

ABSTRAK

Dinda Riski Aulia. NIM. 4193311006 (2023). Pengembangan Lembar Kerja Peserta Didik (LKPD) Berbasis PjBL-STEM untuk Meningkatkan Kemampuan Berpikir Kreatif Matematis pada Siswa SMA Negeri 1 Deli Tua.

Penelitian ini bertujuan untuk mengembangkan LKPD berbasis PjBL-STEM yang valid, praktis, dan efektif sehingga meningkatkan kemampuan berpikir kreatif matematis siswa. Instrumen penelitian yang digunakan dalam penelitian ini yaitu angket validasi LKPD berbasis PjBL-STEM, angket respon siswa dan guru terhadap LKPD berbasis PjBL-STEM, serta tes kemampuan berpikir kreatif matematis (*pretest* dan *posttest*). Setelah instrumen dan LKPD berbasis PjBL-STEM dinyatakan valid oleh validator, kemudian dilanjutkan dengan uji coba lapangan dan penerapan LKPD berbasis PjBL-STEM. Hasil penelitian ini memaparkan bahwa: (1) LKPD berbasis PjBL-STEM yang dikembangkan telah memenuhi kriteria kevalidan dari validator dengan persentase rata-rata validasi pada aspek materi sebesar 3,94 dan pada aspek penyajian sebesar 3,60 dengan kategori sangat layak, (2) LKPD berbasis PjBL-STEM yang dikembangkan telah memenuhi kriteria kepraktisan berdasarkan hasil angket respon siswa yaitu sebesar 78% dan guru yaitu sebesar 91,67% dan dikategorikan sangat praktis, (3) LKPD berbasis PjBL-STEM yang dikembangkan telah memenuhi kriteria keefektifan yaitu (a) hasil belajar siswa memenuhi ketuntasan belajar secara klasikal yaitu $\geq 85\%$, (b) ketercapaian indikator pembelajaran yaitu $\geq 75\%$, (c) kemampuan berpikir kreatif matematis siswa setelah menggunakan LKPD berbasis PjBL-STEM mengalami peningkatan dari yaitu indikator berpikir lancar sebesar 27%, berpikir luwes 20%, indikator berpikir original 18%, indikator elaboratif 13% dan hasil N-Gain memaparkan bahwa kemampuan berpikir kreatif matematis siswa mengalami kenaikan sebesar 0,50 dengan kategori sedang.

Kata kunci: LKPD, PjBL-STEM, kemampuan berpikir kreatif matematis

ABSTRACT

Dinda Riski Aulia. NIM. 4193311006 (2023). Development of Student Worksheets (LKPD) Based on PjBL-STEM to Improve Mathematical Creative Thinking Abilities in Deli Tua 1 Public High School Students.

This research aims to develop valid, practical and effective PjBL-STEM based LKPD so as to improve students' mathematical creative thinking abilities. The research instruments used in this research were a validation questionnaire for PjBL-STEM based LKPD, a student and teacher response questionnaire to PjBL-STEM based LKPD, as well as a mathematical creative thinking ability test (pretest and posttest). After the instrument and PjBL-STEM based LKPD are declared valid by the validator, then proceed with field trials and implementation of the PjBL-STEM based LKPD. The results of this research show that: (1) the PjBL-STEM based LKPD that was developed has met the validity criteria of the validator with an average percentage of validation in the material aspect of 3.94 and in the presentation aspect of 3.60 in the very feasible category, (2) The PjBL-STEM based LKPD that was developed has met the practicality criteria based on the results of the student response questionnaire, namely 78% and teachers, namely 91.67% and is categorized as very practical, (3) The PjBL-STEM based LKPD that was developed has met the effectiveness criteria, namely (a) student learning outcomes meet classical learning completeness, namely $\geq 85\%$, (b) achievement of learning indicators, namely $\geq 75\%$, (c) students' mathematical creative thinking ability after using PjBL-STEM based LKPD has increased from the fluent thinking indicator of 27%, flexible thinking 20%, original thinking indicator 18%, elaborative indicator 13% and the N-Gain results show that students' mathematical creative thinking abilities have increased by 0.50 in the medium category.

Key words: LKPD, PjBL-STEM, mathematical creative thinking abilities