

ABSTRAK

PENGARUH MODEL *PROBLEM BASED LEARNING* TERHADAP KEMAMPUAN KOMUNIKASI MATEMATIS PESERTA DIDIK KELAS V SD

Oleh

ISMUL NURUL KHASANAH

Permasalahan yang terdapat dalam penelitian ini adalah rendahnya kemampuan komunikasi matematis dalam pembelajaran matematika peserta didik kelas V SD Negeri 2 Hargomulyo. Penelitian ini bertujuan untuk mengetahui (1) pengaruh model *problem based learning* terhadap kemampuan komunikasi matematis peserta didik kelas V SD Negeri 2 Hargomulyo dan (2) perbedaan kemampuan komunikasi matematis peserta didik kelas eksperimen dan kelas kontrol. Metode yang digunakan pada penelitian ini adalah *quasi eksperiment* dengan desain penelitian *non-equivalent control group design*. Penelitian ini menggunakan teknik pengambilan sampel yaitu teknik *purposive sampling*, populasi berjumlah 209 peserta didik dengan sampel penelitian berjumlah 38 orang peserta didik. Instrumen pengumpulan data berupa teknik tes dan non tes. Hasil penelitian pada uji hipotesis pertama menggunakan regresi linear sederhana dan memperoleh $F_{hitung} = 60,495 \geq$ nilai $F_{tabel} = 4,413$ dengan $\alpha = 0,05$ sehingga dapat disimpulkan bahwa terdapat pengaruh model *problem based learning* terhadap kemampuan komunikasi matematis peserta didik kelas V SD. Hasil penelitian pada uji hipotesis kedua menggunakan uji-t dengan hasil $t_{hitung} = 2,187 \geq t_{tabel} = 2,028$ dengan taraf signifikan 0,05 sehingga terdapat perbedaan kemampuan komunikasi matematis peserta didik kelas eksperimen dan kelas kontrol.

Kata kunci: komunikasi matematis, matematika SD, model *problem based learning*, *quasi eksperiment*

ABSTRACT

THE EFFECT OF PROBLEM BASED LEARNING MODEL ON THE MATHEMATICAL COMMUNICATION SKILLS OF FIFTH GRADE ELEMENTARY SCHOOL STUDENTS

By

ISMUL NURUL KHASANAH

The problem in this study was the low mathematical communication skills of fifth-grade students at SD Negeri 2 Hargomulyo. The research aimed to determine (1) the effect of the problem based learning model on the mathematical communication skills of fifth-grade students at SD Negeri 2 Hargomulyo and (2) the difference in the mathematical communication skills of students in the experimental and control classes. The method used in this study was a quasi-experiment with a non-equivalent control group design. This study used a purposive sampling technique; the population was 209 students, and the research sample consisted of 38 students. Data collection instruments were tests and non-test. The results of the first hypothesis test used simple linear regression and obtained F_{count} of 60.495 > F_{table} value of 4.413 with $\alpha = 0.05$. It was concluded that the problem based learning model had an effect on the mathematical communication skills of fifth-grade students. The results of the second hypothesis test used a t-test with a t_{count} of 2.187 > t_{table} of 2.028 with a significance level of 0.05. It was concluded that there was a difference in the mathematical communication skills of students in the experimental and control classes.

Keywords: elementary school mathematics, mathematical communication,
problem based learning model, quasi experiment