

**THE IDENTIFICATION OF MATHEMATICS STUDENTS'
CHARACTERISTIC AND METACOGNITIVE LEVEL
IN MATHEMATICAL PROBLEM SOLVING
AT SECOND SEMESTER STATE
UNIVERSITY OF MEDAN**

Aisyah Tohar Nasution (ID.4123312002)

ABSTRACT

Metacognition is needed in solving mathematics problem. It is defined as the knowledge, awareness, and control of one's thinking process. In solving mathematics problem, not all students are able to use their metacognitive that are able to process the thinking. The objective of this research was to describe Mathematics Students characteristics and level of metacognition in mathematical problem solving and to know students' scaffolding question metacognitive in answer the question of problem solving at second semester State University of Medan. This research use qualitative data which is described to get the students' metacognitive representation in mathematical problems. That is why this research is included in descriptive qualitative research.

Held in second semesters students' of Mathematics regular class C 2015 State University of Medan. The subject in this research is the whole mathematics students' who's taking Calculus II at State University of Medan. The students' given test then grouped into three groups that us high level ability, medium and low ability. Every group is taken two subjects to have interview to get more credible data. Then, the data is analyzed to get conclusion from each group. The result of the research is obtained that the high level ability students has reflective cognitive use. Medium level ability students have strategic metacognitive use. Low level ability students have aware use and tacit use.

Scaffolding questions given in the test should be help students in completing the problem. From the result of this research is hoped will be source of information and input material for mathematics lecturer, researchers, and all side which needed especially in Faculty of Mathematics and Natural Science State University of Medan's environment.

Keywords : metacognitive, metacognitive level, problem solving, mathematics problem, scaffolding.