

## ABSTRAK

**Mutia Daramita.** Pengembangan Modul Pengolahan Sampah Plastik Berbasis Proyek pada Mahasiswa Jurusan Biologi FMIPA Universitas Negeri Medan. Tesis. Program Studi Pendidikan Biologi Pascasarjana Universitas Negeri Medan, 2022.

Penelitian ini bertujuan untuk: 1) Mengetahui kelayakan modul pengolahan sampah plastik berbasis proyek pada mata kuliah pencemaran lingkungan pada mahasiswa biologi menurut penilaian ahli materi, ahli bahasa, ahli desain layout dan dosen pengampu mata kuliah pencemaran lingkungan serta tanggapan mahasiswa yang telah mengambil mata kuliah tersebut. 2) Mengetahui hasil uji efektivitas modul pengolahan sampah plastik berbasis proyek yang telah dikembangkan dalam meningkatkan pengetahuan pada mahasiswa biologi. Penelitian ini dilakukan di Jurusan Biologi, FMIPA, Universitas Negeri Medan. Penelitian ini merupakan penelitian pengembangan yang menggunakan metode pengembangan model ADDIE. Instrument penelitian berupa lembar penilaian validator ahli materi, ahli bahasa, ahli desain layout dan dosen pengampu mata kuliah serta angket tanggapan mahasiswa. Hasil penilaian kelayakan isi modul oleh ahli materi pada aspek materi memperoleh nilai rata-rata sebesar 87,91 dengan kategori “sangat layak” dan pada aspek penyajian memperoleh nilai rata-rata sebesar 94,67 dengan kategori “sangat layak”. Hasil penilaian kelayakan modul menurut ahli bahasa memperoleh nilai rata-rata sebesar 90 dengan kategori “sangat layak”. Hasil penilaian kelayakan modul menurut ahli desain layout memperoleh nilai rata-rata sebesar 90,5 dengan kategori “sangat layak”. Tanggapan dosen pengampu mata kuliah pencemaran lingkungan terhadap modul memperoleh persentase sebesar 88% dengan kategori “sangat layak”. Tanggap mahasiswa berdasarkan uji coba produk modul yang menunjukkan kategori “sangat layak”. Hasil uji efektifitas modul pengolahan sampah plastik berbasis proyek dinyatakan cukup efektif dengan perolehan persentase N-gain senilai 72,75%.

Kata kunci : pengembangan, modul , sampah plastik, proyek.

## ABSTRACT

**Mutia Daramita.** Development of Project Based Plastic Waste Processing Module for Biology Department Student FMIPA Universitas Negeri Medan. Thesis. Biology Education Study Program Postgraduate Universitas Negeri Medan, 2022.

This study aim to: 1) knowing the level of feasibility of project based plastic waste processing module in environmental pollution course for biology students according to the assessment of content expert, linguist expert, design layout expert and environmental pollution lecturer's and the responses of biology students. 2) knowing the effectiveness results of the project based plastic waste processing module that has been developed in increasing the knowledge of biology students. This research was conducted at Biology Department, FMIPA, Universitas Negeri Medan. This research was developed based on ADDIE models research and development method. The research instrument was form of an assessment sheet for content expert, linguist expert, design layout expert validators and environmental pollution lecturer's and also students response questionnaires. The feasibility assessment result of module content by content expert on the content aspect obtained an average score of 87,91 with "very feasible" category and the presentation aspect obtained an average score 94,67 with "very feasible" category. The feasibility assessment result of module according linguist expert obtained an average score of 90 with "very feasible" category. The feasibility assessment result of module according to design layout expert obtained an average score of 90,5 with "very feasible" category. The lecturer response to the module obtained a percentage of 88% with "very feasible" category. Student responses to the module which showed with "very feasible" category.

Keywords: development, module, plastic waste, project.