

ABSTRAK

Yosua Hasiholan Sihaloho: Pengembangan Video Tutorial Alat Ukur Untuk Meningkatkan Hasil Belajar Alat Ukur Presisi Kelas XI Teknik Pemesinan di SMK Negeri 1 Percut Sei Tuan. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2025

Penelitian ini bertujuan mengembangkan dan menguji kelayakan video tutorial alat ukur untuk meningkatkan hasil belajar Alat Ukur Presisi siswa kelas XI Teknik Pemesinan di SMK Negeri 1 Percut Sei Tuan. Metode yang digunakan adalah Research and Development (R&D) dengan media berbasis Canva. Hasil validasi ahli menunjukkan kategori “Layak” dengan rata-rata kelayakan 89,35%. Uji efektivitas menunjukkan peningkatan nilai rata-rata siswa dari 63,44 (pre-test) menjadi 83,44 (post-test) dengan N-Gain 0,54 (efektivitas sedang). Berdasarkan uji-t dua sampel independen, diperoleh $t_{hitung} = -7,509 > t_{tabel} = 2,018$ dengan P-value $2,743 \times 10^{-9} < 0,05$, yang berarti terdapat perbedaan signifikan antara hasil belajar sebelum dan sesudah menggunakan video. Dengan demikian, media ini dinyatakan layak dan efektif meningkatkan hasil belajar.

Kata Kunci: Alat Ukur Presisi, Efektivitas Media, Pengembangan Video Tutorial, R&D, Validitas Media.

ABSTRACT

Yosua Hasiholan Sihalo: *Developing a Video Tutorial on Measuring Instruments to Improve Learning Outcomes for Grade XI Precision Measuring Instruments in Machining at SMK Negeri 1 Percut Sei Tuan. Essay, Faculty of Engineering. Unimed. 2025*

This study aims to develop and evaluate the feasibility of a measuring tool tutorial video to improve learning outcomes on Precision Measuring Instruments for Grade XI Machining students at SMK Negeri 1 Percut Sei Tuan. The research employed a Research and Development (R&D) method using Canva-based media. Expert validation results indicated a “Layak” category with an average feasibility score of 89.35%. Effectiveness testing showed an increase in students’ average scores from 63.44 (pre-test) to 83.44 (post-test) with an N-Gain value of 0.54, classified as “moderate effectiveness.” Based on the independent sample t-test, the obtained $t_{count} = -7.509 > t_{table} = 2.018$ with a P-value of $2.743 \times 10^{-9} < 0.05$, indicating a significant difference between students’ learning outcomes before and after using the video. Therefore, the developed media is considered feasible and effective in enhancing learning outcomes.

Keywords: *Precision Measurement Tool, Media Effectiveness, Video Tutorial Development, R&D, Media Validity.*