

**PENGARUH BAHAN AJAR BIOLOGI BERBASIS *EDUCATION FOR SUSTAINABLE DEVELOPMENT* PADA PEMBELAJARAN PROYEK PEMECAHAN MASALAH ISU KEBERLANJUTAN TERHADAP PENGUASAAN KONSEP DAN *SUSTAINABILITY CONSCIOUSNESS* PESERTA DIDIK SMA**

**TESIS**

Diajukan untuk memenuhi sebagian dari syarat untuk memperoleh gelar  
Magister Pendidikan Biologi



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Sebuah tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Magister Pendidikan pada Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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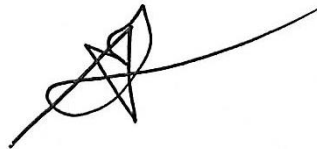
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**PENGARUH BAHAN AJAR BIOLOGI BERBASIS *EDUCATION FOR SUSTAINABLE DEVELOPMENT* PADA PEMBELAJARAN PROYEK PEMECAHAN MASALAH ISU KEBERLANJUTAN TERHADAP PENGUASAAN KONSEP DAN *SUSTAINABILITY CONSCIOUSNESS* PESERTA DIDIK SMA**

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## LEMBAR PERNYATAAN KEASLIAN

Dengan ini saya menyatakan bahwa tesis yang berjudul “Pengaruh Bahan Ajar Biologi Berbasis *Education Sustainable Development* Pada Pembelajaran Proyek Pemecahan Masalah Isu Keberlanjutan Terhadap Penguasaan Konsep dan *Sustainability Consciousness* Peserta Didik SMA” adalah hasil karya saya sendiri. Saya tidak melakukan penjiplakan dan pengutipan dengan cara-cara yang tidak sesuai dengan etika keilmuan yang berlaku. Atas pengertian ini, saya siap menanggung sanksi apabila dikemudian hari ditemukan adanya pelanggaran etika keilmuan atau ada klaim dari pihak lain terhadap keaslian karya saya ini. Oleh karena itu, berikut saya melampirkan hasil uji turnitin yang telah dilakukan pada tesis ini.

Bandung, 31 Agustus 2023



Rinna Lestari

**PENGARUH BAHAN AJAR BIOLOGI BERBASIS *EDUCATION FOR SUSTAINABLE DEVELOPMENT* PADA PEMBELAJARAN PROYEK PEMECAHAN MASALAH ISU KEBERLANJUTAN TERHADAP PENGUASAAN KONSEP DAN *SUSTAINABILITY CONSCIOUSNESS* PESERTA DIDIK SMA**

**ABSTRAK**

Pendidikan untuk pembangunan berkelanjutan memiliki peran penting dalam menciptakan generasi yang dapat mempertimbangkan keberlanjutan dalam pengambilan keputusan. Di sekolah, hal tersebut diimplementasikan melalui pembelajaran. Salah satu upaya yang dapat dilakukan adalah melalui pengembangan pembelajaran dengan menggunakan bahan ajar. Penelitian ini bertujuan untuk mengukur peningkatan penguasaan konsep dan kesadaran keberlanjutan peserta didik setelah menggunakan bahan ajar Biologi berbasis *Education Sustainable for Development*. Metode penelitian ini adalah *pre-experiment* dengan desain *one-group pretest-posttest*. Populasi penelitian merupakan seluruh peserta didik kelas X pada salah satu SMA di Kota Cirebon. Sampel penelitian terdiri dari objek penelitian dan subjek penelitian. Objek penelitian yaitu buku teks Biologi rujukan utama dalam melakukan rekonstruksi bahan ajar. Subjek penelitian yaitu 120 peserta didik pada kelas IX SMP untuk analisis kebutuhan penyusunan bahan ajar, dan 36 peserta didik pada kelas X SMA untuk implementasi bahan ajar. Hasil penelitian menunjukkan bahwa bahan ajar Biologi berbasis *Education Sustainable for Development* dapat meningkatkan penguasaan konsep peserta didik, dengan rata-rata hasil tes meningkat dari 50.63 menjadi 74.84. Namun, perolehan peningkatan tersebut rendah pada beberapa sub bab konsep keanekaragaman hayati. Peningkatan pada kesadaran keberlanjutan terlihat dari N-Gain pada aspek pengetahuan keberlanjutan sebesar 0,68, pada aspek sikap keberlanjutan sebesar 0,59 dan pada aspek tindakan keberlanjutan 0,57 dengan keseluruhan aspek berada pada kategori cukup efektif. Peningkatan yang terjadi masih dalam kategori cukup. Hal ini karena, pembentukan kesadaran keberlanjutan merupakan proses jangka panjang yang berkaitan dengan perubahan sikap dan perilaku peserta didik.

**Kata-kata kunci:** Bahan ajar Biologi berbasis *Education Sustainable for Development*, penguasaan konsep, kesadaran keberlanjutan

# **THE INFLUENCE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT-BASED BIOLOGY TEACHING MATERIALS ON SOLVING PROBLEMS OF SUSTAINABILITY ISSUES PROJECT ON HIGH SCHOOL STUDENTS' CONCEPTUAL UNDERSTANDING AND SUSTAINABILITY CONSCIOUSNESS**

## **ABSTRACT**

Education for sustainable development has an important role in creating a generation that can consider sustainability in decision making. At school, this is implemented through learning. One effort that can be done is through the development of learning using teaching materials. This study aims to measure the increase in students' conceptual understanding and sustainability consciousness after using Biology teaching materials based on Education Sustainable for Development. This research method is a pre-experiment with a one-group pretest-posttest design. The research population was all students of class X at one of the high schools in Cirebon City. The research sample consists of research objects and research subjects. The object of research is Biology textbooks as the main reference in reconstructing teaching materials. The research subjects were 120 students in class IX of junior high school for analyzing the needs of preparing teaching materials, and 36 students in class X of high school for implementing teaching materials. The results showed that Biology teaching materials based on Education Sustainable for Development could improve students' mastery of concepts, with the average test result increasing from 50.63 to 74.84. However, the achievement of this increase is low in several sub-chapters of the concept of biodiversity. An increase in sustainability consciousness can be seen from the N-Gain in the aspect of sustainability knowledge of 0.68, in the aspect of sustainability attitude of 0.59 and in the aspect of sustainability action of 0.57 with all aspects in the category of quite effective. The increase that occurred was still in the sufficient category. This is because, the formation of sustainability consciousness is a long-term process related to changes in attitudes and behavior of students.

**Key words:** Education for Sustainable Development-Based Biology Teaching Materials, Conceptual Understanding, Sustainability Consciousness

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