# ENHANCING STUDENTS' SUSTAINABILITY UNDERSTANDING AND ACTION THROUGH ACTION-ORIENTED ESD LEARNING ON FOOD CONSUMPTION TOPIC

### **RESEARCH PAPER**

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Arranged by:
Nida Sayyidah Munawar
2102071

INTERNATIONAL PROGRAM ON SCIENCE EDUCATION FACULTY OF MATHEMATICS AND SCIENCE EDUCATION UNIVERSITAS PENDIDIKAN INDONESIA 2025

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Oleh Nida Sayyidah Munawar

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

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# ENHANCING STUDENTS' SUSTAINABILITY UNDERSTANDING AND ACTION THROUGH ACTION-ORIENTED ESD LEARNING ON FOOD CONSUMPTION TOPIC

By:

Nida Sayyidah Munawar 2102071

Approved and confirmed by: Supervisor I

Prof. Dr. Ida Kaniawati, M.Si.

NIP 196807031992032001

Supervisor II

Dr. Eliyawati, S.Pd, M.Pd.

NIP 198610112015040001

Received by, Head of Science Education Study Program

Prof. Phil. Dr. H. Ari Widodo, M.Ed.

NIP 196705271992031001

### **DECLARATION OF PLAGIARISM**

I, the undersigned:

Name : Nida Sayyidah Munawar

Students ID : 2102071

Study Program: International Program on Science Education

Title : Enhancing Students' Sustainability Understanding and Action

Through Action-Oriented ESD Learning on Food Consumption

Topic

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Bandung, August 15th 2025

Nida Sayyidah Munawar

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# ENHANCING STUDENTS' SUSTAINABILITY UNDERSTANDING AND ACTION THROUGH ACTION-ORIENTED ESD LEARNING ON FOOD CONSUMPTION TOPIC

Nida Sayyidah Munawar Science Education Universitas Pendidikan Indonesia nidasayyidahmunawar@upi.edu

### **ABSTRACT**

Food consumption issues such as unhealthy eating habits and malnutrition, remains serious problems that require concrete solution. In this context, it is important to introduce students to healthy eating practices while studying food consumption. This study aims to investigate the enhancement of students' sustainability understanding and actions through actionoriented ESD learning on the food consumption topic. The method used was a preexperimental design with a one-group pretest-posttest involving thirty students of 8th-grade junior high school. The instruments were used in multiple-choice tests with reasoning to measure students' sustainability understanding and a questionnaire for sustainability actions. Both instruments have been validated and are reliable for use. The analysis results showed significant differences between the pretest and posttest in both variables: sustainability understanding (p-value  $(0.004) \le \alpha (0.05)$ ) and sustainability action (p-value  $(0.018) < \alpha (0.05)$ ). The average students' scores of sustainability understanding improved from 32.2 to 41.0, although the N-gain was still relatively low (0.13). While the average students' score of sustainability action improved from 63.9 to 68.8. It can be concluded that action-oriented ESD learning can enhance students' sustainability understanding and sustainability actions.

**Keywords:** Action-Oriented ESD Learning, Food Consumption, Sustainability Action, Sustainability Understanding

## MENINGKATKAN PEMAHAMAN DAN AKSI KEBERLANJUTAN SISWA MELALUI PEMBELAJARAN ESD BERORIENTASI AKSI PADA TOPIK KONSUMSI PANGAN

Nida Sayyidah Munawar Science Education Universitas Pendidikan Indonesia nidasayyidahmunawar@upi.edu

### **ABSTRAK**

Masalah konsumsi makanan, terutama kebiasaan makan yang tidak sehat dan gizi yang tidak seimbang, tetap menjadi masalah serius yang memerlukan solusi konkret. Dalam konteks ini, penting untuk memperkenalkan siswa pada praktik makan sehat saat mempelajari konsumsi makanan. Studi ini bertujuan untuk menyelidiki peningkatan pemahaman dan aksi keberlanjutan siswa melalui pembelajaran ESD yang berorientasi pada aksi pada topik konsumsi makanan. Metode yang digunakan adalah pre-experimental design dengan one-group pretest-posttest yang melibatkan tiga puluh siswa kelas 8 SMP. Instrumen yang digunakan adalah tes pilihan ganda dengan penalaran untuk mengukur pemahaman keberlanjutan siswa dan kuesioner untuk tindakan keberlanjutan. Kedua instrumen telah divalidasi dan reliabel untuk digunakan. Hasil analisis menunjukkan perbedaan yang signifikan antara pretest dan posttest pada kedua variabel: pemahaman keberlanjutan (p-value (0,004)  $< \alpha$  (0,05)) dan tindakan keberlanjutan (p-value (0,018)  $< \alpha$ (0,05)). Rata-rata skor pemahaman keberlanjutan siswa meningkat dari 32,2 menjadi 41,0, meskipun N-gain masih relatif rendah (0,13). Sementara itu, rata-rata skor tindakan keberlanjutan siswa meningkat dari 63,9 menjadi 68,8. Dapat disimpulkan bahwa pembelajaran ESD yang berorientasi pada tindakan dapat meningkatkan pemahaman keberlanjutan dan tindakan keberlanjutan siswa.

**Kata Kunci:** Aksi Keberlanjutan, Konsumsi Pangan, Pemahaman Keberlanjutan, Pembelajaran ESD Berorientasi Aksi

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