ABSTRAK

Gufron, Muhammad. 2020. Pengembangan Aplikasi Pengenalan Alat-alat Laboratorium Berbasis *Augmeted Reality (Chem-Lab)*. Skripsi. Program Studi Pendidikan Kimia. Universitas Muhammadiyah Semarang. Pembimbing: (I) Fitria Fatichatul Hidayah, S.Si, M.Pd (II) Dr.Endang Tri Wahyuni M, M.Pd.

Kata Kunci : *Augmented Reality,* pengenalan alat-alat laboratorium, Kimia, Chem-Lab.

Penelitian ini bertujuan untuk mengetahui proses pengembangan Aplikasi *Chem-Lab*, mengetahui tingkat kelayakan *Chem-Lab* yang dikembangkan sebagai media pembelajaran pengenalan alat-alat laboratorium, serta mengetahui hasil analisis respon uji coba media Aplikasi *Chem-Lab*. Jenis penelitian ini adalah penelitian dan pengembangan atau *R and D*. Model yang digunakan adalah pengembangan model 4-D. Model pengembangan 4D terdiri atas 4 tahap utama yaitu: Define (Pendefinisian), Design (Perancangan), Development (Pengembangan) dan Disseminate (Penyebaran). Produk yang dikembangkan kemudian diuji kelayakannya dengan uji ahli materi dan media, hasil dari uji ahli materi didapatkan nilai rataan sebesar 85,9 dengan hasil konversi 4,9 dengan kategori Sangat Baik. Hasil penilaian pada kualitas media pembelajaran ahli media menunjukan skor total rata-rata sebesar 88,5 dengan hasil konversi 4,4. Berdasarkan hasil konversi didasarkan pada pedoman kriteria ideal, hal ini menunjukan kualitas media pembelajaran terbilang Sangat Baik (SB).

ABSTRAC

Gufron, Muhammad. 2020. Application Development for Introduction of Laboratory Tools Based on Augmeted Reality (Chem-Lab). Thesis. Chemistry Education Study Program. Muhammadiyah University of Semarang. Supervisor: (I) Fitria Fatichatul Hidayah, S.Si, M.Pd (II) Dr.Endang Tri Wahyuni M, M.Pd.

Keywords: Augmented Reality, introduction of laboratory equipment, Chemistry, Chem-Lab.

This study aims to determine the process of developing Chem-Lab Applications, determine the level of feasibility of Chem-Lab that was developed as a learning medium for the introduction of laboratory equipment, and to find out the results of the analysis of the response of the Chem-Lab Application media trial. This type of research is research and development or R and D. The model used is the development of 4-D models. The 4D development model consists of 4 main stages, namely: Define, Design, Development and Disseminate. The product developed was then tested for its feasibility by material and media expert test, the results of the material expert test obtained an average value of 85.9 with 4.9 conversion results in the Very Good category. The results of the assessment on the quality of media learning media experts showed an average total score of 88.5 with a conversion result of 4.4. Based on the results of the conversion based on the ideal criteria guidelines, this shows the quality of the learning media is very good.