

Ach. Irgi Bik Nada. 2025. Pengembangan Media Pembelajaran Digital Berbasis STEM Pada Materi Pesawat Sederhana di SMP Al-Anwari. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Dr. Sigit Dwi Saputro, S.Pd., M.Pd.

## ABSTRAK

Pembelajaran yang dapat memanfaatkan kemajuan di bidang ilmu pengetahuan dan teknologi harus disesuaikan dan dipercepat seiring dengan kemajuan ini. Pendekatan *Sains, Technology, Engineering* dan *Mathematics* (STEM) adalah salah satu komponen dari perkembangan pembelajaran terbaru yang mengubah pembelajaran dengan mengumpulkan berbagai bidang, termasuk *sains, technology, engineering* dan *mathematics*. Agar pendekatan STEM dapat sepenuhnya diterapkan, maka dibutuhkan media pembelajaran yang berbasis STEM. Penelitian ini menggunakan model penelitian *ADDIE* dengan beberapa tahapan diantaranya *Analysis, Design, Development, Implementatition, Evaluation*. Instrumen pengambilan data menggunakan lembar angket validasi ahli media, validasi ahli materi, dan angket respon siswa. Penelitian ini menghasilkan media pembelajaran berbasis STEM memperoleh persentase validasi ahli materi 98% dan validasi ahli media 97% dengan kriteria sangat layak. Hasil uji respon siswa memperoleh persentase pada uji perorangan 89%, uji kelompok kecil 91%, dan uji kelompok besar 95% dengan kriteria sangat baik. Berdasarkan hasil penelitian pengembangan media pembelajaran digital berbasis STEM sebagai media pembelajaran dikategorikan sangat layak dan sangat baik digunakan dalam pembelajaran.

**Kata Kunci:** *ADDIE*, STEM, Pesawat Sederhana, Media Pembelajaran Digital

Ach. Irgi Bik Nada. 2025. *Development of STEM-Based Digital Learning Media on Simple Machine Material at SMP Al-Anwari. Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Trunojoyo University, Madura. Advisor: Dr. Sigit Dwi Saputro, S.Pd., M.Pd.*

## **ABSTRACT**

*Learning that can utilize advances in science and technology must be adjusted and accelerated along with these advances. The Science, Technology, Engineering and Mathematics (STEM) approach is one component of the latest learning developments that change learning by bringing together various fields, including science, technology, engineering and mathematics. In order for the STEM approach to be fully implemented, STEM-based learning media are needed. This study uses the ADDIE research model with several stages including Analysis, Design, Development, Implementation, Evaluation. The data collection instrument uses a media expert validation questionnaire sheet, material expert validation, and student response questionnaire. This study produced STEM-based learning media that obtained a percentage of material expert validation of 98% and media expert validation of 97% with very feasible criteria. The results of the student response test obtained a percentage of 89% in individual tests, 91% in small group tests, and 95% in large group tests with very good criteria. Based on the results of the study, the development of STEM-based digital learning media as a learning medium is categorized as very feasible and very good for use in learning.*

**Keyword:** *ADDIE, STEM, Simple Machines, Digital Learning Media*