

ABSTRAK

Nurlaila Anas. 2024. Kemampuan Penalaran Indutif Matematis Siswa Mts Negeri 1 Tidore Pada Materi Teorema Pythagoras Melalui Penerapan Model Project (PjBL) (suatu penelitian pada siswa kelas VIII MTs Negeri 1 Tidore Tahun Ajaran 2024/2025). Penelitian di bawah bimbingan Dr Karman La Nani S.Pd., M.Si. dan Bapak Dr. H. In Hi Abdullah, S.Pd., M.Si,

Penelitian ini bertujuan untuk mengetahui 1) kemampuan penalaran induktif matematis siswa kelas VIII MTs N 1 Tidore pada materi teorema pythagoras yang diterapkan model PjBL lebih baik dibandingkan yang diterapkan model pembelajaran konvensional, 2) penerapan model PjBL dan konvensional secara signifikan dapat meningkatkan kemampuan penalaran induktif matematis siswa kelas VIII MTs N 1 Tidore setelah diterapkan model PjBL dan model konvensional, 3) peningkatan kemampuan penalaran induktif matematis siswa kelas VIII MTs N 1 Tidore pada materi teorema Pythagoras antara yang diterapkan model PjBL lebih tinggi dibandingkan yang diterapkan model pembelajaran konvensional, 4) perbedaan yang signifikan peningkatan kemampuan penalaran induktif matematis siswa kelas VIII MTs N 1 Tidore antara yang diterapkan model PjBL dan model pembelajaran konvensional. Penelitian ini menggunakan jenis Control Group Design dengan dua kelompok sampel yaitu kelompok eksperimen dan kelompok kontrol. Sampel penelitian ini adalah siswa kelas VIII C dan VIII B MTs Negeri 1 Tidore masing-masing berjumlah 21 siswa, Teknik pengumpulan data menggunakan instrumen tes berupa soal uraian sebanyak 4 nomor, dan observasi. Data yang diperoleh dianalisis secara deskriptif dan inferensial. Hasil penelitian diperoleh : 1) Kemampuan penalaran induktif matematis siswa kelas VIII MTs Negeri 1 Tidore pada materi teorema pythagoras yang diterapkan model PjBL lebih baik dibandingkan yang diterapkan model pembelajaran konvensional. 2) penerapan model Project Based Learning dan pembelajaran konvensional secara signifikan dapat meningkatkan kemampuan penalaran induktif matematis siswa, 3) Peningkatan kemampuan penalaran induktif matematis siswa yang diterapkan model PjBL lebih tinggi dibandingkan yang diterapkan PK. 4) Terdapat perbedaan yang signifikan pencapaian dan peningkatan kemampuan penalaran induktif matematis siswa kelas VIII MTs. Negeri 1 Tidore antara yang diterapkan model PjBL dan PK.

Kata Kunci: Kemampuan Penalaran Induktif, Model Project Based learning, Materi Pythagoras.

ABSTRACT

Nurlaila Anas. 2024. Mathematical Inductive Reasoning Ability of Students of Mts Negeri 1 Tidore on Pythagorean Theorem Material Through the Application of Model Project (PjBL) (a study on grade VIII students of MTs Negeri 1 Tidore Academic Year 2024/2025). The research was under the guidance of Dr. Karman La Nani S.Pd., M.Si. and Mr. Dr. H. In Hi Abdullah, S.Pd., M.Si,

This study aims to find out 1) the mathematical inductive reasoning ability of grade VIII MTs N 1 Tidore students on the pythagoras theorem material applied by the PjBL model is better than that applied by the conventional learning model, 2) the application of the PjBL and conventional models can significantly improve the mathematical inductive reasoning ability of grade VIII MTs N 1 Tidore students after applying the PjBL model and the conventional model, 3) the improvement of mathematical inductive reasoning ability of grade VIII MTs N 1 Tidore students in the Pythagoras theorem material between those applied by the PjBL model is higher than that applied by the conventional learning model, 4) there is a significant difference in the improvement of mathematical inductive reasoning ability of grade VIII MTs N 1 Tidore students between those applied by the PjBL model and the conventional learning model. This study uses a type of Control Group Design with two sample groups, namely the experimental group and the control group. The sample of this study is students of grades VIII C and VIII B MTs Negeri 1 Tidore each amounting to 21 students, the data collection technique uses test instruments in the form of 4-number description questions, and observation. The data obtained were analyzed descriptively and inferentially. The results of the study were obtained: 1) The mathematical inductive reasoning ability of students in grade VIII MTs Negeri 1 Tidore on the pythagoras theorem material applied by the PjBL model is better than that applied by the conventional learning model. 2) The application of the Project Based Learning model and conventional learning can significantly improve students' mathematical inductive reasoning ability, 3) The improvement of students' mathematical inductive reasoning ability applied by the PjBL model is higher than that applied by PK. 4) There is a significant difference in the achievement and improvement of mathematical inductive reasoning ability of grade VIII MTs. Negeri 1 Tidore students between those who applied the PjBL and PK models.

Keywords: Inductive Reasoning Ability, Project Based Learning Model, Pythagoras Material.