

**THE EFFECT OF *THE PROBLEM BASED LEARNING* MODEL USING
OPEN-ENDED QUESTIONS ON CRITICAL THINKING SKILLS IN
MATHEMATICS LEARNING OF GRADE III STUDENTS
IN THE LETDA MADE PUTRA GROUP FOR THE 2023/2024 SCHOOL
YEAR**

By

Anak Agung Sagung Sinta Dwijayanti, NIM 2011031022

Department of Elementary Education

ABSTRACT

This study aims to determine the effect of *the Problem Based Learning* model using *Open-Ended Questions* on critical thinking skills in mathematics learning of grade III students in the Letda Made Putra Ajaran Cluster 2023/2024. This study uses a pseudo-experimental research design with *a non-equivalent control group research design*. The population of this study is all grade III in the Letda Made Putra Cluster for the 2023/2024 Academic Year which consists of 11 classes with 324 students. The sample determination technique used was *cluster random sampling* which obtained class III B SD Negeri 18 Dangin Puri as many as 31 students as an experimental group and class III B SD Negeri 2 Dangin Puri as many as 29 students as the control group. Data on critical thinking skills were obtained by providing an instrument in the form of an essay test. The critical thinking ability data obtained from *the post-test* results were analyzed by descriptive statistical techniques and inferential statistical analysis with the t-test *polled variance*. The results of the hypothesis test show that $t_{count} = 5.24 > t_{table} = 2.002$ at the significance level of 5% with $dk = 58$. The results of the analysis showed that there was a significant difference in the ability to think critically in mathematics learning of students who were taught the *Problem Based Learning* model using *Open-Ended Questions* and students who were not taught the *Problem Based Learning* model using *Open-Ended Questions*. Thus, it can be concluded that the *Problem Based Learning* learning model using *Open-Ended Questions* has an effect on the ability to think critically in mathematics learning of grade III students in the Letda Made Putra Cluster for the 2023/2024 school year.

Keywords: *Problem Based Learning*, *Open-ended Question*, Critical Thinking Ability, Mathematics Learning.

**PENGARUH MODEL *PROBLEM BASED LEARNING* MENGGUNAKAN
OPEN-ENDED QUESTION TERHADAP KEMAMPUAN BERPIKIR
KRITIS PADA PEMBELAJARAN MATEMATIKA SISWA KELAS III
DI GUGUS LETDA MADE PUTRA TAHUN AJARAN 2023/2024**

Oleh

Anak Agung Sagung Sinta Dwijayanti, NIM 2011031022

Jurusan Pendidikan Dasar

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh model *Problem Based Learning* menggunakan *Open-Ended Question* terhadap kemampuan berpikir kritis pada pembelajaran matematika siswa kelas III di Gugus Letda Made Putra Ajaran 2023/2024. Penelitian ini menggunakan desain penelitian eksperimen semu dengan rancangan desain penelitian *non-equivalent control group desain*. Populasi penelitian ini adalah seluruh kelas III di Gugus Letda Made Putra Tahun Ajaran 2023/2024 yang terdiri dari 11 kelas dengan siswa sebanyak 324 orang. Teknik penentuan sampel yang digunakan adalah *cluster random sampling* yang memperoleh kelas III B SD Negeri 18 Dangin Puri sebanyak 31 siswa sebagai kelompok eksperimen dan kelas III B SD Negeri 2 Dangin Puri sebanyak 29 siswa sebagai kelompok kontrol. Data kemampuan berpikir kritis diperoleh dengan memberikan instrumen berupa tes esai. Data kemampuan berpikir kritis yang diperoleh dari hasil *post-test* dianalisis dengan teknik statistika deskriptif dan analisis statistik inferensial dengan Uji-t *polled varians*. Hasil uji hipotesis menunjukkan bahwa $t_{hitung} = 5,24 > t_{tabel} = 2,002$ pada taraf signifikansi 5% dengan $dk = 58$. Hasil analisis menunjukkan bahwa terdapat perbedaan yang signifikan kemampuan berpikir kritis dalam pembelajaran matematika siswa yang dibelajarkan model *Problem Based Learning* menggunakan *Open-Ended Question* dengan siswa yang tidak dibelajarkan model *Problem Based Learning* menggunakan *Open-Ended Question*. Dengan demikian dapat disimpulkan bahwa model pembelajaran *Problem Based Learning* menggunakan *Open-Ended Question* berpengaruh terhadap kemampuan berpikir kritis pada pembelajaran matematika siswa kelas III di Gugus Letda Made Putra tahun ajaran 2023/2024.

Kata Kunci: *Problem Based Learning*, *Open-ended Question*, Kemampuan Berpikir Kritis, Pembelajaran Matematika.