

ABSTRAK

Josua Mangasi Feryanto Marpaung. *Pengembangan E-LKS Pada Elemen Gambar Konstruksi Utilitas Gedung dan Sistem Plumbing Kelas XI DPIB SMK Negeri 1 Percut Sei Tuan*. Skripsi. Jurusan Pendidikan Teknik Bangunan. Program Studi Pendidikan Teknik Bangunan. Fakultas Teknik - Universitas Negeri Medan. 2024.

Tujuan penelitian ini adalah untuk mengetahui cara mengembangkan media pembelajaran E-LKS pada elemen Gambar Konstruksi Utilitas Gedung dan Sistem Plumbing siswa kelas XI DPIB di SMK Negeri 1 Percut Sei Tuan dan untuk mengetahui tingkat kelayakan produk media pembelajaran yang dikembangkan sebagai media pembelajaran untuk siswa. Penelitian ini merupakan penelitian pengembangan (*Research and Development*). Model pengembangan yang digunakan adalah model 4D yaitu: (1) *define*, (2) *design*, dan (3) *develop*, (4) *disseminate*. Penelitian ini dilakukan di SMK Negeri 1 Percut Sei Tuan dengan responden penelitian siswa kelas XI Program Keahlian Desain Pemodelan dan Informasi dan Bangunan (DPIB). Instrumen yang digunakan berupa angket. Angket digunakan untuk menguji kelayakan media pembelajaran melalui validasi dua ahli materi, dan satu ahli media. Teknik analisis data dilakukan dengan hitungan statistik deskriptif kuantitatif. Hasil penelitian yang diperoleh adalah: Kelayakan produk berdasarkan validasi ahli materi diperoleh persentase skor sebesar 86,16% termasuk dalam interpretasi “sangat layak”. Berdasarkan validasi ahli media diperoleh persentase skor sebesar 75,55% termasuk dalam interpretasi “layak”. Penilaian siswa melalui angket pengguna mendapatkan persentase skor sebesar 91,75% termasuk dalam interpretasi “sangat layak” dalam arti tingkat penerimaan oleh siswa tergolong tinggi. Dengan demikian media pembelajaran E-LKS yang dikembangkan “layak” digunakan dan dapat dimanfaatkan sebagai media pembelajaran oleh siswa kelas XI DPIB SMK Negeri 1 Percut Sei Tuan.

Kata kunci: Pengembangan Media Pembelajaran E-LKS, Penelitian Pengembangan, 4D, Plumbing

ABSTRACT

Josua Mangasi Feryanto Marpaung. Development of E-LKS on Construction Drawing Elements of Building Utilities and Plumbing Systems Class XI DPIB SMK Negeri 1 Percut Sei Tuan. Thesis. Department of Building Engineering Education. Building Engineering Education Study Program. Faculty of Engineering - Universitas Negeri Medan. 2024.

The aim of this research is to find out how to develop E-LKS learning media on elements of Building Utility Construction Drawings and Plumbing Systems for class XI DPIB students at SMK Negeri 1 Percut Sei Tuan and to find out the level of feasibility of learning media products developed as learning media for students. This research is development research (Research and Development). The development model used is the 4D model, namely: (1) define, (2) design, and (3) develop, (4) disseminate. This research was conducted at SMK Negeri 1 Percut Sei Tuan with research respondents from class XI students of the Modeling and Information and Building Design Skills Program (DPIB). The instrument used is a questionnaire. The questionnaire was used to test the feasibility of learning media through validation by two material experts and one media expert. The data analysis technique was carried out using quantitative descriptive statistics. The research results obtained were: Product feasibility based on material expert validation obtained a score percentage of 86.16%, including the interpretation of "very feasible". Based on media expert validation, a score percentage of 75.55% was obtained, including the "decent" interpretation. Student assessment via user questionnaires obtained a score percentage of 91.75%, including the interpretation of "very feasible" in the sense that the level of acceptance by students is relatively high. Thus, the -based E-LKS learning media developed is "fit" to be used and can be utilized as a learning medium by class XI DPIB students at SMK Negeri 1 Percut Sei Tuan.

Keywords: E-LKS Learning Media Development, , Development Research, 4D,

Plumbing