

PENGARUH PROJECT-BASED LEARNING BERMUATAN SUSTAINABLE
DEVELOPMENT GOALS TERHADAP KESADARAN BERKELANJUTAN
DAN KETERAMPILAN PENGAMBILAN KEPUTUSAN PADA MATERI
BIOTEKNOLOGI

TESIS

diajukan untuk memenuhi sebagian syarat memperoleh gelar Magister Pendidikan
Biologi



oleh
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PROGRAM STUDI MAGISTER PENDIDIKAN BIOLOGI
DEPARTEMEN PENDIDIKAN BIOLOGI
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Sebuah tesis yang diajukan untuk memenuhi sebagian syarat memperoleh gelar Magister Pendidikan Biologi (M.Pd.) pada Program Studi Magister Pendidikan Biologi Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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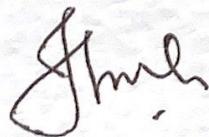
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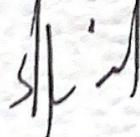
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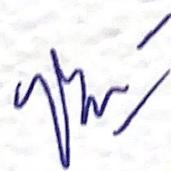
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PERNYATAAN BEBAS PLAGIARISME

Dengan ini saya menyatakan bahwa tesis dengan judul “Pengaruh *Project-Based Learning* Bermuatan *Sustainable Development Goals* Terhadap Kesadaran Berkelanjutan dan Keterampilan Pengambilan Keputusan pada Materi Bioteknologi” beserta seluruh isinya adalah benar-benar karya saya sendiri. Saya tidak melakukan penjiplakan atau pengutipan dengan cara-cara yang tidak sesuai dengan etika ilmu yang berlaku dalam masyarakat keilmuan. Atas pernyataan ini, saya siap menanggung risiko atau sanksi apabila di kemudian hari ditemukan adanya pelanggaran etika keilmuan atau ada klaim dari pihak lain terhadap keaslian karya saya ini.

Bandung, Juli 2024

Yang membuat pernyataan,



Widya Eko Nurazizah

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KATA PENGANTAR

Puji syukur kehadirat Allah SWT yang telah memberikan kekuatan, kesehatan, dan kesempatan kepada penulis sehingga tesis ini dapat selesai. Tesis yang berjudul “Pengaruh *Project-Based Learning* Bermuatan *Sustainable Development Goals* Terhadap Kesadaran Berkelanjutan dan Keterampilan Pengambilan Keputusan pada Materi Bioteknologi” disusun sebagai syarat untuk memenuhi gelar magister pendidikan Biologi.

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Bandung, Juli 2024



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Widya Eko Nurazizah

ABSTRAK

PENGARUH PROJECT-BASED LEARNING BERMUATAN SUSTAINABLE DEVELOPMENT GOALS TERHADAP KESADARAN BERKELANJUTAN DAN KETERAMPILAN PENGAMBILAN KEPUTUSAN PADA MATERI BIOTEKNOLOGI

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Rendahnya kesadaran berkelanjutan dan keterampilan pengambilan keputusan sebagian besar siswa di Indonesia mendorong upaya untuk melakukan pembelajaran yang dapat membekalkan kesadaran berkelanjutan dan keterampilan pengambilan keputusan. Salah satu upaya untuk membekalkan kesadaran berkelanjutan dan keterampilan pengambilan keputusan adalah melalui *Project-Based Learning* (PjBL) bermuatan SDGs. Tujuan penelitian ini yaitu mengetahui pengaruh PjBL bermuatan SDGs terhadap kesadaran berkelanjutan dan keterampilan pengambilan keputusan siswa pada materi Bioteknologi. Metode penelitian yang digunakan adalah *quasi-experiment* dengan desain *nonequivalent pretest-posttest control group*. Sampel penelitian ini adalah siswa kelas XII SMA yang terdiri dari 66 siswa ditentukan dengan teknik *purposive sampling*. Penelitian dilakukan pada dua kelas, yaitu kelas eksperimen dan kelas kontrol. Instrumen penelitian berupa kuesioner dan lembar observasi pembelajaran. Kuesioner kesadaran berkelanjutan berjumlah 18 butir pernyataan yang dimodifikasi dari *Sustainability Consciousness Questionnaire Short* (SCQ-S). Kuesioner keterampilan pengambilan keputusan berjumlah 15 butir pernyataan yang dimodifikasi dari *Assessing Decision Making skills* (ADMS) *Questionnaires*. Lembar observasi pembelajaran disusun berdasarkan sintaks PjBL. Analisis data menggunakan *Independent Sample T-test* dan *Mann-Whitney U Test*. Interpretasi hasil statistik menunjukkan bahwa terdapat pengaruh PjBL bermuatan SDGs terhadap kesadaran berkelanjutan dan keterampilan pengambilan keputusan. Indikator yang paling dipengaruhi oleh PjBL bermuatan SDGs adalah indikator pengetahuan berkelanjutan pada kesadaran berkelanjutan dan indikator merumuskan alternatif-alternatif pada keterampilan pengambilan keputusan. Hasil tersebut sejalan dengan hasil observasi keterlaksanaan PjBL bermuatan SDGs dengan kategori sangat baik.

Kata kunci: *Project-Based Learning*, *Sustainable Development Goals*, Kesadaran Berkelanjutan, Keterampilan Pengambilan Keputusan, Bioteknologi.

ABSTRACT

THE INFLUENCE OF PROJECT BASED LEARNING CONTAINING SUSTAINABLE DEVELOPMENT GOALS ON SUSTAINABILITY AWARENESS AND DECISION-MAKING SKILLS IN BIOTECHNOLOGY MATERIAL

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The low level of sustainability awareness and decision-making skills of most students in Indonesia requires efforts to carry out learning that can provide sustainability awareness and decision-making skills. One effort to provide sustainability awareness and decision-making skills is through Project-Based Learning (PjBL) containing SDGs. This research aims to determine the effect of PjBL containing SDGs on students' sustainability awareness and decision-making skills in Biotechnology material. The research method was a quasi-experiment with a nonequivalent pretest-posttest control group design. The sample for this research was class XII high school students consisting of 66 students determined using a purposive sampling technique. The research was conducted in two classes, namely the experimental class and the control class. The research instruments were questionnaires and learning observation sheets. The sustainability awareness questionnaire consists of 18 statement items adapted from the Sustainability Consciousness Questionnaire Short (SCQ-S). The decision-making skills questionnaire consists of 15 statement items adapted from the Assessing Decision Making skills (ADMS) Questionnaires. The learning observation sheet is prepared based on the PjBL syntax. Data analysis used the Independent Sample T-test and the Mann-Whitney U Test. Interpretation of statistical results shows an influence of PjBL containing SDGs on sustainability awareness and decision-making skills. The indicators most influenced by PjBL containing SDGs are sustainability knowingness indicator on sustainability awareness and identify the alternatives indicator on decision-making skill. These results are in line with the results of observations of the implementation of PjBL containing SDGs in the very good category.

Keywords: Project-Based Learning, Sustainable Development Goals, Sustainable Awareness, Decision-Making Skills, Biotechnology.

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