

## ABSTRAK

**Visensia Evitaria (141414017). *Kemampuan Pedagogik dan Profesional Mahasiswa PPG SM3T PGSD Mengenai Materi Operasi Hitung Bilangan Bulat Tahun 2018*. Skripsi, Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta, 2018.**

Penelitian ini bertujuan untuk (1) mendeskripsikan kemampuan profesional mahasiswa PPG SM3T PGSD dalam membuat representasi dari masalah yang berhubungan dengan penjumlahan dan pengurangan bilangan bulat serta menyelesaikan operasi perkalian dan menerapkan konsep pembagian pada bilangan bulat, dan (2) mendeskripsikan kemampuan pedagogik mahasiswa PPG SM3T PGSD dalam merancang langkah-langkah mengenalkan bilangan bulat negatif.

Jenis penelitian dalam penelitian ini adalah penelitian deskriptif kualitatif. Subjek dalam penelitian ini adalah 38 mahasiswa PPG SM3T PGSD tahun 2018. Metode pengumpulan data menggunakan tes tertulis untuk mengukur proses berpikir yang kisi-kisinya disesuaikan dengan kompetensi dasar tingkat Sekolah Dasar dan wawancara untuk memperkuat hasil tes berpikir mahasiswa. Instrumen penelitian yang digunakan adalah instrumen pengumpulan data yang berupa soal tes uraian dan pedoman wawancara. Tahap-tahap dalam menganalisis data-data yaitu tahap reduksi data, tahap penyajian data, dan tahap penarikan kesimpulan. Tahap reduksi peneliti memilih data-data yang pokok untuk digunakan dalam penarikan kesimpulan. Tahap penyajian data peneliti menyajikan data berupa deskripsi data berdasarkan klarifikasi menurut indikator soal. Pada tahap kesimpulan, peneliti menarik kesimpulan berdasarkan analisis.

Berdasarkan data tersebut peneliti melakukan analisis sehingga peneliti dapat menyimpulkan bahwa sebesar 76.32% mahasiswa mampu membuat representasi dari masalah yang berhubungan dengan penjumlahan dan pengurangan bilangan bulat. Sebesar 87.72% mahasiswa mampu menyelesaikan permasalahan operasi penjumlahan dan pengurangan bilangan bulat. Sebesar 65.79% mahasiswa mampu menjelaskan penyelesaian operasi perkalian dan menerapkan konsep pembagian pada bilangan bulat. Sebesar 73.68% mahasiswa mampu merancang langkah-langkah mengenalkan bilangan bulat negatif.

**Kata kunci:** kemampuan pedagogik, profesional, operasi hitung bilangan bulat, PPG SM3T PGSD

**ABSTRACT**

*Visensia Evitaria (141414017). The Pedagogical Competence and Professionalism Competence of PPG SM3T PGSD Students Related Integers Arithmetic Operations 2018. Undergraduate thesis, Mathematics Education Study Program, Mathematics and Science Education Department, Science and Education Faculty, Sanata Dharma University, Yogyakarta, 2018.*

*The aims of this study were to (1) describe the professional ability of PPG SM3T PGSD students in making representation of problems related to addition and reduction of integers and solving multiplication operations and applying the concept of division to integers, and (2) describe the pedagogic ability of PPG SM3T PGSD students in designing steps to introduce negative integers.*

*The type of research in this study was qualitative descriptive. The subjects in this study were 38 PPG SM3T PGSD students class of 2018. The method of data collection used a written test to measure the thinking process whose mind idea were adapted to the basic competencies of the Elementary School level and interview to strengthen the test results with students. The research instrument used was an instrument for collecting data in the form of description test questions and interview guidelines. The stages in analyzing data were the data reduction stage, the data presentation stage, and the conclusion stage. In the data reduction, the researcher selected the main data used in the conclusion. In the data presentation, the researcher presented the data based on the clarification according to the Indicator of the questions. In the conclusion, the researcher drew a conclusion based on the analysis.*

*Based on the data, the researcher did the analysis so that the researcher could conclude that 51.75% of the students were able to make representative of the problems which were related to integer addition and subtraction; 87.72% students were able to solve integer addition and subtraction problems; 44.73% students were explain the multiplication operation settlement and apply the division concept on the integer; and 73.68% of the students were able to design the steps in introducing negative integer.*

**Keywords:** *pedagogic competence, professional, Integers Arithmetic Operations, PPG SM3T PGSD*