ABSTRAK

PENGEMBANGAN LKPD BERBASIS OBSERVASI, BERPIKIR ANALISIS, DAN KOMUNIKASI (OBAK) PADA MATERI SISTEM EKSKRESI MANUSIA UNTUK MENINGKATKAN LITERASI SAINS PESERTA DIDIK

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Penelitian ini bertujuan untuk menghasilkan produk berupa LKPD berbasis OBAK pada materi sistem ekskresi manusia dan mengetahui kelayakan LKPD serta mengetahui efektivitas LKPD dalam meningkatkan kemampuan literasi sains peserta didik. Penelitian dilaksanakan pada semester genap di SMPN 8 Metro. Model pengembangan yang digunakan yaitu model 4D (*Define, Design, Develop,* dan *Disseminate*). Sampel diambil menggunakan teknik *purposive sampling* dengan kelas VIII B berjumlah 32 siswa sebagai kelas eksperimen dan kelas VIII A sebanyak 31 siswa sebagai kelas kontrol. Jenis data berupa data kuantitatif dan kualitatif. Hasil penelitian menunjukkan bahwa skor kelayakan LKPD dari ahli media sebesar 89,26% dengan kriteria "Sangat Layak", ahli materi sebesar 89,25% dengan kriteria "Sangat Layak", ahli bahasa sebesar 90,95% dengan kriteria "Sangat Layak", dan ahli praktisi sebesar 94,48% kriteria "Sangat Layak". Kemudian produk diuji coba skala kecil memperoleh skor kelayakan sebesar 97,4% kriteria "Sangat Layak", uji coba skala besar memperoleh skor kelayakan sebesar 95,8% dengan kriteria "Sangat Layak", dan dari hasil nilai *pretest-postest* pada kelas eksperimen yang menggunakan LKPD berbasis OBAK mendapat skor nilai *n-gain* sebesar 0,55 kriteria "sedang" serta dari hasil uji hipotesis menggunakan *Mann-Whitney U* didapatkan nilai sig. (2-*tailed*) 0,00 < 0,05. Dari hasil perhitungan menggunakan *effect size* didapatkan skor sebesar 1,8 dengan kategori besar. Dari hasil uji hipotesis menggunakan *Mann-Whitney U* dan perhitungan *effect size* dapat disimpulkan bahwa terdapat efektivitas penggunaan LKPD berbasis OBAK terhadap kemampuan literasi sains peserta didik. Oleh karena itu, LKPD berbasis OBAK pada materi sistem ekskresi manusia yang telah dikembangkan dapat diimplementasikan dalam kegiatan pembelajaran IPA kelas VIII SMP sebagai upaya dalam meningkatkan kemampuan literasi sains peserta didik.

Kata kunci: Lembar Kerja Peserta Didik, Model OBAK (Observasi, Berpikir Analisis, Komunikasi), Sistem Ekskresi Manusia, Kemampuan Literasi Sains.

ABSTRACT

DEVELOPMENT OF LKPD BASED ON OBSERVATION, THINKING ANALYSIS, AND COMMUNICATION (OBAK) ON THE MATERIAL OF HUMAN EXCRETORY SYSTEM TO IMPROVE STUDENTS SCIENCE LITERACY SCIENCE LITERACY OF STUDENTS

By

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This research aims to develop a product in the form of an OBAK-based Student Worksheet (LKPD) on the human excretory system material, determine the feasibility of the LKPD, and assess its effectiveness in improving students scientific literacy skills. The study was conducted during the even semester at SMPN 8 Metro. The development model used was the 4D model (Define, Design, Develop, and Disseminate). The sample was selected using a purposive sampling technique, with class VIII B consisting of 32 students as the experimental group and class VIII A consisting of 31 students as the control group. The data collected included both quantitative and qualitative data. The research results showed that the feasibility scores of the LKPD were as follows: 89.26% from media experts with the "Highly Feasible" criterion, 89.25% from material experts with the "Highly Feasible" criterion, 90.95% from language experts with the "Highly Feasible" criterion, and 94.48% from practitioner experts with the "Highly Feasible" criterion. The small-scale trial obtained a feasibility score of 97.4% with the "Highly Feasible" criterion, while the large-scale trial obtained a feasibility score of 95.8% with the "Highly Feasible" criterion. Furthermore, the pretest-posttest results in the experimental class, which used the OBAK-based LKPD, showed an n-gain score of 0.55, categorized as "moderate." The hypothesis test using the Mann-Whitney U test resulted in a significance value (2-tailed) of 0.00 < 0.05. The effect size calculation yielded a score of 1.8, classified as a large effect. Based on the hypothesis test results using the Mann-Whitney U test and effect size calculations, it can be concluded that the use of the OBAK-based LKPD effectively enhances students' scientific literacy skills. Therefore, the OBAK-based LKPD on the human excretory system material that has been developed can be implemented in eighth-grade science learning activities in junior high school as an effort to improve students' scientific literacy skills.

***Keywords**: Student Worksheet (LKPD), OBAK Model (Observation, Analytical Thinking, Communication), Human Excretory System, Scientific Literacy Skills.*