

ABSTRACT

PENI SRI RAHAYU. 2023. *Analysis of Students' Mathematical Literacy Thinking Processes Viewed from Self-Renewal Capacity. Mathematics Education Master's Study Program. Graduate program. Siliwangi University.*

This research aims to describe students' mathematical literacy thinking processes in terms of self-renewal capacity in the high, medium and low categories. This research is a qualitative research study with a research method, namely the exploration method. Data collection techniques include tests and interviews. The students who were used as subjects were 3 students based on high, medium and low self-renewal capacity categories. The subjects of this research were students in class IX A of Ibnu Hanbal Islamic Middle School. The research results show that subjects with self-renewal capacity in the high category are able to solve all the questions presented with the right steps and results, so that subjects in the high category are able to achieve the three processes of mathematical literacy, namely the process of formulating, the process of implementing (employed), and the process of interpreting (interpret). Subjects with self-renewal capacity in the medium category in the formulating process were able to identify the important aspects contained in the questions completely and clearly. In the process of applying concepts (employed), medium category subjects were only able to achieve the steps of designing and implementing strategies to find mathematical solutions but did not find the right results from the problems presented. Subjects with low self-renewal capacity in the formulating process were able to identify important aspects of the questions and write them down, but not completely. Then the low category subjects were only able to achieve the steps of designing and implementing strategies to find mathematical solutions but did not find the right results from the problems presented. In the process of interpreting (interpreting), low category subjects are able to explain the results obtained in writing, while medium category subjects are able to explain the results obtained in written form and explain them again orally.

Keywords: *Mathematical literacy, PISA, Self-renewal capacity*

ABSTRAK

PENI SRI RAHAYU. 2023. **Analisis Proses Berpikir Literasi Matematis Peserta Didik Ditinjau dari *Self-Renewal Capacity***. Program Studi Magister Pendidikan Matematika. Program Pascasarjana. Universitas Siliwangi.

Penelitian ini bertujuan untuk mendeskripsikan proses berpikir literasi matematis peserta didik ditinjau dari *self-renewal capacity* pada kategori tinggi, sedang dan rendah. Penelitian ini merupakan penelitian kualitatif dengan metode penelitian yaitu metode eksplorasi. Teknik pengumpulan data berupa tes, dan wawancara. Peserta didik yang dijadikan subjek sebanyak 3 orang peserta didik berdasarkan *self-renewal capacity* kategori tinggi, sedang dan rendah. Subjek penelitian ini merupakan peserta didik kelas IX A SMP Islam Ibnu Hanbal. Hasil penelitian menunjukkan bahwa subjek dengan *self-renewal capacity* dengan kategori tinggi mampu menyelesaikan semua soal yang disajikan dengan langkah dan hasil yang tepat, sehingga subjek kategori tinggi mampu mencapai ketiga proses literasi matematis, yaitu proses merumuskan (*formulate*), proses menerapkan (*employed*), dan proses menafsirkan (*interpret*). Subjek dengan *self-renewal capacity* dengan kategori sedang pada proses merumuskan (*formulate*) mampu mengidentifikasi aspek penting yang terdapat pada soal secara lengkap dan jelas. Pada proses menerapkan konsep (*employed*) subjek kategori sedang hanya mampu mencapai langkah merancang dan menerapkan strategi untuk menemukan solusi matematika. Subjek dengan *self-renewal capacity* dengan kategori rendah pada proses merumuskan (*formulate*) mampu mengidentifikasi aspek penting pada soal dan menuliskannya. Kemudian subjek kategori rendah hanya mampu mencapai langkah merancang dan menerapkan strategi untuk menemukan solusi matematika. Pada proses menafsirkan (*interpret*) subjek kategori rendah mampu menjelaskan hasil yang didapat secara tulisan, adapun subjek kategori sedang mampu menjelaskan hasil yang didapat dalam bentuk tulisan dan diperjelas kembali secara lisan

Kata kunci: : Literasi Matematis, PISA, *Self-renewal capacity*