

**Pengaruh Model *Problem Based Learning* Berbantuan Media *Qreatif*
Terhadap Peningkatan Kemampuan Pemahaman Konsep Peserta Didik
Kelas IV Sekolah Dasar**

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ABSTRAK

Kemampuan pemahaman konsep peserta didik Indonesia secara umum masih rendah, PISA 2022 menunjukkan hanya 18% peserta didik Indonesia mencapai kemahiran matematika minimal (Level 2). Kondisi ini sejalan dengan pemetaan kompetensi matematika oleh Disdik Jabar bersama ITB terhadap 6.840 peserta didik SD dan SMP di Jawa Barat, yang membuktikan pemahaman konsep sebagai pilar fundamental keberhasilan pembelajaran matematika. Persoalan tersebut tampak pada peserta didik kelas IV SDN 031 Pelesiran Kota Bandung, di mana 50% peserta didik belum mencapai Kriteria Ketuntasan Minimal (KKM) materi bangun datar, akibat dominasi pendekatan konvensional dan minimnya integrasi teknologi edukatif interaktif. Kondisi ini melandasi perlunya penerapan model *Problem Based Learning* (PBL) berbantuan media *Qreatif* untuk meningkatkan pemahaman konsep. Penelitian ini bertujuan mengetahui pengaruh model tersebut terhadap peningkatan pemahaman konsep peserta didik, menggunakan pendekatan kuantitatif metode *Quasi Experiment* desain *Nonequivalent Control Group Design*. Subjek penelitian berjumlah 50 peserta didik di SDN 031 Pelesiran Kota Bandung, terdiri atas kelas eksperimen (IV B) dan kelas kontrol (IV A) masing-masing 25 peserta didik. Data dikumpulkan melalui tes uraian *pretest* dan *posttest*, didukung lembar observasi aktivitas pembelajaran. Hasil uji *N-Gain* menunjukkan peningkatan pemahaman konsep kelas eksperimen 0,5998 dan kelas kontrol 0,4927, keduanya berkategori sedang. Uji normalitas *Shapiro-Wilk* menunjukkan kedua kelompok berdistribusi normal, namun data tidak homogen sehingga hipotesis diuji dengan *Mann-Whitney U* dan diperoleh $0,008 < 0,05$, menunjukkan perbedaan peningkatan pemahaman konsep signifikan antara kedua kelas, dengan *effect size Cohen's d* sebesar 0,898 kategori besar. Model *Problem Based Learning* berbantuan media *Qreatif* terbukti efektif memperkuat pemahaman konsep peserta didik.

Kata Kunci: *Problem Based Learning*, Media *Qreatif*, Pemahaman Konsep

The Effect of the Problem Based Learning Model Assisted by Qreatif Media on Improving the Concept Understanding Ability of Fourth-Grade Primary School Learners

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ABSTRACT

Indonesian students' conceptual understanding generally remains low; PISA 2022 revealed that only 18% of Indonesian students reached the minimum mathematical proficiency level (Level 2). This condition is consistent with a mathematics competency mapping conducted by the West Java Education Office (Disdik Jabar) in collaboration with the Bandung Institute of Technology (ITB) involving 6,840 elementary and junior high school students in West Java, which demonstrated that conceptual understanding is a fundamental pillar of successful mathematics learning. This issue was also evident among fourth-grade students at SDN 031 Pelesiran, Bandung City, where 50% of students had not reached the Minimum Mastery Criteria (KKM) on the topic of plane geometry, largely due to the dominance of conventional teaching approaches and limited integration of interactive educational technology. These conditions underscore the need to implement the Problem Based Learning (PBL) model assisted by Qreatif media to improve conceptual understanding. This study aims to examine the effect of implementing this model on the improvement of students' conceptual understanding, using a quantitative approach with the Quasi-Experimental method and a Nonequivalent Control Group Design. The research subjects consisted of 50 fourth-grade students at SDN 031 Pelesiran, Bandung City, divided into an experimental class (IV B) and a control class (IV A), with 25 students each. Data were collected through essay-type pretests and posttests, supported by learning activity observation sheets. The N-Gain test results showed an increase in conceptual understanding of 0.5998 in the experimental class and 0.4927 in the control class, both classified as moderate. The Shapiro-Wilk normality test indicated that both groups were normally distributed; however, the data were not homogeneous, so hypothesis testing was conducted using the Mann-Whitney U test, yielding a value of $0.008 < 0.05$, indicating a significant difference in the improvement of conceptual understanding between the two classes, with a Cohen's d effect size of 0.898 (large category). The Problem Based Learning model assisted by Qreatif media proved effective in strengthening students' conceptual understanding.

Keywords: *Problem Based Learning, Qreatif Media, Conceptual Understanding*

***Pengaruh Model Problem Based Learning Dibantuan Média Qreatif Kana
Ngaronjatna Kamampuh Paham Konsép Peserta Didik Kelas IV Sakola Dasar***

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RINGKESAN

Kamampuh pamahaman konsép peserta didik Indonesia sacara umum tacan acan sae; PISA 2022 nuduhkeun ngan 18% peserta didik Indonesia anu tiasa ngahontal kamahéran matematika minimal (Level 2). Kaayaan ieu saluyu sareng pamétaan kompetensi matematika ku Disdik Jabar sareng ITB ka 6.840 peserta didik SD sareng SMP di Jawa Barat, anu ngabuktikeun yén pamahaman konsép mangrupikeun pilar fundamental pikeun kasuksésan diajar matematika. Perkawis kasebat kasawang dina peserta didik kelas IV SDN 031 Pelesiran Kota Bandung, dimana 50% peserta didik tacan ngahontal Kriteria Ketuntasan Minimal (KKM) dina matéri wangun datar, ku sabab dominasi pendekatan konvensional sareng kirangna integrasi téknologi édukatif interaktif. Kaayaan ieu janten dasar kabutuhan pikeun ngalarapkeun modél Problem Based Learning (PBL) dibantosan média Qreatif kanggo ningkatkeun pamahaman konsép. Panalungtikan ieu gaduh tujuan pikeun uninga pangaruh modél kasebat kana ningkatna pamahaman konsép peserta didik, ngagunakeun pendekatan kuantitatif metode Quasi Experiment desain Nonequivalent Control Group Design. Subjek panalungtikan aya 50 peserta didik di SDN 031 Pelesiran Kota Bandung, kabagi janten kelas ékspérimén (IV B) sareng kelas kontrol (IV A) masing-masing 25 peserta didik. Data dikumpulkeun ngalangkungan tés uraian pretest sareng posttest, dibantosan ku lembar observasi aktivitas diajar. Hasil uji N-Gain nuduhkeun ningkatna pamahaman konsép kelas ékspérimén 0,5998 sareng kelas kontrol 0,4927, sadayana kaasup kategori sedeng. Uji normalitas Shapiro-Wilk nuduhkeun kadua kelompok distribusina normal, ngan data teu homogen, ku kituna uji hipotesis ngagunakeun Mann-Whitney U sareng kahontal ajén $0,008 < 0,05$, anu nuduhkeun aya bédana ningkatna pamahaman konsép anu signifikan diantawis kadua kelas, kalayan effect size Cohen's d 0,898 kategori ageung. Modél Problem Based Learning dibantosan média Qreatif kabuktian épéktif dina nguatkeun pamahaman konsép peserta didik.

Kecap Pamageuh: Problem Based Learning, Media Qreatif, Pamahaman Konsep