

ABSTRACT

NAHDAH FAIZAH HARAHAHAP. Development of QR Code-Based E-LKPD By Problem-Based Learning Model of Plane Teaching Materials in 4th Grade Elementary School. Skripsi. Medan: Faculty of Education, State University of Medan. 2023.

The background of this research is based on the problem, namely, the use of LKPD still uses practice questions in textbooks which are less interesting so that students feel bored during the learning process. Development of Electronic Student Worksheets is one of the learning tools that supports the achievement of learning objectives. This study aims to determine the Validity, Effectiveness and Practicality of the QR Code-based e-LKPD through the Problem Based Learning model in improving the learning outcomes of fourth grade students at SDN 064966 Medan. This study uses the Research & Development method with the Thiagarajan model (4-D) which consists of 4 steps, namely defining, designing, developing and disseminating. Data collection techniques are observation, interviews, scales and tests. Data analysis techniques, namely qualitative data analysis techniques and quantitative data analysis techniques. This research and development resulted in an E-LKPD product with a PBL-based QR-Barcode as a mathematics learning LKPD on data structure material for fourth grade students at SD N 064966 Medan. The results of the analysis indicate that the e-LKPD for this product has been validated by design and material experts. LKPD obtained a proportion of 91.57% and 88.75% in the very feasible category. The practicality results obtained the proportion in the very practical category of 92.78% and the effectiveness obtained several results, namely the completeness of the test results obtained by 81% with the qualification very effective. Thus, QR Code-based e-LKPD through the Problem Based Learning model on flat shape material which is declared valid, practical, and effective is used as a learning tool and is able to train critical thinking skills.

Keyword : Electronic Student Worksheets (e-LKPD), *Problem Based Learning* (PBL), Flat Shapes, 4-D Models

ABSTRAK

NAHDAH FAIZAH HARAHAHAP. Pengembangan E-LKPD Berbasis Qr-Code Melalui Model *Problem Based Learning* pada Materi Bangun Datar di Kelas IV Sekolah Dasar. Skripsi. Medan : Fakultas Ilmu Pendidikan Universitas Negeri Medan. 2023.

Penelitian ini dilatar belakangi berdasarkan masalah yaitu, penggunaan LKPD masih menggunakan soal Latihan pada buku paket yang kurang menarik sehingga peserta didik merasa bosan pada saat proses pembelajaran berlangsung. Pengembangan Lembar Kerja Peserta Didik Elektronik adalah salah satu perangkat pembelajaran yang menunjang ketercapaian tujuan pembelajaran. Penelitian ini bertujuan untuk mengetahui Validitas, Efektivitas dan Praktikalitas dari *e-LKPD* berbasis QR Code melalui model *Problem Based Learning* dalam meningkatkan hasil belajar siswa kelas IV SDN 064966 Medan. Penelitian ini menggunakan metode *Research & Development* dengan model Thiagarajan (4-D) yang terdiri 4 langkah yaitu *define, design, development* dan *disseminate*. Teknik pengumpulan data yaitu observasi, wawancara, skala dan test. Teknik analisis data yaitu teknik analisis data kualitatif dan teknik analisis data kuantitatif. Penelitian dan pengembangan ini menghasilkan produk *E-LKPD* dengan *QR-Barcode* berbasis PBL sebagai LKPD pembelajaran matematika materi bangun datar pada siswa kelas IV SD N 064966 Medan. Hasil analisis menandakan bahwa *e-LKPD* produk ini telah divalidasi oleh ahli desain dan materi LKPD memperoleh persentase 91,57% dan 88,75 % dengan kategori sangat layak. Hasil kepraktisan mendapatkan persentase dengan kategori sangat praktis sebesar 92,78% dan keefektifan mendapatkan beberapa hasil yaitu ketuntasan hasil tes diperoleh 81% dengan kualifikasi sangat efektif. Dengan demikian, *e-LKPD* berbasis QR Code melalui model *Problem Based Learning* pada materi bangun datar yang dihasilkan dinyatakan valid, praktis, dan efektif digunakan sebagai perangkat pembelajaran serta mampu melatih keterampilan berpikir kritis.

Kata Kunci : Lembar Kerja Peserta Didik Elektronik (e-LKPD), *Problem Based Learning* (PBL), Bangun datar, Model 4-D