

ABSTRAK

NURVITA. Analisis Kesulitan Metakognisi Dan Koneksi Matematis Siswa Dengan Menggunakan Model Pembelajaran Kooperatif Tipe Jigsaw Di Smp N 1 Lawe Bulan Aceh Tenggara. Tesis Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2019.

Penelitian ini mendeskripsikan bagaimana tingkat kemampuan metakognisi dan koneksi matematis siswa menggunakan model pembelajaran kooperatif tipe jigsaw, bagaimana proses jawaban pemecahan masalah metakognisi dan koneksi matematis siswa dengan menggunakan model pembelajaran kooperatif tipe jigsaw dan bagaimana kesulitan siswa memecahkan masalah metakognisi dan koneksi matematis siswa. Jenis penelitian yang digunakan adalah penelitian kualitatif, maka pada pelaksanaan penelitian dilakukan triangulasi data untuk mendapatkan keabsahan hasil penelitian. Untuk menjawab pertanyaan penelitian maka dilakukan analisis data terhadap hasil penelitian berdasarkan prosedur penelitian kualitatif menggunakan Model Miles and Huberman mencakup koleksi data (*data collection*), reduksi data (*data reduction*), penyajian data (*data display*), dan penyimpulan (*conclusion*). Tingkat kemampuan metakognisi dari 38 orang siswa dengan kemampuan metakognisi siswa sangat rendah sebanyak 13%, kemampuan rendah sebanyak 37%, kemampuan sedang sebanyak 18% dan kemampuan tinggi sebanyak 32%. Tingkat kemampuan koneksi matematis siswa dari 38 orang dengan kemampuan 'sangat rendah' sebanyak 16%, kemampuan rendah sebanyak 39%, kemampuan sedang sebanyak 29% dan kemampuan tinggi sebanyak 16%. Setelah proses jawaban siswa dideskripsikan maka disimpulkan pada proses jawaban metakognisi dan koneksi matematis siswa berkaitan dengan objek matematika dan berkenaan dengan proses jawaban pemecahan masalah metakognisi dan koneksi matematis tidak terjadi pertentangan dengan kesepakatan yang telah ada dalam matematika baik fakta, konsep, prinsip maupun prosedur. Analisis kesulitan metakognisi dan koneksi matematis siswa dalam penelitian ini adalah pada analisis kesulitan metakognisi siswa, siswa tidak dapat menuliskan apa yang diketahui pada permasalahan, siswa juga tidak dapat menerapkan informasi yang diperoleh dalam konsep yang telah dipikirkannya, siswa tidak dapat menentukan langkah awal yang harus dilakukan dalam memecahkan masalah, siswa tidak dapat menyelesaikan soal dengan benar. Pada analisis kesulitan koneksi matematis siswa, siswa tidak dapat menghubungkan informasi dalam soal dengan materi sebelumnya dengan benar, siswa dapat menghubungkan materi bangun ruang sisi datar dengan materi pelajaran fisika tetapi belum benar, siswa tidak dapat menghubungkan materi bangun ruang sisi datar dengan materi pelajaran fisika tetapi belum benar dan siswa tidak mampu menghubungkan masalah kehidupan nyata pada soal bangun ruang sisi datar.

Kata Kunci: Analisis Kesulitan Metakognisi, Koneksi Matematis Siswa, Model Pembelajaran Kooperatif Tipe Jigsaw.

ABSTRACT

Nurvita. Analysis Of Metacognition Difficulties And Mathematical Conections Of Students Using The Jigsaw Type Cooperative Learning Model In The Countrys First Junior High School In Aceh Sountheast. Thesis Graduate Mathematics Education Study Program State University of Medan, 2019.

This study describes how the level of metacognition and mathematical connection abilities of students using the jigsaw cooperative learning model, how to answer the process of solving metacognition problems and mathematical connections using jigsaw cooperative learning models and how difficulties students solve metacognition problems and mathematical connections of students. The type of research used is qualitative research, then the implementation of the research carried out data triangulation to obtain the validity of the research results. To answer the research question, the data analysis of the results of research based on qualitative research procedures using the Miles and Huberman Model includes data collection (data collection), data reduction (data reduction), data presentation (data display), and conclusion. Metacognition of 38 students with metacognitive abilities of very low students as much as 13percent, low abilities as much as 37 percent, moderate abilities as much as 18percent and high abilities as much as 32 percent. The level of mathematical connection ability of students from 38 people with very low abilities as much as 16percent, low abilities as much as 39percent, moderate abilities as much 29 as percent and high abilities as much as 16percent. After the students' answer process is described, it is concluded in the process answers to metacognition and mathematical connections of students related to mathematical objects and with regard to the process of answering the problem of metacognition and mathematical connections do not occur in opposition to the agreements that have existed in mathematics both facts, concepts, principles and procedures. Analysis of metacognition difficulties and mathematical connections of students in this study is to analyze students' metacognitive difficulties, students cannot write down what is known on the problem, students also cannot apply information obtained in the concepts they have thought, students cannot determine the initial steps to do in solving problems, students cannot solve the problem correctly. In analyzing the mathematical connection difficulties of students, students cannot correctly relate information in the matter to the previous material, students can relate material to construct flat-side space with physics subject matter but it is not correct, students cannot relate material to construct flat-side space with physics subject matter but not yet correct and students are not able to connect real-life problems in the matter of building a flat side.

Keywords: *Analysis of Metacognition Difficulties, Student Mathematical Connections, Type Jigsaw Cooperative Learning Model.*