

Soleha. 2025. *Pengaruh Model Collaborative Problem Solving Berbantuan Cisco Packet Tracer Terhadap Hasil Belajar Siswa Pada Materi VLAN*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing : Puji Rahayu Ningsih, S.Pd., M.Pd

ABSTRAK

Abstrak: Penelitian ini bertujuan untuk mengetahui pengaruh model *Collaborative Problem Solving* berbantuan *Cisco Packet Tracer* terhadap hasil belajar siswa pada materi VLAN. Metode penelitian yang digunakan adalah *Quasi Experiment* dengan desain penelitian *Nonequivalent Control Group Design*. Sampel yang digunakan berjumlah 52 siswa yang terbagi menjadi 2 kelompok yaitu kelas XI TKJ A kelompok kontrol dan XI TKJ B kelompok eksperimen. Pengumpulan data berupa tes, wawancara, observasi dan angket. Berdasarkan hasil penelitian diperoleh, (1) Terdapat pengaruh model *Collaborative Problem Solving* berbantuan *Cisco Packet Tracer* dengan hasil belajar siswa (ranah kognitif) didasarkan pada uji signifikan yang diperoleh hasil $Z_{hitung} < Z_{tabel}$ atau $-3,404 < 1,96$ sehingga H_a diterima dan pada uji gain ternormalisasi memperoleh nilai 0,608 yang berkategori “sedang”. (2) Aktivitas pelaksanaan pembelajaran menggunakan model *Collaborative Problem Solving* berbantuan *Cisco Packet Tracer* menunjukkan hasil baik. Aktivitas guru memperoleh presentase 96,7% dengan kategori “sangat baik” dan aktivitas siswa memperoleh presentase 85% dengan kategori “sangat baik”. (3) Respon siswa pada pembelajaran dengan model *Collaborative Problem Solving* berbantuan *Cisco Packet Tracer* memperoleh presentase 83% berkategori sangat baik dari siswa. Sehingga dapat disimpulkan bahwa terdapat pengaruh model *Collaborative Problem Solving* berbantuan *Cisco Packet Tracer* terhadap hasil belajar siswa pada materi VLAN.

Kata Kunci: Hasil Belajar, *Collaborative Problem Solving*, *Cisco Packet Tracer*

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ABSTRAK

Abstract: This study aims to determine the effect of the Collaborative Problem Solving model assisted by Cisco Packet Tracer on student learning outcomes in VLAN material. The research method used was a Quasi-Experimental design with a Nonequivalent Control Group Design. The sample consisted of 52 students divided into two groups: Class XI TKJ A as the control group and Class XI TKJ B as the experimental group. Data collection methods included tests, interviews, observations, and questionnaires. Based on the research results, (1) There is an effect of the Collaborative Problem Solving model assisted by Cisco Packet Tracer on student learning outcomes (cognitive domain) based on the significance test, which yielded a z -value $< z$ -table or $3.482 < 2.064$, thus accepting the alternative hypothesis (H_a). The normalized gain test yielded a value of 0.608, categorized as "moderate." (2) The implementation of learning activities using the Collaborative Problem Solving model assisted by Cisco Packet Tracer showed good results. Teacher activities obtained a percentage of 96.7% in the "very good" category, and student activities obtained a percentage of 85% in the "very good" category. (3) Student responses to learning using the Collaborative Problem Solving model assisted by Cisco Packet Tracer obtained a percentage of 83% categorized as very good from students. Thus, it can be concluded that there is an influence of the Collaborative Problem Solving learning model assisted by Cisco Packet Tracer on student learning outcomes in VLAN material.

Keywords: Learning Outcomes, Collaborative Problem Solving, Cisco Packet Tracer