

## ABSTRAK

**Putri Sabila Alhaq Hasibuan:** Pengaruh Model Pembelajaran Berbasis Proyek, Inkuiri, dan Konvensional Terhadap Hasil Belajar, Pemahaman Konsep, dan Keterampilan Proses Sains di SMA Negeri 1 Kisaran. Tesis. Program Pascasarjana Universitas Negeri Medan. 2015.

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran berbasis proyek, inkuiri, dan konvensional terhadap: (1) hasil belajar, (2) pemahaman konsep, dan (3) keterampilan proses sains siswa pada materi pencemaran lingkungan di SMA Negeri 1 Kisaran. Metode penelitian menggunakan kuasi eksperimen dengan sampel penelitian sebanyak 3 kelas ditentukan dengan teknik *cluster random sampling*. Kelas A dibelajarkan dengan menggunakan model pembelajaran berbasis proyek, kelas B dengan model pembelajaran inkuiri, sedangkan kelas C dengan pembelajaran konvensional. Instrumen penelitian menggunakan tes hasil belajar dalam bentuk pilihan ganda, tes pemahaman konsep, dan keterampilan proses sains dalam bentuk uraian. Teknik analisis data menggunakan Analisis Kovariat (ANAKOVA) pada taraf signifikansi  $\alpha = 0,05$  dengan bantuan SPSS 21.0. Hasil penelitian menunjukkan: (1) Terdapat pengaruh signifikan model pembelajaran terhadap hasil belajar ( $P=0,000$ ). Hasil belajar siswa yang dibelajarkan dengan model pembelajaran berbasis proyek ( $82,50 \pm 7,90$ ) lebih tinggi dibandingkan model pembelajaran inkuiri ( $79,77 \pm 8,48$ ) dan konvensional ( $69,34 \pm 8,23$ ). (2) Terdapat pengaruh signifikan model pembelajaran terhadap pemahaman konsep ( $P=0,000$ ). Pemahaman konsep siswa yang dibelajarkan dengan model pembelajaran inkuiri ( $80,55 \pm 7,65$ ) lebih tinggi dibandingkan model pembelajaran berbasis proyek ( $77,76 \pm 8,83$ ) dan konvensional ( $68,58 \pm 8,34$ ). (3) Terdapat pengaruh signifikan model pembelajaran terhadap keterampilan proses sains ( $P=0,000$ ). Keterampilan proses sains siswa yang dibelajarkan dengan model pembelajaran inkuiri ( $78,95 \pm 8,257$ ) lebih tinggi dibandingkan model pembelajaran berbasis proyek ( $77,02 \pm 8,24$ ) dan konvensional ( $65,34 \pm 7,11$ ). Berdasarkan hasil penelitian model pembelajaran inkuiri lebih baik dari model pembelajaran berbasis proyek dan konvensional.

Kata Kunci: Model Pembelajaran Inkuiri, Model Pembelajaran Berbasis Proyek, Konvensional, Hasil Belajar, Pemahaman Konsep, Keterampilan Proses Sains.



## ABSTRACT

**Putri Sabila Alhaq Hasibuan:** Effect of Project Based Learning Model, Inquiry, and Conventional Against Learning Results, Concept, and Science Process Skills in SMA Negeri 1 Kisaran. Thesis. Graduate Program, State University of Medan (UNIMED). 2015.

This research is aims to determine: The effect of Project Based Learning model, Inquiry and Conventional to: (1) learning outcomes, (2) an understanding of concepts, and (3) science process skills of students in the matter of environmental pollution in SMA Negeri 1 Kisaran. The research method using a quasi experimental samples are 3 classes determined by random cluster sampling technique. Class A learn using Project Based Learning model, class B with Inquiry Learning model, while class C with Conventional Learning. The research instrument used achievement test in the form of multiple choice, test understanding of concepts, and science process skills in narrative form. Data were analyzed using Analysis Covariates (Anacova) at the level of significance  $\alpha = 0.05$  with SPSS 21.0. The results showed: (1) There is a significant impact on learning outcomes of the learning model ( $P = 0.000$ ). Student learning outcomes that learned with Project Based Learning model ( $82.50 \pm 7.90$ ) was higher than the Inquiry Learning model ( $79.77 \pm 8.48$ ) and Conventional ( $69.34 \pm 8.23$ ). (2) There is a significant influence on the understanding of the concept of learning model ( $P = 0.000$ ). Understanding the concept of students that learned by Inquiry Learning model ( $80.55 \pm 7.65$ ) higher than Project Based Learning model ( $77.76 \pm 8.83$ ) and Conventional ( $68.58 \pm 8.34$ ). (3) There is a significant influence on the model of learning science process skills ( $P = 0.000$ ). Science process skills of students that learned by Inquiry Learning model ( $78.95 \pm 8.25$ ) higher compared Project Based Learning model ( $77.02 \pm 8.24$ ) and Conventional ( $65.34 \pm 7.11$ ). Based on the results of Inquiry Learning model better than Project Based Learning model and Conventional.

*Keywords:* Inquiry Learning Model, Project Based Learning Model, Conventional, Results Learning, Understanding Concepts, Science Process Skills.