Ability of Prospective Teacher Students about Mathematics Reasoning Activities in Mathematics Instructional (Case Study on Teaching Study in Micro Teaching Practices)

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ABSTRACT

The main purpose of this study is to describe the ability of prospective mathematics teacher students in designing and realizing mathematics learning that can realize students' reasoning.

The research was use descriptive quantitative research method. The selection of quantitative methods was proposed to analyze and reveal the phenomenon of the ability to design and practice mathematics learning that can provide reasoning in the practice of micro teaching. The research subjects were mathematics education students who took micro teaching lectures. Data collection techniques used in this study were observational techniques or observation, and document studies.

The results showed that the students' ability in designing assignments and designing learning activities in the lesson plans from the beginning of the practice to the end there was an increase in the quality of the learning design, both the quality of the indicator formulation, the formulation of learning objectives as well as the activities in the preliminary, core and closing activities. The materials selected were all in the SMP and SMA materials, although the proportions of each material were different, topics on trigonometry and calculus were very rarely chosen by students in the practice of micro teaching. The design that develops the ability to reason is to develop the conjecture; identify commonalities; generalization; prove; and explain. In the practice of learning mathematics in micro-classes from the beginning to the end of learning there is an increase in accordance with the improvement in the quality of the design. The most frequent effort made by students to develop their reasoning skills when practicing mathematics is to ask their students for explanations. The number of questions submitted has not started with sufficient information for students to answer

Kata Kunci: reasoning, micro teaching