

## ABSTRAK

### **Yovanka Melinda Samosir, NIM.4181131006 (2018). Pengaruh Penerapan *E-Modul* Kimia Berbasis *Cooperative Learning Type* NHT Pada Pembelajaran Ikatan Kimia Kelas X SMA**

Penelitian ini bertujuan untuk (1) mengetahui apakah ada pengaruh penerapan *e-modul* kimia berbasis *cooperative type* NHT terhadap hasil belajar siswa.(2) mengetahui apakah peningkatan hasil belajar siswa dengan penerapan *e-modul* kimia berbasis *cooperative type* NHT lebih tinggi dari pembelajaran NHT disertai media bahan ajar refrensi siswa. Penelitian ini dilaksanakan di SMA Swasta Harapan Baru Medan pada bulan November-Desember 2021. Dari hasil penelitian diperoleh nilai rata-rata *pretest* kelas eksperimen sebesar 36 dan kontrol sebesar 28,167. Sedangkan nilai rata-rata *posttest* kelas eksperimen sebesar 82,667 dan kelas kontrol sebesar 77,5. Pada uji hipotesis yaitu uji-t satu pihak (pihak kanan) pada taraf signifikansi 0,05 diperoleh  $t_{hitung} > t_{tabel}$  yakni  $3,004 > 2,002$  maka  $H_a$  diterima dan  $H_o$  ditolak. Berdasarkan hal tersebut maka ada pengaruh penerapan *e-modul* kimia berbasis *cooperative type* NHT terhadap hasil belajar siswa. Dengan demikian dapat disimpulkan bahwa ada pengaruh penerapan *e-modul* kimia berbasis *cooperative type* NHT terhadap hasil belajar kimia siswa pada materi ikatan kimia. Nilai N-Gain ternormalisasi kimia siswa kelas eksperimen lebih tinggi dari kelas kontrol yaitu  $0,731 > 0,687$  atau berdasarkan persentase N-Gain yaitu 73,10% untuk kelas eksperimen dan 68,70% untuk kelas kontrol. Selisih dari peningkatan hasil belajar dari kedua kelas yaitu 4,4% maka dapat disimpulkan bahwa penerapan *e-modul* kimia berbasis *cooperative type* NHT lebih tinggi dari pembelajaran NHT disertai media bahan ajar refrensi siswa pada materi ikatan kimia.

Kata Kunci : *E-Modul* Kimia Berbasis *Cooperative type* NHT, Hasil belajar Kimia Siswa, Ikatan Kimia.



## ABSTRACT

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This study aims to (1) find out whether there is an effect of applying the e-module based cooperative learning type NHT on student learning outcomes. (2) to find out whether the increase in student learning outcomes with the application of an e-module based cooperative learning type NHT is higher than cooperative learning type NHT by student reference teaching materials. This research was conducted at the Harapan Baru Senior High School Medan in November-December 2021. From the results of the study, the average pretest value for the experimental class was 36 and the control was 28,167. While the posttest average value of the experimental class was 82,667 and the control class was 77,5. In the hypothesis test, namely the t-test of one test at a significance level of 0,05, it is obtained that  $t_{count} > t_{table}$  which is  $3,004 > 2,002$  the  $H_a$  is accepted and  $H_o$  is rejected. Based on this, there is an effect of applying the an e-module based cooperative type NHT on student learning outcomes. The chemical normalized N-Gain value of the experimental class students was higher than the control class, namely  $0,731 > 0,687$  or based on the N-Gain percentage, which was 73,10% for the experimental class and 68,70% for the control class. The difference from the increase in learning outcomes of the two classes, namely 4,4%, it can be concluded that the application of the an e-module based cooperative learning type NHT by student reference teaching materials on chemical bonding material.

Keywords: E-Module Chemistry Based on Cooperative type NHT, Student Chemistry Learning Outcomes, Chemical Bond.

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