ABSTRAK

Deviyana Kopman : Pengembangan Bahan Ajar Berbasis STEM Sebagai Alternatif Pembelajaran Biologi SMA Negeri 5 Kota Ternate Di Masa New Normal. **Ternate : Fakultas Keguruan Dan Ilmu Pendidikan Universitas Kahirun Ternate 2022**

STEM meningkatkan keterampilan siswa dalam empat bidang ilmu yaitu keterampilan sains, keterampilan mengoperasikan teknologi, keterampilan teknik penyelesaian masalah dan keterampilan matematika yang sangat baik diterapkan untuk menghadapi tentang abad 21. Penelitian ini bertujuan untuk menghasilakn produk LKPD berbasis STEM (*sanis, technology, engineering, matematic*) pada materi respirasi anaerob kelas XII SMA Negeri 5 Kota Ternate. Penelitian ini merupan kan panilitian dan pengembangan (R&D) dengan menggunakan model pengembangan 4D meliputi; *define, design, develop, disseminate*. Hasil penelitian LKPD bebrbasis STEM dengan "Fermentasi Alkohol" layak digunakan sebagai media pembelajaran, hasil validasi produk pada kategori sangat layak dengan rata-rata presentase pada validasi materi 88, 2%, validasi media 87,4% dan untuk validasi respon siswa 85,67%. LKPD fermentasi alkohol layak digunakan bahan ajar pada konsep Respirasi Anaerob.

Kata kunci: LKPD, STEM (*Sains, Technology, Engineering, Maathematic*)

ABSTARCT

Deviyana Kopman: Development of STEM-Based Teaching Materials as an Alternative for Biology Learning at SMA Negeri 5 Ternate City in the New Normal Period. **Ternate : Faculty of Teacher Training and Education, University of Kahirun Ternate 2022**

STEM improves student skills in four fields of science, namely science skills, technology operating skills, problem solving engineering skills and mathematical skills that are very well applied to dealing with the 21st century. This study aims to produce STEM-based LKPD products (sanis, technology, engineering, mathematics).) on the material of class XII anaerobic respiration of SMA Negeri 5 Ternate City. This research is a research and development (R&D) research using a 4D development model including; define, design, develop, disseminate. The results of the STEM-based LKPD research with "Alcohol Fermentation" are suitable for use as learning media, the product validation results are in the very feasible category with an average percentage of 88.2% on material validation, 87.4% of media validation and 85.67% for student response validation. Alcoholic fermentation worksheets are suitable for use as teaching materials on the concept of Anaerobic Respiration.

Keywords: LKPD, STEM (Science, Technology, Engineering, Mathematics)