ABSTRAK

Francisca Shinta Aprilia Yanida, 2020. ANALISIS KEMAMPUAN PEMECAHAN MASALAH HOT (*HIGHER ORDER THINKING*) BERDASARKAN LANGKAH POLYA PADA POKOK BAHASAN SISTEM PERSAMAAN LINEAR DUA VARIABEL DI KALANGAN SISWA KELAS VIII SMP KANISIUS WONOSARI TAHUN AJARAN 2019/2020. Skripsi. Program Studi Pendidikan Matematika dan lmu Pengetahuan Alam, Fakultas Keguruan dan lmu Pendidikan, Universitas Sanata Dharma Yogyakarta.

Penelitian ini bertujuan untuk menganalis kemampuan pemecahan masalah siswa kelas VIII SMP Kanisius Wonosari terkait masalah berpikir tingkat tinggi atau HOT menurut langkah Polya dalam matematika.

Jenis penelitian ini adalah penelitian kualitatif. Subjek penelitian siswa kelas VIII di SMP Kanisius Wonosari yang berjumlah enam. Subjek terbagi atas siswa berkemampuan tinggi, siswa berkemampuan sedang, dan siswa berkemampuan rendah. Peneliti menggunakan data hasil penyelesaian soal berpikir tingkat tinggi atau HOT dan data wawancara. Selanjutnya data yang diperoleh, dianalisis berdasarkan empat kegiatan pemecahan masalah menurut langkah Polya.

Hasil penelitian menunjukkan: (1) Siswa berkemampuan tinggi dinyatakan mampu melaksanakan kegiatan pada seluruh kegiatan pemecahan masalah berpikir tingkat tinggi atau HOT. (2) Siswa berkemampuan tinggi dinyatakan mampu melaksanakan kegiatan pada memahami masalah dan strategi pemecahan masalah. Akan tetapi pada kegiatan melaksanakan perhitungan dan memeriksa kembali hasil atau solusi siswa berkemampuan sedang masih kurang mampu dalam melaksanakan kegiatan. (3) Siswa berkemampuan rendah dinyatakan mampu melaksanakan kegiatan memahami masalah. Akan tetapi kelompok siswa berkemampuan rendah ini kurang mampu dalam kegiatan merencanakan atau merancang strategi pemecahan masalah, kegiatan melakukan perhitungan, serta kegiatan memeriksa kembali hasil atau solusi pada pemecahan masalah.

Kata kunci: kemampuan siswa, *Higher Order Thinking*, Langkah Polya.

ABSTRACT

Francisca Shinta Aprilia Yanida, 2020. ANALYSIS OF HOT (HIGHER ORDER THINKING) PROBLEM SOLVING BASED ON THE STEP OF POLYA IN THE TOPIC OF LINEAR EQUATION SYSTEM OF TWO VARIABLES FOR GRADE VIII OF KANISIUS WONOSARI JUNIOR HIGH SCHOOL IN THE 2019/2020 ACADEMIC YEAR. *Thesis. Mathematics Education Study Program And Natural Sciences, Faculty of Teacher Training And Education, Sanata Dharma University Yogyakarta.*

This study aims to analyze the problem solving abilities of subjects of eighth-grade students at Kanisius Wonosari Junior High School related to high-level thinking problems or HOT according to Polya's steps in mathematics.

This type of research is qualitative research. The research subjects of eighth-grade students at Kanisius Wonosari Junior High School were six. Subjects were divided into students with high abilities, students with moderate abilities, and students with low abilities. Researchers used data from the completion of high-level thinking questions or HOT and interview data. Furthermore, the data obtained were analyzed based on four problem-solving activities according to Polya's steps.

The results showed: (1) High-ability students were declared able to carry out activities in all high-level thinking problem-solving activities or HOT. (2) Students with high ability are stated able to carry out activities on understanding problems and problem-solving strategies. However, the activities of carrying out calculations and re-checking the results or solutions of capable students are still less able to carry out activities. (3) Low ability students are stated able to carry out activities to understand the problem. However, this low-ability group of students is less able to plan or design problem-solving activities, to conduct calculations, and to re-examine the results or solutions to problem-solving.

***Keywords**: Student Ability, Higher Order Thinking, Polya Steps*