ABSTRAK

Leo Agung Noviar Kidung Adi. 2012. Pemanfaatan Program *Cabri 3D* Dalam Upaya Mengatasi Kesulitan Belajar Siswa Kelas V SD Negeri Banyuurip Purworejo Pada Pokok Bahasan Volume Kubus Dan Balok. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.

Penelitian ini bertujuan untuk mengetahui apa saja kesulitan yang dialami siswa kelas V SD Negeri Banyuurip Purworejo dalam mempelajari materi volume kubus dan balok serta bagaimana peran program *Cabri 3D* kaitannya dalam mengatasi kesulitan-kesulitan belajar pada siswa yang muncul terkhusus pada saat mempelajari pokok bahasan volume kubus dan balok.

Penelitian ini dilakukan di SD Negeri Banyuurip Purworejo. Subjek penelitian adalah siswa kelas V. Metode penelitian yang digunakan adalah penelitian kualitatif-deskriptif. Data penelitian dikumpulkan melalui rekaman interaksi pembelajaran, wawancara, hasil pekerjaan siswa, serta angket. Dalam penelitian ini peneliti melakukan pembelajaran penuh pada pokok bahasan volume kubus dan balok. Guna mengetahui kesulitan belajar siswa pada pokok bahasan tersebut, peneliti tidak menggunakan test diagnostik melainkan dari data pengamatan dan pengalaman peneliti pada proses pembelajaran. Angket juga digunakan untuk mendukung dalam mengetahui kesulitan belajar siswa. Selanjutnya dilakukan model pembelajaran dengan menggunakan program *Cabri 3D* sebagai upaya mengatasi kesulitan belajar tersebut. Dari hasil penelitian menunjukkan bahwa siswa mengalami kesulitan dalam pokok bahasan volume kubus dan balok yaitu kesulitan dalam menggambar dan kesulitan dalam hal keterampilan berpikir. Berdasarkan hasil pembelajaran dengan menggunakan program *Cabri 3D* dapat disimpulkan bahwa siswa terbantu dalam mengatasi kesulitan belajar seperti kesulitan belajar dalam hal memahami bangun ruang kubus dan balok serta pemahaman terkait konsep volume kubus.

Kata-kata kunci: Volume Kubus dan Balok, Kesulitan Belajar, *Cabri 3D*

ABSTRACT

Leo Agung Noviar Kidung Adi. 2012. The Use of *Cabri 3D* Program in Effort to Overcome Learning Difficulties of 5th Grade Students of Banyuurip Elementary School in Purworejo on Cube and Cuboid Volume Topic. Mathematics Education Studies Program, Department of Mathematics and Natural Sciences, Faculty of Teacher Training And Education, University of Sanata Dharma.

This research aims to find out what the difficulties that experienced by the fifth grade students of Banyuurip Elementary School in Purworejo on learning the volume material of cube and cuboid and how the role of *Cabri 3D* program related in overcoming students learning difficulties that arise particularly in studying cube and cuboid volume topic.

The research was conducted at Banyuurip Elementary School in Purworejo. Subjects were fifth grade students. The research method used is descriptive qualitative research. Data were collected through recordings of learning interactions, interviews, results of student work, as well as questionnaires. In this research, researchers conducted a full study on cube and cuboid volume topic. To determine the students learning difficulties on that subject, researchers did not use a diagnostic test rather than from observational data and experienced researchers in the learning process. Questionnaires are also used to determine the students learning difficulties. After that, the researcher conducted learning model using *Cabri 3D* program in an attempt to overcome the learning difficulties. The results showed that students had difficulty in cube and cuboid volume like difficulty in drawing skill and learning difficulty in thinking skill. Based on the results of learning by using *Cabri 3D* program can be concluded that students was helped in overcome the learning difficulties like learning difficulty in understanding in cube and cuboid and understanding in cube volume topic.

Key words: Volume of The Cube and Cuboid, Learning Difficulties, *Cabri 3D*