

ABSTRAK

Theresia Gita Rosalia (111414018). “PROFIL KEMAMPUAN PENALARAN MATEMATIS DAN KOMUNIKASI MATEMATIS SECARA TERTULIS SISWA KELAS X MIA 1 SMA N 1 PRAMBANAN KLATEN PADA POKOK BAHASAN DIMENSI TIGA DITINJAU DARI PERBEDAAN GENDER”. Skripsi Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma Yogyakarta, Oktober 2015.

Penelitian ini bertujuan untuk mendeskripsikan kemampuan penalaran matematis dan kemampuan komunikasi matematis secara tertulis serta mendeskripsikan perbedaan antara kedua kemampuan tersebut pada pokok bahasan dimensi tiga ditinjau dari perbedaan gender terhadap siswa kelas X MIA 1 SMA N 1 Prambanan Klaten Tahun Ajaran 2014/2015.

Penelitian ini merupakan penelitian deskriptif kuantitatif. Subjek penelitian adalah siswa kelas X MIA 1 SMA N 1 Prambanan Klaten sejumlah 32 siswa terdiri dari 17 siswa putri dan 15 siswa putra. Instrumen data yang digunakan dalam penelitian ini adalah tes hasil belajar siswa dan wawancara. Data tes hasil belajar siswa dianalisis dengan cara mendeskripsikan semua jawaban tes masing-masing siswa, kemudian menentukan skor kemampuan penalaran matematis dan komunikasi matematis secara tertulis masing-masing siswa. Siswa dikelompokkan berdasarkan hasil penyekoran kemampuan penalaran matematis maupun kemampuan komunikasi matematis secara tertulis, kemudian menentukan persentase tiap kelompok kemampuan matematika dari hasil pengelompokan siswa tersebut. Data wawancara dianalisis untuk menguatkan tes hasil belajar siswa.

Hasil penelitian menunjukkan bahwa (1) Kemampuan penalaran matematis siswa putri lebih tinggi dibandingkan siswa putra, (2) Kemampuan komunikasi matematis secara tertulis dalam menulis dan menggambar siswa putri lebih tinggi dibandingkan siswa putra sehingga kemampuan komunikasi matematis secara tertulis siswa putri lebih tinggi dibandingkan siswa putra, (3) Perbedaan kemampuan matematika antara siswa putra dan siswa putri dalam tes hasil belajar siswa menunjukkan bahwa mayoritas siswa putri lebih baik dalam menulis jawaban soal dengan baik dan menjelaskan hubungan antara fakta, apa yang ditanyakan, jawaban soal, dan kesimpulan yang logis dibandingkan mayoritas siswa putra.

Kata kunci : dimensi tiga, gender, kemampuan komunikasi matematis secara tertulis, kemampuan penalaran matematis.

ABSTRACT

Theresia Gita Rosalia (111414018). “THE PROFILE OF MATHEMATICAL REASONING ABILITY AND WRITTEN MATHEMATICAL COMMUNICATION ABILITY OF THE STUDENTS OF CLASS X MIA 1 SMA N 1 PRAMBANAN KLATEN ON THE TOPIC OF THREE DIMENSIONS AS OBSERVED BY GENDER DIFFERENCE POINT OF VIEW”. Thesis of Department of Mathematics and Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University Yogyakarta, Oktober 2015.

This research aims to describe the abilities of mathematical reasoning and written mathematical communication and to describe the difference between those two abilities on the topic of three dimensions as observed by gender difference point of view of the students of class X MIA 1 SMA N 1 Prambanan Klaten, in the academic year of 2014-2015.

This research is considered as a descriptive-qualitative research. The research subject is 32 students of class X MIA 1 SMA N 1 Prambanan Klaten, who consists of 17 female students and 15 male students. Data instrument being used in this research is students' learning achievement test and interview. The data collected from students' learning achievement test were analyzed by describing all the students' answers. The next step was deciding the score for the each student's mathematical reasoning ability and written mathematical communication ability. The following step was deciding each group percentage of the mathematic ability generated from the student grouping phase. The data gained from the interview then were analyzed in order to support the students' learning result test.

The result shows that (1) the female students' mathematical reasoning ability was higher compared to that of male students, (2) the female students' written mathematical communication ability on writing and drawing was higher than that of male students so that the female students' written mathematical communication ability was higher than that of male students, (3) the disparity of mathematic ability between male and female students in performing the students' learning result test shows that the majority of female students are able to write the answers to the given problems and also are able to show the relation between the facts, what is questioned, the answers to the problems, and the reasonable conclusion in a way better than their majority of male colleagues.

Keywords: three dimensions, gender, written mathematical communication ability, mathematical reasoning ability.