

## ABSTRAK

**SOLIKIN (NIM: 8166176017). Pengaruh Model Pembelajaran *Inquiry Training* Terhadap Pemahaman Konsep Kalor dan Keterampilan Proses Sains Siswa SMA.** Tesis Medan. Program Studi Pendidikan Fisika Pascasarjana Universitas Negeri Medan, 2019.

Penelitian ini bertujuan untuk menganalisis perbedaan: pemahaman konsep siswa yang dibelajarkan dengan model pembelajaran *inquiry training* dan pembelajaran konvensional, serta keterampilan proses sains siswa yang dibelajarkan dengan model pembelajaran *inquiry training* dan pembelajaran konvensional. Penelitian ini merupakan penelitian quasi eksperimen. Populasi penelitian adalah siswa kelas XI SMA Al Fityan Medan. Pemilihan sampel dilakukan secara random dengan mengacak kelas. Instrumen yang digunakan terdiri dari: (1) tes pemahaman konsep berupa pilihan berganda, (2) lembar observasi keterampilan proses sains berupa lembar ceklist. Data dalam penelitian ini dianalisis dengan uji t sampel bebas. Dari hasil penelitian uji hipotesis terdapat perbedaan, maka dikatakan bahwa: (1) pemahaman konsep siswa yang dibelajarkan dengan model pembelajaran *inquiry training* lebih baik dibandingkan dengan siswa yang menggunakan pembelajaran konvensional, (2) keterampilan proses sains siswa yang dibelajarkan dengan model pembelajaran *inquiry training* lebih baik dibandingkan dengan siswa yang menggunakan pembelajaran konvensional.

Kata kunci: *Inquiry Training, konvensional, Pemahaman Konsep, Keterampilan Proses Sains*

## ABSTRACT

SOLIKIN (NIM: 8166176017). **The Effect of Inquiry-Based Learning Method on Senior High School Student's Conceptual Understanding of Heat and Scientific Process Skills.** Thesis, Medan, Physics Education Department, Postgraduate, State University of Medan, 2019.

This study aims to analyze the differences: (1) the conceptual understanding of students taught with inquiry-based learning method and conventional learning, (2) the scientific process skills of students taught with inquiry-based learning method and conventional one. This research employed a quasi experimental method. The population of study was XI grade student of SMA Al Fityan Medan. The sample was chosen randomly. The instrument used in this research were multiple choice questions and observation sheet. multiple choice questions were used to analyzed student's conceptual understanding, while observation sheet were used to investigate student's scientific process skills. The data of this research were analyzed using independent sample t-test. the results of this study showed a significant difference, that can be conclude as bellow: (1) the conceptual understanding of students taught with inquiry-based learning method are better than the students taught with conventional learning, (2) the scientific process skills of students taught with inquiry-based learning method are better than the students taught with conventional learning.

Keywords: *Inquiry-Based Learning, Conventional Learning, Conceptual Understanding Of Heat, Student's Scientific Process Skills*