

## ABSTRAK

Dicky Whastoe Sihombing, NIM 5162321002: *Pengembangan Media Pembelajaran Berbasis e-learning Pada Mata Pelajaran Gambar Teknik Otomotif Kelas X TKR di SMKN 1 Kutalimbaru Tahun Ajaran 2021/2022*. Skripsi Fakultas Teknik. Universitas Negeri Medan. 2021.

Penelitian ini bertujuan mengembangkan media pembelajaran gambar teknik dengan aplikasi Berbasis *e-learning* yang berisi kompetensi dasar mengklasifikasi huruf, angka dan etiket gambar teknik otomotif siswa kelas X TKR SMK dan mengetahui kevalidan, kelayakan dan kepraktisan media pembelajaran berbasis *e-learning* berdasarkan penilaian ahli materi, ahli media, ahli desain pembelajaran, praktisi dan siswa.

Tujuan Penelitian, yaitu (1) mengembangkan media berbasis *e-learning* pada mata pelajaran gambar teknik kelas X TKR di SMKN 1 Kutalimbaru. (2) mengetahui kevalidan media berbasis *e-learning* pada mata pelajaran gambar teknik kelas X TKR di SMKN 1 Kutalimbaru. (3) mengetahui kelayakan media berbasis *e-learning* pada mata pelajaran gambar teknik kelas X TKR di SMKN 1 Kutalimbaru. (4) mengetahui kepraktisan media berbasis *e-learning* pada mata pelajaran gambar teknik kelas X TKR di SMKN 1 Kutalimbaru.

Jenis penelitian pengembangan ini adalah prosedur pengembangan ADDIE dilakukan melalui 5 tahap yaitu (a). tahap analisis, (b). tahap perencanaan ,(c). tahap pengembangan, (d). tahap implementasi (penerapan) dan, (e). tahap evaluasi.

Hasil penelitian ini menunjukkan sebagai berikut: (1) Hasil analisis validasi media pembelajaran gambar teknik berbasis *e-learning* sebesar 0,91 tergolong pada kategori validitas tinggi dan layak digunakan. (2) Hasil analisis respon guru dan siswa diperoleh 92% peserta didik memberikan respon “sangat positif” dan 8% peserta didik memberikan “respon positif”. Begitupun dengan respon guru 100% guru memberikan respon “sangat positif”. Hasil analisis kepraktisan penggunaan media oleh guru dan siswa diperoleh dengan rerata jumlah skor keseluruhan 42,4 dengan kategori “ $X > 38$ ” sehingga dapat disimpulkan bahwa secara signifikan media pembelajaran berbasis *e-learning* “sangat praktis” digunakan.

**Kata Kunci:** Penelitian dan Pengembangan, Media Pembelajaran, Media Berbasis *E- Learning*

## ABSTRACT

Dicky Whastoe Sihombing, NIM 5162321002: *Development of e-learning-based Learning Media in Automotive Engineering Drawing Subject Class X TKR at SMKN 1 Kutalimbaru Academic Year 2021/2022*. Essay. Faculty of Engineering, University Negeri Medan. 2021.

This study aims to develop technical drawing learning media with an *e-learning* based application that contains basic to classified letters, numbers and etiquette of automotive technical drawings for class X TKR SMK students and find out the validity, feasibility and practicality of electronic based learning based on the assessment of material experts, media experts, learning design experts, practitioners and students.

The research objectives are (1) to develop *e-learning* based media on technical drawing subjects for class X TKR at SMKN 1 Kutalimbaru. (2) determine the feasibility of *e-learning* based media in the technical drawing subject for class X TKR at SMKN 1 Kutalimbaru. (3) to know the practicality of *e-learning*-based media on technical drawing subjects for class X TKR at SMKN 1 Kutalimbaru. (4) determine the suitability of *e-learning* based media with student characteristics.

This type of development research is the ADDIE development procedure carried out through 5 stages, namely (a). analysis stage, (b). planning stage, (c). development stage, (d). implementation stage (implementation) and, (e). evaluation stage.

The results of this study indicate the following: (1) The results of the validation analysis of *e-learning* based technical drawing learning media of 0.91 are at the index "> 0.8" belonging to the high validity category and suitable for use. (2) The results of the analysis of teacher and student responses obtained that 92% of students gave a "very positive" response and 8% of students gave a "positive response". Likewise with the teacher's response, 100% of the teachers gave a "very positive" response. The results of the analysis of the practicality of using media by teachers and students were obtained with an average total score of 42.4 with the category "X>38" so it can be concluded that significantly *e-learning*-based learning media is "very practical" used.

**Keywords:** Research and Development, Learning Media, Media based on *E- Learning*