

ABSTRAK

ERNA LAILASARI: “Pengaruh Model Pembelajaran *Discovery Based Unity of Science* (DBUS) Berbantu *Liveworksheet* Untuk Meningkatkan Keterampilan Proses Sains Siswa Pada Materi Inovasi Teknologi Biologi”

Keterampilan proses sains merupakan aspek penting dalam pembelajaran sains yang meliputi observasi, prediksi, eksperimen, analisis data, dan penyimpulan. Penelitian ini dilakukan dengan tujuan untuk menganalisis pengaruh model *Discovery based unity of science* berbantu *Liveworksheet* pada keterampilan proses sains siswa pada materi inovasi teknologi biologi. Metode yang digunakan kuasi-eksperimen dengan desain *non equivalent control group*. Instrumen yang digunakan yakni tes keterampilan proses sains, lembar observasi guru dan siswa, serta angket respon siswa. Hasil penelitian menunjukkan adanya pengaruh model pembelajaran *Discovery based unity of science* (DBUS) berbantu *Liveworksheet* terhadap keterampilan proses sains siswa pada materi inovasi teknologi biologi. Hasil yang diperoleh dari penelitian menunjukkan persentase aktivitas guru dan siswa di kelas dengan model DBUS sebesar 90%. Peningkatan keterampilan proses sains siswa pada kelas dengan model DBUS lebih tinggi dari kelas tanpa model DBUS, yakni dengan N-Gain 0,38 termasuk kategori kecil. Hasil penelitian menunjukkan adanya pengaruh model pembelajaran DBUS berbantu *liveworksheet* terhadap keterampilan proses sains siswa pada materi inovasi teknologi biologi. Pengaruh tersebut dilihat berdasarkan hasil analisis uji i dependent sample t-test yang memperoleh nilai signifikan $0,000 < 0,05$ yang berarti H₀ ditolak dan H₁ diterima. Oleh karena itu, penelitian mengenai pengaruh model pembelajaran DBUS berbantu *liveworksheet* terhadap keterampilan proses sains siswa pada materi inovasi teknologi biologi dapat mengatasi pemasalahan guru mata pelajaran biologi ketika di kelas.

Kata Kunci: *Discovery based unity of science* (DBUS), *Liveworksheet*, Keterampilan Proses Sains

ABSTRACT

ERNA LAILASARI: “The Influence of Discovery Based Unity of Science (DBUS) Learning Model Assisted by Liveworksheet to Improve Students’ Science Process Skill in Biological Technology Innovation Material”

Scientific process skills are a crucial aspect of science learning, encompassing observation, prediction, experimentation, data analysis, and conclusion. This study aims to analyze the influence of the Discovery based unity of science (DBUS) model assisted by Liveworksheet on students scientific process skills in biological technology innovation material. The quasi-experimental method with a non-equivalent control group design was used. The instruments employed were scientific process skills tests, teacher and student observation sheets, and student response questionnaires. The results show that the DBUS model assisted by Liveworksheet has an influence on students' scientific process skills in biological technology innovation material. The results obtained from the study show that the percentage of teacher and student activity in the class with the DBUS model was 90%. The increase in students' scientific process skills in the class with the DBUS model was higher than in the class without the DBUS model, with an N-Gain of 0.38 which are in the small category. The results of the study show that there is an influence of the DBUS model assisted by Liveworksheet on students' scientific process skills in biological technology innovation material. This influence is seen based on the results of the independent sample t-test analysis, which obtained a significant value of $0.000 < 0.05$, meaning H_0 is rejected and H_1 is accepted. Therefore, research on the influence of the DBUS model assisted by Liveworksheet on students' scientific process skills in biological technology innovation material can address the problems faced by biology teachers in the classroom.

Keyword: Discovery based unity of science (DBUS), Liveworksheet, Scientific process skills