

**PENGARUH MODEL *PROBLEM BASED LEARNING* BERBANTUAN
MEDIA DIGITAL *KAHOOT* TERHADAP PEMAHAMAN MATEMATIS
PESERTA DIDIK SEKOLAH DASAR**

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ABSTRAK

Penelitian ini dilatar belakangi oleh rendahnya kemampuan pemahaman konsep matematis hal itu disebabkan karena kurangnya pemanfaatan media digital dan penerapan model yang sesuai dengan karakteristik peserta didik, dimana banyak peserta didik merasa pembelajaran matematika sulit dan kurang menarik. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh penerapan model *Problem Based Learning* (PBL) yang dibantu media digital *Kahoot* dengan membandingkan dua kelas, yaitu kelas eksperimen dan kelas kontrol. Subjek penelitian berupa Peserta Didik kelas IV SDN Pengasinan VIII Kota Bekasi, dengan fokus pada kelas IV A dan IV B yang dipilih menggunakan teknik sampling jenuh berdasarkan rekomendasi guru dan kesetaraan kemampuan pemahaman konsep matematis peserta didik Sekolah Dasar. Penelitian ini menggunakan pendekatan kuantitatif dengan metode quasi eksperimen dan desain *Nonequivalent Control Group Design*. Data dikumpulkan melalui *pretest*, *posttest*, dan lembar observasi. Hasil uji t dua sampel bebas menunjukkan perbedaan signifikan antara kelas eksperimen dan kelas kontrol dengan nilai signifikansi 2-tailed sebesar 0,042 ($< 0,05$), sehingga hipotesis nol ditolak dan hipotesis alternatif diterima. Ini mengindikasikan bahwa penggunaan model *Problem Based Learning* dengan media digital *Kahoot* memberikan perbedaan yang sangat signifikan yang berbeda dibandingkan pembelajaran *Direct Intruction* terhadap pemahaman matematis peserta didik Sekolah Dasar. Selain itu, nilai *effect size* juga menunjukkan pengaruh signifikan dengan nilai 1,32 dengan kategori *effect besar*. Dengan demikian, dapat disimpulkan bahwa penerapan model *Problem Based Learning* berbantuan media digital *Kahoot* berpengaruh positif dan signifikan terhadap pengaruh pemahaman matematis peserta didik Sekolah Dasar dibandingkan dengan metode pembelajaran *Direct Intruction*.

Kata Kunci: Pemahaman matematis, *model Problem Based Learning*, media digital *Kahoot*, peserta didik sekolah dasar

**THE EFFECT OF PROBLEM-BASED LEARNING APPROACH
SUPPORTED BY KAHOOT DIGITAL MEDIA ON MATHEMATICAL
UNDERSTANDING OF ELEMENTARY SCHOOL STUDENTS**

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ABSTRACT

This study was motivated by the low ability to understand mathematical concepts, which was caused by the lack of utilization of digital media and the application of models that suit the characteristics of the students. Many students perceive learning mathematics as difficult and less interesting. The purpose of this study was to determine the effect of applying the Problem Based Learning (PBL) model assisted by the digital media Kahoot by comparing two classes, namely the experimental class and the control class. The research subjects were fourth-grade students of SDN Pengasinan VIII Bekasi City, focusing on classes IV A and IV B, which were selected using a saturated sampling technique based on teacher recommendations and equality of mathematical concept understanding ability among elementary school students. This research used a quantitative approach with a quasi-experimental method and a Nonequivalent Control Group Design. Data were collected through pretest, posttest, and observation sheets. The results of the independent two-sample t-test showed a significant difference between the experimental class and the control class, with a 2-tailed significance value of 0.042 (< 0.05), so the null hypothesis was rejected, and the alternative hypothesis was accepted. This indicates that the use of the Problem Based Learning model with Kahoot digital media gives a very significant difference compared to Direct Instruction learning on the mathematical understanding of elementary school students. Furthermore, the effect size also showed a significant impact with a value of 1.32 categorized as a large effect. Thus, it can be concluded that the application of the Problem Based Learning model assisted by the Kahoot digital media has a positive and significant effect on the mathematical understanding of elementary school students compared to the Direct Instruction learning method.

Keywords: Kahoot digital media, problem-based learning methodology, and math comprehension. Elementary school students

**PANGARUH MODEL PEMBELAJARAN BERBASIS MASALAH
DIBANTUAN KU MEDIA DIGITAL KAHOOT PIKEUN
KABEHARENGAN PAMAHAMAN MATEMATIS MURID SAKOLA
DASAR**

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ABSTRAK

Panilitian ieu dilatar belakangi ku handapna kamampuh murid dina ngartos konsep matématika, nu disababkeun ku kurangna pamakean média digital jeung panerapkeun modél nu saluyu jeung ciri khas peserta didik. Loba murid ngarasa yén diajar matématika téh hésé jeung kurang pikaresepeun. Tujuan panilitian ieu nyaéta pikeun nalungtik pangaruh panerapan modél Problem Based Learning (PBL) anu dibantu ku média digital Kahoot kalayan ngabandingkeun dua kelas, nya éta kelas ékspérimén jeung kelas kontrol. Subjek panilitian nyaéta murid kelas IV SDN Pengasinan VIII Kota Bekasi, kalayan fokus kana kelas IV A jeung IV B anu dipilih ngagunakeun téknik sampling jenuh dumasar kana rekoméndasi guru jeung kasajajaran kamampuh ngartos konsep matématika murid sakola dasar. Panilitian ieu ngagunakeun pendekatan kuantitatif kalayan métode quasi ékspérimén jeung rancangan Nonequivalent Control Group Design. Data dikumpulkeun ngaliwatan pretest, posttest, jeung lembar observasi. Hasil uji t dua sampel bébas némbongkeun bédana signifikan antara kelas ékspérimén jeung kelas kontrol kalayan nilai signifikansi 2-tailed 0,042 ($< 0,05$), sahingga hipotesis nol ditolak sarta hipotesis alternatif ditarima. Ieu nandakeun yén pamakéan modél Problem Based Learning kalayan média digital Kahoot ngabogaan bédana anu pisan signifikan dibandingkeun jeung diajar Direct Instruction dina pamahaman matématika murid sakola dasar. Salian ti éta, nilai effect size ogé némbongkeun pangaruh signifikan kalayan nilai 1,32 sarta dikategorikeun effect ageung. Ku kituna, bisa disimpulkeun yén panerapan modél Problem Based Learning dibantu média digital Kahoot boga pangaruh positif jeung signifikan kana pamahaman matématika murid sakola dasar dibandingkeun jeung métode diajar Direct Instruction.

Kecap Pamageuh: pamahaman matématika, modél Problem Based Learning, média digital Kahoot, peserta didik sekolah dasar.