ABSTRAK

Indi Fauzati Ulfah, NIM 4193311061 (2024). Pengembangan Lembar Kerja Peserta Didik Berbasis *Augmented Reality* dengan Model *Problem Based Learning* untuk Meningkatkan Kemampuan Pemecahan Masalah Siswa MTsN 1 Medan.

Penelitian ini bertujuan menghasilkan Lembar Kerja Peserta Didik (LKPD) berbasis *augmented reality* melalui model *problem based learning* yang valid, praktis, dan efektif sehingga dapat meningkatkan kemampuan pemecahan masalah siswa MTsN 1 Medan pada materi bangun ruang sisi datar yang berfokus pada Kubus dan Balok. Instrumen penelitian yang digunakan yaitu lembar validasi LKPD, lembar RPP, tes kemampuan pemecahan masalah (pretest dan posttest), dan angket respon. Setelah LKPD dan instrumen dinyatakan valid oleh dosen validator ahli media dan ahli materi, dilanjutkan dengan uji lapangan. Hasil penelitian menunjukkan bahwa: (1) LKPD berbasis *augemented reality* yang dikembangkan dengan model *problem based learning* telah memperoleh penilaian validitas yang tinggi. Penilaian dilakukan oleh ahli media dengan persentase sebesar 90,3% dan oleh ahli materi sebesar 91,5%, kedua kriteria tersebut memperoleh kategori sangat valid, (2) LKPD berbasis *augemented reality* yang dikembangkan dengan model *problem based learning* telah memenuhi kriteria praktis dengan persentase dari angket kepraktisan untuk guru sebesar 86,7% dan angket respon siswa sebesar 80,32%, dengan kategori sangat praktis, (3) LKPD berbasis *augemented reality* yang dikembangkan dengan model *problem based learning* telah memenuhi kriteria efektif yang ditentukan dari (a) ketercapaian ketuntasan belajar siswa secara klasikal sebesar 90%; (b) ketercapaian ketuntasan indikator yang dirumuskan sebesar 87,1%; (c) peningkatan kemampuan pemecahan masalah siswa setelah belajar menggunakan LKPD mengalami peningkatan sebesar 32,6 dan ditinjau dari nilai n-gain peningkatan berada pada kategori sedang dengan rata-rata 0,58; (d) pembelajaran dengan menggunakan LKPD memperoleh respon positif dengan persentase sebesar 82,9%.

Kata Kunci: LKPD, *augmented reality*, *problem based learning*, kemampuan pemecahan masalah, kubus dan balok

ABSTRACT

Indi Fauzati Ulfah, NIM 4193311061 (2024). Development of Augmented Reality Based Student Worksheets with Problem Based Learning Model to Improve Problem Solving Ability of MTsN 1 Medan Students.

This research aims to produce Augmented Reality-based Student Worksheets (LKPD) through a problem based learning model that is valid, practical and effective so that it can improve the problem solving abilities of MTsN 1 Medan students on flat-sided geometric material that focuses on Cubes and Beams. The research instruments used were LKPD validation sheets, RPP sheets, problem solving ability tests (pretest and posttest), and response questionnaires. After the LKPD and instruments are declared valid by validator lecturers, media experts and material experts, they continue with field tests. The research results show that: (1) Augmented reality-based LKPD developed using the problem based learning model has obtained a high validity assessment. The assessment was carried out by media experts with a percentage of 90.3% and by material experts with a percentage of 91.5%, both criteria obtained a very valid category, (2) augmented reality based LKPD developed with a problem based learning model has met the practical criteria with a percentage from the practicality questionnaire for teachers, it was 86.7% and the student response questionnaire was 80.32%, in the very practical category, (3) augmented reality-based LKPD developed using the problem based learning model has met the effective criteria determined by (a) achievement classical student learning completeness is 90%; (b) achievement of completeness of the indicators formulated was 87.1%; (c) the increase in students' problem solving abilities after learning to use LKPD increased by 32.6 and in terms of the n-gain value the increase was in the medium category with an average of 0.58; (d) learning using LKPD obtained a positive response with a percentage of 82.9%

Keywords: LKPD, augmented reality, problem based learning, problem solving skills, cubes and blocks