

Lindawati . 2025. Pengembangan E-Modul Sistem Komputer Berbasis *Problem Based Learning* Pada Kelas X Di SMKS Darul Mustofa. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Unoversitas Trunojoyo Madura. Pembimbing : Muhamad Afif Effindi, S.Kom., M.T.

ABSTRAK

E-Modul merupakan media elektronik inovasi pembelajaran daring dari pembelajaran tatap muka. Dalam penelitian ini memiliki tujuan untuk mengembangkan E-Modul dengan bantuan aplikasi canva dan unity. E-Modul yang dihasilkan mengarah pada pemecahan masalah. Tahapan *problem based learning* berupa orientasi terhadap masalah, mengorganisasi peserta didik, membimbing penyelidikan individu maupun kelompok, mengembangkan dan menyajikan hasil, dan menganalisis serta mengevaluasi hasil pemecahan masalah. Aplikasi E-Modul tersebut membahas mengenai materi sistem komputer pada kelas X di SMKS Darul Mustofa. Pada penelitian instrument yang digunakan melalui wawancara dan angket. Instrument penelitian melibatkan ahli media, ahli materi ahli modul ajar dan respon peserta didik. Penelitian ini menggunakan model penelitian ADDIE yang memiliki 5 tahapan, yaitu analisis, desain, pengembangan, implementasi dan evaluasi. Kelayakan E-Modul ini ditinjau dari beberapa penilaian validasi oleh ahli media, ahli materi, serta ahli modul ajar. Selain itu dalam penelitian juga menggunakan angket respon siswa yang terbagi menjadi tiga golongan yaitu perorangan, kelompok kecil, dan kelompok besar yang digunakan untuk mengetahui tanggapan peserta didik dalam penggunaan E-modul pada saat pembelajaran. Hasil penilaian kelayakan E-modul oleh ahli media pada penelitian ini memperoleh persentase 84%, ahli materi memperoleh persentase 84% dan ahli modul ajar menetapkan “Layak/dapat digunakan menggunakan revisi” pada penelitian ini. Sedangkan mengenai angket respon siswa yang dilakukan pada uji coba perorangan memperoleh persentase 96%, uji coba kelompok kecil memperoleh persentase 92% dan uji coba kelompok besar memperoleh persentase 92%. Berdasarkan hasil tersebut dapat disimpulkan bahwa E-Modul Sistem Komputer Berbasis *Problem Based Learning* Pada Kelas X dinyatakan layak digunakan dalam pembelajaran.

Kata Kunci: E-Modul, Pembelajaran berbasis masalah, ADDIE, Sistem Komputer, Canva, Unity

Lindawati. 2025. Development of Computer System E-Module Based on Problem Based Learning for Class X at SMKS Darul Mustofa. Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Trunojoyo Madura University. Supervisor: Muhamad Afif Effindi, S.Kom., M.T.

ABSTRAK

E-Module is an innovative electronic media for online learning derived from face-to-face learning. The E-Module can be used with interactive learning models. This research aims to develop the E-Module with the help of the Canva and Unity applications. The resulting E-Module is directed towards problem-solving. The stages of problem-based learning include orientation to the problem, organizing students, guiding individual and group investigations, developing and presenting results, and analyzing and evaluating problem-solving outcomes. This E-Module application discusses computer systems material for grade X at SMKS Darul Mustofa. In this research, the instruments used included interviews and questionnaires. The research instruments involved media experts, material experts, teaching module experts, and participant responses. This research uses the ADDIE research model which has 5 stages, namely analysis, design, development, implementation, and evaluation. The feasibility of this E-Module is assessed from several validation assessments by media experts, material experts, and instructional module experts. In addition, the research also uses a student response questionnaire divided into three groups: individual, small group, and large group, which is used to determine students' responses to the use of the E-module during learning. The assessment results of the feasibility of the E-module by media experts in this study obtained a percentage of 84%, material experts obtained a percentage of 84%, and instructional module experts determined "Feasible/usable with revision" in this study. Meanwhile, regarding the student response questionnaire conducted during the individual trial, it received a percentage of 96%, the small group trial received a percentage of 92%, and the large group trial also received a percentage of 92%. Based on these results, it can be concluded that the E-Module on Computer Systems based on Problem Based Learning for Class X is deemed suitable for use in learning.

Keywords: E-Module, Problem-based learning, ADDIE, Computer Systems, Canva, Unity.