

## ABSTRAK

**A.Rengani. 2015. Efektivitas Penggunaan Program Geogebra Pada Pembelajaran Matematika Topik Prisma dan Limas Ditinjau Dari Motivasi dan Hasil Belajar Di Kelas VIII Homeschooling Jogja Patriae Academy. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan IPA, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.**

Penelitian ini bertujuan untuk melihat efektivitas penggunaan program *GeoGebra* pada pembelajaran matematika topik prisma dan limas ditinjau dari motivasi dan hasil belajar siswa di kelas VIII *Homeschooling* Jogja Patriae Academy Tahun Ajaran 2014/2015.

Penelitian ini menggunakan jenis penelitian pra eksperimen kualitatif dan kuantitatif. Disebut penelitian pra eksperimen karena tidak menggunakan kelas kontrol, hanya menggunakan satu kelas eksperimen. Instrumen penelitian yang digunakan dalam pengumpulan data terdiri dari : (1) Kuesioner motivasi belajar siswa, (2) Wawancara motivasi belajar siswa, (3) Tes hasil belajar siswa. Data hasil kuesioner motivasi belajar siswa dianalisis secara kuantitatif dengan menentukan skor total dan persentase yang diperoleh masing-masing siswa, kemudian berdasarkan hasil persentase tersebut ditentukan kriteria motivasi belajar siswa. Data hasil wawancara dianalisis secara kualitatif sebagai penguat dari hasil kuesioner motivasi belajar siswa. Sedangkan data tes hasil belajar dianalisis kuantitatif dengan menentukan skor total dan membandingkan dengan KKM.

Hasil penelitian menunjukkan bahwa (1) penggunaan program *GeoGebra* pada pembelajaran matematika topik prisma dan limas efektif ditinjau dari motivasi belajar siswa, (2) penggunaan program *GeoGebra* pada pembelajaran matematika topik prisma dan limas belum efektif ditinjau dari hasil belajar siswa. Analisis data kuesioner motivasi belajar secara keseluruhan indikator menunjukkan bahwa motivasi belajar sangat tinggi, yaitu 87,02 %. Hasil kuesioner motivasi belajar siswa didukung dengan hasil wawancara yang keseluruhan siswa menunjukkan ketertarikan dalam pembelajaran matematika topik prisma dan limas menggunakan program *GeoGebra*. Nilai rata-rata tes hasil belajar sudah memenuhi KKM yaitu sebesar 7,42. Namun, jumlah siswa yang memenuhi KKM belum mencapai 75% sehingga analisis data tes hasil belajar siswa menunjukkan program *GeoGebra* belum efektif.

## ABSTRACT

**A.Renggani. 2015. *The Effectiveness Of The Use Geogebra Program For Mathematics Learning In The Topic Of Prism And Pyramid Observed In Students' Motivation And Learning Result At VIII Class Of Homeschooling Jogja Patriae Academy. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.***

This research aimed to found out the effectiveness of the use of *GeoGebra* program for mathematics learning in the topic of prism and pyramid observed in students' motivation and learning result at VIII class of Homeschooling Jogja Patriae Academy in academic year 2014/2015.

This research was a qualitative and quantitative pre-experiment research since it only used one experiment class; without control class. The research instruments were: (1) Students learning motivation questionnaire, (2) Students learning motivation interview, and (3) students' test result. The questionnaire results were analyzed quantitatively by deciding the total score and the percentage from each student. Based on those percentage results, the researcher decided the criteria of students learning motivation. Meanwhile, the interview results were analyzed qualitatively to support the questionnaire results. While students' test results were analyzed quantitatively by deciding the total score and by evaluating them to *KKM*.

The results of this research confirmed that (1) the use of *GeoGebra* program for mathematics learning in the topic of prism and pyramid was effective; it could be seen from the students' learning motivation, (2) the use of *GeoGebra* program for mathematics learning in the topic of prism and pyramid was not effective yet; it could be seen from students' result. Motivation questionnaire analysis of all indicator confirmed that the learning motivation was very high: 87,02 %. It was also supported by the interview results that most of the students showed their interest in the mathematics learning in the topic of prism and pyramid using *GeoGebra* program. The average of the test score had already filled *KKM* as 71, 42. However, the number of the students who already passed the *KKM* had not reached 75%. Therefore, the analysis of the students' test result confirmed that *GeoGebra* program was not effective yet.