PENGEMBANGAN TRAINER SENSOR BERASIS ARDUINO SEAGAI MEDIA PEMBELAJARAN PADA MATA KULIAH MIKROKONTROLER

Oleh :

Gede Budi Astrawan, NIM 1615061015

Prodi S1 Pendidikan Teknik Elektro

ABSTRAK

Penelitian ini dilakukan bertujuan untuk: (1) menghasilkan produk media pembelajaran Trainer Sensor Berbasis Arduino pada mata kuliah mikrokontroler. (2) mengetahui kelayakan media pembelajaran Trainer Sensor Berbasis Arduino pada mata kuliah mikrokontroler. (3) mengetahui respons dari mahasiswa terhadap penerapan media pembelajaran Trainer Sensor Berbasis Arduino.Penelitian ini menggunakan metode penelitian dan pengembangan atau lebih dikenal dengan *Research and Development.* Berdasarkan hasil penelitian yang telah dilaksanakan, diperoleh hasil yaitu: (1) hasil uji validasi ahli materi diperoleh hasil persentase 83,33% pada kualifikasi layak, (2) hasil uji validasi ahli mediadiperoleh hasil 100% kualifikasi sangat layak, (3) rentang skor 5 responden pada uji kelompok kecil semuanya klasifikasi sangat baik dan, (4) rentang skor 11 responden pada uji kelompok besar semuanya klasisfikasi sangat baik termasuk klasifikasi sangat baik. Bedasarkan hasil yang didapatkan, maka Media Trainer Sensor Berbasis Arduino Sebagai Media Pembelajaran Pada Mata Kuliah Mikrokontroler, layak digunakan sebagai media pembelajaran.

Kata Kunci: Pengembangan media, Trainer sensor berbasis arduino, Mikrokontroler.

ABSTRACT

The aim of this research is to: (1) produce Arduino-based Sensor Trainer Sensor learning media products on microcontroller subjects. (2) knowing the feasibility of learning media for Arduino-based Sensor Trainer in microcontroller subjects. (3) determine the response of students to the application of learning media for Arduin-based Sensor Trainer. This research uses research and development methods or better known as Research and Development. Based on the results of the research that has been carried out, the results obtained are: (1) the results of the validation test of material experts obtained the results of the percentage of 83.33% on the qualification of feasible, (2) the results of the validation of the mediation expert were obtained the results of 100% very decent qualifications, (3) the range of scores 5 respondents in the small group test were all very good classification and, (4) the range of scores of 11 respondents in the large group test were all very good classification including very good classification. Based on the results obtained, the Arduino-based Sensor Media Trainer as a Learning Media in Microcontroller Subjects, is fit to be used as a learning medium.

Keywords: Media development, Arduino-based sensor trainer, microcontroller.