

ABSTRAK

Rahmawati, Christina Esti. 2014. *Keefektifan Pembelajaran Matematika Materi Penjumlahan Pecahan Dengan Pendekatan Pendidikan Matematika Realistik Indonesia (PMRI) di SD Negeri Tamanan, Banguntapan, Bantul*. Yogyakarta: Universitas Sanata Dharma.

Kata Kunci: pendekatan PMRI, keefektifan pembelajaran matematika, keaktifan siswa, hasil belajar siswa.

Penelitian ini bertujuan untuk mengetahui keefektifan pembelajaran matematika dalam materi penjumlahan pecahan dengan pendekatan PMRI yang ditinjau dari hasil belajar dan keaktifan siswa IV SD Negeri Tamanan, Banguntapan, Bantul. Jenis penelitian yang digunakan adalah penelitian *quasi-experimental design* tipe *non-equivalent control group design*. Populasi dalam penelitian ini adalah semua siswa kelas IV SD Negeri Tamanan, Banguntapan, Bantul, dan sampel penelitian ini yaitu siswa kelas IVa sebagai kelompok kontrol dan siswa kelas IVb sebagai kelompok eksperimen. Pengumpulan data dilakukan dengan memberi soal *pretest* dan *posttest* yang terdiri dari lima soal uraian. Pemberian lembar kuesioner untuk mengetahui keaktifan siswa, mengisi lembar pengamatan untuk keterlaksanaan PMRI dan keaktifan siswa. Teknik analisis data dilakukan dengan menggunakan program komputer *IBM SPSS Statistics 20 for windows*.

Hasil penelitian ini menunjukkan bahwa pembelajaran matematika dengan pendekatan PMRI efektif jika ditinjau dari hasil belajar siswa dan keaktifan siswa. Hal ini dibuktikan dengan analisis hasil belajar siswa yang menunjukkan harga $t\text{-test} > t\text{-tabel}$, yaitu $3.738 > 1.674$, yang berarti bahwa rata-rata skor *posttest* kelompok eksperimen lebih besar dari rata-rata skor *posttest* kelompok kontrol. Selain itu, analisis belajar berdasarkan KKM menunjukkan bahwa 50% siswa kelompok kontrol lulus KKM dan 92.85% siswa kelompok eksperimen lulus KKM, hal ini berarti siswa kelompok eksperimen lebih banyak lulus KKM yang menunjukkan pembelajaran matematika dengan pendekatan PMRI efektif ditinjau dari hasil belajar. Adapun analisis keaktifan siswa menunjukkan bahwa siswa kelompok kontrol sebesar 3.58% cukup aktif, 64.28% aktif, dan 32.14% sangat aktif, sedangkan siswa kelompok eksperimen 42.86% aktif dan 57.14% sangat aktif. Analisis tersebut menunjukkan bahwa pembelajaran matematika dengan pendekatan PMRI efektif ditinjau dari keaktifan siswa.

ABSTRACT

Rahmawati, Christina Esti. 2014. The Effectiveness of Mathematics Learning in Fraction Addition Materials with the Indonesian Realistic Mathematics Education (PMRI) Approach in Tamanan Public Elementary School in Banguntapan, Bantul. Yogyakarta: Sanata Dharma University.

Keywords: *PMRI approach, the effectiveness of mathematics learning, students' active involvements, students' learning results*

This research aimed at identifying the effectiveness of mathematics learning in fraction addition materials with the PMRI approach which was reviewed from the learning results and active involvements of the Tamanan Public Elementary School students of grade IV in Banguntapan, Bantul. The type of the research employed was quasi-experimental design of non-equivalent control group design. The population of this research was all Tamanan Public Elementary School students of grade IV in Banguntapan, Bantul and the samples of this research were the grade IV students of class A as the control group and the grade IV students of class B as the experimental group. The data collection was done by giving the students the pretest and the posttest which each consisted of five problems. The questionnaires were given to the students for the purpose of identifying the students' active involvements and the researcher filled in the observation sheets as the report of the conduct of the PMRI and as the means of identifying the students' active involvements. The data analysis was done by means of manually used formulas and an IBM SPSS Statistics 20 for windows computer program.

The results of this research showed that the mathematics learning with the PMRI approach was effective if reviewed from the learning results and active involvements of the students. These were proved by the analysis of the students' learning results which showed the value of $t\text{-test} > t\text{-table}$, i.e. $3.738 > 1.674$, which meant that the average score of the experimental group's posttest was higher than the average score of control group's posttest. Besides, the learning analysis based on KKM showed that 50% of the students in the control group passed the KKM passing grade. This meant that there were more of the students in the experimental group passed the KKM passing grade. It showed that the mathematics learning with the PMRI approach was effective reviewed from the learning results. As for the analysis of the students' active involvement, it showed that 3.58% of the students in the control group were fairly active, 64.28% of them were active, and 32.14% of them were very active. In the experimental group, 42.86% of the students were active and 57.14% of them were very active. The analysis showed that the mathematics learning with PMRI approach was effective reviewed from the students' active involvement.