PERBANDINGAN PENINGKATAN KEMAMPUAN PEMAHAMAN DAN KOMUNIKASI MATEMATIS ANTARA SISWA YANG MENGGUNAKAN MODEL PEMBELAJARAN *THINK TALK WRITE* DAN SISWA YANG MENGGUNAKAN MODEL *DIRECT INSTRUCTION*

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh dan perbandingan penggunaan model pembelajaran *think talk write* dan model *direct instruction* terhadap pencapaian kemampuan pemahaman dan komunikasi matematis siswa pada materi keliling dan luas persegi dan persegi panjang. Untuk mengetahui pencapaian kemampuan pemahaman dan komunikasi matematis siswa pada kelas eksperimen I yang menggunakan model pembelajaran *think talk write* dan kelas eksperimen II yang menggunakan model *direct instruction* maka dilakukan penelitian kuasi eksperimen dengan menggunakan desain penelitian *Nonequivalent Control Group Design*. Subjek penelitian adalah siswa kelas III (tiga) SD di Kabupaten Sumedang yang berjumlah 52 orang siswa yang terbagi dalam 2 kelas masing-masing berjumlah 26 orang siswa. Perlakuan (*treatment*) dilakukan sebanyak enam pertemuan pada setiap kelas eksperimen I dan kelas eksperimen II. Instrumen yang digunakan dalam penelitian ini berupa tes berbentuk uraian baik untuk kemampuan pemahaman maupun kemampuan komunikasi matematis siswa. Berdasarkan hasil perhitungan persentase skor rata-rata *pretest* dan *posttest* kemampuan pemahaman matematis pada kelas *think talk write* didapat peningkatan sebesar 18,34% dan kelas *direct instruction* sebesar 21,3%. Sedangkan untuk kemampuan komunikasi matematis pada kelas *think talk write* didapat peningkatan sebesar 19,23% dan kelas *direct instruction* sebesar 17,58%. Hasil perhitungan statistik parametrik dengan uji perbedaan dua rata-rata independen (uji-t) menunjukkan bahwa tidak terdapat perbedaan yang signifikan mengenai peningkatan kemampuan pemahaman dan kemampuan komunikasi matematis siswa antara kelas eksperimen I yang menggunakan model pembelajaran *think talk write* dan kelas eksperimen II yang menggunakan model *direct instruction*. Berdasarkan hasil penelitian dapat disimpulkan bahwa kedua kelas eksperimen memiliki efektivitas yang sama baik pada kemampuan pemahaman matematis maupun kemampuan komunikasi matematis siswa.

Kata kunci: pemahaman matematis, komunikasi matematis, model pembelajaran *think talk write*, dan model *direct instruction*.

COMPARISON OF THE IMPROVEMENT OF MATHEMATICAL COMPREHENSION AND COMMUNICATION ABILITY BETWEEN STUDENT WHO USE THINK TALK WRITE LEARNING MODEL AND STUDENT WHO USE DIRECT INSTRUCTION MODEL

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ABSTRACT

The purpose of this study was to determine the effect and comparison of think talk write learning model and direct instruction model to the achievement of student's mathematical comprehension and communication ability in perimeter and area of the square and rectangle learning materials. To determine the ability of mathematical comprehension and communication achievement of students who applied think talk write learning model in experimental class I and those who used direct instruction model in experimental class II then the quasi-experimental research conducted by the research design Nonequivalent Control Group Design. The research subject were 52 third grade students in Sumedang, divided into two classes, each of which consists of 26 students. The treatment was done during six meetings in each experimental class I and experimental class II. The instruments used to collect the research data were mathematical comprehension test and mathematical communication test, both in the form of test description. Based on the result of the calculation of the average percentage score pretest and posttest, the ability of mathematical comprehension in think talk write classroom increased by 18.34% while in direct instruction classroom of 21.3%. As for mathematical communication ability in think talk write classroom obtained an increase of 19.23% and in direct instruction classroom by 17.58%. The results of statistical parametric differences test two averages independent sample (t-test) shows that there are no significant differences regarding an increase in the ability of comprehension and communication skills mathematical students between experimental class I, using model think talk write and experimental class II uses model of direct instruction. Based on the result of this study concluded that both the experimental class have the same effectiveness on the ability of mathematical comprehension and communication skills of students.

Keywords: mathematical comprehension, mathematical communication, think talk write learning model, and the model of direct instruction.