

## ABSTRAK

Ditya Mi'rojunisa Azzahra. (2023). **Peningkatan Kemampuan Pemahaman Matematis dan *Self-Regulated Learning* siswa SMA Melalui Model *Problem Based Learning* Berbantuan Canva.**

Matematika merupakan bagian penting dalam pendidikan. Diperlukan kemampuan untuk memahami ide-ide sederhana agar siswa tidak salah mengartikan berbagai konsep, kemampuan tersebut yaitu kemampuan pemahaman matematis. Untuk mengaitkan konsep-konsep dalam matematika maka diperlukan *self-regulated learning* dalam menyelesaikan permasalahan yang akan dihadapi. Namun kenyataannya kemampuan pemahaman matematis dan *self-regulated learning* siswa masih tergolong rendah. Salah satu model pembelajaran yang dapat diterapkan dalam meningkatkan kemampuan pemahaman matematis dan *self-regulated learning* adalah model *problem based learning* berbantuan canva. Penelitian ini bertujuan untuk: (1) mengetahui peningkatan kemampuan pemahaman matematis siswa yang memperoleh model *Problem Based Learning* berbantuan canva lebih tinggi daripada siswa yang memperoleh model pembelajaran konvensional; (2) mengetahui *self-regulated learning* yang memperoleh model *Problem Based Learning* berbantuan canva lebih baik daripada siswa yang memperoleh model pembelajaran konvensional; (3) mengetahui korelasi antara kemampuan pemahaman matematis dan *self-regulated learning* yang memperoleh model *Problem Based Learning* berbantuan canva. Penelitian ini menggunakan metode eksperimen semu (*quasi eksperiment*) dengan desain penelitian *nonequivalent control grup design*. Peserta didik kelas XI di SMAN 1 Cililin ditetapkan sebagai populasi. Untuk sampel penelitiannya terdiri dari dua kelas. Instrumen yang digunakan dalam penelitian ini berupa soal uraian tes kemampuan pemahaman matematis dan non tes angket *self-regulated learning*. Analisis data menggunakan analisis uji t yang diolah menggunakan *software SPSS 23 for windows*. Simpulan penelitian ini adalah: (1) Peningkatan kemampuan pemahaman matematis siswa yang memperoleh model *problem-based learning* berbantuan canva lebih tinggi daripada siswa yang memperoleh pembelajaran konvensional; (2) *Self-regulated learning* yang memperoleh model *problem-based learning* berbantuan canva lebih baik daripada siswa yang memperoleh pembelajaran konvensional; (3) Terdapat korelasi positif yang signifikan antara kemampuan pemahaman matematis dengan *self-regulated learning* yang memperoleh model *problem-based learning* berbantuan canva.

**Kata Kunci** : *problem based learning*, canva, pemahaman matematis, *self-regulated learning*.

## **ABSTRACT**

Ditya Mi'rojunisa Azzahra. (2023). ***Improving High School Students' Mathematical Understanding and Self-Regulated Learning Skills Through the Problem Based Learning Model Assisted by Canva.***

*Mathematics is an important part of education. The ability to understand simple ideas is needed so that students do not misinterpret various concepts, this ability is the ability to understand mathematics. To apply concepts in mathematics, self-regulated learning is needed in solving the problems to be faced. But in fact the ability of students' mathematical understanding and self-regulated learning is still relatively low. One of the learning models that can be applied to improve mathematical understanding skills and self-regulated learning is the Canva-assisted problem-based learning model. This study aims to: (1) determine the increase in the ability of students' mathematical understanding who received the Problem Based Learning model with the help of canvas was higher than students who received the conventional learning model; (2) knowing that self-regulated learning who gets the Problem Based Learning model assisted by Canva is better than students who get the conventional learning model; (3) find out the correlation between mathematical understanding ability and self-regulated learning that obtains the Canva-assisted Problem Based Learning model. This study used a quasi-experimental method with a nonequivalent control group research design. Class XI students at SMAN 1 Cililin are defined as the population. The research sample consisted of two classes. The instruments used in this study were in the form of test questions for understanding mathematical comprehension tests and self-regulated learning non-questionnaire tests. Data analysis used t-test analysis which was processed using SPSS 23 for Windows software. The conclusions of this study are: (1) The increase in the mathematical understanding ability of students who obtain problem-based learning models assisted by canvas is higher than students who receive conventional learning; (2) Self-regulated learning that gets the problem-based learning model assisted by Canva is better than students who get conventional learning; (3) There is a significant positive correlation between mathematical understanding ability and self-regulated learning that obtains the Canva-assisted problem-based learning model.*

*Keywords: problem based learning, canva, mathematical understanding, self-regulated learning.*

## RINGKESAN

Ditya Mi'rojuna Azzahra. (2023). *Ngaronjatkeun Pamahaman Matematika Siswa SMA jeung Kamampuh Diajar Mandiri Ngaliwatan Modél Pangajaran Dumasar Masalah Dibantuan ku Canva*.

Matematika mangrupa bagian penting dina atikan. Kamampuh maham gagasan basajan diperlukeun sangkan siswa henteu salah harti kana rupa-rupa konsép, ieu kamampuh mangrupa kamampuh maham matematika. Pikeun ngalarapkeun konsép-konsép dina matematika, perlu diajar mandiri dina ngaréngsékeun masalah anu bakal disanghareupan. Tapi dina kanyataanana kamampuh pamahaman matematika siswa jeung diajar mandiri masih kawilang handap. Salasahiji modél pangajaran anu bisa diterapkeun pikeun ngaronjatkeun kaparigelan pamahaman matematik jeung diajar mandiri nya éta modél pangajaran berbasis masalah berbantuan Canva. Ieu panalungtikan miboga tujuan pikeun: (1) nangtukeun ngaronjatna kamampuh pamahaman matematis siswa anu narima modél Pangajaran Dumasar Masalah kalayan bantuan canva leuwih luhur batan siswa anu narima modél pangajaran konvensional; (2) mikanyaho yén pangajaran mandiri anu meunang modél Pangajaran Dumasar Masalah dibantuan ku Canva leuwih hadé batan siswa anu meunang modél pangajaran konvensional; (3) mikanyaho korélasi antara kamampuh maham matematik jeung diajar mandiri nu meunang model Pangajaran dumasar Masalah Berbantuan Canva. Ieu panalungtikan ngagunakeun métode kuasi ékspérimén kalawan desain panalungtikan kelompok kontrol nonequivalent. Siswa kelas XI SMAN 1 Cililin dihartikeun salaku populasi. Sampel panalungtikan diwangun ku dua kelas. Instrumén anu digunakeun dina ieu panalungtikan nya éta wangun soal tés maham tés pamahaman matematik jeung tés non angkét diajar mandiri. Analisis data ngagunakeun analisis t-test anu diolah ngagunakeun software SPSS 23 for Windows. Kacindekan tina ieu panalungtikan nya éta: (1) ngaronjatna kamampuh pamahaman matematik siswa anu meunangkeun modél pangajaran dumasar masalah dibantuan kanvas leuwih luhur batan siswa anu narima pangajaran konvensional; (2) Pangajaran mandiri anu meunang modél pangajaran dumasar masalah dibantuan ku Canva leuwih alus batan siswa anu meunang pangajaran konvensional; (3) Aya korélasi positif anu signifikan antara kamampuh pamahaman matematik jeung diajar mandiri anu meunangkeun modél pangajaran dumasar masalah dibantuan ku canva.

Konci: *problem based learning, canva, pamahaman matematis, self-regulated learning.*