

## ABSTRAK

**Zahra Tazkia** Pengembangan Multimedia Interaktif Berbasis *Web* pada Materi Hukum Newton tentang Gerak di Tingkat SMA. Program Pascasarjana, Universitas Negeri Medan, 2019.

Penelitian bertujuan untuk mengembangkan multimedia interaktif berbasis *web* pada materi hukum Newton tentang gerak yang valid, praktis dan efektif serta mengetahui *gain* hasil belajar peserta didik. Metode penelitian yang digunakan adalah metode penelitian pengembangan berdasarkan model pengembangan ADDIE (*Analysis, Design, Development, Implementation, Evaluation*). Hasil penelitian dengan model ADDIE pada tahap analisis dibutuhkan multimedia interaktif berbasis *web*. Tahap desain diperoleh rancangan materi, Lembar Kerja Peserta Didik (LKPD) dan tes. Tahap pengembangan dihasilkan multimedia interaktif berbasis *web* yang valid oleh ahli media dan ahli materi. Tahap implementasi diperoleh multimedia interaktif berbasis *web* yang sangat praktis oleh pengguna (guru dan peserta didik). Tahap evaluasi diperoleh multimedia interaktif berbasis *web* yang efektif oleh peserta didik kelompok kecil dan kelompok terbatas dengan *N-gain* pada kategori tinggi. Kesimpulan dari hasil dan pembahasan diperoleh multimedia interaktif berbasis *web* yang valid, praktis, efektif dan dapat meningkatkan pemahaman konsep peserta didik tingkat SMA.

Kata Kunci: *pengembangan, desain ADDIE, multimedia interaktif berbasis web*

## ABSTRACT

**ZAHRA TAZKIA.** The Development of Web-Based Interactive Multimedia in Newton's Law on Motion Materials at the Senior High School. Postgraduate Program, State University of Medan 2019.

The research aimed to develop the web-based interactive multimedia in Newton's law materials about valid motion, practical and effective and knew the gain of student learning outcomes. The research method used was the development research method based on the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation). The results of the research with the ADDIE model at the analysis stage required web-based interactive multimedia. The design phase was obtained by the material design, Student Worksheet (LKPD) and tests. The development phase produced web-based interactive multimedia valid by media experts and material experts. The implementation phase is obtained by web-based interactive multimedia that is very practical by users (teachers and students). The evaluation phase obtained effective web-based interactive multimedia by small group students and limited groups with N-gain in the high category. Conclusions from the results and discussion obtained by web-based interactive multimedia that is valid, practical, effective and could improve the understanding of the concepts of high school level students.

Keywords : *development, ADDIE design, web-based interactive multimedia*