

ABSTRAK

Annisa Nasution, NIM 4171141006 (2017). Penyusunan LKPD Berbasis STEM Untuk Menumbuhkan Keterampilan Berpikir Kreatif Siswa Kelas X MIPA SMA Negeri 6 Pematang Siantar T.P 2020/2021

Penelitian ini bertujuan untuk menyusun dan mengetahui tingkat kelayakan serta mengetahui efektivitas LKPD berbasis STEM dalam menumbuhkan keterampilan berpikir kreatif siswa pada materi Perubahan Lingkungan. Metode penelitian yang digunakan adalah penelitian pengembangan dengan model pengembangan ADDIE (*Analysis, Design, Development, Implementation and Evaluation*). Populasi dalam penelitian ini adalah siswa kelas X SMA Negeri 6 Pematang Siantar, validator ahli materi, ahli pembelajaran, ahli desain dan guru biologi. Instrumen yang digunakan berupa angket dengan teknik pengumpulan data berupa lembar validasi ahli materi, ahli pembelajaran, ahli desain, penilaian guru biologi dan tanggapan siswa. Teknik analisis data menggunakan analisis deksriptif, kuantitatif dan kualitatif. Hasil penelitian ini berdasarkan penilaian ahli materi diperoleh sebesar 90,17 % dengan kriteria “Sangat Layak”, penilaian ahli pembelajaran diperoleh sebesar 94,64 % dengan kriteria “Sangat Layak”, penilaian ahli desain diperoleh sebesar 88,6 % dengan kriteria “Sangat Layak”, penilaian guru biologi diperoleh sebesar 94,79 % dengan kriteria “Sangat Layak” dan tanggapan siswa diperoleh sebesar 96,67 dengan kriteria “Layak”. Tingkat efektivitas LKPD berbasis STEM dalam menumbuhkan keterampilan berpikir kreatif siswa diperoleh nilai sebesar 88 % dengan kriteria “Sangat Tinggi”. LKPD berbasis STEM yang disusun untuk menumbuhkan keterampilan berpikir kreatif siswa memperoleh penilaian dengan kriteria sangat tinggi dan telah memenuhi persyaratan serta efektif digunakan dalam menumbuhkan keterampilan berpikir kreatif siswa dan layak digunakan dalam proses pembelajaran pada materi perubahan lingkungan.

Kata kunci :Berpikir Kreatif, LKPD, STEM

ABSTRACT

Annisa Nasution, NIM 4171141006 (2017). Preparation of STEM-Based Student Worksheet (LKPD) to Foster Creative Thinking Skills of Student in Class X MIPA SMA Negeri 6 Pematang Siantar T.P 2020/2021

This study aims to formulate and determine the level of feasibility and to determine the effectiveness of STEM-based LKPD in fostering student creative thinking skills in the subject of Environmental Change. The research method used is development research with the ADDIE (Analysis, Design, Development, Implementation and Evaluation). The population in this study were 10th grade students of SMA Negeri 6 Pematang Siantar, material expert validator, learning expert, design expert and biology teacher. The instrument used was in the form of a questionnaire with data collection techniques in the form of validation sheets for expert, learning expert, design expert, biology teacher assessments and student responses. The data analysis technique used descriptive, quantitative and qualitative. The results of this study based on the material expert assessment obtained by 90.17% with the criteria "Very Feasible", the assessment of learning expert obtained by 94.64% with the criteria "Very Feasible", the design expert judgment was obtained by 88.6% with the criteria "Very Feasible", the biology teacher assessment was obtained at 94.79% with the criteria "Very Feasible" and student responses obtained for 96.67 with the criteria "Feasible". The effectiveness level of STEM-based LKPD in fostering students creative thinking skills obtained a score of 88% with the criteria "Very High". STEM-based LKPD which is structured to foster students creative thinking skills obtains an assessment with very high criteria and has met the requirements and is effectively used in fostering students creative thinking skills and is suitable for use in the learning process on environmental change material.

Keywords : Creative thinking, LKPD, STEM