

Moh Afif Yuski. 2023. *Pengembangan Perangkat Pembelajaran Dengan Model Pembelajaran Project Based Learning Materi Desain Jaringan Lokal Kelas X Tkj*. Skripsi Program Studi Pendidikan Informatika, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Dosen Pembimbing 1: Muchamad Arif, S.Pd., M.Pd, Dosen Pembimbing 2: Nuru Aini, S.Kom., M.Kom

ABSTRAK

Tujuan penelitian ini adalah untuk mengembangkan dan mengetahui kevalidan serta kelayakan perangkat pembelajaran berbasis *Project Based Learning* pada mata pelajaran computer dan jaringan dasar materi desain jaringan lokal program keahlian TKJ kelas X. Jenis penelitian yang digunakan adalah penelitian dan pengembangan. Model penelitian yang digunakan model 4D (*Define, Design, Develop, Disseminate*). Tahap analisis meliputi analisis kurikulum, materi dan peserta didik. Tahap *Design* yaitu melakukan tahap perancangan perangkat pembelajaran. Tahap *Develop* yaitu tahap pengembangan yakni membuat perangkat pembelajaran berupa RPP dan LKPD. Tahap *Disseminate* yaitu tahap penybarluasan produk. Berdasarkan pada tahap validasi RPP mendapatkan nilai 80%, Validasi LKPD mendapatkan nilai 84% dengan kategori Valid. Hasil angket respon siswa dalam uji coba kelompok kecil mendapatkan nilai 97,4%, dan hasil angket respon siswa uji kelompok besar mendapatkan nilai 99,45%. Dengan demikian perangkat pembelaran berbasis *Project Based Learning* pada mata pelajaran Komputer dan Jaringan Dasar materi desain jaringan lokal kelas X TKJ tergolong valid dan sangat layak dapat digunakan dalam pembelajaran.

Kata Kunci : Perangkat Pembelajaran, Model Pembelajaran, *Project Based Learning*. Desain Jaringan Lokal.

Moh Afif Yuski 2023. *Development of Learning Devices Using a Project Based Learning Learning Model Local Network Design Material Class X Tkj. Informatics Education Study Program Thesis, Faculty of Education, Trunojoyo University, Madura. Advisor 1: Muchamad Arif, S.Pd., M.Pd, Advisor 2: Nuru Aini, S.Kom., M.Kom*

ABSTRACT

The purpose of this study was to develop and determine the validity and feasibility of learning tools based on Project Based Learning in computer subjects and basic network local network design material for class X TKJ expertise programs. The type of research used was research and development. The research model used is the 4D model (Define, Design, Develop, Disseminate). The analysis phase includes analysis of the curriculum, materials and students. The Design stage is to carry out the learning device design stage. The Develop stage is the development stage, namely making learning tools in the form of lesson plans and worksheets. The Disseminate stage is the product dissemination stage. Based on the RPP validation stage, it gets a value of 80%, LKPD Validation gets a value of 84% in the Valid category. The results of the student response questionnaire in the small group trial obtained a score of 97.4%, and the results of the student response questionnaire in the large group test obtained a value of 99.45%. Thus the learning tools based on Project Based Learning in Computer and Basic Networks subject, local network design material for class X TKJ are classified as valid and very feasible to be used in learning.

Keywords: *Learning Devices, Learning Models, Project Based Learning. Local Network Design.*