

Maya Sih Hika Pamungkas. 2019. **Misconception Analysis Viewed from Thinking Styles of Seventh-Grade Students of Junior High Schools and Remediation Efforts Using Concept Cartoons on Plant Photosynthesis and Respiration Topics.** Thesis. Advisor: Prof. Sulisty Saputro, M.Si, Ph.D. Co-Advisor: Dr.rer.nat. Sri Mulyani, M.Si. Master of Science Education, Faculty of Teacher Training and Education, Sebelas Maret University.

ABSTRACT

Misconception is one factor that can influence the students' understanding of concept and their achievement. Students' thinking styles are one factor that can cause misconception. This research aimed to find out: 1) the thinking styles of the seventh-grade junior high school students; 2) the misconception of the seventh-grade junior high school students with reflective, impulsive, quickly precise (QP), and slowly imprecise (SI) thinking styles; and 3) the effectiveness of concept cartoons to remediate the students' misconception on plant photosynthesis and respiration topics.

The research subjects were the students of 7.1 SMP A, the students of 7C SMP B, and the students of 7PK.1 SMP C in the even semester of 2017/2018 academic year. This research belongs to the mixed-method of qualitative and quantitative. The data were collected using tests. The instruments were Matching Familiar Figure Test (MFFT) (Warli, 2010) and four-tier. The data were analysed using qualitative and quantitative analysis.

The results of the research show that 1) there are reflective, impulsive, and SI thinking styles in SMP A; there are reflective, impulsive, QP, and SI thinking styles in SMP B; and there are only reflective and SI thinking styles in SMP C; 2) the misconception percentage of reflective and QP students is lower than that of impulsive and SI students; and 3) concept cartoons can remediate the misconception of the seventh-grade students in the plant photosynthesis and respiration topics.

Keywords: misconceptions, thinking style, four tier, remediation, concept cartoons