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The Analysis Critical-Thinking Skills of Junior High School Students on Geoscience

Anggraeni Rusmia Putri¹, Eko Hariyono², Erman³

1,2,3 State University of Surabaya, Surabaya, Indonesia





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ABSTRACT

This research aims to analyze the critical-thinking skill of the junior high school student in Mojokerto. This research describes students geoscience conception by using question instruments related to students' critical-thinking skills. The method that used in this research was pre-experimental design with one-shot case study design and descriptive quantitative approach. The test is done online via google form. The question instrument contains 20 questions related to geoscience concept, disasters, and mitigation materials that have been validated by a validator. This research involved 107 students who were on the 7th grade of junior high school in Mojokerto. The results showed that the analysis related to geoscience knowledge of students got an average of 48.79% which was included as very low category, while the critical-thinking skills got 43% on the interpretation indicator, 52% analysis, 79% evaluation, 40% inferential, explanation. 54%, and self regulation 40% with an average critical-thinking skills of 51% which concluded in the very low category. These critical-thinking skills must be built, especially in geoscience conceptl. The accuracy of the analysis of critical-thinking skills in this research only shows the results in the Mojokerto area.

INTRODUCTION

The 21st century is an open flow of globalization that allows information and technology to develop very rapidly which will give an impact to the changing of life aspects (Wijaya *et al*, 2016). Critical-thinking is an ability or a skill to making concept, applying, analyzing, synthesizing, and evaluating the information that has been collected from the observation process (Abdullah, 2013). *Partnership for 21st Century Skill* identifies that critical-thinking skills are one that is needed to prepare the student and working world (Zubaidah, et al., 2015). Critical-thinking includes the individuals skills to make a reason effectively, ask a question and solve the problems, analyze and evaluate, critically describe the decision and the process (Guo, 2016).

In this research, an analyze of the critical-thinking skills of student about geoscience will be carried out. Knowledge of earth science is needed so that people can significantly avoid and cut the damage caused by extreme incident to became the main life disaster (Hariyono, et al, 2016). This is due to the geographic location of Indonesia which is prone to disasters, raise the victims, environmental damage, the losses of properties and impact the psychology (Permenkes, 2014). Some supporting factors in advancing geoscience education in science learning at the level of junior high school according to Anggrayni, et al (2020) among others (1) global sources of profit or income depend on energy source the involved nature were depent on geosciences knowledge; (2) air, soil, minerals, and other resources are a step towards the increasing human population and the global world of global domination today; and (3) recent climate

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