

ABSTRAK

RESTI AYU ANDINI: Pengaruh *Research Oriented Collaborative Inquiry Learning Model (REORCILEA)* Terhadap Hasil Belajar Kognitif dan Aktivitas Siswa Pada Materi Asam Basa Di SMA Negeri 6 Lhokseumawe. **Program Studi Pendidikan Kimia FKIP Universitas Malikussaleh.**

Model REORCILEA merupakan model pembelajaran berbasis riset yang menekankan peserta didik untuk belajar secara aktif melalui pencarian informasi untuk menyelesaikan tugas atau memecahkan masalah secara mandiri. Penelitian ini bertujuan untuk mengetahui pengaruh *Research Oriented Collaborative Inquiry Learning Model (REORCILEA)* terhadap hasil belajar kognitif dan aktivitas siswa pada materi asam basa.

Penelitian ini menggunakan pendekatan kuantitatif dengan desain *Intact Group Comparison*. Subjek penelitian adalah siswa kelas XI SMA Negeri 6 Lhokseumawe semester genap tahun ajaran 2024/2025. Teknik pengambilan sampel dilakukan dengan cara *purposive sampling*, dimana kelas kontrol berjumlah 24 siswa dan kelas eksperimen berjumlah 22 siswa. Instrument penelitian berupa soal dan lembar observasi yang telah melalui uji validitas, reliabilitas, tingkat kesukaran dan daya beda. Hasil uji menunjukkan bahwa 17 soal dinyatakan valid dan lembar observasi telah dinyatakan layak digunakan.

Hasil penelitian menunjukkan bahwa kelas eksperimen memperoleh nilai kognitif dan aktivitas belajar yang lebih tinggi dibandingkan kelas kontrol, dengan rata-rata nilai masing-masing sebesar 71,66 dan 74,71. Sebaliknya, kelas kontrol memperoleh rata-rata 58,58 untuk hasil kognitif dan 50,58 untuk aktivitas belajar. Data hasil penelitian memenuhi asumsi normalitas dan homogenitas, sehingga dapat dianalisis menggunakan uji-t dengan nilai sig.(2-tailed) $0,000 < 0,05$ artinya H_0 ditolak dan H_1 diterima. Dengan demikian, dapat disimpulkan bahwa model REORCILEA berpengaruh signifikan terhadap peningkatan hasil belajar kognitif dan aktivitas siswa.

Kata Kunci: Hasil Kognitif, Aktivitas Belajar, *Research Oriented Collaborative Inquiry Learning*, *Intact Group Comparison*, Asam Basa.

ABSTRACT

RESTI AYU ANDINI: The Effect of the Research Oriented Collaborative Inquiry Learning Model (REORCILEA) on Cognitive Learning Outcomes and Student Activities at SMA Negeri 6 Lhokseumawe in Acid-Base Material. **Chemistry Education Study Programme, FKIP, Malikussaleh University**

The REORCILEA model is a research-based learning model that emphasises active learning through information seeking to complete tasks or solve problems independently. This study aims to determine the effect of the Research Oriented Collaborative Inquiry Learning Model (REORCILEA) on cognitive learning outcomes and student activities in acid-base material.

This study employs a quantitative approach with an Intact Group Comparison design. The research subjects are Grade XI students at State Senior High School 6 Lhokseumawe in the second semester of the 2024/2025 academic year. The sampling technique used was purposive sampling, with the control class consisting of 24 students and the experimental class consisting of 22 students. The research instruments consisted of questions and observation sheets that had undergone validity, reliability, difficulty level, and discriminative power tests. The test results showed that 17 questions were deemed valid, and the observation sheets were deemed suitable for use.

The research results showed that the experimental class achieved higher cognitive scores and learning activities compared to the control class, with average scores of 71,66 and 74,71, respectively. Conversely, the control class achieved an average of 58,58 for cognitive outcomes and 50,58 for learning activities. The research data met the assumptions of normality and homogeneity, allowing analysis using a t-test with a sig. (2-tailed) value of $0,000 < 0,05$, meaning H_0 was rejected and H_1 accepted. Thus, it can be concluded that the REORCILEA model significantly influences improvements in cognitive learning outcomes and student activity.

Keywords: Cognitive Outcomes, Learning Activities, Research Oriented Collaborative Inquiry Learning Model, *Intact Group Comparison*, Acids and Bases