ABSTRAK

Simon P Sagala: Pelatihan Desain Body Sepeda Motor Listrik Menggunakan Model CODE (Compass, Observation, Demonstration, Evaluation) Untuk Meningkatkan Kemampuan Gambar Teknik Bagi Siswa Kelas XI TSM Di SMK Swasta Alwasliyah Hamparan Perak. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2024

Penelitian dalam skripsi ini dilatar belakangi oleh proses pengembangan sepeda motor listrik dalam bidang Pengembangan desain produk yang mempertimbangkan keinginan. kompentensi yang menjadi dasar dan tolak ukur seorang pekerja di dunia industri sangat perlu untuk dipahami dan dianalisis serta dipelajari, maka permasalahan yang terjadi pada desain sepeda motor listrik sangat berhubungan dengan mata pelajaran gambar tenik di siswa TSM SMK Swasta Alwasliyah Hamparan Perak, mata pelajaran gambar tenik salah satu materi yang membahas praktek menggambar, tetapi dengan banyaknya materi pelajaran pada mata pelajaran tersebut, maka dibutuhkannya pengetahuan tambahan yang dapat mengebangkan kompetensi yang mendukung mata pelajaran gambar teknik, untuk melengkapi kebutuhan tersebut dilakukan pelatihan model CODE.Pelatihan dengan didasarkan oleh model CODE yang merupakan singkatan dari Compass, Observation, Demonstration, Evaluation. Model yang dibentuk dari Problem Based Learning (PBL) dan Demonstrasi Learning (DL), dilaksanakan dengan melihat masalah yang terjadi, dengan sintak yang diterapkan peserta mampu memecahkan masalah melalui studi kasus dilapangan, mampu belajar secara relevan dengan kebutuhan keahlian desain dilapangan. Mencari contoh masalah pada aplikasi dilapangan. Ini didasari dari sulitnya mendapatkan informasi dari industri untuk melihat proses gambar dari desain body sepeda motor listrik mereka, maka dibuat sebuah desain sepeda motor listrik sebagai media pendukung pada pelatihan dan nantinya akan dibandingkan dengan desain-desain dilapangan yang di search secara online, dengan begitu peserta dapat memahami permasalahan yang akan dikuasai.Setelah proses pembelajaran selesai pelatih memberikan soal post-test kepada masing-masing siswa berlangsung selama 90 menit (2x45 menit). Hasil pre-test dan post-test siswa pada kelas eksperimen memiliki perbedaan hasil belajar yang cukup mencolok. Dilihat dari hasil statistik deskriptif bahwa pelatihan menggunakan Model CODE pada desain body sepeda motor listrik pada siswa kelas XI TSM di SMK Swasta Alwasliyah Hamparan Perak. memiliki rata-rata nilai post-test sebesar 69.79 yaitu kategori baik.

Kata Kunci: Pelatiahan, Desain Body Sepeda Motor Listrik, Model CODE

ABSTRACT

Simon P Sagala: Electric Motorcycle Body Design Training Using the CODE (Compass, Observation, Demonstration, Evaluation) Model to Improve Technical Drawing Skills for Class XI TSM Students at Alwasliyah Hamparan Perak Private Vocational School. Thesis. Medan State University Faculty of Engineering. 2024

The research in this thesis is motivated by the process of developing electric motorbikes in the field of product design development that takes into account desires. Competencies which are the basis and benchmark for a worker in the industrial world really need to be understood, analyzed and studied, so the problems that occur in the design of electric motorbikes are closely related to the subject of technical drawing for TSM students at Alwasliyah Hamparan Perak Private Vocational School, the subject of technical drawing one of the materials discusses the practice of drawing, but with the large amount of learning material in this subject, additional knowledge is needed that can develop competencies that support technical drawing subjects. To complement this need, CODE model training is carried out. Training is based on the CODE model which stands for Compass, Observation, Demonstration, Evaluation. The model is formed from Problem Based Learning (PBL) and Demonstration Learning (DL), implemented by looking at the problems that occur, with the syntax applied, participants are able to solve problems through case studies in the field, able to learn relevantly to the needs of design skills in the field. Look for examples of problems in applications in the field. This is based on the difficulty of getting information from industry to see the drawing process of their electric motorbike body designs, so an electric motorbike design was created as a supporting medium for the training and later it will be compared with designs in the field that are searched online, so that participants can understand the problem to be addressed. After the learning process is complete the trainer gives post-test questions to each student which lasts for 90 minutes (2x45 minutes). The pre-test and post-test results of students in the experimental class had quite striking differences in learning outcomes. Judging from the results of descriptive statistics, the training used the CODE Model in electric motorbike body design for class XI TSM students at the Alwasliyah Hamparan Perak Private Vocational School. has an average post-test score of 69.79, which is in the good category.

Keywords: Training, Electric Motorcycle Body Design, CODE Model