey's HSD post hoc test, two-way ANOVA, and a paired-samples t-test. The results showed that the implementation of VAK learning assisted by Wordwall was categorized as very good. Furthermore, the improvement in students' mathematical problem-solving ability differed significantly among the learning groups, the achievement of mathematical problem-solving ability varied according to the learning model and gender, and students' self-efficacy improved after participating in VAK learning assisted by Wordwall.

Keywords: *Mathematical Problem-Solving Ability, Self-Efficacy, Visual, Auditory, and Kinesthetic (VAK) Learning Model, Wordwall*