

ABSTRAK

Juanda: Pengembangan Instrumen Penilaian Kompetensi Siswa Pada Materi Instalasi kWh Meter 1 Fasa Di Kelas XI SMK Negeri 1 Percut Sei Tuan. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2021

Penelitian ini bertujuan untuk: (1) mengembangkan instrumen penilaian untuk mengukur kemampuan peserta didik pada materi instalasi kWh meter 1 fasa, (2) mengetahui kelayakan instrumen penilaian peserta didik pada materi Instalasi kWh meter 1 fasa.

Penelitian ini termasuk dalam penelitian dan pengembangan menggunakan model 4-D (*Four D Model*) yang meliputi: (1) pendefinisian (*define*) berbagai informasi yang berkaitan dengan produk yang akan dikembangkan, (2) perancangan (*design*) produk awal berbentuk instrumen penilaian, (3) pengembangan (*develop*) produk akhir instrumen penilaian berdasarkan validasi para ahli dan uji terbatas, (4) penyebaran (*disseminate*) produk akhir yang telah tervalidasi untuk dapat dimanfaatkan sekolah. Penelitian ini dilakukan hanya sampai tahap pengembangan (*develop*) karena situasi pandemi *Covid-19*. Data produk berupa data kualitatif yang didapat dari saran dan masukan ahli materi dan ahli evaluasi, serta berupa data kuantitatif yang berasal dari penilaian ahli materi, ahli evaluasi dan uji terbatas.

Tingkat kelayakan instrumen penilaian dibuktikan dengan nilai indeks di antara 88% sampai 100% (sangat valid) untuk validasi materi dan nilai indeks di antara 77% sampai 93% (sangat valid) untuk validasi evaluasi. Sementara validitas soal *HOTS* dari 20 soal terdapat 4 soal tidak valid. Tingkat reliabilitas soal *HOTS* adalah 0,71 dengan kategori Tinggi,, tingkat kesukaran soal *HOTS* memiliki rata-rata 0,65 dengan kategori cukup. Selanjutnya rata-rata daya pembeda yakni 0,38 dengan kategori cukup. Dengan demikian pengembangan instrumen penilaian ini sangat baik karena telah diuji kelayakannya oleh para ahli dan uji terbatas.

Kata kunci : *instrumen penilaian, Four D Model, Instalasi kWh meter 1 fasa.*



ABSTRACT

Juanda: Development of Student Competency Assessment Instruments on Installation Material 1 Phase kWh Meter in Class XI SMK Negeri 1 Percut Sei Tuan. Essay. Faculty of Engineering, State University of Medan, 2021

This study aims to: (1) develop instruments to measure students abilities in the material installation of 1-phase kWh meters, (2) indicators of student assessment on the 1-phase kWh meter installation material.

This research is included in research and development using the 4-D model which includes: (1) defining various information related to the product to be developed, (2) designing the initial product in the form of an assessment instrument, (3) developing the final product of the instrument based on expert validation, (4) distributing the final product that has been validated to be used by schools. This research was carried out only until the stage developing due to the Covid-19 pandemic situation. Product data is in the form of qualitative data obtained from suggestions and input from material experts and evaluation experts, and in the form of quantitative data from material experts and evaluation experts.

The feasibility level of the assessment instrument is evidenced by an index value between 88% to 100% (very valid) for material validation and an index value between 77% to 93% (very valid) for evaluation validation. While the validity of the HOTS questions out of 20 questions, there were 4 invalid questions. The reliability level of the HOTS questions was 0.71 in the High category, the difficulty level of the HOTS questions had an average of 0.65 in the sufficient category. Furthermore, the average distinguishing power is 0.38 which is in the sufficient category. Thus the development of this assessment instrument is very good because it has been tested for its feasibility by experts and limited testing.

Keywords: assessment, 4-D Model, 1 phase kWh meter installation.

