

ABSTRAK

PENGEMBANGAN BAHAN AJAR MATA PELAJARAN DASAR DAN PENGUKURAN LISTRIK UNTUK SEKOLAH MENENGAH KEJURUAN

Penelitian ini bertujuan untuk mengembangkan bahan ajar dasar dan pengukuran listrik, dan mengetahui kelayakan bahan ajar yang telah dikembangkan di SMK Negeri 1 Koba Kab. Bangka Tengah Propinsi Bangka Belitung. Metode penelitian ini menggunakan *research & development* (R & D) yang diawali dengan studi pendahuluan dilanjutkan tahap pengembangan dan penilaian produk. Subjek penelitian ditentukan dengan menggunakan teknik *purposive sampling* yang terdiri dari tiga orang expert judgement dan 28 orang peserta didik teknik instalasi pemanfaatan tenaga listrik. Pengumpulan data dengan teknik studi dokumentasi, wawancara dan kuisioner berupa angket. Prosedur penelitian ini adalah proses penyusunan bahan ajar dasar dan pengukuran listrik melalui tahap-tahap sebagai berikut: (a) Studi pendahuluan, dengan melakukan wawancara terhadap ketua program dan guru. Studi analisis silabus dan menganalisa kompetensi dasar dalam penyusunan bahan ajar (b) Mengumpulkan sumber belajar dan literatur serta pokok-pokok materi yang akan disusun. (c) Penyusunan draft bahan ajar dasar dan pengukuran listrik. (d) Uji coba terbatas produk. (e) uji coba Lebih luas produk. (f) Pengolahan data dan evaluasi. Kesimpulan penelitian ini adalah pengembangan bahan ajar mata pelajaran dasar dan pengukuran listrik yaitu bahan dikembangkan dari kurikulum 2013 dan silabus mata pelajaran dasar dan pengukuran listrik, sehingga materi bahan ajar dikembangkan mulai dari materi arus listrik dan arus elektron, bahan-bahan listrik, elemen pasif, elemen aktif, rangkaian resistif arus searah, teorema dua kutub, daya dan usaha, peralihan rangkaian, sistem satuan pengukuran, alat ukur dan pengukuran listrik, dan jenis alat ukur. Kelayakan bahan ajar di validasi dan dinilai oleh *expert judgement*, sedangkan untuk keterbacaan dan penggunaan bahan ajar dasar dan pengukuran listrik di ujicoba pada sejumlah peserta didik dengan hasil dalam kategori baik.

Kata Kunci: Pengembangan Bahan Ajar, Dasar dan Pengukuran Listrik

ABSTRACT

DEVELOPING BASIC TEACHING MATERIALS AND ELECTRICAL MEASUREMENT FOR VOCATIONAL HIGH SCHOOL

This research is aimed to develop teaching materials of basic principle and electrical measurement, and to figure out the feasibility of teaching materials which have been developed in SMK Negeri 1 Koba Kab. Bangka Tengah Bangka Belitung. This research method using the research & development (R & D) that begins with a preliminary study followed the development phase and product assessment. Research subjects are determined by using purposive sampling technique that consists of three expert judgment and 28 students electricity utilization installation techniques. Collecting data with tecnic documentation study, interview and questionnaire in the form of a questionnaire. The procedure of this research is the process of preparing the basic teaching materials and electrical measurements through the stages as follows: (a) A preliminary study, by conducting interviews with the head of the program and teachers. Studies syllabus analysis and analyzing core competencies in materials development. (b) Collect a source of learning and literature as well as the main points of the material to be prepared. (c) Preparation of draft basic teaching materials and electrical measurements. (d) The trial is limited products. (e) More extensive product testing. (f) Data processing and evaluation. The conclusion of this study is the development of teaching materials and the basic subjects, namely electrical measurements of curriculum materials developed in 2013 and syllabus basic subjects and electrical measurements, so that the teaching materials developed starting from the material of electric current and electron current, electrical materials, passive elements, active elements, resistive circuits direct current, two poles theorem, power and effort, switching circuits, system of units of measurement, measuring instruments and electrical measurements , and the type of measuring device. The validation of the feasibility of teaching materials and assessed by expert judgment, whereas for readability and use basic teaching materials and electrical measurements on the test in a number of students with results in both categories.

Keywords: Teaching Material Development, Basic Electromechanical Works