

ABSTRAK

PENGARUH MODEL *PROBLEM-BASED LEARNING* (PBL) BERBANTU E-LKPD TERHADAP KEMAMPUAN PEMECAHAN MASALAH SISWA SMP KELAS VII PADA MATERI INTERAKSI ANTAR MAKHLUK HIDUP DAN LINGKUNGANNYA

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Penelitian ini bertujuan untuk mengetahui pengaruh penerapan model *Problem-Based Learning* (PBL) berbantu e-LKPD terhadap kemampuan pemecahan masalah serta tanggapan peserta didik. Penelitian ini merupakan penelitian *quasi experiment* dengan desain *Pretest-Posttest nonequivalent control group*. Sampel penelitian terdiri atas 32 peserta didik kelas eksperimen dan 32 peserta didik kelas kontrol yang dipilih menggunakan teknik *purposive sampling*. Data kuantitatif diperoleh melalui hasil *Pretest* dan *Posttest* kemampuan pemecahan masalah pada materi interaksi antar makhluk hidup dan lingkungannya, sedangkan data kualitatif diperoleh dari angket tanggapan peserta didik. Hasil uji hipotesis menggunakan *Independent Sample T-Test* menunjukkan nilai signifikansi sebesar $0,004 < 0,05$ yang berarti penerapan model PBL berbantu e-LKPD berpengaruh signifikan terhadap kemampuan pemecahan masalah peserta didik. Rata-rata nilai *N-Gain* kelas eksperimen sebesar 0,64 dengan kategori sedang, lebih tinggi dibandingkan kelas kontrol sebesar 0,45 dengan kategori sedang. Perbedaan indikator kemampuan pemecahan masalah paling besar terdapat pada melaksanakan penyelesaian sebesar 0,65 pada kelas eksperimen dan 0,34 pada kelas kontrol, sedangkan terendah pada memeriksa kembali hasil sebesar 0,60 pada kelas eksperimen dan 0,48 pada kelas kontrol. Hasil angket menunjukkan peserta didik memberikan tanggapan sangat baik terhadap penerapan model PBL berbantu e-LKPD. Dengan demikian, model PBL berbantu e-LKPD dapat digunakan sebagai alternatif pembelajaran IPA untuk meningkatkan kemampuan pemecahan masalah peserta didik.

Kata kunci: e-LKPD, kemampuan pemecahan masalah, peserta didik, *Problem-Based Learning* (PBL), *quasi experiment*

ABSTRACT

THE EFFECT OF PROBLEM-BASED LEARNING (PBL) MODEL ASSISTED BY E-LKPD ON PROBLEM-SOLVING ABILITIES OF SEVENTH-GRADE JUNIOR HIGH SCHOOL STUDENTS IN THE TOPIC OF INTERACTIONS BETWEEN LIVING THINGS AND THEIR ENVIRONMENT

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This study aimed to determine the effect of the implementation of the Problem-Based Learning (PBL) model assisted by electronic student worksheets (e-LKPD) on students' problem-solving skills and their responses toward the learning process. This research employed a quasi-experimental method using a pretest-posttest nonequivalent control group design. The sample consisted of 32 students in the experimental class and 32 students in the control class, selected through purposive sampling. Quantitative data were obtained from the pretest and posttest results of students' problem-solving skills on the topic of interactions among living organisms and their environment, while qualitative data were collected through a student response questionnaire. The results of the hypothesis test using an Independent Samples t-Test showed a significance value of $0.004 < 0.05$, indicating that the implementation of the PBL model assisted by e-LKPD had a significant effect on students' problem-solving skills. The average N-Gain score of the experimental class was 0.64, categorized as moderate, which was higher than that of the control class, with an average N-Gain score of 0.45, also categorized as moderate. The greatest difference in problem-solving skill indicators was found in the carrying out the plan, with scores of 0.65 in the experimental class and 0.34 in the control class. Meanwhile, the smallest difference was observed in the indicator of looking back, with scores of 0.60 in the experimental class and 0.48 in the control class. The questionnaire results indicated that students gave very positive responses to the implementation of the PBL model assisted by e-LKPD. Therefore, the PBL model assisted by e-LKPD can be used as an alternative science learning approach to improve students' problem-solving skills.

Keywords: Problem-Based Learning (PBL), Problem-solving ability, e-LKPD, science learning, quasi-experiment