ABSTRAK

WANJUL PRANSISCO SIRAIT : Pengembangan Prototype Pengontrolan Lampu Via Android Sebagai Media Pembelajaran di SMK Swasta Dwi Warna Medan. 2023

Penelitian ini bertujuan untuk mengembangnkan media pembelajaran menggunakan Prototype pengontrolan lampu pada mata pelajaran teknik mikrokontroller dan mikroprosesor di SMK Dwiwarna Medan Metode penelitian yang digunakan adalah metode penelitian dan pengembangan (research and development) dengan model penelitian pengembangan ADDIE. Tahapan dalam pengembangannya yaitu 1) Tahap Analysis, 2) Design, 3) Development or Production, 4) Implementation or Delivery, 5) Evaluations. Pengambilan data validasi materi dan media pembelajaran menggunakan skala likert. Hasil dari penelitian pengembangan ini berupa Prototype pengontrolan lampu berserta Jobsheet . media pembelajran berbasisi prototype ini telah melalui tahap uji validasi dengan rata – rata persentase capaian sebesar 85 **%** menurut ahli materi dan 88,12 **%** menurut ahli media. Dari hasil pnelitian dapat disimpulkan bahwa media pembelajaran menggunakan Prototype Pengontrolan lampu ini memenuhi syarat dengan kualitas Layak untuk digunakan sebagai media penunjang kegiatan pembelajaran pemograman mikroprosesor dan mikrokontroller.

Kata – kata Kunci : *Media Pembelajaran, Light control prototype*

ABSTRACK

WANJUL PRANSISCO SIRAIT: Development of Light Control Prototype Via Android as Learning Media at Dwi Warna Private Vocational High School Medan. 2023

This study aims to develop learning media using Prototype light control in the subject of microcontroller and microprocessor engineering at SMK Dwiwarna Medan The research method used is research and development method with ADDIE development research model. The stages in the development are 1) Analysis stage, 2) Design, 3) Development or Production, 4) Implementation or Delivery, 5) Evaluations. Data collection of validation of learning materials and media using a Likert scale. The results of this development research are in the form of a Prototype of light control along with Jobsheet. This prototype-based learning media has gone through the validation test stage with an average percentage achievement of 85% according to material experts and 88.12% according to media experts. From the results of the research, it can be concluded that the learning media using the Prototype of this light controller is qualified with a decent quality to be used as a medium to support microprocessor and microcontroller programming learning activities.

Keywords : *Learning Media, Elevator Simulator Prototype*