

ABSTRAK

Ida Ayu Saputri. 2024. Penerapan Model *Contextual Teaching and Learning* dan Ekspositori Terhadap Kemampuan Penalaran Matematis Siswa SMP. Penelitian di bawah bimbingan Bapak Dr. Drs. Hasan Hamid, M.Si dan Ibu Dr. Ida Kurnia Waliyanti, S.Si, M.Sc.

Penelitian ini bertujuan untuk mengetahui bagaimana kemampuan penalaran matematis siswa setelah diterapkan model *Contextual Teaching and Learning* dengan kemampuan penalaran matematis siswa setelah diterapkan model *contextual teaching and learning* dengan ekspositori dan apakah terdapat perbedaan kemampuan penalaran matematis siswa setelah diterapkan model *contextual teaching and learning* dengan ekspositori.

Jenis penelitian yang digunakan adalah metode penelitian *Quasi Exprimental Design* dengan jenis desain *Nonequivalent Control Grup Design* dengan dua kelompok sampel. Sampel penelitian ini adalah siswa-siswa kelas VIII-1 dan kelas VIII-2 dengan jumlah sampel 52 siswa, kelas VIII-1 sebagai kelas eksperimen dan kelas VIII-2 sebagai kelas kontrol. Teknik pengumpulan data pada penelitian ini dilakukan dengan menggunakan instrumen tes berupa soal uraian sebanyak 3 nomor.

Hasil analisis deskriptif menunjukkan kemampuan penalaran matematis siswa setelah diterapkan model *Contextual Teaching and Learning* terdapat 8 siswa (24,24%) yang memperoleh kategori sangat baik, terdapat 11 siswa (33,33%) yang memperoleh kategori baik, terdapat 4 siswa (15,38%) yang memperoleh kategori cukup dan terdapat 3 siswa (11,54%) yang memperoleh kategori kurang baik, sedangkan kemampuan penalaran matematis siswa setelah diterapkan model ekspositori terdapat 11 siswa (33,33%) yang memperoleh kategori baik, 9 siswa (34,62%) yang memperoleh kategori cukup dan 6 siswa (23,08%) yang memperoleh kategori kurang baik. Nilai rata-rata kemampuan penalaran matematis siswa kelas VIII SMP Negeri 5 Kota Ternate dengan model *Contextual Teaching and Learning* yaitu 81,50, sedangkan nilai rata-rata kemampuan penalaran matematis siswa kelas kontrol adalah 67,38. Hal ini berarti kemampuan penalaran matematis siswa lebih tinggi setelah diterapkan model *Contextual Teaching and Learning* dibandingkan dengan ekspositori. Hasil analisis inferensial dengan pengujian hipotesis nilai Sig. (2-tailed) $0,034 \leq 0,05$. Dengan demikian terdapat perbedaan Model *Contextual Teaching and Learning* dan model ekspositori terhadap kemampuan penalaran matematis siswa.

Kata Kunci: Model *Contextual Teaching and Learning*, Ekspositori dan Kemampuan Penalaran Matematis

ABSTRACT

Ida Ayu Saputri. 2024. Application of Contextual Teaching and Learning and Expository Models to Mathematical Reasoning Ability of Junior High School Students. Research under the guidance of Dr Drs Hasan Hamid, M.Si and Dr Ida Kurnia Waliyanti, S.Si, M.Sc.

This study aims to determine how students' mathematical reasoning ability after the application of Contextual Teaching and Learning and Expository models and whether there is a difference in the application of Contextual Teaching and Learning and Expository models on students' mathematical reasoning ability.

The type of research used is the Quasi Experimental Design research method with the design type of Nonequivalent Control Group Design with two sample groups. The samples of this study were students of class VIII-1 and class VIII-2 with a total sample of 52 students, class VIII-1 as the experimental class and class VIII-2 as the control class. The data collection technique in this study was carried out using a test instrument in the form of a 3-number description question.

The results of the descriptive analysis showed that the mathematical reasoning ability of students after applying the Contextual Teaching and Learning model there were 8 students (24.24%) who obtained a very good category, there were 11 students (33.33%) who obtained a good category, there were 4 students (15.38%) who obtained a sufficient category and there were 3 students (11, 54%) who obtained the less good category, while the mathematical reasoning ability of students after applying the expository model there were 11 students (33.33%) who obtained the good category, 9 students (34.62%) who obtained the sufficient category and 6 students (23.08%) who obtained the less good category. The average value of mathematical reasoning ability of students in class VIII SMP Negeri 5 Kota Ternate with Contextual Teaching and Learning model is 81.50, while the average value of mathematical reasoning ability of control class students is 67.38. This means that students' mathematical reasoning ability is higher after applying the Contextual Teaching and Learning model compared to expository. The results of inferential analysis with hypothesis testing Sig value. (2-tailed) $0.034 < = 0.05$. Thus, there is a difference between Contextual Teaching and Learning model and expository model on students' mathematical reasoning ability.

Keywords: Contextual Teaching and Learning Model, Expository and Mathematical Reasoning Ability