ISSUE ANALYSIS USING OPEN-ENDED QUESTIONS FOR HIGHER ORDER THINKING SKILLS (HOTS) DEVELOPMENT

Lea C. Garcia University of the Philippines Rural High School, PHILIPPINES Email: leureal@yahho.com

ABSTRACT

Analyzing environmental issues is an expression of how one should love and protect the Mother Earth. A significant manifestation is this case study of six grade 8 Filipino students whose thinking skills were determined when they analyzed an environmental issue. The study aimed to describe the students' thinking processes when they analyze the issue on plastic pollution. Using a survey questionnaire consisting of five open-ended questions about plastic waste, results reveal students' use of critical thinking skills based on Freedman's (1994) model of critical thinking skills when they analyzed the environmental issue. In answering the questions, the students generally made identification of the problem, synthesis, analysis and provision for a solution. Science teachers must develop a curriculum that will challenge the young people's higher order thinking skills and their desire to care for the environment. Teachers themselves must be creative in exposing the students to more open-ended questioning during class discussions. School administrators should initiate professional development program to teach critical thinking and similar studies should be conducted involving a larger group of students to attain generalizability of findings. Intervening factors such as adult verbal instruction, socioeconomic status, type of school, type of community and gender may also be considered as part of the study.

Keywords: Critical Thinking Skills, Local Environmental Issue, Open-Ended Questions, Plastic Waste, Thinking Skills.