

## ABSTRAK

**Muhammad Irsaf Nasution 5162121002: Pengembangan Multimedia Pembelajaran Interaktif Teknik Pemesinan Bubut Program Keahlian Teknik Pemesinan Kelas XI SMK Swasta Dwiwarna Medan. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2021.**

Penelitian ini bertujuan untuk menghasilkan multimedia pembelajaran interaktif teknik pemesinan bubut program keahlian Teknik Pemesinan kelas XI SMK Swasta Dwiwarna Medan dan untuk mengetahui kelayakan multimedia pembelajaran interaktif yang akan dikembangkan.

Penelitian pengembangan ini menggunakan model pengembangan ADDIE, dimana ADDIE ini meliputi tahapan *analysis* (analisis), *design* (perancangan), *development* (pengembangan), *implementation* (implementasi), *evaluation* (evaluasi). Pengujian produk dilakukan dengan menggunakan instrumen angket. Kelayakan produk diukur melalui validasi ahli media, ahli materi, dan ahli desain pembelajaran. Serta penilaian produk multimedia pembelajaran interaktif ini juga diujikan kepada pengguna/siswa.

Berdasarkan hasil penelitian diketahui bahwa produk multimedia pembelajaran interaktif Teknik Pemesinan Bubut pada kompetensi dasar mengidentifikasi bagian-bagian mesin bubut dengan hasil pengujian kelayakan produk berdasarkan validasi ahli materi diperoleh rata-rata skor sebesar 4,603 dengan kriteria “sangat baik”, Berdasarkan validasi ahli media diperoleh rata-rata skor sebesar 4,338 dengan kriteria “sangat baik”, dan validasi ahli desain pembelajaran diperoleh rata-rata skor sebesar 4,216 dengan kriteria “sangat baik”. Sedangkan Penilaian yang dilakukan kepada siswa melalui uji coba perorangan diperoleh rata-rata skor sebesar 4,454 dengan interpretasi “akseptansi tinggi”, uji coba skala kecil mendapatkan rata-rata skor sebesar 4,742 dengan interpretasi “akseptansi tinggi”, dan uji coba skala besar mendapatkan rata-rata skor sebesar 4,805 dengan interpretasi “akseptansi tinggi” Dengan demikian hasil tersebut dapat disimpulkan bahwa produk penelitian pengembangan multimedia pembelajaran interaktif yang dikembangkan ini layak untuk digunakan sebagai sumber belajar atau referensi pembelajaran mandiri bagi siswa kelas XI teknik Pemesinan bubut.

**Kata Kunci:** Multimedia Pembelajaran Interaktif, Kelayakan Media, Teknik Pemesinan Bubut

## ABSTRACT

**Muhammad Irsaf Nasution 5162121002: Development of Multimedia Interactive Learning Engineering Machining Lathe Engineering Program Machining Engineering Class XI Private Vocational School Dwiwarna Medan. Thesis. Faculty of Engineering. The State University of Medan. 2021.**

This research aims to produce interactive multimedia learning techniques machining lathe engineering expertise program Machining Engineering class XI Private Vocational School Dwiwarna Medan using Adobe Flash CS6 and to know the feasibility of multimedia interactive learning to be developed.

This research uses R&D (research and development) research with the ADDIE development model, where ADDIE has five stages of research including analysis, design, development, implementation, evaluation. Product testing is conducted using questionnaire instruments, product feasibility is measured through validation of media experts, material experts, and learning design experts. As well as interactive multimedia product assessments are also conducted by users (students).

Based on the results of the study it is known that interactive multimedia learning products Lathe Machining Techniques with basic competencies identify the parts of lathes obtained product feasibility test results based on expert validation material obtained an average score of 4,603 with the criteria "excellent", Based on validation media experts obtained an average score of 4,338 with the criteria "excellent", and validation of learning design experts obtained an average score of 4,216 with the criteria "excellent". While assessments conducted to students through individual trials obtained an average score of 4,454 with the interpretation of "high acceptance", Small-scale trials scored an average score of 4,742 with the interpretation of "high acceptance", and large-scale trials scored an average score of 4,805 with the interpretation of "high acceptance" Thus the results can be concluded that this interactive learning multimedia development research product developed is worthy to be used as a learning resource or self-learning reference for students of grade XI lathe machining techniques.

**Keywords:** Multimedia Interactive Learning, Media Feasibility, Lathe Machining Techniques