

ABSTRAK

AGUSTINA WULANDARI BERUTU: Pengaruh Strategi *Relating, Experiencing, Applying, Cooperating, Transferring* (REACT) Terhadap Kemampuan Numerasi dan Kemandirian Belajar Siswa Di SMA Negeri 2 Kesuma Bangsa. **Program Studi Pendidikan Matematika FKIP Universitas Malikussaleh, 2025.**

Rendahnya kemampuan numerasi dan kemandirian belajar siswa dipengaruhi oleh berbagai faktor, salah satunya adalah penggunaan model, pendekatan, atau strategi pembelajaran yang belum optimal dan kurang tepat. Hal ini berdampak pada minimnya partisipasi aktif siswa dalam proses pembelajaran serta rendahnya kemampuan mereka dalam memahami, mengaitkan, dan merepresentasikan konsep-konsep matematika secara menyeluruh dan kontekstual. Oleh karena itu, diperlukan strategi pembelajaran yang bersifat kontekstual dan interaktif yang tidak hanya mendorong keaktifan siswa tetapi juga membantu mereka membangun pemahaman yang bermakna terhadap materi pelajaran, seperti strategi *Relating, Experiencing, Applying, Cooperating, Transferring* (REACT). Penelitian ini bertujuan untuk mengetahui pengaruh strategi *Relating, Experiencing, Applying, Cooperating, Transferring* (REACT) terhadap kemampuan numerasi dan kemandirian belajar siswa di SMA Negeri 2 Kesuma Bangsa.

Penelitian ini menggunakan pendekatan kuantitatif dengan jenis *Quasi Experiment* dan desain *Nonequivalent Control Group*. Populasi dalam penelitian ini adalah seluruh siswa kelas X SMA Negeri 2 Kesuma Bangsa. Teknik pengambilan sampel dilakukan dengan teknik *purposive sampling*, di mana kelas XE-1 ditetapkan sebagai kelas eksperimen dan kelas XE-2 sebagai kelas kontrol. Masing-masing kelas sampel terdiri dari 20 siswa. Teknik pengumpulan data dalam penelitian ini meliputi instrumen tes dan non-tes. Pengujian hipotesis dilakukan menggunakan uji *independent sample t-test* dan *Mann-Whitney* dengan bantuan *software SPSS* versi 25.

Berdasarkan hasil uji hipotesis terhadap kemampuan numerasi siswa menggunakan uji *Mann-Whitney* diperoleh nilai *Asymp. Sig. (2-tailed)* sebesar $0,015 < \alpha$ ($\alpha=0,05$), maka H_a diterima dan H_o ditolak. Dengan demikian terdapat pengaruh strategi REACT terhadap kemampuan numerasi siswa. Sementara itu, hasil uji hipotesis terhadap kemandirian belajar siswa menggunakan uji *independent sample t-test* didapatkan nilai *Sig. (2-tailed)* sebesar $0,011 < \alpha$ ($\alpha=0,05$), maka H_a diterima dan H_o ditolak. Dengan demikian terdapat pengaruh strategi REACT terhadap kemandirian belajar siswa.

Kata kunci: Strategi REACT, Kemampuan numerasi, Kemandirian belajar siswa.

ABSTRACT

AGUSTINA WULANDARI BERUTU: *The Effect of Relating, Experiencing, Applying, Cooperating, Transferring (REACT) Strategies on Numeracy Ability and Student Learning Independence at SMA Negeri 2 Kesuma Bangsa. Mathematics Education Study Program, FKIP Malikussaleh University, 2025.*

The low numeracy skills and learning independence of students are influenced by various factors, one of which is the use of learning models, approaches, or strategies that are not optimal and inappropriate. This has an impact on the lack of active participation of students in the learning process and their low ability to understand, relate, and represent mathematical concepts comprehensively and contextually. Therefore, a contextual and interactive learning strategy is needed that not only encourages student activeness but also helps them build a meaningful understanding of the subject matter, such as the Relating, Experiencing, Applying, Cooperating, Transferring (REACT) strategy. This study aims to determine the effect of the Relating, Experiencing, Applying, Cooperating, Transferring (REACT) strategy on the numeracy skills and learning independence of students at SMA Negeri 2 Kesuma Bangsa.

This study uses a quantitative approach with a Quasi Experiment type and a Nonequivalent Control Group design. The population in this study were all grade X students of SMA Negeri 2 Kesuma Bangsa. The sampling technique was carried out using a purposive sampling technique, where class XE-1 was designated as the experimental class and class XE-2 as the control class. Each sample class consisted of 20 students. Data collection techniques in this study included test and non-test instruments. Hypothesis testing was carried out using the Mann–Whitney test and independent sample t-test with the help of SPSS software version 25.

Based on the results of the hypothesis test on students' numeracy abilities using the Mann–Whitney test, the Asymp. Sig. (2-tailed) value was $0.015 < \alpha$ ($\alpha = 0.05$), so H_a was accepted and H_o was rejected. Thus, there was an influence of the REACT strategy on students' numeracy abilities. Meanwhile, the results of the hypothesis test on students' learning independence using the independent sample t-test obtained a Sig. (2-tailed) value of $0.011 < \alpha$ ($\alpha = 0.05$), so H_a was accepted and H_o was rejected. Thus, there was an influence of the REACT strategy on students' learning independence.

Keywords: REACT strategy, Numeracy skills, Student learning independence.