

## ABSTRAK

**Ilham Shah: Pengembangan Media Pembelajaran Berbasis Multimedia Interaktif Pada Mata Pelajaran Konstruksi Jalan dan Jembatan Siswa Kelas XII DPIB SMK Negeri 1 Percut Sei Tuan. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2021**

Tujuan penelitian ini adalah untuk: (1) Mengembangkan media pembelajaran berbasis multimedia interaktif pada mata pelajaran konstruksi jalan dan jembatan siswa Kelas XII DPIB SMK Negeri 1 Percut Sei tuan dengan menggunakan *Adobe Flash CS6*. (2) Mengetahui tingkat validitas media pembelajaran yang dikembangkan sebagai media pembelajaran bagi siswa. Media pembelajaran berbasis multimedia interaktif dikembangkan menggunakan beberapa *software* yang terdiri dari *Adobe Flash CS6*, *Wondershare Filmora X*, *Adobe Photoshop*, dan *Sketch Up Pro 2016*.

Penelitian ini merupakan penelitian pengembangan(*Research and Development*). Model pengembangan yang digunakan adalah model desain instruksional ADDIE yang terdiri atas: (1) *Analysis*, (2) *Design*, (3) *Development*. Penelitian ini dilakukan di SMK Negeri 1 Percut Sei Tuan dengan responden penilaian siswa Kelas XII DPIB. Tahap uji kelayakan produk dilakukan penilaian oleh dua ahli materi dan satu ahli media. Teknik pengumpulan data dengan menggunakan angket. Teknik analisis data dilakukan dengan hitungan statistik deskriptif.

Adapun hasil penelitian ini adalah: (1) Produk media pembelajaran berbasis multimedia interaktif pada mata pelajaran Konstruksi Jalan dan Jembatan pada kompetensi dasar Menerapkan prosedur pembuatan gambar potongan jalan dan jembatan dan Menggambar potongan jalan dan jembatan. (2) Kelayakan produk berdasarkan validasi ahli materi 1 diperoleh rata-rata skor sebesar **3,7** termasuk dalam interpretasi “**layak**”, validasi ahli materi 2 diperoleh rata-rata skor sebesar **4,03** termasuk dalam interpretasi “**layak**”. Sedangkan berdasarkan validasi ahli media mendapat skor rata-rata sebesar **4,1** termasuk dalam interpretasi “**sangat layak**”. Penilaian siswa melalui angket user mendapatkan rata-rata skor sebesar **4,48** termasuk dalam interpretasi “**akspresiasi sangat tinggi**”. Dengan demikian media pembelajaran berbasis multimedia interaktif yang dikembangkan sangat layak digunakan sebagai media pembelajaran

**Kata Kunci:** Multimedia Interaktif, *Adobe Flash CS6*, ADDIE

## ABSTRACT

**Ilham Shah: Development of Interactive Multimedia-Based Learning Media on Road and Bridge Construction Subjects for Class XII Students of DPIB SMK Negeri 1 Percut Sei Tuan. Essay. Faculty of Engineering, State University of Medan. 2021**

*The aims of this study were to: (1) develop interactive multimedia-based learning media on road and bridge construction subjects for class XII students of DPIB SMK Negeri 1 Percut Sei Tuan using Adobe Flash CS6. (2) Knowing the level of validity of the learning media developed as learning media for students. Interactive multimedia-based learning media was developed using several software consisting of Adobe Flash CS6, Wondershare Filmora X, Adobe Photoshop, and Sketch Up Pro 2016.*

*This research is a research and development (Research and Development). The development model used is the ADDIE instructional design model which consists of: (1) Analysis, (2) Design, (3) Development. This research was conducted at SMK Negeri 1 Percut Sei Tuan with the assessment respondents of Class XII DPIB students. The product feasibility test phase is assessed by two material experts and one media expert. Data collection techniques using a questionnaire. The data analysis technique was carried out by calculating descriptive statistics.*

*The results of this study are: (1) interactive multimedia-based learning media products on the subject of Road and Bridge Construction on basic competencies Applying procedures for making road and bridge sections and Drawing road and bridge sections. (2) The feasibility of the product based on the validation of the material expert 1 obtained an average score of 3.7 included in the "feasible" interpretation, the validation of the material expert 2 obtained an average score of 4.03 included in the "appropriate" interpretation. Meanwhile, based on the validation of media experts, an average score of 4.1 was included in the "very feasible" interpretation. Student assessment through a user questionnaire got an average score of 4.48 which was included in the interpretation of "very high expectations". Thus the interactive multimedia-based learning media developed is very suitable to be used as a learning medium*

**Keywords:** Interactive Multimedia, Adobe Flash CS6, ADDIE