

ABSTRAK

Gita Siwi Prima Pramuditiya, Nim 4173341029 (2023), Pengembangan Lembar Kerja Peserta Didik (LKPD) Pembelajaran Biologi Berbasis STEM Pada Materi Virus di Kelas X IPA Madrasah Aliyah Negeri Sidikalang Tahun Pembelajaran 2023/2024.

Penelitian ini bertujuan untuk merancang dan menghasilkan Lembar Kerja Peserta Didik (LKPD) berbasis Sains Technology Engineering and Mathematics (STEM) pada materi Virus. Desain penelitian yang digunakan adalah jenis penelitian pengembangan. Subjek dalam penelitian ini adalah Ahli materi, Ahli Pembelajaran, Ahli Desain, Guru Biologi dan siswa kelas X-1 Madrasah Aliyah Negeri Sidikalang. Pengumpulan data menggunakan instrumen berupa lembar tanggapan. Analisis data menggunakan analisis deskriptif, kuantitatif, dan kualitatif. Perancangan LKPD berbasis STEM ini menggunakan model 4D, yaitu melalui tahap *Define, Design, Development, and Dessiminate*. Hasil penelitian menunjukkan perancangan LKPD berbasis STEM berdasarkan hasil penilaian ahli materi memperoleh presentase sebesar 80,1% dengan kriteria layak, penilaian ahli pembelajaran memperoleh presentase sebesar 90,0% dengan kriteria sangat layak, penilaian ahli desain memperoleh presentase sebesar 90,9% dengan kriteria sangat layak. Hasil dari penggunaan LKPD berbasis STEM memperoleh presentase 82,3% dengan jumlah peserta didik yang tuntas sebanyak 27 orang dan ketuntasan belajar klasikal diperoleh presentase sebesar 90%. LKPD berbasis STEM pada materi Virus yang sudah dirancang memperoleh kriteria penilaian “sangat tinggi” dan telah memenuhi syarat efektif digunakan dalam pembelajaran serta layak digunakan dalam proses pembelajaran Biologi pada materi Virus.

Kata Kunci : LKPD, STEM, 4D, Ketuntasan Belajar Klasikal

ABSTRACT

Gita Siwi Prima Pramuditiya, Nim 4173341029 (2023), Development of Student Activity Sheets (LKPD) for STEM-Based Biology Learning on Virus Material in Class X IPA Madrasah Aliyah Negeri Sidikalang Academic Year 2023/2024.

This research aims to design and produce Student Worksheets (LKPD) based on Science Technology Engineering and Mathematics (STEM) on Virus material. The research design used is a type of development research. The subjects in this research were material experts, learning experts, design experts, biology teachers and class X-1 students at Madrasah Aliyah Negeri Sidikalang. Data collection uses instruments in the form of response sheets. Data analysis uses descriptive, quantitative and qualitative analysis. This STEM-based LKPD design uses a 4D model, namely through the Define, Design, Development and Dessiminate stages. The results of the research show that the design of STEM-based LKPD based on the results of the material expert's assessment obtained a percentage of 80.1% with feasible criteria, the learning expert's assessment obtained a percentage of 90.0% with very feasible criteria, the design expert's assessment obtained a percentage of 90.9% with the criteria very worthy. The results of using STEM-based LKPD obtained a percentage of 82.3% with a total of 27 students who completed it and a percentage of classical learning completion obtained a percentage of 90%. The STEM-based LKPD on Virus material that has been designed has received "very high" assessment criteria and has met the requirements for being effective for use in learning and suitable for use in the Biology learning process on Virus material.

Keywords : LKPD, STEM, 4D, Classical Learning Completeness