

## ABSTRAK

**Yuni Vonti Ria Sinaga. 2015. Analisis Kemampuan dan Kesulitan Siswa Kelas X Bisnis Manajemen pada Materi Program Linear di SMK Marsudi Luhur I Yogyakarta Tahun Ajaran 2014/2015. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.**

Penelitian ini bertujuan untuk mengetahui kemampuan dan kesulitan yang dialami siswa dalam menyelesaikan soal matematika materi Program Linear serta mengetahui faktor penyebab kesulitan yang dialami siswa tersebut. Subjek dari penelitian ini adalah siswa kelas X Bisnis Manajemen yang berjumlah 13 siswa di SMK Marsudi Luhur I Yogyakarta yang mengalami kesulitan pada materi Program Linear. Penelitian ini menggunakan metode deskriptif kualitatif. Dan pengumpulan data dilakukan dari bulan Februari-April 2015. Pengumpulan data diperoleh dengan cara observasi, tes diagnostik dengan materi program linear yang terdiri dari 3 soal, dan wawancara dengan siswa.

Berdasarkan pengumpulan data tersebut, maka setiap data atau informasi yang diperoleh akan diolah dalam bentuk deskriptif untuk mengidentifikasi kemampuan dan kesulitan siswa serta faktor penyebab kesulitan siswa. Kemampuan yang dimiliki siswa dilihat berdasarkan kemampuan penyelesaian masalah menurut Polya. Sedangkan kesulitan yang dialami siswa didasarkan pada kesalahan-kesalahan yang dilakukan oleh siswa pada saat mengerjakan soal tes menurut Lerner.

Hasil penelitian adalah kemampuan dan kesulitan yang dimiliki siswa serta faktor penyebab kesulitan yang dialami siswa pada materi Program Linear. Adapun kemampuan tersebut adalah kemampuan memahami masalah, kemampuan merencanakan penyelesaian, kemampuan melaksanakan rencana, dan kemampuan memeriksa kembali proses dan hasil. Sedangkan kesulitan yang dialami siswa adalah kesulitan mengubah kalimat verbal menjadi model matematika, kesulitan dalam melakukan perhitungan (ditinjau dari kesalahan melakukan perhitungan), kesulitan dalam menggambar grafik dan menentukan langkah-langkah penyelesaian (ditinjau dari kesalahan penggunaan proses yang keliru dan tulisan yang tidak terbaca). Dan yang menjadi faktor penyebabnya adalah siswa kurang aktif bertanya, siswa jarang belajar, siswa kurang teliti, dan terburu-buru saat mengerjakan soal.

Kata kunci: *Kemampuan, kesulitan, faktor-faktor penyebab kesulitan, program linear*

## ABSTRACT

**Yuni Vonti Ria Sinaga. 2015. The ability and difficulties analysis of Class X students of Management Business class on the materials of linear program in SMK Marsudi Luhur 1 Yogyakarta in the academic year of 2014/2015. Thesis. Mathematic Education Study Program, Department of Mathematics and Science Education, Faculty of Teacher Training and Education, Sanata Dharma University. Yogyakarta.**

This research aims to find out the ability and difficulties the students underwent in accomplishing mathematic problem of linear program materials and in understanding the causative faktor of the difficulties the students underwent. The research's subjects were 13 students of class X of Management Business of SMK Marsudi Luhur I Yogyakarta who got trouble in studying linear program materials. This research made use of descriptive-qualitative method. The data gathering had been conducted in the period of February to April 2015. The data were collected through observation, diagnostic test on linear program materials consist of three questions, and interviewing the students.

Every datum or information collected was then processed into the form of description in order to identify the students' ability and difficulties and also the causative faktor of the students' difficulties. The students' ability was observed based on their ability in accomplishing the problems based on Polya. Meanwhile, the difficulties the students underwent were observed through the errors they made during the test according to Lerner.

The result of the research is the students' ability and difficulties, also the causative faktor of the difficulties the students underwent on linear program materials. However, the ability means the students ability in understanding the materials, the ability in organizing the solution for the problem, the ability in executing the solution, and the ability in rechecking the process and the result. Meanwhile, the students' difficulties means the difficulties in interpreting verbal text into mathematic model, the difficulties in computing or calculating (reviewed from the error in the computing process), difficulties in drawing graphics and determining accomplishment steps (reviewed from the errors in the use of wrong process and unreadable writings). Furthermore, the causative faktors are: the students who did not encourage themselves to raise problems, the students did not spend time for study, the students were less meticulous, and the students hastily answered the given questions.

Key words: ability, difficulties, causative faktors, linear program