

**PERBEDAAN HASIL BELAJAR DAN KETERAMPILAN PROSES SAINS
SISWA MENGGUNAKAN MODEL PEMBELAJARAN BERBASIS
MASALAH DAN MODEL PEMBELAJARAN COOPERATIVE
LEARNING TIPE *GROUP INVESTIGATION* PADA MATERI
KEANEKARAGAMAN HAYATI DI KELAS X
SMA NEGERI 20 MEDAN TAHUN
PEMBELAJARAN 2017/2018**

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ABSTARAK

Penelitian ini bertujuan untuk mengetahui perbedaan hasil belajar dan keterampilan proses sains siswa menggunakan model pembelajaran berbasis masalah dan model pembelajaran *cooperative learning* tipe *group investigation* pada materi Keanekaragaman Hayati di kelas X SMA Negeri 20 Medan tahun pembelajaran 2017/2018. Penelitian ini merupakan penelitian kuasi eksperimen. Sampel dalam penelitian ini diambil dengan teknik *random sampling*, dimana populasi penelitian yaitu seluruh kelas X SMA Negeri 20 medan yang berjumlah 5 kelas dan sampel yang digunakan adalah Kelas X MS 1 dan kelas X MS 2. Kelas X MS 1 sebagai kelas eksperimen I diajarkan dengan menggunakan model pembelajaran *cooperative learning* tipe *group investigation* dan kelas X MS 2 sebagai kelas eksperimen II diajarkan dengan menggunakan model pembelajaran berbasis masalah. Masing-masing berjumlah 33 dan 30 siswa. Alat pengumpul data yang digunakan dalam penelitian ini adalah test pilihan berganda sebanyak 30 soal sebagai soal pretest dan posttest dengan rincian 15 soal test kognitif dan 15 soal test keterampilan proses sains. Hasil pengujian hipotesis yang di peroleh untuk test kognitif menunjukkan bahwa $t_{hitung} > t_{tabel}$ yaitu $(2,431 > 1,999)$ dan untuk test keterampilan proses sains juga demikian $t_{hitung} > t_{tabel}$ yaitu $(4,152 > 1,999)$ dengan taraf kepercayaan $(\alpha = 0,05)$. Dengan demikian H_0 ditolak dan H_a diterima sehingga dapat disimpulkan bahwa terdapat perbedaan hasil belajar dan keterampilan proses sains siswa dengan menggunakan model pembelajaran berbasis masalah dan model pembelajaran *cooperative learning* tipe *group investigation* pada materi Keanekaragaman Hayati di kelas X SMA Negeri 20 Medan. Dalam penelitian ini hasil belajar dan keterampilan proses sains siswa menggunakan model *cooperative learning* tipe *group investigation* lebih tinggi dibandingkan dengan model pembelajaran berbasis masalah.

Kata kunci: Model Pembelajaran, Pembelajaran Berbasis Masalah, Group Investigation, Hasil belajar, Keterampilan Proses Sains

**THE DIFFERENCES LEARNING OUTCOMES AND SCIENCE
PROCESS SKILLS BETWEEN STUDENTS THAT WERE TAUGHT
BY USING PROBLEM BASED LEARNING MODEL AND
COOPERATIVE LEARNING WITH GROUP INVESTIGATION
MODEL ON BIODIVERSITY TOPIC IN CLASS X SMA
NEGERI 20 MEDAN IN ACADEMIC YEAR 2017/2018**

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ABSTARACT

This research aim to know the differences learning outcomes and science process skills between students that were taught by using problem based learning model and cooperative learning with group investigation model on Biodiversity topic in class X SMA Negeri 20 Medan in academic year 2017/2018. This research was quasi eksperiment. The sample in this research was taken by using random sampling, where the population was all student of X SMA Negeri 20 Medan that consist of five classes and sample is X MS 1 and X MS 2. Class X MS 1 as the first experiment class taught by cooperative learning with group investigation model and class X MS 2 as second experiment class taught by problem based learning model. Each class consist of 33 and 30 students. The instrument in this research is multiple choice test which have 30 numbers using as pretest and posttest, with detail 15 numbers kognitif test and 15 numbers science process skills test. The result of hypothesis test for kognitif test showed that $t_{count} > t_{table}$ ($2.43 > 1.99$) and science process skills test $t_{count} > t_{table}$ ($4.15 > 1.99$) with significance level 0,05. There by hence H_0 was rejected at the same time accepted H_a . The conclusion of this research is there was difference learning outcomes and scienc process skills between students that were taught by using problem based learning model and cooperative learning with group investigation model on Biodiversity topic in class X SMA Negeri 20 Medan in academic year 2017/2018. The research result showed that learning outcomes and science process skills that taught by cooperative learning with group investigation model is better than problem based learning model.

Keyword: Study Model, Problem Based learning, Group Investigation, Learning Outcomes, Science Process skills.