

ABSTRAK

Rasyid Ridho Respati (2026). **Penerapan Model *Problem-Based Learning* Belajar Berbantuan *AI Assistant Teacher* dan *Quizizz* Terhadap Kemampuan Pemecahan Masalah Matematis.**

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan pemecahan masalah matematis dan self-efficacy peserta didik dalam menyelesaikan permasalahan matematika. Penelitian ini bertujuan untuk mengetahui apakah pencapaian kemampuan pemecahan masalah matematis dan self-efficacy peserta didik yang memperoleh pembelajaran *Problem-Based Learning* berbantuan Quizizz dan AI Assistant Teacher lebih baik dibandingkan dengan peserta didik yang memperoleh pembelajaran konvensional, serta untuk mengetahui hubungan antara kemampuan pemecahan masalah matematis dan self-efficacy peserta didik. Metode yang digunakan adalah penelitian kuantitatif dengan desain *quasi experiment* menggunakan *Nonequivalent Control Group Design*. Sampel penelitian terdiri atas dua kelas, yaitu kelas eksperimen yang memperoleh pembelajaran *Problem-Based Learning* berbantuan Quizizz dan AI Assistant Teacher serta kelas kontrol yang memperoleh pembelajaran konvensional. Instrumen penelitian berupa tes kemampuan pemecahan masalah matematis dan angket self-efficacy. Analisis data dilakukan menggunakan uji normalitas, uji homogenitas, uji Mann–Whitney U, dan uji korelasi. Hasil penelitian menunjukkan bahwa nilai signifikansi kemampuan pemecahan masalah matematis sebesar 0,368 dan self-efficacy sebesar 0,658, yang keduanya lebih besar dari taraf signifikansi 0,05. Selain itu, hasil uji korelasi menunjukkan tidak terdapat hubungan yang signifikan antara kemampuan pemecahan masalah matematis dan self-efficacy peserta didik. Dengan demikian, penerapan model *Problem-Based Learning* berbantuan Quizizz dan AI Assistant Teacher belum menunjukkan pencapaian yang lebih baik terhadap kemampuan pemecahan masalah matematis maupun self-efficacy dibandingkan dengan pembelajaran konvensional.

Kata kunci : Kemampuan Pemecahan Masalah Matematis, *Self-efficacy*, *Problem Based Learning*, *Quizizz*, *AI Assistant Teacher*

ABSTRACT

Rasyid Ridho Respati (2026). *The Implementation of the Problem-Based Learning Model Assisted by an AI Teacher Assistant and Quizizz on Students' Mathematical Problem-Solving Ability.*

This study was motivated by the low level of students' mathematical problem-solving ability and self-efficacy in solving mathematical problems. The objectives of this study were to determine whether the achievement of mathematical problem-solving ability and self-efficacy of students who received the Problem-Based Learning model assisted by Quizizz and AI Assistant Teacher was better than that of students who received conventional learning, and to examine the relationship between mathematical problem-solving ability and students' self-efficacy. This study employed a quantitative approach with a quasi-experimental method using the Nonequivalent Control Group Design. The sample consisted of two classes: an experimental class that received Problem-Based Learning assisted by Quizizz and AI Assistant Teacher and a control class that received conventional learning. The research instruments included a mathematical problem-solving ability test and a self-efficacy questionnaire. Data were analyzed using the normality test, homogeneity test, Mann–Whitney U test, and correlation test. The results showed that the significance values for mathematical problem-solving ability and self-efficacy were 0.368 and 0.658, respectively, both of which were greater than the significance level of 0.05. In addition, the correlation test indicated no significant relationship between mathematical problem-solving ability and students' self-efficacy. Therefore, the implementation of the Problem-Based Learning model assisted by Quizizz and AI Assistant Teacher did not demonstrate better achievement in mathematical problem-solving ability or self-efficacy compared with conventional learning.

Keyword : Problem-Based Learning, Quizizz, AI Assistant Teacher, mathematical problem-solving ability, self-efficacy.

RINGKESAN

Rasyid Ridho Respati (2026). *Palaksanaan Modél Pangajaran Problem-Based Learning Dibantuan ku AI Assistant Teacher jeung Quizizz kana Kamampuh Ngaréngsékeun Masalah Matematis jeung Self-Efficacy*

Panalungtikan ieu dilaksanakeun dumasar kana masih handapna kamampuh ngaréngsékeun masalah matematis jeung self-efficacy peserta didik dina ngaréngsékeun pasualan matematika. Tujuan tina panalungtikan ieu nyaéta pikeun mikanyaho naha kahontalna kamampuh ngaréngsékeun masalah matematis jeung self-efficacy peserta didik anu diajar ngagunakeun modél Problem-Based Learning dibantuan ku Quizizz jeung AI Assistant Teacher leuwih hadé batan peserta didik anu diajar maké pangajaran konvensional, sarta pikeun mikanyaho aya henteuna hubungan antara kamampuh ngaréngsékeun masalah matematis jeung self-efficacy peserta didik. Métode anu digunakeun nyaéta panalungtikan kuantitatif kalawan desain quasi experiment maké Nonequivalent Control Group Design. Sampel panalungtikan ngawengku dua kelas, nyaéta kelas ékspérimén anu dibéré perlakuan modél Problem-Based Learning dibantuan ku Quizizz jeung AI Assistant Teacher, sarta kelas kontrol anu diajar maké pangajaran konvensional. Instrumén panalungtikan mangrupa tés kamampuh ngaréngsékeun masalah matematis jeung angkét self-efficacy. Analisis data dilaksanakeun ngagunakeun uji normalitas, uji homogénitas, uji Mann–Whitney U, jeung uji korélasi. Hasil panalungtikan némbongkeun yén ajén signifikansi kamampuh ngaréngsékeun masalah matematis nyaéta 0,368 jeung self-efficacy nyaéta 0,658, anu duanana leuwih gedé batan taraf signifikansi 0,05. Salian ti éta, hasil uji korélasi némbongkeun yén teu aya hubungan anu signifikan antara kamampuh ngaréngsékeun masalah matematis jeung self-efficacy peserta didik. Ku kituna, palaksanaan modél Problem-Based Learning dibantuan ku Quizizz jeung AI Assistant Teacher can némbongkeun kahontalna hasil anu leuwih hadé dina kamampuh ngaréngsékeun masalah matematis boh dina self-efficacy lamun dibandingkeun jeung pangajaran konvensional.

Kecap Galeuh: Problem-Based Learning, Quizizz, AI Assistant Teacher, kamampuh ngaréngsékeun masalah matematis, self-efficacy.