

# **PENGARUH MODEL *GAME-BASED LEARNING* BERBANTUAN MEDIA *GAME DIGITAL GEOMETRY DASH* TERHADAP KEMAMPUAN NUMERASI SISWA KELAS III SD GUGUS KOMPYANG SUJANA**

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## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Game-Based Learning* berbantuan media game digital *Geometry Dash* terhadap kemampuan numerasi siswa kelas III di Gugus Kompyang Sujana Tahun Ajaran 2024/2025. Metode yang digunakan adalah *quasi experiment* dengan desain *Nonequivalent Control Group Design*, yang melibatkan dua kelompok: kelompok eksperimen dan kelompok kontrol. Populasi penelitian ini adalah seluruh siswa kelas III di Gugus Kompyang Sujana yang berjumlah 413 siswa. Sampel ditentukan dengan teknik *cluster random sampling* melalui dua tahap pengundian. Tahap pertama menghasilkan dua kelas terpilih: kelas IIIB SD Negeri 8 Peguyangan dan kelas III SD Negeri 4 Peguyangan. Pada tahap kedua, kelas IIIB SD Negeri 8 Peguyangan ditetapkan sebagai kelompok eksperimen yang dibelajarkan menggunakan model *Game-Based Learning* berbantuan *Geometry Dash*, sedangkan kelas III SD Negeri 4 Peguyangan sebagai kelompok kontrol yang dibelajarkan dengan metode konvensional.

Kedua kelompok mendapatkan perlakuan selama enam kali pertemuan. Data kemampuan numerasi siswa diperoleh melalui instrumen tes objektif berbentuk pilihan ganda dan dianalisis menggunakan uji-t setelah memenuhi prasyarat uji normalitas dan homogenitas. Hasil uji-t menunjukkan bahwa nilai t-hitung sebesar 5,402 dan t-tabel sebesar 1,996 pada taraf signifikansi 5% dengan derajat kebebasan ( $dk$ ) = 66. Karena t-hitung lebih besar dari t-tabel, maka  $H_0$  ditolak dan  $H_a$  diterima. Artinya, terdapat perbedaan yang signifikan dalam kemampuan numerasi antara kelompok yang dibelajarkan dengan model *Game-Based Learning* berbantuan *Geometry Dash* dan kelompok yang tidak. Dengan demikian, model pembelajaran ini terbukti berpengaruh positif dan signifikan terhadap kemampuan numerasi siswa kelas III di Gugus Kompyang Sujana Denpasar Utara Tahun Ajaran 2024/2025.

Kata Kunci: *Game-based learning*, *Geometry Dash*, Kemampuan Numerasi Siswa.

**THE EFFECT OF GAME-BASED LEARNING MODEL USED BY  
GEOMETRY DASH DIGITAL GAME MEDIA ON THE NUMERATION  
ABILITY OF GRADE III STUDENTS OF ELEMENTARY SCHOOL GUGUS  
KOMPYANG SUJANA**

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**ABSTRACT**

**This study aims** to determine the effect of the Game-Based Learning learning model assisted by the Geometry Dash digital game media on the numeracy ability of grade III students in Gugus Kompyang Sujana in the 2024/2025 Academic Year. The method used is a quasi experiment with a Nonequivalent Control Group Design, involving two groups: the experimental group and the control group. The population of this study was all grade III students in Gugus Kompyang Sujana totaling 413 students. The sample was determined using the cluster random sampling technique through two stages of drawing. The first stage resulted in two selected classes: class IIIB of SD Negeri 8 Peguyangan and class III of SD Negeri 4 Peguyangan. In the second stage, class IIIB of SD Negeri 8 Peguyangan was determined as the experimental group taught using the Game-Based Learning model assisted by Geometry Dash, while class III of SD Negeri 4 Peguyangan was the control group taught using conventional methods. Both groups received treatment for six meetings. Data on students' numeracy abilities were obtained through objective test instruments in the form of multiple choices and analyzed using the t-test after meeting the prerequisites for normality and homogeneity tests. The results of the t-test showed that the t-count value was 5.402 and the t-table was 1.996 at a significance level of 5% with degrees of freedom ( $dk$ ) = 66. Because the t-count is greater than the t-table,  $H_0$  is rejected and  $H_a$  is accepted. This means that there is a significant difference in numeracy skills between the group that was taught with the Game-Based Learning model assisted by Geometry Dash and the group that was not. Thus, this learning model has been proven to have a positive and significant effect on the numeracy skills of grade III students in the Kompyang Sujana Cluster, North Denpasar, in the 2024/2025 Academic Year.

**Keywords:** Game-based learning, Geometry Dash, Students' Numeracy Skills.