ABSTRAK

Marisca Kinanti, 2021. Analisi Kemampuan Penalaran Matematis dan Keaktifan Belajar Siswa pada Materi Relasi dan Fungsi di Kelas VIII A SMP N 2 Piyungan Tahun Ajaran 2021/2022. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma Yogyakarta.

Penelitian ini bertujuan untuk: (1) mendeskripsikan kemampuan penalaran matematis siswa pada kelas VIII A SMP N 2 Piyungan dalam menyelesaikan soal materi Relasi dan Fungsi; (2) mendeskripsikan keaktifan belajar siswa kelas VIII A SMP N 2 Piyungan dalam pembalajaran Relasi dan Fungsi.

Jenis penelitian ini adalah deskriptif kuantitatif dan kualitatif. Subjek penelitian ini yaitu siswa kelas VIII A SMP N 2 Piyungan Tahun Ajaran 2021/2022 yang terdiri dari 29 siswa. Objek penelitian ini adalah kemampuan penalaran matematis dan keaktifan belajar siswa pada materi relasi dan fungsi. Metode pengumpulan data yang digunakan dalam adalah observasi pembelajaran guru terkait keaktifan belajar siswa, tes kemampuan penalaran siswa, dan angket kekatifan belajar. Teknik pengumpulan data yang digunakan yaitu observasi pembelajaran terkait kaktifan belajar siswa, analisis data tes kemampuan penalaran siswa, dan analisis data angket keaktifan belajar siswa.

Hasil penelitian ini menjunjukkan bahwa: (1) kemampuan penalaran matematis siswa kelas VIII A SMP N 2 Piyungan berdasarkan kategori ketercapaian kemampuan penalaran matematis yaitu siswa dengan tingkat kemampuan penalaran rendah sebesar 17%, siswa dengan tingkat kemampuan penalaran sedang sebesar 55%, dan siswa dengan tingkat kemampuan penalaran tinggi sebesar 28%; (2) keaktifan belajar siswa kelas VIII A SMP N 2 Piyungan berdasarkan kriteria keaktifan belajar yaitu siswa dengan tingkat keaktifan belajar siswa rendah sebesar 4%, siswa dengan tingkat keaktifan belajar siswa sedang sebesar 72%, dan siswa dengan tingkat keaktifan belajar siswa tinggi sebesar 24%.

Kata kunci : kemampuan penalaran matematis, keaktifan belajar, relasi dan fungsi

ABSTRACT

Marisca Kinanti, 2021. Analysis of Mathematical Reasoning Ability and Students' Learning Liveliness on Learning Material of Relation and Function in Class VIII A SMP N 2 Piyungan Academic Year 2021/2022. Thesis. Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University Yogyakarta.

This study aims to: (1) describe the mathematical reasoning ability of students in class VIII A of SMP N 2 Piyungan in solving Relational and Function problems; (2) describe the learning liveliness of students in class VIII A of SMP N 2 Piyungan in learning Relations and Functions.

This type of research were descriptive quantitative and qualitative. The subjects of this study were students of class VIII A of SMP N 2 Piyungan in the 2021/2022 academic year which consisted of 29 students. The object of this research were the ability of mathematical reasoning and learning liveliness of students in relation and function material. Data collection methods used were observation on teacher's teaching process, students' reasoning ability tests, and learning liveliness questionnaires. The data collection techniques used were learning observations related to student learning liveliness, analyzing students' learning reasoning ability test data, and analyzing student learning liveliness questionnaire data.

The results of this study indicate that: (1) the mathematical reasoning ability of class VIII A students of SMP N 2 Piyungan based on the category of achievement of mathematical reasoning abilities, namely students with a low level of reasoning ability were 17%, students with a moderate level of reasoning ability were 55%, and students with high level of reasoning ability were 28%; (2) the learning liveliness of class VIII A students of SMP N 2 Piyungan based on the criteria of learning liveliness, namely students with a low level of students' learning liveliness were 4%, students' with a moderate level of students' learning liveliness were 72%, and students' with a high level of student learning liveliness were 24 %

Keywords: mathematical reasoning ability, learning liveliness, relations and functions