

ABSTRAK

Carolyn Loulani Palpialy (2026). **Peningkatan Kemampuan Penalaran Matematis dan *Self-efficacy* Siswa SMA Melalui Model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos**

Penelitian ini bertujuan untuk: (1) Menganalisis apakah peningkatan kemampuan penalaran matematis siswa yang memperoleh model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos lebih tinggi daripada siswa yang memperoleh model pembelajaran biasa; (2) Menganalisis apakah *self-efficacy* siswa yang memperoleh model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos lebih baik daripada siswa yang memperoleh model pembelajaran biasa; (3) Menganalisis apakah terdapat korelasi positif antara kemampuan penalaran matematis dan *self-efficacy* siswa yang memperoleh model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos. Metode penelitian yang digunakan dalam penelitian ini adalah *quasi experiment* (eksperimen semu) dengan desain penelitian *non-equivalent control group design*. Subjek dari penelitian ini adalah siswa kelas X SMA Pasundan 3 Bandung, dengan sampel penelitian berjumlah 45 siswa dan terdiri dari 2 kelas. Instrumen yang digunakan dalam penelitian ini berupa soal tes uraian kemampuan penalaran matematis dan angket *self-efficacy* yang telah di uji coba dan dinyatakan valid untuk digunakan dalam penelitian. Analisis data pada penelitian ini menggunakan *software SPSS 23.0 for Windows*. Berdasarkan analisis data hasil penelitian, diperoleh kesimpulan: (1) Peningkatan kemampuan penalaran matematis siswa yang memperoleh model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos lebih tinggi daripada siswa yang memperoleh model pembelajaran biasa; (2) *Self-efficacy* siswa yang memperoleh model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos lebih baik daripada siswa yang memperoleh model pembelajaran biasa; (3) Terdapat korelasi positif antara kemampuan penalaran matematis dan *self-efficacy* siswa yang memperoleh model *Think Pair Share* Pendekatan *Deep Learning* Berbantuan Desmos.

Kata Kunci: Kemampuan penalaran matematis, *self-efficacy*, Model *Think Pair Share*, *Deep Learning*, Desmos.

ABSTRACT

Carolin Loulani Palpialy (2026). *Improving Senior High School Students Mathematical Reasoning Ability and Self-Efficacy Through the Think Pair Share Model with a Desmos-Assisted Deep Learning Approach.*

This study aims to: (1) determine whether the improvement in students' mathematical reasoning ability through the Think Pair Share model with a Desmos-assisted Deep Learning approach is higher than that of students who receive the conventional learning model; (2) determine whether the self-efficacy of students through the Think Pair Share model with a Desmos-assisted Deep Learning approach is better than that of students who receive the conventional learning model; (3) determine whether there is a positive correlation between mathematical reasoning ability and self-efficacy among students who receive the Think Pair Share model with a Desmos-assisted Deep Learning approach. The research method used in this study is a quasi-experiment with a non-equivalent control group design. The subjects of this study were grade X students of SMA Pasundan 3 Bandung, with a research sample consisting of 45 students divided into two classes. The instruments used in this study consist of an essay test for mathematical reasoning ability and a self-efficacy questionnaire, both of which have been trialed and declared valid for research use. Data analysis in this study was performed using SPSS 23.0 for Windows software. Based on the data analysis, the conclusions are: (1) the improvement in students' mathematical reasoning ability through the Think Pair Share model with a Desmos-assisted Deep Learning approach is higher than that of students who receive the conventional learning model; (2) the self-efficacy of students through the Think Pair Share model with a Desmos-assisted Deep Learning approach is better than that of students who receive the conventional learning model; (3) there is a positive correlation between mathematical reasoning ability and self-efficacy among students who receive the Think Pair Share model with a Desmos-assisted Deep Learning approach.

Keywords: *Mathematical reasoning ability, self-efficacy, Think Pair Share model, Deep Learning, Desmos.*

RINGKESAN

Carolin Loulani Palpialy (2026). *Ningkatkeun Kamampuh Penalaran Matematis jeung Self-Efficacy Siswa SMA Ngaliwatan Model Think Pair Share Pendekatan Deep Learning Dibantun Ku Desmos*

Ieu panalungtikan miboga tujuan pikeun: (1) Mikanyaho naha kanaékan kamampuh penalaran matematis siswa anu ngagunakeun modél Think Pair Share Pendekatan Deep Learning Berbantuan Desmos leuwih luhur tibatan siswa anu ngagunakeun modél pangajaran biasa; (2) Mikanyaho naha self-efficacy siswa anu ngagunakeun modél Think Pair Share Pendekatan Deep Learning Berbantuan Desmos leuwih alus tibatan siswa anu ngagunakeun modél pangajaran biasa; (3) Mikanyaho naha aya korélasi positif antara kamampuh penalaran matematis jeung self-efficacy siswa anu ngagunakeun modél Think Pair Share Pendekatan Deep Learning Berbantuan Desmos. Méthode panalungtikan anu digunakeun dina ieu panalungtikan nyaéta quasi experiment (ékspérimén semu) kalayan desain panalungtikan non-equivalent control group design. Subjék tina ieu panalungtikan nyaéta siswa kelas X SMA Pasundan 3 Bandung, kalayan sampel panalungtikan anu jumlahna 45 siswa sarta diwangun ku 2 kelas. Instrumén anu digunakeun dina ieu panalungtikan mangrupa soal tést uraian kamampuh penalaran matematis jeung angkétt self-efficacy anu geus diuji coba sarta dinyatakeun valid pikeun digunakeun dina panalungtikan. Analisis data dina ieu panalungtikan ngagunakeun software SPSS 23.0 for Windows. Dumasar kana analisis data hasil panalungtikan, kacindekanana nyaéta: (1) Kanaékan kamampuh penalaran matematis siswa anu ngagunakeun modél Think Pair Share Pendekatan Deep Learning Berbantuan Desmos leuwih luhur tibatan siswa anu ngagunakeun modél pangajaran biasa; (2) Self-efficacy siswa anu ngagunakeun modél Think Pair Share Pendekatan Deep Learning Berbantuan Desmos leuwih alus tibatan siswa anu ngagunakeun modél pangajaran biasa; (3) Aya korélasi positif antara kamampuh penalaran matematis jeung self-efficacy siswa anu ngagunakeun modél Think Pair Share Pendekatan Deep Learning Berbantuan Desmos.

Kecap Konci: Kamampuh penalaran matematis, self-efficacy, Model Think Pair Share, Deep Learning, Desmos.