

PENGEMBANGAN E-LKPD (LEMBAR KEGIATAN PESERTA DIDIK ELEKTRONIK) BERBASIS *COMPUTATIONAL THINKING* PADA MATERI Kaidah Pencacahan Kelas XII SMA

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ABSTRAK

Rendahnya kemampuan berpikir komputasi peserta didik menyebabkan peserta didik kurang mampu dalam menyelesaikan masalah non rutin dalam pembelajaran khususnya masalah non rutin yang memiliki karakteristik untuk melatih kemampuan berpikir komputasi. Maka dari itu diperlukan solusi dengan pengembangan bahan ajar yang sesuai melalui E-LKPD (Lembar Kegiatan Peserta Didik Elektronik) berbasis *computational thinking*. Penelitian ini dilakukan dalam upaya mengembangkan E-LKPD untuk melatih kemampuan berpikir komputasi peserta didik sekaligus membelajarkan materi kaidah pencacahan kelas XII SMA. Pengembangan E-LKPD menggunakan model ADDIE dengan berbantuan *heyzine* dan *wizer.me*. Formatnya dikemas dalam bentuk *e-flipbook* petunjuk E-LKPD yang didalamnya terdapat tata cara akses masing-masing E-LKPD. Pada proses pengembangan E-LKPD dilakukan uji validitas isi/materi dengan uji validitas Gregory, uji kelayakan ahli materi dan ahli media dengan angket penilaian LORI, uji kepraktisan dengan angket *User Experience Questionnaire* (UEQ), serta uji efektivitas digunakan hasil tes hasil belajar. Berdasarkan hasil penelitian diperoleh, uji validitas isi/materi mendapatkan skor sebesar 1 yang berada pada kriteria sangat tinggi. Selanjutnya, uji kelayakan materi dan kelayakan media mendapatkan rata-rata nilai sebesar 5 dan 4,69 yang berada pada kriteria sangat tinggi. Hasil uji kepraktisan terhadap 28 responden yang terdiri atas dua guru dan 26 peserta didik diperoleh hasil dari aspek *attractiveness* diperoleh skor rata-rata 2,02 dengan kategori *excellent*, aspek *perspicuity* diperoleh skor rata-rata 1,88 dengan kategori *good*, aspek *efficiency* diperoleh skor rata-rata 2,13 dengan kategori *excellent*, aspek *dependability* diperoleh skor rata-rata 2,04 dengan kategori *excellent*, aspek *stimulation* diperoleh skor rata-rata 2,19 dengan kategori *excellent*, dan aspek *novelty* diperoleh skor rata-rata 2,16 dengan kategori *excellent*. Kemudian, hasil uji efektivitas diperoleh persentase ketuntasan yakni sebesar 84,6% dengan jumlah ketuntasan peserta didik sebanyak 22 dari 26 peserta didik. Saran dalam penelitian ini, perlu adanya penelitian lebih lanjut dengan subjek penelitian yang lebih luas.

Kata Kunci: E-LKPD, *computational thinking*, kaidah pencacahan

**THE DEVELOPMENT OF E-LKPD (ELECTRONIC WORKSHEET) BASED
ON COMPUTATIONAL THINKING ON
ENUMERATION RULES FOR XII CLASS**

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ABSTRACT

The low ability of students' computational thinking causes students to be less able to solve non-routine problems in learning, especially non-routine problems which have the characteristics to train computational thinking skills. Therefore a solution is needed by developing appropriate teaching materials through computational thinking-based E-LKPD (Electronic Worksheet). This research was conducted to develop an E-LKPD to train students' computational thinking abilities and teach students the material for enumeration rules for class XII SMA. E-LKPD development uses the ADDIE model with the help of heyzine and wizer.me. The format is packaged in the form of an e-LKPD manual e-flipbook in which there are procedures for accessing each E-LKPD. In the E-LKPD development process, content/material validity tests were carried out using the Gregory validity test, material expert and media expert feasibility tests using the LORI assessment questionnaire, practicality tests using the User Experience Questionnaire (UEQ) questionnaire, and effectiveness testing using the results of learning outcomes tests. Based on the research results obtained, the content/material validity test gets a score of 1 which is in the very high criteria. Furthermore, the material feasibility test and media feasibility get an average value of 5 and 4.69 which are in the very high criteria. The results of the practicality test on 28 respondents consisting of two teachers and 26 students obtained results from the attractiveness aspect obtained an average score of 2.02 in the excellent category, the perspicuity aspect obtained an average score of 1.88 in the good category, the efficiency aspect obtained an average score of 2.13 in the excellent category, the dependability aspect obtained an average score of 2.04 in the excellent category, the stimulation aspect obtained an average score of 2.19 in the excellent category, and the novelty aspect obtained an average score of 2.16 with excellent category. Then, the effectiveness test results obtained a completeness percentage of 84.6% with the number of completeness students as many as 22 out of 26 students. This study suggests that for further research with a larger research subject.

Keywords: *E-LKPD, computational thinking, enumeration rules*