

Lingga Zenny. 2022. *Pengembangan E-Modul IPA Berorientasi Etnosains Pada Materi Bioteknologi*. Skripsi, Progam Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing 1 : Dr. Badrud Tamam, S.Si., M.Pd.

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan produk berupa e-modul IPA berorientasi etnosains pada materi bioteknologi. E-modul berorientasi etnosains berisikan materi dan berbagai gambar yang menarik mengenai proses pembuatan Brem, guna mengetahui kelayakan materi, kelayakan media, kepraktisan serta respons peserta didik. Jenis penelitian yang digunakan yaitu penelitian pengembangan (*developmental research*) menggunakan model penelitian 4D terdiri dari (*Define, Design, Develop and Disseminate*). Penelitian dilakukan di MTsN 2 Madiun, Kecamatan Kebonsari, Kabupaten Madiun tahun ajaran 2021/2022 total keseluruhan 193 peserta didik. Sampel penelitian ini adalah 23 peserta didik. Pengambilan sampel dengan teknik *Non-probability* berjenis *purposive sampling*. Data yang diperoleh dianalisis validitas, kepraktisan dan respons peserta didik. Hasil Validasi materi sebesar 0,85 dengan kategori sangat layak. Validasi media sebesar 0,83 dengan kategori sangat layak. Hasil kepraktisan sebesar 86% dengan kategori sangat praktis, dan hasil respon peserta didik sebesar 85% dengan kategori sangat positif, sehingga dapat digunakan dalam proses pembelajaran materi Bioteknologi.

Kata Kunci :4D, E-modul IPA, Etnosains.

Linga Zenny. 2022. Development of Ethnoscience Oriented Science E-Modules on Biotechnology Materials. Thesis, Science Education Study Program, Faculty of Education, Trunojoyo University, Madura. Advisor 1: Dr. Badrud Tamam, S.Si., M.Pd.

ABSTRACT

This study aims to develop a product in the form of an ethnoscience-oriented science e-module on biotechnology materials. The ethnoscience-oriented e-module contains interesting materials and pictures about the process of making Brem, in order to determine the feasibility of the material, media feasibility, practicality and student responses. The type of research used is developmental research - 4D research model consisting of (Define, Design, Develop and Disseminate). The research was conducted at MTsN 2 Madiun, Kebonsari District, Madiun Regency for the 2021/2022 academic year, a total of 193 students. The sample of this research is 23 students. Sampling with non-probability technique is purposive sampling type. The data obtained were analyzed for validity, practicality and student responses. The result of material validation is 0.85 with a very decent category. The media validation is 0.83 with a very decent category. The results of practicality are 86% in the very practical category, and the results of student responses are 85% in the very positive category, it concluded that e-modul they can be used in the learning process of Biotechnology material.

Keywords: 4D, Science E-module, Ethnoscience.