

The Ability of Junior High School (SMP) Mathematics Teachers of Writing Higher Order Thinking Skills (HOTS) Items

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ABSTRACT

In the era of the industrial revolution 4.0, teachers are required to be able to organize learning and assessment based on higher level thinking (*Higher Order Thinking Skills = HOTS*). Therefore, information about the ability of teachers to construct HOTS items is really needed, so the purpose of this study is to describe the ability of Junior High School (SMP) Mathematics teachers in writing HOTS items.

This research is a survey research with a *cross sectional survey* design. The population of this research is the junior high school mathematics teacher in Sleman Regency. Then the sample in this study were 21 teachers from 11 schools obtained through *non-stratified random sampling* techniques. Each teacher was instructed to make a HOTS instrument blueprint and develop it in 3 items. The items made by the sample teacher are essay instruments. The items that were completed were then reviewed by two mathematics teachers from Junior High School in Yogyakarta. The next step after validation is trial. The number of respondents used was 263 students, with details of 127 students of class VIII and 136 students of class VII. The trial results were analyzed quantitatively, using a classical approach.

The results showed that the quality of the questions produced by the teacher based on the results of the estimated reliability of 0.635 for class VII and 0.416 for class VIII. Likewise with the item discrimination index generated less than 50% of the questions made by teachers who possess the item discrimination index are categorized as quite good, good and very good. Factors causing this include the lack of teacher experience in writing HOTS item questions. This is a special note to make efforts to habituate teachers to use HOTS questions on daily tests, UTS and UAS proportionally so that the experience and ability of teachers to write HOTS item questions increases.

Kata Kunci: *Junior High School, mathematics teacher, HOTS*