

ABSTRAK

Hawari Alwi Saragih, NIM 5161122005 : Pengembangan Video Pada Model Pembelajaran *Problem Based Learning* Mata Pelajaran Pekerjaan Dasar Otomotif Siswa Kelas X TBSM SMK Swasta Mandiri Percut Sei Tuan Tahun Ajaran 2020/2021. Skripsi. Fakultas Teknik Universitas Negeri Medan 2022.

Penelitian ini bertujuan untuk mengetahui kelayakan: Pengembangan Video Pada Model Pembelajaran *Problem Based Learning* Mata Pelajaran Pekerjaan Dasar Otomotif Siswa Kelas X TBSM SMK Swasta Mandiri Percut Sei Tuan . prosedur pengembangan model penelitian dengan menggunakan langkah-langkah yaitu (a) *concept*, (b) *design*, (c) *material collecting* (d) *assembly*, (e) *testing*, (f) *distribution*. Teknik analisis data dilakukan dengan menggunakan teknik analisis deskriptif kuantitatif, yaitu dengan menganalisis data kuantitatif yang diperoleh dari angket uji ahli dan uji lapangan. Instrumen pengumpulan data yang digunakan dalam penelitian ini adalah lembar evaluasi berupa angket.

Hasil penelitian dan pembahasan, dapat disimpulkan beberapa hal sebagai berikut: Berdasarkan Penilaian kelayakan media pembelajaran video tutorial pada materi menggunakan alat ukur mekanik ini dilakukan oleh ahli materi, ahli media, dan 10 orang reviewer mahasiswa jurusan teknik mesin UNIMED. Persentase skor kelayakan dijelaskan sebagai berikut: Persentase skor kelayakan berdasarkan penilaian dari ahli materi 1 ditinjau dari aspek relevansi materi, kualitas materi dan bahasa memperoleh Secara keseluruhan tingkat validasi materi pembelajaran video tutorial memperoleh skor 44 (97,7%) dilihat dari materinya dikategorikan sangat layak. Persentase skor kelayakan berdasarkan penilaian dari ahli media 1 ditinjau dari aspek: fungsi dan manfaat, visual media, audio media, tifografi, Bahasa, pemrograman. Secara keseluruhan tingkat validasi materi pembelajaran video memperoleh skor 75 (100%). Sehingga media pembelajaran ini dikategorikan layak. Persentase skor kelayakan berdasarkan penilaian dari ahli media 2 Secara keseluruhan tingkat validasi materi pembelajaran video memperoleh skor 71 (94.6%). Sehingga media pembelajaran ini dilihat dari medianya dikategorikan layak. Persentase skor kelayakan berdasarkan tanggapan *reviewer* dari 10 orang ditinjau dari aspek: tampilan, pengoperasian, kemanfaatan. Secara keseluruhan penilaian terhadap *reviewer* video tutorial ini memperoleh skor 428 (96.17%). Sehingga skor keseluruhan yang diperoleh sebesar 96.33%. Skor ini masuk dalam kategori sangat layak. Persentase skor kelayakan berdasarkan tanggapan dari 30 orang siswa ditinjau dari aspek: tampilan, pengoperasian, kemanfaatan. Secara keseluruhan penilaian video tutorial ini memperoleh skor 1.616 (98 %). Skor rata-rata respon siswa adalah 98.5%. berdasarkan tabel skala kriteria kelayakan termasuk dalam kategori sangat layak.

Berdasarkan data diatas media pembelajaran video tutorial mampu meningkatkan hasil belajar siswa yaitu Skor nilai rata-rata kelas X TBSM 1 lebih tinggi dibandingkan nilai rata-rata kelas TBSM 3 dengan selisih 7,7% sehingga media video tutorial cocok digunakan untuk proses belajar mengajar di kelas.

Kata Kunci: *Problem Based Learning*, Video Tutorial, Hasil Belajar, Menggunakan Alat Ukur Mekanik

ABSTRACT

Hawari Alwi Saragih, Register Number 5161122005 : *Video Development on Problem Based Learning Learning Models for Basic Automotive Jobs at grade X Students TBSM Mandiri Vocational High School Percut Sei Tuan Academic Year 2020/2021. Essay. Fakultas Of Engineering State University of Medan 2022.*

This study aimed to determine the feasibility of: Video Development on Problem Based Learning Learning Model for Basic Automotive Work Subjects at grade X TBSM Mandiri Vocational High School Percut Sei Tuan. the procedure for developing a research model using the steps, namely (a) concept, (b) design, (c) material collecting (d) assembly, (e) testing, (f) distribution. Data analysis techniques were carried out using quantitative descriptive analysis techniques, namely by analyzing quantitative data obtained from expert test questionnaires and field tests. The data collection instrument used in this study was an evaluation sheet in the form of a questionnaire.

The results of the research and discussion, it can be concluded several things as follows: Based on the feasibility assessment of the video tutorial learning media on the material using a mechanical measuring instrument this was carried out by material experts, media experts, and 10 reviewers of students majoring in mechanical engineering UNIMED. The percentage of feasibility scores is explained as follows: The percentage of feasibility scores based on the assessment of material from the first expert in terms of material relevance, material quality and language obtained Overall the level of validation of video tutorial learning materials obtained a score of 44 (97.7%) seen from the material categorized as very feasible . The percentage of the feasibility score is based on the assessment of media from the first expert in terms of: functions and benefits, visual media, audio media, typography, language, programming. Overall, the level of validation of video learning materials obtained a score of 75 (100%). So that this learning media is categorized as feasible. The percentage of feasibility scores based on the assessment of media from second expert, the result was the level of validation of video learning materials obtained a score of 71 (94.6%). So that this learning media seen from the media is categorized as feasible. Percentage of feasibility scores based on reviewer responses from 10 people in terms of: appearance, operation, usability. Overall, the assessment of this video tutorial reviewer got a score of 428 (96.17%). In result, score was 96.33%. This score was in the very decent category. Percentage of feasibility scores based on responses from 30 students in terms of: appearance, operation, usability. Overall, the assessment of this video tutorial obtained a score of 1,616 (98%). The average score of student responses was 98.5%.

Based on the data above, the video tutorial learning media was able to improve student learning outcomes, namely the average score of grade X TBSM 1 is higher than the average value of TBSM 3 with a difference of 7.7% so that the video tutorial media was suitable for teaching and learning in the classroom. .

Keywords: Problem Based Learning, Video Tutorials, Learning Out Comes, Using Mechanical Measuring Tools