

ABSTRAK

Arju Hendi Firmansyah: Pengembangan Media Pembelajaran Berbasis *E-Book* Untuk Meningkatkan Hasil Belajar Siswa Pada Pelajaran Dasar-Dasar Teknik Mesin Kelas X Di SMK Negeri 1 Percut Sei Tuan. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2024.

Penelitian ini bertujuan untuk mengetahui tingkat kelayakan dan efektivitas media pembelajaran berbasis *e-book* untuk meningkatkan hasil belajar siswa pada pelajaran dasar-dasar teknik mesin kelas X di SMK Negeri 1 Percut Sei Tuan. Penelitian ini menggunakan metode *Research and Development* (R&D) dengan model ADDIE (*Analysis, Design, Development, Implementation, Evaluation*). Penelitian dilakukan pada kelas X pada pelajaran dasar-dasar teknik mesin (DDTM) dengan total 29 siswa. Data yang diambil dalam penelitian ini yaitu berupa instrumen angket dan soal *pretest* dan *posttest*. Kelayakan media pembelajaran pada elemen teknik dasar proses produksi pada bidang manufaktur (teknik mesin) setelah melalui tahapan validasi oleh ahli materi, ahli media, ahli desain, dan ahli instrumen pada penelitian ini adalah 39,4 dan rata-rata skor 3,68 yang dimana menempati kategori/kriteria sangat layak dan instrumen berupa angket yang telah di nilai oleh responden pengguna media pembelajaran berbasis *e-book* menyatakan bahwa *e-book* membantu mereka memahami materi lebih baik dan membuat belajar menjadi lebih menarik, oleh karena itu memperoleh hasil instrumen berupa angket dengan nilai rata rata keseluruhan 3,57 dengan presentase 89,35% dengan kategori sangat layak. Untuk mengetahui keefektifan diperoleh dari nilai *pretest* dan *posttest* melalui tahap uji *t-paired* dengan nilai *t* hitung 17,44 dan nilai *t* tabel 1,699, oleh karena itu nilai *t* hitung > *t* tabel yakni $17,44 > 1,699$ maka terdapat peningkatan yang signifikan dari hasil belajar siswa sebelum dan sesudah menggunakan media pembelajaran berbasis *e-book*.

Kata Kunci: Pengembangan, Media Pembelajaran, *E-Book*, Hasil Belajar.



ABSTRACT

Arju Hendi Firmansyah: Development of E-Book Based Learning Media to Improve Student Learning Outcomes in Basic Mechanical Engineering Subject Grade X Students at SMK Negeri 1 Percut Sei Tuan.

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This research was aim to determine the level of feasibility and effectiveness of e-book-based learning media to improve student learning outcomes in the basics of mechanical engineering grade X at SMK Negeri 1 Pefcut Sei Tuan. This research used the Research and Development (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. The research was conducted in class X in the basics of mechanical engineering (DDTM) subject with a total of 29 students. The data taken in this research were in the form of a questionnaire instrument and pre-test and post-test questions. The feasibility of learning media on the basic technical elements of the production process in the manufacturing sector (mechanical engineering) after going through the validation stages by material experts, media experts, design experts and instrument experts in this research was 39.4 and the average score was 3.68, which were included in the very feasible category and the instrument in the form of a questionnaire which has been assessed by respondents who use e-book-based learning media stated that e-book help them understand the material better and make learning more interesting, therefore obtained the results of the instrument in the form of a questionnaire with a score the overall average was 3.57 with a percentage of 89.35% in the very feasible category. In order to find out the effectiveness obtained from the pre-test and post-test scores through the T-paired test stage with a calculated T-value of 17.44 and a T-table value of 1.699, therefore $T\text{-count} > T\text{-table value}$ is $17.44 > 1.699$ so there is a significant increase in student learning outcomes before and after using e-book based learning media.

Keyword: Development, Learning Media, E-Book, Learning Outcomes.

