



Geoscience Literacy Profile of Junior High School Students

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ABSTRACT

The purpose of this research is to find out the geoscience literacy profile of junior high school students in Surabaya. The method used in this research is quantitative method. The test is done online through google form. The problem used in the test instrument is an adaptation of the TIMSS (Trends in Mathematics and Science Study) question in the Earth Science sub-discussion. The question instrument contains 10 points of multiple choice questions, and 3 items of description questions that are the result of the development of indicator slices of TIMSS (Trends in Mathematics and Science Study) 2019 and basic competency indicators of curriculum 2013. The study subjects were 85 respondents who were grade VIII students of State and Private Junior High in Surabaya. The results showed that the geoscience literacy capability profile of junior high school students in Surabaya with an average score of 58.2% is included in the low criteria, there are two indicators that have low achievement criteria, namely identifying or describing changes in the earth's surface, and the impact of geological events; and describe the process of hydrological cycles and know the sun as a source of energy for the hydrology cycle, sufficient achievement criteria, contained in the domain of cognitive knowing and reasoning. While the criteria for achievement are low, it is found in the cognitive domain applying.

INTRODUCTION

Geoscience is widely defined as a study of Earth and planetary systems. Geoscience is a broad science, where geosciences also learn about the relationship of a process in the scale of a planetary system to explore the chemical reactions that occur in a mineral. Understanding of the earth, is a holistic understanding of the Earth's system covering the oceans, atmosphere, hydrosphere, and biosphere, as well as inter-system interactions (Manduca. 2012). Essential components in this geoscience include geoscience knowledge, predicting skills, and decision making skills. These essential components are necessary to face present and future challenges (Fermeli et al, 2014; Hariyono, 2017).

Anggrayni (2020) in her research also revealed that an understanding of geoscience is indispensable in facing the challenges and developments of the times. Some of these challenges include global needs that depend on the utilization of energy, where the energy produced was produced, and both of them happened on Earth. Thus, the condition indirectly also involves an understanding of geosciences. The next challenges are water, soil, and mineral sources that are beginning to be scarce in some areas due to rising global populations and industries, as well as climate change.

In the Educational field in 2003, Indonesia has proposed a new curriculum. The new curriculum changes the learning steps of exploration, elaboration, and confirmation. Teaching-learning approach that suitable in this condition was scientific approach (Wiyanto, 2017). Scientific approach is an approach that aims to knowledge through several steps such as: observing, questioning, experimenting, associating, and

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