

***CONCEPT IMAGE DAN LEARNING OBSTACLES SISWA SMP
MATERI OPERASI HITUNG CAMPURAN PADA BILANGAN BULAT
NEGATIF***

TESIS

Diajukan untuk memenuhi salah satu syarat memperoleh gelar
Magister Pendidikan Matematika



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OPERASI HITUNG CAMPURAN PADA BILANGAN BULAT NEGATIF***

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**LEMBAR PENGESAHAN
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ABSTRAK

Ulfa Najiya Hanifa (2002477) *Concept Image* dan *Learning Obstacles* Siswa SMP Materi Operasi Hitung Campuran pada Bilangan Bulat Negatif

Konsep operasi hitung campuran pada bilangan bulat negatif merupakan hal yang penting bagi siswa untuk menunjang pada materi selanjutnya. Namun, konsep yang dimiliki siswa masih memiliki ketidaksesuaian dengan konsep yang seharusnya. Tujuan dari penelitian ini yaitu untuk mengetahui *concept image* guru yang dihubungkan dengan *concept image* siswa, kemudian untuk mengetahui *concept image* siswa yang dihubungkan dengan *concept definition* dan mengetahui adanya *learning obstacles* yang dialami oleh siswa terkait operasi hitung campuran pada bilangan bulat negatif. Metode yang digunakan dalam penelitian ini adalah metode fenomenologi dengan pendekatan kualitatif. Instrumen yang digunakan yaitu tes, wawancara dan studi dokumen. Subjek penelitian terdiri atas satu orang guru yang diwawancarai, 32 siswa yang mengikuti tes dan diambil 9 siswa yang mengikuti wawancara. Penelitian ini dilaksanakan pada kelas VII di salah satu SMP di Kabupaten Bandung, Jawa Barat. Hasil penelitian menunjukkan bahwa Analisis *concept image* yang dimiliki siswa terhadap materi operasi hitung campuran pada bilangan bulat negatif serta *learning obstacles* yang teridentifikasi dilakukan berdasarkan hasil uji instrumen, wawancara mendalam, dan analisis buku teks. Hasil penelitian menunjukkan bahwa *concept image* siswa memiliki ketidaksesuaian dengan *concept definition*, sedangkan *concept image* guru memiliki kesesuaian dengan *concept definition*, siswa mengalami *learning obstacles* yang dialami siswa berdasarkan *ontogenic obstacle* yaitu ketidaktahuan siswa terhadap konteks yang digunakan, kurangnya minat belajar siswa dan melekatnya konsep “meminjam” yang telah dipelajari di sekolah dasar, *didactical obstacle* yaitu keterbatasan dalam penyampaian materi karena waktu yang terbatas, *epistemological obstacle* yaitu kesulitan dalam memaknai sifat abstrak dari bilangan bulat negatif.

Kata Kunci: *concept image*, *learning obstacles*, operasi hitung campuran

ABSTRACT

Ulfa Najiya Hanifa (2002477) Concept Image and Learning Obstacles for Junior High School Students Material on Mixed Count Operations on Negatif Integers

The concept of mixed arithmetic operations on negatif integers is important for students to support the next material. However, the concept that students have still has a discrepancy with the concept that should be. The purpose of this study is to find out the teacher's concept image associated with the student's concept image, then to find out the student's concept image associated with the concept definition and to find out the learning obstacles experienced by students related to mixed arithmetic operations on negatif integers. The method used in this study is a phenomenological method with a qualitatif approach. The instruments used were tests, interviews, and document studies. The research subjects consisted of one interviewed teacher, 32 students took the test and 9 students took the interview. This research was conducted in class VII at a junior high school in Bandung Regency, West Java. The results of the study show that the analysis of the concept image that students have of mixed arithmetic operations material on negatif integers and identified learning obstacles is carried out based on the results of instrument tests, in-depth interviews, and analysis of textbooks. The results showed that the student's concept image a discrepancy with the concept definition, while the teacher's concept image had conformity with the concept definition, students experienced learning obstacles experienced by students based on ontogenic obstacles, namely students' ignorance of the context used

Keywords : concept image, learning obstacles, mixed arithmetic operations

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