

# THE STUDY OF JUNIOR HIGH SCHOOL STUDENTS' MATHEMATICS NUMERATION LITERACY

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## ABSTRACT

The 2022 Research Group is focused on the goal of describing the difficulties and mistakes made by junior high school students in solving mathematical literacy or numeracy problems and the factors that cause these student errors and difficulties.

This research uses descriptive research with quantitative and qualitative approaches. The research subjects of this study were junior high school students in Yogyakarta. Data collection was carried out through written tests, interviews, and documentation using instruments such as tests, interview guides, and document sheets. The stages of data analysis include data reduction, data presentation, and drawing conclusions.

The results of this study indicate that the types of errors made by class VII students of SMP Negeri 1 Depok in solving PISA-oriented mathematical literacy questions about space and shape content in flat shapes based on the Newman method were errors in reading, understanding problems, transformation, processing skills and writing the final answer. Types of errors made by class VII students of SMP Negeri 6 Yogyakarta in solving numeration questions of the AKM type with geometry content were numerical difficulties and geometric difficulties based on Van Hiele's thinking stages. Types of errors made by class VIII G students of SMP Negeri 1 Bantul in solving HOTS-oriented math literacy questions based on Watson's criteria, namely incorrect data, incorrect procedures, missing data, missing conclusions, response level conflicts, indirect manipulation, skill hierarchy problems, and Above Other. The types of mistakes made by class VIII A students of SMP Negeri 14 Yogyakarta in solving SPLDV numeration problems based on the Polya stage were errors in understanding the problem, determining a problem-solving plan, carrying out the problem-solving plan, and re-checking the answers. The reason students make mistakes is because they are in a hurry, are not thorough, do not re-check the answers given, are not used to writing conclusions, are too sure of their answers, and are the result of errors in the previous process.

Kata Kunci: *Mathematical literacy, numeracy, junior high school*