

ABSTRAK

ADINDA HASANAH : Pengaruh Model Pembelajaran *Inquiry Student Team Achievement Division* (InSTAD) Terhadap Keterampilan Proses Sains dan Hasil Belajar Kognitif pada Materi Elektrolit dan Nonelektrolit, **Program Studi Pendidikan Kimia FKIP Universitas Malikussaleh, 2026.**

Penelitian ini dilakukan untuk mengetahui pengaruh penerapan model pembelajaran *Inquiry Student Team Achievement Division* (InSTAD) terhadap keterampilan proses sains serta hasil belajar kognitif siswa pada materi elektrolit dan nonelektrolit di SMA Negeri 1 Kuta Makmur. Penelitian ini menggunakan pendekatan kuantitatif dengan metode Pra-eksperimen dengan desain *Intact group comparison*. Sampel penelitian terdiri atas dua kelas, yaitu Kelas X-1 yang terdiri atas 22 siswa ditetapkan sebagai kelompok eksperimen dan mengikuti pembelajaran dengan model InSTAD, sedangkan kelas X-3 yang berjumlah 25 siswa menjadi kelompok kontrol dengan penerapan model *Discovery Learning*.

Hasil analisis menunjukkan bahwa penggunaan model InSTAD memberikan pengaruh yang signifikan terhadap keterampilan proses sains dan hasil belajar kognitif siswa. Ditinjau dari keterampilan proses sains, kelompok eksperimen memperoleh nilai rata-rata sebesar 85,04, sementara kelompok kontrol mencapai nilai rata-rata 71,83. Rata-rata nilai hasil belajar kognitif pada kelas eksperimen sebesar 83,22, sedangkan pada kelas kontrol sebesar 73,23. Berdasarkan hasil pengujian hipotesis, diperoleh nilai signifikansi sebesar 0,000 untuk keterampilan proses sains dan 0,010 untuk hasil belajar kognitif. Kedua nilai tersebut lebih kecil daripada taraf signifikansi 0,05. Oleh karena itu, dapat dinyatakan bahwa penerapan model *Inquiry Student Team Achievement Division* (InSTAD) memberikan pengaruh positif dan signifikan terhadap keterampilan proses sains maupun hasil belajar kognitif siswa pada materi elektrolit dan nonelektrolit.

Kata kunci: InSTAD, keterampilan proses sains, hasil belajar kognitif, elektrolit dan nonelektrolit.

ABSTRACT

ADINDA HASANAH: The Effect of the Inquiry Student Team Achievement Division (InSTAD) Learning Model on Students' Science Process Skills and Cognitive Learning Outcomes in Electrolyte and Nonelectrolyte Materials, **Chemistry Education Study Program, Faculty of Teacher Training and Education, Malikussaleh University, 2026.**

This study aimed to determine the effect of the *Inquiry Student Team Achievement Division* (InSTAD) learning model on students' science process skills and cognitive learning outcomes in the topic of electrolyte and nonelectrolyte solutions at SMA Negeri 1 Kuta Makmur. This study employed a quantitative approach using a pre-experimental method with an *Intact Group Comparison* design. The research sample consisted of two classes, namely Class X-1 as the experimental class, comprising 22 students who were taught using the InSTAD learning model, and Class X-3 as the control class, comprising 25 students who were taught using the Discovery Learning model.

The results showed that the InSTAD learning model had a significant effect on students' science process skills and cognitive learning outcomes. The mean score of science process skills in the experimental class was 85.04, while that of the control class was 71.83. The average cognitive learning outcome score in the experimental class was 83.22, whereas the control class obtained an average score of 73.23. The hypothesis testing results indicated that the significance value for science process skills was $0.000 < 0.05$, and for cognitive learning outcomes was $0.010 < 0.05$. Therefore, it can be concluded that the *Inquiry Student Team Achievement Division* (InSTAD) learning model has a positive effect on students' science process skills and cognitive learning outcomes in the topic of electrolyte and nonelectrolyte solutions.

Keywords: Inquiry Student Team Achievement Division (InSTAD), science process skills, cognitive learning outcomes, electrolyte and nonelectrolyte materials.