

***LEARNING OBSTACLES* SISWA SEKOLAH MENENGAH PERTAMA
PADA KONSEP KEKONGRUENAN DAN KESEBANGUNAN SEGITIGA**

TESIS

Diajukan untuk memenuhi salah satu syarat untuk memperoleh gelar
Magister Pendidikan Matematika



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Sebuah tesis yang diajukan untuk memenuhi salah satu syarat dalam memperoleh gelar
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ABSTRAK

Idvan Aprizal Bintara (1906564). *Learning Obstacles* Siswa Sekolah Menengah Pertama pada Konsep Kekongruenan dan Kesebangunan Segitiga.

Geometri adalah salah satu topik penting dalam matematika sekolah. Walaupun demikian, masih banyak siswa mengalami permasalahan untuk memahami konsep kekongruenan dan kesebangunan segitiga yang diakibatkan oleh makna dan pemaknaan siswa terkait konsep tersebut. Penelitian ini dilakukan dengan tujuan untuk mengidentifikasi *learning obstacles* siswa Sekolah Menengah Pertama (SMP) pada konsep kekongruenan dan kesebangunan segitiga berdasarkan makna konsep kekongruenan dan kesebangunan segitiga dari sudut pandang siswa dan pengalaman siswa memperoleh makna tersebut. Penelitian ini menggunakan pendekatan penelitian kualitatif dengan desain fenomenologi, melibatkan 45 siswa SMP kelas IX dan seorang guru matematika di salah satu sekolah di Majalengka, Jawa Barat. Pengumpulan data dilakukan dengan triangulasi data melalui tes uraian, wawancara mendalam, dan studi dokumen. Hasil penelitian menunjukkan bahwa makna konsep kekongruenan dan kesebangunan segitiga dari sudut pandang siswa terbagi menjadi empat, yaitu bersifat intuitif, komprehensif, parsial, dan inkonsisten. Pengalaman siswa memperoleh makna tersebut bersumber dari apa yang mereka pelajari dari guru dan sumber ajar yang digunakan. Oleh karena itu, penelitian ini menunjukkan bahwa siswa mengalami beberapa *learning obstacles* pada konsep kekongruenan dan kesebangunan segitiga, yang terdiri dari *ontogenic obstacles*; *didactical obstacles*; dan *epistemological obstacles*. Berdasarkan hasil penelitian, *learning obstacles* yang teridentifikasi tersebut dapat dijadikan pertimbangan atau referensi untuk mengembangkan desain didaktis konsep kekongruenan dan kesebangunan segitiga yang lebih optimal.

Kata Kunci: *Learning Obstacles*, *Ontogenic Obstacles*, *Didactical Obstacles*, *Epistemological Obstacles*, Konsep Kekongruenan dan Kesebangunan Segitiga.

ABSTRACT

Idvan Aprizal Bintara (1504500). **Learning Obstacles of Junior High School Students on the Concept of Congruent and Similar Triangles.**

Geometry is one of the important topics in school mathematics. However, there are still many students who have problems understanding the concepts of congruent and similarity triangles caused by students' meanings and meanings related to these concepts. This study aims to identify the learning obstacles of junior high school (SMP) students on the concept of congruent and similarity triangles based on the meaning of congruent and similarity triangles concept from the students' point of view and the experience of students obtaining these meanings. This study used a qualitative research approach with a phenomenological design and involved forty-five 9th grade and a mathematics teacher at a school in Majalengka, West Java. The data were collected using triangulation wicks included test, in-depth interviews, and document study. The results showed that the meaning of congruent and similarity triangles concept from the students' point of view was divided into four types, namely intuitive, comprehensive, partial, and inconsistent. Students' experiences in obtaining these meanings came from what they learn from their teacher and their textbook used by them. Therefore, this study showed that students experience several learning obstacles in the concept of congruent and similarity triangles, which consist of ontogenic obstacles; didactical obstacles; and epistemological obstacles. Based on the results of this study, the identified learning obstacles can be used as a reference for developing a more optimal didactical design of congruent and similarity triangles concept.

Keyword: Learning Obstacles, Ontogenic Obstacles, Didactical Obstacles, Epistemological Obstacles, Congruent and Similar Triangles.

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