## Measurement of High Level Thinking Ability of High School Students in Biology Subject in Yogyakarta City

by Drs. Triatmanto, M.Si., Prof. Dr. Bambang Subali, M.S., Atik Kurniawati, M.Pd.

## **ABSTRACT**

This study aims to develop an instrument to measure students' higher order thinking skills in Biology in high school and to report the measurement results of the sample SMA.

The research was conducted using the testing method. The research begins with compiling a grid and continues with the development of test items. The instruments that have been made are tested to see their validity and reliability. Items that have empirical evidence of fit with the model, then through the trial model used are packaged as a test kit used in measurement. The test was conducted on students from class X to class XII. The test is imposed on a sample from a hypothetical / theoretical population. The hypothetical population in this study is defined as the population of high school students who have characteristics represented by 6 public high schools and 5 private high schools, each of which consists of potential and non-potential high schools in Yogyakarta. Data processing for investigating the validity of the items used the Quiest program, a partial model of the polytomous credit pattern. For processing the results used comparison tests between categories of SMA.

The measurement results show the opposite results with the school category and schools that are in the upper category do not show high average scores.

Kata Kunci: High-level thinking skills, measurement