

ABSTRAK

ELSA NOPTA SITORUS. Analisis Kesulitan Proses Berpikir Kreatif Matematis Siswa dalam Pembelajaran Berbasis Masalah (PBM) Di SMP Negeri 13 Medan. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, Maret 2019.

Penelitian ini bertujuan untuk menganalisis dan mengetahui: (1) tingkat kemampuan berpikir kreatif matematis siswa dalam Pembelajaran Berbasis Masalah; (2) deskripsi proses jawaban siswa dalam pembelajaran berbasis masalah; (3) kesulitan proses berpikir kreatif matematis siswa dalam pembelajaran berbasis masalah (PBM). Penelitian ini merupakan penelitian kualitatif deskriptif. Subjek penelitian ini adalah siswa SMP Negeri 13 Medan kelas VIII-5 yang berjumlah 32 orang, kemudian diangkat untuk subjek wawancara berdasarkan tingkat kemampuan berpikir kreatif dan proses jawaban siswa, berdasarkan indikator dan aspek kesalahan.

Adapun hasil penelitian sebagai berikut: (1) tingkat kemampuan berpikir kreatif matematis dari 32 orang siswa dengan kemampuan 'sangat rendah' sebanyak 31,25% berjumlah 10 siswa, kemampuan 'rendah' sebanyak 6,25% berjumlah 2 siswa, kemampuan 'sedang' sebanyak 37,50% berjumlah 12 siswa, kemampuan 'tinggi' sebanyak 12,50% berjumlah 4 siswa dan kemampuan 'sangat tinggi' sebanyak 12,50% berjumlah 4 siswa; (2) proses jawaban siswa dalam berpikir kreatif pada pembelajaran berbasis masalah yaitu: a) Pada kategori sangat tinggi, siswa menyelesaikan masalah pada indikator kelancaran, keluwesan, keaslian dan elaborasi. b) Pada kategori tinggi, siswa menyelesaikan masalah pada indikator kelancaran, keluwesan dan keaslian. c) Pada kategori sedang, siswa menyelesaikan masalah pada indikator kelancaran dan keluwesan. d) Pada kategori rendah, siswa menyelesaikan masalah pada indikator kelancaran. e) Pada kategori sangat rendah, siswa menyelesaikan masalah pada indikator kelancaran hanya dengan satu cara. Kesulitan proses berpikir kreatif matematis dalam pembelajaran berbasis masalah, yaitu: a) Pada kategori sangat tinggi, siswa tidak memiliki kesulitan. b) Pada kategori tinggi, siswa mengalami kesulitan penerapan ide, pada indikator elaborasi. c) Pada kategori sedang, siswa mengalami kesulitan merencanakan penerapan ide dan penerapan ide pada indikator keluwesan, keaslian dan elaborasi. d) Pada kategori rendah, siswa mengalami kesulitan merencanakan penerapan ide dan penerapan ide pada indikator kelancaran, mengalami kesulitan mensintesis ide, merencanakan penerapan ide dan penerapan ide pada indikator keluwesan, keaslian dan elaborasi. e) Pada kategori sangat rendah, siswa mengalami kesulitan mensintesis ide, merencanakan penerapan ide dan penerapan ide pada indikator kelancaran, keluwesan, keaslian dan elaborasi.

Kata Kunci: Berpikir Kreatif dalam Matematika, Proses Berpikir Kreatif, Model Pembelajaran Berbasis Masalah.

ABSTRACT

ELSA NOPTA SITORUS. Analysis of the Difficulties of the Mathematical Creative Thinking Process in Problem Based Learning (PBL) in SMP Negeri 13 Medan. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, March 2019.

This study aims to analyze and find out: (1) the level of mathematical creative thinking skills of students in Problem Based Learning; (2) description of the student's answer process in problem-based learning; (3) difficulties in students' creative mathematical thinking processes in problem-based learning (PBM). This research is a descriptive qualitative study. The subjects of this study were students of SMP Negeri 13 Medan in class VIII-5 which numbered 32 people, then were appointed to the subject of the interview based on the level of creative thinking ability and the students' answer process, based on indicators and aspects of error.

The results of the study are as follows: (1) the level of mathematical creative thinking skills of 32 students with 'very low' abilities as much as 31.25% totaling 10 students, 'low' abilities as much as 6.25% totaling 2 students, 'moderate' abilities 37.50% amounted to 12 students, 'high' abilities as much as 12.50% amounted to 4 students and 'very high' abilities as much as 12.50% totaling 4 students; (2) the process of answering students in creative thinking on problem-based learning, namely: a) In very high categories, students solve problems on indicators of fluency, flexibility, authenticity and elaboration. b) In the high category, students solve problems on indicators of fluency, flexibility and authenticity. c) In the medium category, students solve problems on indicators of fluency and flexibility. d) In the low category, students solve problems on fluency indicators. e) In the very low category, students solve problems on the indicators of fluency in only one way. The difficulty of mathematical creative thinking processes in problem-based learning, namely: a) In very high categories, students have no difficulties. b) In the high category, students have difficulty applying ideas, on elaboration indicators. c) In the medium category, students have difficulty planning the application of ideas and the application of ideas to indicators of flexibility, authenticity and elaboration. d) In the low category, students have difficulty planning the application of ideas and the application of ideas to indicators of fluency, having difficulty synthesizing ideas, planning the application of ideas and applying ideas to indicators of flexibility, authenticity and elaboration. e) In very low categories, students have difficulty synthesizing ideas, planning the application of ideas and applying ideas to indicators of fluency, flexibility, authenticity and elaboration.

Keywords: Creative Thinking in Mathematics, Creative Thinking Process, Problem Based Learning Model.