

## ABSTRAK

ANDRE PUNGU SITUMORANG, NIM 5163122002 :*Pengembangan Media Pembelajaran Interaktif Berbasis Aplikasi Android Pada Mata Pelajaran Pekerjaan Dasar Teknik Otomotif (PDTO) Pada Kelas X SMKN 1 Lubuk Pakam*. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2021.

Penelitian ini bertujuan untuk mengembangkan media pembelajaran interaktif berbasis aplikasi android pada Mata Pelajaran Pekerjaan Dasar Teknik Otomotif (PDTO) materi alat ukur mekanik kelas X SMK N 1 Lubuk Pakam dan menguji tingkat kelayakan media pembelajaran interaktif berbasis aplikasi android pada materi alat ukur mekanik Kelas X SMK N 1 Lubuk Pakam.

Penelitian ini adalah penelitian pengembangan atau Research and Development (R&D) yang diadaptasi dari model pengembangan ADDIE. Berdasarkan tahapannya ada 5 tahap yaitu: (1) *Analysis*, (2) *Design*, (3) *Development*, (4) *Implementation*, dan (5) *Evaluation*. Penelitian ini dilakukan di SMKN 1 Lubuk Pakam dengan subjek penelitian yaitu siswa kelas X TKR. Validasi dilakukan oleh ahli materi, ahli media pembelajaran, ahli desain pembelajaran, dan penilaian dari siswa (pengguna). Media yang dikembangkan dilakukan uji coba terhadap 30 siswa Kelas X TKR SMKN 1 Lubuk Pakam.

Hasil penelitian menunjukkan bahwa tingkat kelayakan media pembelajaran interaktif berbasis aplikasi android pada Mata Pelajaran Pekerjaan Dasar Teknik Otomotif (PDTO) materi alat ukur mekanik kelas X SMK N 1 Lubuk Pakam sebagai media pembelajaran berdasarkan penilaian: (1) Penilaian dari ahli media secara keseluruhan memperoleh skor rata-rata 4,55 dengan persentase keseluruhan yaitu 91%, yang artinya ahli media menyatakan media pembelajaran “sangat baik” dan “layak” untuk digunakan. (2) Penilaian dari ahli materi secara keseluruhan memperoleh skor rata-rata 4,52 dengan persentase keseluruhan yaitu 90%, yang artinya ahli materi menyatakan media pembelajaran “sangat baik” dan “layak” untuk digunakan. (3) Penilaian dari ahli desain pembelajaran secara keseluruhan memperoleh skor rata-rata 4,58, dan persentase keseluruhan yaitu 91,76% yang artinya ahli desain pembelajaran menyatakan media pembelajaran “sangat baik” dan “layak” untuk digunakan. (4) Kemudian berdasarkan hasil uji coba lapangan pada 30 orang siswa mendapatkan skor rata-rata yaitu 4,5 persentase keseluruhan mendapat 90% yang artinya 30 orang peserta didik menyatakan media pembelajaran “sangat baik” dan “layak” untuk digunakan.

Kata Kunci: Alat Ukur Mekanik, Media pembelajaran interaktif , *Android*, *ADDIE*, Pekerjaan Dasar Teknik Otomotif.

## ABSTRACT

ANDRE PUNGU SITUMORANG, NIM 5163122002: *Development of Android Application-Based Interactive Learning Media in Automotive Engineering Basic Work Subjects in Class X SMKN 1 Lubuk Pakam*. Essay. Faculty of Engineering. Medan State University. 2021.

This study aims to develop interactive learning media based on android applications in the Basic Automotive Engineering (PDTO) subject for mechanical measuring instruments for class X SMK N 1 Lubuk Pakam and test the feasibility level of interactive learning media based on android applications on mechanical measuring instruments in Class X SMK N 1 Lubuk Pakam.

This research is a research and development (R&D) which is adapted from the ADDIE development model. Based on the stages, there are 5 stages, include: (1) *Analysis*, (2) *Design*, (3) *Development*, (4) *Implementation*, and (5) *Evaluation*. This research was conducted at SMKN 1 Lubuk Pakam with research subjects namely students of class X TKR. Validation is carried out by material experts, learning media experts, learning design experts, and assessments from students (users). The developed media was tested on 30 students of Class X TKR SMKN 1 Lubuk Pakam.

The results showed that the level feasibility of interactive learning media based on android applications in the Basic Automotive Engineering (PDTO) subject for mechanical measuring instruments for class X SMK N 1 Lubuk Pakam as a learning medium based on the assessment: (1) The overall assessment of media experts obtained a score an average of 4.55 with an overall percentage of 91%, which means that media experts stated that the learning media was "very good" and "worthy" to be used. (2) The assessment of the material experts as a whole obtained an average score of 4.52 with a percentage The overall score is 90%, which means that the material expert stated that the learning media was "very good" and "appropriate" to use. (3) The assessment of the learning design experts as a whole obtained an average score of 4.58, and the overall percentage was 91.76%, which means that the learning design experts stated that the learning media were "very good" and "worthy" to be used. (4) Then based on the results of field trials, 30 students got an average score of 4.5, the overall percentage got 90%, which means 30 students stated that the learning media was "very good" and "worthy" to be used.

Keywords: Mechanic Measuring Instruments, interactive Learning Media, Android, ADDIE, Automotive Engineering Basic Work.