

## ABSTRAK

**AI SITI SUMIYATI. Peningkatan Kemampuan Literasi matematis dan *Self-Confidence* Siswa SMA Melalui Model *Problem-Based Learnig* Berbantuan Geogebra.**

Kemampuan literasi matematis merupakan salah satu kemampuan matematika yang penting untuk diimiliki oleh siswa. Namun pada kenyataannya, kemampuan literasi matematis siswa masih tergolong rendah. Tujuan pada penelitian ini adalah untuk: 1) Mengetahui peningkatan kemampuan literasi matematis siswa SMA yang memperoleh model *Problem-Based Learning* (PBL) berbantuan Geogebra lebih tinggi daripada siswa SMA yang memperoleh model pembelajaran konvensional; 2) Mengetahui *self-confidence* siswa SMA yang memperoleh model *Problem-Based Learning* (PBL) berbantuan Geogebra lebih baik daripada siswa SMA yang memperoleh model pembelajaran konvensional; 3) Mengetahui korelasi antara kemampuan literasi matematis dengan *self-confidence* siswa SMA yang memperoleh model *Problem-Based Learning* (PBL) berbantuan Geogebra. Metode yang digunakan dalam penelitian ini adalah eksperimen semu (*quasi experiment*) dengan desain penelitiannya yaitu *non-equivalent control group design*. Subjek dari penelitian ini adalah siswa Kelas XI pada semester genap SMAN 9 Bandung tahun ajaran 2023/2024 sebanyak 2 kelas berdasarkan pertimbangan. Instrumen penelitian yang digunakan berupa tes kemampuan literasi matematis dan angket *Self-confidence*. Data yang diperoleh kemudian dilakukan analisis menggunakan *software IBM SPSS 23 for Windows*. Hasil penelitian menyimpulkan bahwa: 1) Peningkatan kemampuan literasi matematis siswa SMA yang memperoleh model *Problem-Based Learning* (PBL) berbantuan Geogebra lebih tinggi daripada siswa SMA yang memperoleh model pembelajaran konvensional; 2) *Self-confidence* siswa SMA yang memperoleh model *Problem-Based Learning* (PBL) berbantuan Geogebra lebih baik daripada siswa SMA yang memperoleh model pembelajaran konvensional; 3) Terdapat korelasi antara kemampuan literasi matematis dengan *self-confidence* siswa SMA yang memperoleh model *Problem-Based Learning* (PBL) berbantuan Geogebra.

**Kata Kunci:** Literasi Matematis, *Self-Confidence*, *Problem-Based Leraning* (PBL), Geogebra.

## **ABSTRACT**

***AI SITI SUMIYATI. Improvement of the Mathematical Literacy Ability and Self-Confidence of Senior High School Students Through the Problem-Based Learning Model Assisted by Geogebra.***

*Mathematical literacy ability is one of the important mathematical abilities for students to have. However, in reality, students' mathematical literacy abilities are still relatively low. The aims of this research are to: 1) Find out whether the increase in mathematical literacy skills of high school students who receive the Problem-Based Learning (PBL) model assisted by Geogebra is higher than that of high school students who receive the conventional learning model; 2) Knowing that the self-confidence of high school students who receive the Problem-Based Learning (PBL) model assisted by Geogebra is better than high school students who receive the conventional learning model; 3) Knowing the correlation between mathematical literacy skills and the self-confidence of high school students who receive the Problem-Based Learning (PBL) model assisted by Geogebra. The method used in this research is a quasi-experiment with a research design, namely non-equivalent control group design. The subjects of this research were Class XI in the even semester of SMAN 9 Bandung for the 2023/2024 academic year has 2 classes based on considerations. The research instruments used were a mathematical literacy ability test and a self-confidence questionnaire. The data obtained was then analyzed using IBM SPSS 23 for Windows software. The research results concluded that: 1) The improvement in mathematical literacy skills of senior high school students who received the Problem-Based Learning (PBL) model assisted by Geogebra was higher than high school students who received the conventional learning model; 2) Self-confidence of high school students who receive the Problem-Based Learning (PBL) model assisted by Geogebra is better than high school students who receive the conventional learning model; 3) There is a correlation between mathematical literacy skills and the self-confidence of high school students who receive the Problem-Based Learning (PBL) model assisted by Geogebra.*

***Keywords:*** *Mathematical Literacy, Self-Confidence, Problem-Based Learning (PBL), Geogebra.*

## **ABSTRAK**

AI SITI SUMIYATI. *Ngaronjatkeun Kamampuan Literasi Matematika jeung Percaya Diri Siswa SMA make ModéL Problem-Based Learning kalayan bantuan Geogebra*

*Kamampuan literasi matematika mangrupa salah sahiji kamampuan matematika anu penting pikeun dipiboga ku siswa. Sanajan kitu, dina kanyataanana, kamampuan literasi matematika siswa masih kawilang handap. Tujuan tina ieu panalungtikan nya éta: 1) Pikeun mikanyaho ngaronjatna kamampuan literasi matematika siswa SMA anu narima modéL Problem-Based Learning (PBL) kalayan bantuan Geogebra leuwih luhur batan siswa SMA anu narima modéL pangajaran konvensional; 2) Mikanyaho yén kapercayaan diri siswa SMA anu narima modéL Problem-Based Learning (PBL) kalayan bantuan Geogebra leuwih hadé batan siswa SMA anu narima modéL pangajaran konvensional; 3) Nganyahokeun korélasí antara kamampuan literasi matematika jeung rasa percaya diri siswa SMA anu narima modéL Problem-Based Learning (PBL) kalayan bantuan Geogebra. Méode anu digunakeun dina ieu panalungtikan nyaéta ékspérímén semu kalayan desain panalungtikan nya éta non-equivalent control group design. Subjek dina ieu panalungtikan nya éta kelas XI dina semester genap SMAN 9 Bandung taun ajaran 2023/2024 diwangun ku 2 kelas anu dipilih dumasar kana tinimbang. Instrumén panalungtikan anu digunakeun nya éta téS kamampuan literasi matematika jeung angkét kapercayaan diri. Data anu dimeunangkeun tuluy dianalisis ngagunakeun software IBM SPSS 23 for Windows. Hasil panalungtikan nyindekkeun yén: 1) Ningkatna kamampuan literasi matematika siswa SMA anu narima modéL Problem-Based Learning (PBL) kalayan bantuan Geogebra leuwih luhur batan siswa SMA anu narima modéL pangajaran konvensional; 2) Kapercayaan diri siswa SMA anu narima modéL Problem-Based Learning (PBL) kalayan bantuan Geogebra leuwih alus batan siswa SMA anu narima modéL pangajaran konvensional; 3) Aya korélasí antara kamampuan literasi matematika jeung rasa percaya diri siswa SMA anu narima modéL Problem-Based Learning (PBL) kalayan bantuan Geogebra.*

**Kata Kunci:** *Kamampuan Literasi Matématika, Percaya Diri, Problem-Based Learning (PBL), Geogebra.*