PENGARUH MODEL PEMBELAJARAN *INQUIRY BASED LEARNING (IBL)* TERHADAP KETERAMPILAN PROSES SAINS (KPS) SISWA PADA MATERI SISTEM KOORDINASI

disusun oleh,

Ria Irianti

1005174

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *inquiry based learning* (IBL) terhadap keterampilan proses sains (KPS) siswa pada materi sistem koordinasi untuk siswa SMA jurusan Ilmu Pengetahuan Alam (IPA) kelas XI. Metode yang digunakan dalam penelitian ini adalah *pre-experimental* dengan desain *one group pre-test post-test.* Populasi dari penelitian ini adalah seluruh siswa kelas XI di SMAN 15 Bandung, dengan sampel sebanyak 1 kelas yaitu kelas XI IPA 2. Data hasil penelitian ini diperoleh dengan menggunakan instrument berbentuk soal esai sebanyak 10 soal, yang dilakukan pada waktu sebelum pembelajaran (*pre-test*) dan setelah pembelajaran (*post-test*). Dari hasil penelitian diperoleh nilai rata-rata *pre-test* sebesar 53,45 dan rata-rata *post-test* sebesar 79,55. Peningkatan indikator keterampilan proses sains siswa mendapat nilai gain sebesar 0,47 dan termasuk dalam kriteria 'sedang'. Dari hasil uji hipotesis diperoleh hasil *Sig. (2 tailed)* sebesar 0.000 yang berarti bahwa nilai Sig. *(2 tailed)* < 0.05 maka hipotesis H_1 diterima. Diakhir penelitian siswa diberikan angket respon terhadap pembelajaran yang dilaksanakan. Secara umum siswa memberikan respon positif terhadap pembelajaran dengan data yang di dapat mengenai respon siswa terhadap pembelajaran mendapat nilai rata-rata sebesar 82,30% berada diantara kategori 'baik'. Adapun keterlaksanaan pembelajaran dalam penelitian ini memperoleh nilai rata-rata sebesar 84,58%, berada diantara kategori 'baik' dengan menggunakan metode *rating scale*. Berdasarkan data hasil penelitian yang diperoleh maka dapat disimpulkan bahwa pembelajaran dengan menggunakan model pembelajaran *Inquiry Based Learning (IBL)* dapat meningkatkan Keterampilan Proses Sains (KPS) siswa pada materi sistem koordinasi.

Kata kunci : *inquiry based learning, IBL, keterampilan proses sains, KPS, sistem koordinasi, sistem termoregulasi*

INFLUENCE OF INQUIRY BASED LEARNING (IBL) LEARNING MODEL ON SCIENCE PROCESS SKILL ON COORDINATION SYSTEM MATERIAL

Ria Irianti

1005174

ABSTRACT

This study aims to determine the effect of inquiry based learning (IBL) learning model on the science process skill (KPS) of students on the coordination system material for high school students of science majors (IPA) class XI. Stages of learning that carried out include observation, manipulation, generalization, verification and the last application. The indicators of the students' science process skills observed include eight (8) aspects of questioning skills, planning experiments, proposing hypotheses, interpretations, predictions, applying concepts, using tools and materials as well as communication skills. For the material the coordination system is limited to termoregulation. To measure the implementation of learning inquiry based learning during the process of research took place using the instructional learning instrument filled by three (3) observers. The implementation of learning in this study obtained an average value of 84,58% in the categories 'good' by using the rating scale method. The research data to measure the improvement of students' science process skill is obtained from the test of pre-test value and post-test value which is then measured by using gain value search formula. Improvement of students science process skill indicator got a gain value of 0.47 and included in 'medium' criterion. At the end of the study the students were given a questionnaire response to the learning that was carried out. In general, students responded positively to the learning with the data obtained about students' responses to learning received an average score of 82.30% between 'good' and 'excellent' categories but more close to the 'good' category.

Keywords: inquiry based learning, IBL, science process skills, PPP, coordination system, thermoregulation system