

ABSTRAK

Chyntia Khairiyah Nasution, NIM 4192441001 (2019), Pengembangan Panduan Praktikum Berbasis Android Mata Pelajaran Biologi Kelas XI IPA Semester Genap di SMA Negeri 11 Medan Tahun Pembelajaran 2022/2023

Penelitian ini bertujuan untuk mengembangkan panduan praktikum biologi berbasis *android* berdasarkan analisis kebutuhan siswa dan analisis kurikulum, mengetahui tingkat kelayakan, serta mengetahui pengaruh panduan praktikum berbasis *android* terhadap hasil belajar siswa. Metode penelitian yang digunakan R&D, Model ADDIE. Hasil penelitian menunjukkan bahwa data analisis kebutuhan siswa menunjukkan 97,14% siswa mengatakan akan lebih efektif apabila digunakan panduan praktikum biologi berbasis *android*, analisis kurikulum dan tujuan pembelajaran mendapat data kurikulum yang digunakan adalah Kurikulum 2013 sehingga pengembangan produk disesuaikan dengan indikator kurikulum. Desain panduan praktikum terdiri dari petunjuk penggunaan, KD, materi, alat & bahan, prosedur kerja, video tutorial, pertanyaan, format penulisan laporan, referensi dan profil pengembang. Tingkat kelayakan produk panduan praktikum berbasis *android* mendapat kriteria “Sangat Layak” dari penilaian ahli materi, ahli media pembelajaran dan ahli desain pembelajaran. Produk mendapat kriteria “Sangat Baik” berdasarkan respon guru dan siswa. Hasil evaluasi didapati skor rata-rata kategori baik yang menunjukkan bahwa panduan praktikum berbasis *android* memberikan pengaruh positif dalam kegiatan pembelajaran praktikum.

Kata Kunci : Pengembangan, Panduan Praktikum, Android.



ABSTRACT

Chyntia Khairiyah Nasution, NIM 4192441001 (2019), Development of an Android-Based Practicum Guide for Biology Class XI IPA Even Semester at SMA Negeri 11 Medan 2022/2023 Academic Year

This study aims to develop an android-based biology practicum guide based on student needs analysis and curriculum analysis, determine the feasibility level, and determine the effect of an android-based practicum guide on student learning outcomes. The research method used is R&D, the ADDIE Model. The results showed that 97.14% of students said that it would be more effective if the android-based biology practicum guide was used, curriculum analysis and learning objectives obtained from the curriculum data used was the 2013 Curriculum so that product development was adjusted to curriculum indicators. The practicum guide design consists of instructions for use, KD, materials, tools & materials, work procedures, video tutorials, questions, report writing formats, references and developer profiles. The feasibility level of android-based practicum guide products received the criteria of "Very Eligible" from the assessment of material experts, learning media experts and learning design experts. The product gets the criteria of "Very Good" based on teacher and student responses. The results of the evaluation found that the average score was in a good category which indicated that the Android-based practicum guide had a positive influence on practicum learning activities.

Keywords: *Development, Practicum Guide, Android*

