

ABSTRAK

Kadu, Joko Godo (2025). Pengaruh Model Pembelajaran *Problem Based Learning* Berbantuan *Quizizz* Untuk Meningkatkan Kemampuan Berpikir Kritis dan Pemecahan Masalah Siswa IV SDN 19 Dauh Puri

Penelitian ini bertujuan untuk menganalisis pengaruh model *Problem Based Learning* (PBL) yang berbantuan *Quizizz* terhadap peningkatan kemampuan berpikir kritis dan pemecahan masalah siswa sekolah dasar. Pengaruh tersebut dikaji baik secara simultan maupun parsial dengan membandingkan hasilnya terhadap pembelajaran konvensional.

Penelitian ini menggunakan pendekatan kuantitatif dengan desain *quasi-experimental* tipe *non-equivalent control group design* yang dilaksanakan di SDN 19 Dauh Puri. Populasi penelitian berjumlah 120 siswa, dengan sampel sebanyak 62 siswa kelas IV yang terdiri dari dua kelas setara, yaitu kelas eksperimen (diajar menggunakan PBL berbantuan *Quizizz*) dan kelas kontrol (diajar menggunakan pembelajaran konvensional). Data dikumpulkan melalui tes kemampuan berpikir kritis dan pemecahan masalah yang diberikan sebelum (*pretest*) dan sesudah (*posttest*) pembelajaran, serta didukung oleh lembar observasi dan angket persepsi siswa. Instrumen penelitian telah divalidasi oleh ahli dan diuji reliabilitasnya untuk memastikan keabsahan data. Teknik analisis data meliputi uji statistik deskriptif, uji prasyarat (normalitas, homogenitas, dan korelasi antarvariabel), serta uji hipotesis menggunakan ANOVA dan MANOVA pada taraf signifikansi 5%. Apabila hasil ANOVA menunjukkan perbedaan yang signifikan, dilakukan uji lanjut menggunakan uji Tukey HSD dengan membandingkan nilai Q hitung dan Q tabel untuk menentukan kelompok yang berbeda nyata.

Hasil penelitian menunjukkan bahwa terdapat pengaruh signifikan secara simultan maupun parsial penerapan model PBL berbantuan *Quizizz* terhadap kemampuan berpikir kritis dan pemecahan masalah siswa. Uji lanjutan Tukey HSD mengungkapkan perbedaan signifikan antara kelompok eksperimen dan kontrol dengan selisih rerata sebesar 12,532 dan taraf signifikansi 0,001 ($< 0,05$). Secara spesifik, hasil uji ANOVA menunjukkan nilai signifikan untuk kemampuan berpikir kritis ($F = 21,404$; $p < 0,05$) dan kemampuan pemecahan masalah ($F = 44,264$; $p < 0,05$). Disimpulkan model *Problem Based Learning* berbantuan *Quizizz* terbukti efektif dalam meningkatkan kemampuan berpikir kritis dan pemecahan masalah siswa sekolah dasar.

Kata Kunci: *Problem Based Learning*, *Quizizz*, berpikir kritis, pemecahan masalah, pembelajaran IPA, sekolah dasar.

ABSTRACT

Kadu, Joko Godo (2025). The Influence of the Quiziz-Assisted Problem Based Learning Model to Improve Critical Thinking and Problem-Solving Skills of Students IV SDN 19 Dauh Puri

This study aims to analyze the effect of the Problem-Based Learning (PBL) model assisted by Quizizz on improving the critical thinking and problem-solving skills of elementary school students. The influence is examined both simultaneously and partially by comparing the results with conventional learning.

This study employed a quantitative approach with a quasi-experimental design, specifically a non-equivalent control group design, conducted at SDN 19 Dauh Puri. The population consisted of 120 students, with a sample of 62 Grade IV students divided into two equivalent classes: an experimental class (taught using PBL assisted by Quizizz) and a control class (taught using conventional learning). Data were collected through tests of critical thinking and problem-solving skills administered before (pretest) and after (posttest) the learning process, supported by observation sheets and student perception questionnaires. The research instruments were validated by experts and tested for reliability to ensure data validity. Data analysis techniques included descriptive statistics, prerequisite tests (normality, homogeneity, and inter-variable correlation), and hypothesis testing using ANOVA and MANOVA at a 5% significance level. If the ANOVA results indicated a significant difference, a post-hoc test using the Tukey HSD test was performed by comparing the calculated Q value with the Q table value to determine which groups differed significantly.

The results indicate that there is a significant simultaneous and partial effect of applying the PBL model assisted by Quizizz on students' critical thinking and problem-solving skills. The Tukey HSD post-hoc test revealed a significant difference between the experimental and control groups, with a mean difference of 12.532 and a significance value of 0.001 (< 0.05). Specifically, the ANOVA test results showed significant values for critical thinking skills ($F = 21.404$; $p < 0.05$) and problem-solving skills ($F = 44.264$; $p < 0.05$). In conclusion, the Problem-Based Learning model assisted by Quizizz is proven effective in improving the critical thinking and problem-solving skills of elementary school students.

Keywords

Problem Based Learning, Quizizz, critical thinking, problem solving, science learning, elementary school.