

## ABSTRAK

**Agnes Ika Padmasari. 2013. Pemanfaatan Media Komputer Berbasis GeoGebra yang Dilengkapi dengan LKS dalam Pembelajaran Remedial pada Topik Segiempat dan Sifat-sifatnya di Kelas VII C Semester II SMP Pangudi Luhur Sedayu Tahun Ajaran 2012/2013. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.**

Penelitian ini bertujuan untuk mengetahui kesulitan-kesulitan yang dialami siswa dalam mempelajari topik segiempat dan sifat-sifatnya serta mengetahui sejauh mana pemanfaatan program *GeoGebra* dapat membantu memperbaiki kesulitan belajar siswa dalam memahami konsep segiempat dan sifat-sifatnya pada pembelajaran remedial.

Subjek penelitian adalah siswa kelas VII C SMP Pangudi Luhur Sedayu yang belum memenuhi Kriteria Ketuntasan Minimal (KKM) pada pembelajaran topik segiempat dan sifat-sifatnya. Penelitian ini merupakan penelitian kuantitatif dan kualitatif. Pengumpulan data dilaksanakan selama bulan April sampai dengan Mei 2013. Instrumen penelitian yang digunakan adalah tes diagnostik, tes evaluasi remedial, dan wawancara. Analisa data dilakukan (1) untuk mengetahui kesulitan-kesulitan siswa yang didapat melalui tes diagnostik, (2) Untuk mengetahui sejauh mana media komputer berbasis *GeoGebra* yang dilengkapi dengan LKS dapat membantu memperbaiki kesulitan belajar siswa dalam memahami konsep segiempat dan sifat-sifatnya dengan membandingkan pemahaman awal (tes diagnostik) dan pemahaman akhir (tes evaluasi remedial) siswa setelah mengikuti pembelajaran remedial serta dari hasil wawancara siswa.

Dari hasil tes diagnostik terdapat 23 siswa yang belum mencapai KKM. Kesulitan-kesulitan yang dialami siswa diantaranya mengelompokkan bangun segiempat, mengidentifikasi sifat-sifat segiempat yang ditinjau dari sisi, sudut dan diagonal, dan kesulitan dalam mendefinisikan segiempat serta menjelaskan hubungan antar segiempat. Berdasarkan hasil tes evaluasi remedial dan hasil perbandingan pemahaman awal dengan pemahaman akhir siswa dapat disimpulkan bahwa kesulitan-kesulitan yang dialami siswa pada dasarnya dapat diatasi. Hal ini ditunjukkan dari keberhasilan pemanfaatan program *GeoGebra* dalam pembelajaran remedial yaitu 20 siswa dari 23 siswa yang mengalami kesulitan belajar sudah dapat teratasi kesulitan belajarnya atau 86,96 % siswa sudah memenuhi KKM. Dari 23 siswa semuanya mengalami peningkatan nilai. Rata-rata kelas juga meningkat dari 57,61 menjadi 78,69 dan meningkatnya ketercapaian tiap indikator walaupun terdapat dua indikator yang belum mencapai 75% sesuai dengan pemaparan di BAB III. Dua indikator tersebut adalah mengidentifikasi sifat-sifat segiempat dan menentukan hubungan antar segiempat.

**Kata kunci** : Media Komputer Berbasis *GeoGebra*, Pembelajaran Remedial, Segiempat dan Sifat-sifatnya.

**ABSTRACT**

**Agnes Ika Padmasari. 2013. *The Utilization of GeoGebra-Based Computer Media Equipped with LKS in Remedial Learning on the Topic about Rectangle and Its Characteristics of Grade VII C 2<sup>nd</sup> Semester Students at SMP Pangudi Luhur Sedayu in 2012/2013 Academic Year.* Mathematics Education Study Program, Department of Mathematics Education and Science, Faculty of Teachers Training and Education, Sanata Dharma University.**

This study aimed to know the difficulties found by students in learning the topic about rectangle and its characteristics and to know to what extent the utilization of *GeoGebra* program could help the students to minimize the difficulties they found in understanding the concept of rectangle and its characteristics in remedial learning.

The subjects of this research were grade VII C students at SMP Pangudi Luhur Sedayu who had not reached the minimum mastery criteria (KKM) yet in learning the topic about rectangle and its characteristics. This research was quantitative and qualitative research. The data gathering was conducted from April until May 2013. The research instruments used were diagnostic test, remedial evaluation test, and interview. The data analysis was done (1) to know the difficulties found by the students through diagnostic test, (2) to know to what extent the *GeoGebra*-based computer media equipped with LKS could help the students to minimize the difficulties they found in understanding the concept of rectangle and its characteristics by comparing the students' preliminary understanding (the diagnostic test) and the final understanding (the remedial evaluation test) after joining the remedial learning and also from the result of the interview to the students.

From the diagnostic test, there were 23 students who had not reached the KKM yet. The difficulties found by the students were categorizing the rectangles, identifying the characteristics of a rectangle seen from the sides, angles and diagonals, and the difficulties in defining the rectangle and also explaining the relation between rectangles. Based on the remedial evaluation test and the comparison results between the preliminary understanding and the final understanding of the students, it could be concluded that the difficulties could be solved. It was shown from the success of the utilization of *GeoGebra* program in remedial learning, in which the difficulties of 20 out of 23 students in learning had been solved or 86.96% of all of the students had been reached the KKM. All of the 23 students improved their grades. The students' average class grades also increased from 57.61 up to 78.69. The achievement of each indicator also increased even though there were two indicators that had not reached 75% yet in accordance with what has been explained in chapter III. The two indicators were identifying the characteristics of a rectangle and determining the relation between the rectangles.

**Keywords:** *GeoGebra*-based Computer Media, Remedial Learning, Rectangle and Its Characteristics.