PENGARUH MODEL PEMBELAJARAN BERBASIS MASALAH (*PROBLEM BASED LEARNING*) TERHADAP HASIL BELAJAR DAN KETERAMPILAN PROSES SAINS SISWA PADA MATERI SISTEM REPRODUKSI MANUSIA DI KELAS XI-PMS SMA NEGERI 1 BINJAI TAHUN PEMBELAJARAN 2014/2015

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran berbasis masalah terhadap hasil belajar dan keterampilan proses sains siswa pada materi sistem reproduksi manusia di kelas XI-PMS SMA Negeri 1 Binjai T.P.2014/2015. Jenis penelitian ini adalah eksperimen murni. Populasi dalam penelitian ini adalah seluruh siswa kelas XI-PMS SMA Negeri 1 Binjai yang terdiri dari 6 kelas. Teknik pengambilan sampel dilakukan dengan *random sampling*, kemudian diambil dua kelas sebagai sampel. Kelas XI-PMS 4 dengan jumlah 41 siswa sebagai kelas kontrol dan kelas XI-PMS 1 dengan jumlah 35 siswa sebagai kelas eksperimen. Kelas eksperimen diajarkan dengan model pembelajaran berbasis masalah dan kelas kontrol diajarkan dengan pembelajaran metode ceramah. Instrumen yang digunakan untuk mengumpulkan data hasil belajar berupa tes tertulis berbentuk pilihan berganda, yang diberikan sebelum dan sesudah proses pembelajaran. Sedangkan data keterampilan proses sains diperoleh melalui observasi langsung. Hasil penelitian menunjukkan bahwa rata-rata nilai pretes kelas eksperimen adalah 61,82 dan pada kelas kontrol adalah 53,22. Kemudian rata-rata nilai postes untuk kelas eksperimen lebih tinggi yakni 82,3 dibandingkan dengan kelas kontrol yakni 71,82. Dari hasil pengujian hipotesis diperoleh bahwa $t_{hitung} > t_{tabel}$ (6,63 > 1,99) berarti H_o ditolak dan H_a diterima. Sehingga dapat disimpulkan bahwa ada pengaruh model pembelajaran berbasis masalah terhadap hasil belajar siswa. Sedangkan rata-rata nilai keterampilan proses sains kelas eksperimen adalah 81,96 dan pada kelas kontrol adalah 59,20. Dari hasil pengujian hipotesis diperoleh bahwa $t_{hitung} > t_{tabel}$ (10,79 > 1,99) berarti H_o ditolak dan H_a diterima. Sehingga dapat disimpulkan bahwa ada pengaruh model pembelajaran berbasis masalah terhadap keterampilan proses sains siswa.

Kata kunci: Pengaruh, *problem based learning*, hasil belajar, keterampilan proses sains

THE EFFECT OF PROBLEM BASED LEARNING MODEL ON THE STUDENTS' LEARNING OUTCOMES AND SCIENCE PROCESS SKILLS ON THE HUMAN'S REPRODUCTION SYSTEM IN CLASS XI PMS SMA NEGERI 1 BINJAI ACADEMIC YEAR 2014/2015

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ABSTRACT

This research aimed to determining the effect of the problem based learning model on the students' learning outcomes and science process skills in learning the human's reproduction system in class XI-PMS SMA Negeri 1 Binjai Academic Year 2014/2015. This type of research is experiment. The population in this study are the students of class XI-PMS SMA Negeri 1 Binjai which amount to six classes. Sampling was performed by using the random sampling technique, and then it took two classes as samples. The XI-PMS 4 class with 41 students was as the control class and the XI-PMS 1 class with 35 students was as the experiment class. The experiment class was taught with problem based learning model and the control class with the lecture method. The instrument was used to collect the data of students' learning outcomes was a written test consisting of multiple-choice-typed questions, which was given before and after the learning process. While the data of science process skills was collected by observation. The results show that the average pre-test score for the experiment class is 61,82 and for the control class is 53,22. Then the average post-test score for the experiment class is higher at 82,3 than control class was at 71,82. From the results of testing the hypothesis, it is obtained that $t_{arithmetic} > t_{table}$ (6,63 > 1,99) which means that H_o is rejected and H_a is accepted. It can be concluded that there is the influenced of problem based learning model on the students'learning outcomes. While the average science process skills score for the experiment class is 81,96 and for the control class is 59,20. From the results of testing the hypothesis, it is obtained that $t_{arithmetic} > t_{table}$ (10,79 > 1,99) which means that H_o is rejected and H_a is accepted. It can be concluded that there is the influenced of problem based learning model on the students'science process skills.

Keywords: Effect, problem based learning, learning outcomes, science process skills