ABSTRAK

Arnold Purba. 5141131002. Pengembangan Instrumen Penilaian Kompetensi Siswa Pada Materi Instalasi Penerangan 1 Fasa di Kelas XI SMKN 2 Medan. Skripsi. Fakultas Teknik, Universitas Negeri Medan. 2021.

Penelitian ini bertujuan untuk mendeskripsikan rancangan, kelayakan dan kualitas serta respon siswa terkait pengembangan instrumen penilaian kompetensi siswa pada materi instalasi penerangan 1 fasa di Kelas XI SMK. Penelitian ini termasuk jenis penelitian pengembangan dengan menggunakan model pengembangan 3D (define, design dan develop). Subjek penelitian ini adalah siswa kelas XI SMKN 2 Medan sebanyak 30 siswa. Data penelitian dikumpulkan melalui lembar validasi ahli dan angket respon siswa. Teknik analisis data menggunakan analisis data kuantitatif dan kualitatif.

Hasil penelitian dan pengembangan disimpulkan bahwa: (1) instumen penilaian kompetensi siswa dirancang melalui beberapa tahap mulai dari pengembangan spesifikasi instrumen dengan membuat kisi-kisi soal, penulisan soal, penelaahan soal melalui proses validasi isi kepada validator ahli, perakitan soal, ujicoba dan analisis butir soal hingga pencetakan soal pada kertas HVS dengan ukuran A4 (21×29.7 cm); (2) instrumen penilaian kompetensi siswa pada materi instalasi penerangan 1 fasa kelas XI SMK yang dikembangkan telah memenuhi kriteria valid berdasarkan penilaian praktisi dan validator ahli meliputi aspek materi (isi), aspek konstruksi dan aspek bahasa serta hasil ujicoba dan analisis butir soal diperoleh dari 25 soal yang diujicobakan seluruhnya tergolong valid (sahih), reliabel (handal), dan memiliki tingkat kesukaran yang tergolong sedang, serta hasil analisis daya pembeda butir tes rata-rata tergolong cukup dan baik; dan (3) respon siswa terkait instrumen penilaian kompetensi siswa yang dikembangkan juga tergolong kriteria baik dengan rata-rata skor angket secara keseluruhan sebesar 3,70. Hal ini sekaligus mengindikasikan bahwa instrumen penilaian kompetensi yang telah dihasilkan telah dinyatakan layak dan dapat digunakan untuk mengukur kemampuan siswa materi instalasi penerangan 1 fasa di Kelas XI SMK.

Kata Kunci: Instrumen Penilaian Kompetensi, Instalasi Penerangan.

ABSTRACT

Arnold Purba. 5141131002. Development of Student Competency Assessment Instruments on Materials for 1 Phase Lighting Installation in Class XI of SMKN 2 Medan. Undergraduate Thesis. Faculty of Engineering, Universitas Negeri Medan. 2021.

This study aims to describe the design, feasibility and quality as well as student responses related to the development of student competency assessment instruments on single-phase lighting installation materials in Class XI SMK. This research is a type of development research using a 3D development model (define, design and develop). The subjects of this study were students of class XI SMKN 2 Medan as many as 30 students. Research data were collected through expert validation sheets and student response questionnaires. The data analysis technique used quantitative and qualitative data analysis.

The results of the research and development concluded that: (1) the student competency assessment instrument was designed through several stages starting from developing instrument specifications by making question grids, writing questions, reviewing questions through the content validation process to expert validators, assembling questions, testing and item analysis. questions to printing questions on HVS paper with A4 size $(21 \times 29.7 \text{ cm})$; (2) the instrument for assessing student competence in the 1-phase lighting installation material for class XI SMK that was developed has met the valid criteria based on the assessment of practitioners and expert validators covering material aspects (content), construction aspects and language aspects as well as test results and item analysis obtained from 25 all of the questions tested are valid (valid), reliable (reliable), and have a moderate level of difficulty, and the results of the analysis of the distinguishing power of the test items on average are quite and good; and (3) student responses related to the developed student competency assessment instrument are also classified as good criteria with an overall questionnaire score of 3.70. This also indicates that the competency assessment instrument that has been produced has been declared feasible and can be used to measure the ability of students in single-phase lighting installation materials in Class XI SMK.

Keywords: Competency Assessment Instrument, Information Installation.