

ABSTRAK

PIPIT RAHMAH : Pengaruh Strategi *Relating, Experiencing, Applying, Cooperating, Transferring* (REACT) Terhadap Literasi Kimia dan Sikap Ilmiah Peserta Didik di SMA Negeri 1 Muara Batu. **Program Studi Pendidikan Kimia FKIP Universitas Malikussaleh, 2025.**

Penelitian ini bertujuan untuk mengetahui Pengaruh Strategi REACT Terhadap Literasi Kimia dan Sikap Ilmiah Peserta Didik di SMA Negeri 1 Muara Batu. Penelitian ini dilaksanakan pada semester genap tahun ajaran 2024/2025.

Penelitian ini menggunakan pendekatan kuantitatif. Jenis penelitian yang digunakan yaitu *pre eksperimental design*, dengan desain *intact-group comparasion*. Terdiri dari dua kelas yaitu kelas eksperimen dan kelas kontrol. Teknik pengambilan sampel menggunakan purposive sampling. Data dalam penelitian ini diperoleh dari hasil tes dan observasi. Instrumen pengumpulan data dalam penelitian ini adalah tes essay yang telah di validasi dan lembar observasi yang telah divalidasi oleh para ahli dan akan diisi oleh observer ketika dalam proses pembelajaran guna untuk menilai sikap ilmiah peserta didik pada pembelajaran ikatan kimia di kelas X. Teknik analisis data yaitu menggunakan uji normalitas menggunakan uji *shapiro – wilk*, uji homogenitas menggunakan uji *levene test*, dan pengujian hipotesis menggunakan uji *independent sample t-test*.

Berdasarkan hasil uji hipotesis berdistribusi normal dan data yang di uji homogenitas mempunyai varian yang sama atau homogen. Maka digunakan uji parametrik *Independent sample t- tes* di peroleh signifikan $0,000 < \text{taraf sig. } (\alpha = 0,05)$ ini menyatakan bahwa H_1 diterima. Menunjukkan bahwa terdapat pengaruh strategi REACT terhadap literasi kimia. Sedangkan data untuk sikap ilmiah menggunakan uji parametrik *independent sample t-test* di peroleh signifikan $0,000 < \text{taraf sig. } (\alpha = 0,05)$ ini menyatakan bahwa H_1 di terima. Hasil penelitian menunjukkan bahwa terdapat pengaruh strategi REACT terhadap literasi kimia dan sikap ilmiah peserta didik di SMA Negeri 1 Muara Batu pada materi ikatan kimia . diharapkan kepada peneliti selanjutnya untuk menerapkan strategi REACT ini pada materi dan mata pelajaran lainnya.

Kata Kunci : REACT, Literasi Kimia, Sikap Ilmiah, Ikatan Kimia

ABSTRACT

PIPIT RAHMAH : The Effect of the Relating, Experiencing, Applying, Cooperating, Transferring (REACT) Strategy on Chemistry Literacy and Scientific Attitudes of Students at Muara Batu State Senior High School 1. Chemistry Education Study Programme, Faculty of Teacher Training and Education, Malikussaleh University, 2025.

This study aims to determine the effect of the REACT strategy on chemical literacy and scientific attitudes among students at SMA Negeri 1 Muara Batu. The study was conducted during the second semester of the 2024/2025 academic year.

This study employs a quantitative approach. The research design used is a pre-experimental design with an intact-group comparison design. It consists of two classes, namely the experimental class and the control class. The sampling technique used is purposive sampling. The data in this study were obtained from test results and observations. The data collection instruments in this study were an essay test that had been validated and an observation sheet that had been validated by experts and would be filled out by observers during the learning process to assess the scientific attitudes of students in chemistry bonding learning in Grade X. The data analysis techniques used were the Shapiro-Wilk normality test, the Levene test for homogeneity, and hypothesis testing using the independent sample t-test.

Based on the hypothesis testing results, it is normally distributed, and the data tested for homogeneity had the same or homogeneous variance. Therefore, the parametric independent sample t-test was used, yielding a significance level of $0.000 < \text{significance level } (\alpha = 0.05)$, indicating that H_1 was accepted. This shows that the REACT strategy has an effect on chemistry literacy. Meanwhile, the data for scientific attitudes using the parametric independent sample t-test obtained a significance of $0.000 < \text{significance level } (\alpha = 0.05)$, indicating that H_1 is accepted. The research results indicate that there is an effect of the REACT strategy on chemical literacy and scientific attitudes of students at SMA Negeri 1 Muara Batu in the subject of chemical bonding. It is hoped that future researchers will apply this REACT strategy to other subjects and courses.

Keywords: REACT, Chemical Literacy, Scientific Attitude, Chemical Bonding