

ABSTRAK

PENGEMBANGAN LEMBAR KERJA PESERTA DIDIK BERBASIS MASALAH PADA MATERI FLUIDA DINAMIK UNTUK MENUMBUHKAN LITERASI DIGITAL DAN KEMAMPUAN BERKOLABORASI PESERTA DIDIK

Oleh

LILIS PURNAMASARI

Penelitian ini bertujuan untuk mendeskripsikan produk berupa Lembar Kerja Peserta Didik berbasis masalah pada materi fluida dinamik yang valid, praktis dan efektif untuk menumbuhkan literasi digital dan kemampuan berkolaborasi peserta didik. Metode penelitian menggunakan desain *Research and Development* (R & D) model Gall *et al* (2003). Pengumpulan data menggunakan lembar validasi, kuesioner dan lembar observasi. Analisis data dilakukan dengan teknik analisis kuantitatif dan analisis deskriptif kualitatif. Hasil uji validasi, menunjukkan nilai validasi isi sebesar 92,61% dan nilai validasi konstruk sebesar 89,22% dengan kategori sangat baik, sehingga produk dinyatakan valid. Hasil uji kepraktisan menunjukkan respon peserta didik terhadap penggunaan produk, yaitu sebesar 79,89% (kategori praktis) dan diketahui persentase keterlaksanaan pembelajaran, yaitu sebesar 65,22% (kategori tinggi), sehingga produk dinyatakan praktis. Selanjutnya, hasil uji keefektifan produk menunjukkan nilai *n-gain* untuk literasi digital sebesar 0,44 (kategori sedang) dan nilai *n-gain* kemampuan berkolaborasi sebesar 0,24 (kategori rendah). Hasil uji *Paired Samples T* menunjukkan nilai signifikan sebesar 0,000 ($< 0,05$), yang berarti ada perbedaan yang signifikan antara nilai rata-rata hasil *pretest* dan *posttest* literasi digital dan kemampuan berkolaborasi peserta didik. Berdasarkan hasil penelitian, dapat disimpulkan bahwa produk yang dikembangkan telah memenuhi kategori valid, praktis dan efektif, sehingga bisa dikatakan layak untuk digunakan sebagai bahan ajar.

Kata kunci: Lembar Kerja Peserta Didik, Pembelajaran Berbasis Masalah, Literasi Digital dan Kemampuan Berkolaborasi

ABSTRACT

DEVELOPMENT OF PROBLEM-BASED STUDENT WORKSHEETS ON DYNAMIC FLUID MATERIALS FOR ARAISING STUDENTS DIGITAL LITERACY AND COLLABORATIVE SKILL

By

LILIS PURNAMASARI

This research goal was to describe a product in the form of a problem-based Student Worksheets on dynamic fluid materials that were valid, practical and effective for araising students digital literacy and collaborative skills. The research method used the Research and Development (R & D) model of Gall et al (2003). Collecting data used validation sheets, questionnaires and observation sheets. Data analysis was carried out using quantitative analysis techniques and qualitative descriptive analysis. The results of the validation test, showed that the content validation value was 92.61% and the construct validation value was 89.22% with a very good category, so the product was declared valid. The results of the practicality test showed the response of students to the use of the product, which was 79.89% (practical category) and it was known that the percentage of learning implementation was 65.22% (high category), so the product was declared practical. Furthermore, the results of the product effectiveness test showed that the n-gain value for digital literacy was 0.44 (medium category) and the n-gain value for collaboration ability was 0.24 (low category). The results of the Paired Samples T test showed a significant value of 0.000 (< 0.05), which meant that there was a significant difference between the average value of the pretest and posttest results of digital literacy and the ability to collaborate with students. Based on the results of the research, it could be concluded that the product developed has met the valid, practical and effective categories, so it could be said that it was feasible to be used as teaching material.

Keywords: Student Worksheet, Problem Based Learning, Digital Literacy and Collaboration Ability