

ABSTRAK

Ifbrani Niko Tua Siregar (5163331014) : Pengembangan Media Pembelajaran Berbasis Prototype Solar Panel KIT pada Mata Pelajaran Pembangkit Listrik Tenaga Surya Di SMK Swasta Imelda Medan. Skripsi. Fakultas Teknik. Jurusan Pendidikan Teknik Elektro. Universitas Negeri Medan. 2023

Penelitian ini bertujuan : Untuk pengembangan *Prototype Solar Panel KIT* pada mata pelajaran Pembangkit Listrik Tenaga Surya di SMK Swasta Imelda Medan dan untuk mengetahui Kelayakan *Prototype Solar Panel KIT* pada mata pelajaran Instalasi Penerangan Listrik di SMK Swasta Imelda Medan. Adapun metode Penelitian yang digunakan merupakan metode Penelitian dan Pengembangan (*Research and Development*) Model ADDIE dikembangkan oleh Dick and Carry dari tahap dari tahap 1 sampai tahap 5 yaitu 1. Analisis, 2. Desain, 3. Pengembangan, 4. Implementasi, 5. Evaluasi. Data pada penelitian ini diperoleh melalui instrument yang diadaptasi dari Mourdel), yang terdiri dari ahli materi, ahli media. Hasil penelitian ini adalah : (1) pembuatan *Prototype Solar Panel KIT* memiliki langkah-langkah meliputi : mencari materi yang ingin dijelaskan dan membuat desain produk, penilaian media oleh ahli media dan ahli materi, validasi dan revisi. (2) Hasil kelayakan *Prototype Instalasi Penerangan Listrik* sebagai media pembelajaran adalah : penilaian ahli media memperoleh nilai persentase 87.50 % dengan kategori sangat layak, penilaian ahli materi memperoleh 89,61% dengan kategori sangat layak. Maka diperoleh kesimpulan media yang dikembangkan layak untuk digunakan.

Kata kunci : *Pengembangan, Prototype, Solar panel KIT, Instalasi Penerangan Listrik,*



ABSTRACT

Ifbrani Niko Tua Siregar(5163331014): Development of Solar Panel KIT Prototype for Solar Power Generation Subjects at Imelda Medan Private Vocational School.Thesis. Department of Electrical Engineering Education. Faculty of Engineering, State University of Medan. 2023.

This study aims: This study aims: To develop the Prototype Solar Panel KIT in the eyes of the Solar-Electrical Power Plant at Imelda Private Vocational School Medan and to determine the Feasibility of the Prototype Solar Panel KIT in the Electric Lighting Installation subject at Imelda Medan Private Vocational School. The research method used is the Research and Development method. The ADDIE model was developed by Dick and Carry from stages 1 to 5, namely 1. Analysis, 2. Design, 3. Development, 4. Implementation, 5. Evaluation . The data in this study were obtained through an instrument adapted from Mourdel, which consisted of material experts and media experts. The results of this research are: (1) the making of the Prototype Solar Panel KIT has steps that include: searching for material to be explained and making product designs, media assessment by media experts and material experts, validation and revision. (2) The results of the feasibility of the Electric Lighting Installation Prototype as a learning medium are: the media expert's assessment obtained a percentage value of 87.50% in the very feasible category, the material expert's assessment obtained 89.61% in the very feasible category. Then it can be concluded that the developed media is feasible to use.

Keyword : Development, Prototype media, Electrical Lighting Installatio