

## ABSTRAK

**Shindy Arnanda Laudra, NIM.4183341001 (2021). Pengaruh Penggunaan Model Pembelajaran Berbasis Proyek (*project based learning*) Terhadap Hasil Belajar Biologi Pada Materi Sistem Pencernaan Siswa Kelas XI IPA SMAN 1 Tanah Jawa Kabupaten Simalungun T.P. 2021/2022**

Tujuan penelitian ini adalah untuk mengetahui pengaruh penggunaan model pembelajaran berbasis proyek (*project based learning*) terhadap hasil belajar biologi pada materi sistem pencernaan siswa kelas XI IPA SMAN 1 Tanah Jawa Kabupaten Simalungun T.P.2021/2022. Jenis penelitian ini adalah penelitian eksperimen semu dengan *Pretest and Posttest control group design*. Populasi penelitian ini yaitu seluruh siswa kelas XI IPA SMAN 1 Tanah Jawa yang berjumlah 142 dan dibagi atas 4 kelas. Sampel penelitian ini adalah siswa kelas XI IPA 3 yang berjumlah 35 orang sebagai kelas eksperimen yang diberi perlakuan dengan model *project based learning* dan siswa kelas XI IPA 4 yang berjumlah 34 orang yang diberi perlakuan dengan model konvensional berupa metode ceramah. Instrumen yang digunakan adalah berupa instrument tes. Hasil penelitian menunjukkan bahwa nilai rata-rata kemampuan kognitif siswa kelas eksperimen yaitu 71,34 lebih tinggi daripada kelas kontrol yang nilai rata-rata kemampuan kognitifnya sebesar 65,44. Berdasarkan hasil hipotesis dengan menggunakan uji-t didapatkan bawasannya nilai sign 2-tailed pada data postes  $0,003 < 0,05$  dimana ini menunjukkan bawasannya model pembelajaran *project based learning* berpengaruh positif terhadap keterampilan proses sains dan kemampuan kognitif siswa pada materi sistem pencernaan di kelas XI IPA SMAN 1 Tanah Jawa Kabupaten Simalungun T.P. 2021/2022.

**Kata kunci : *Project Based Learning, Hasil Belajar Kognitif, Materi Sistem Pencernaan Makanan***



## ***ABSTRACT***

**Shindy Arnanda Laudra, NIM. 4183341001. The Effect of Using Project Based Learning Models on Biology Learning Outcomes in Digestive System Materials for Class XI Science Students at SMAN 1 Tanah Jawa, Simalungun Regency T.P. 2021/2022**

The study aims to determine the effect of using a project-based learning model on the learning outcomes of biology in the digestive system material for class XI IPA students of SMAN 1 Tanah Jawa, Simalungun Regency, T.P.2021/2022. This type of research is a quasi-experimental research with Pretest and Posttest control group design. The population of this study were all students of class XI IPA SMAN 1 Tanah Jawa, totaling 142 and divided into 4 classes. The samples of this research were 35 students of class XI IPA 3 as an experimental class who were treated with a project based learning model and 34 students of class XI IPA 4 who were treated with a conventional model in the form of the lecture method. The instrument used is a test instrument. The results showed that the average value of the cognitive abilities of the experimental class students was 71.34 which was higher than the control class whose average value of cognitive abilities was 65.44. Based on the results of the hypothesis using the t-test, it was found that the 2-tailed sign value in the posttest data was  $0.003 < 0.05$ , which indicates that the project-based learning model has a positive effect on science process skills and students' cognitive abilities on the digestive system material in the classroom. XI IPA SMAN 1 Tanah Jawa, Simalungun Regency, TP 2021/2022.

**Keywords:** *Project Based Learning, Cognitive Learning Outcomes, Digestive System Materials*

