STUDENTS’ UNDERSTANDING OF ENVIRONMENTAL MANAGEMENT AND CONSERVATION

by:
Rex N. Olinares
Teacher III, Pablo Roman National High School - SHS

Technology is continuously evolving and dynamic. The modern generation counts on technology as a way of living and people treat this as a necessity instead of luxury. However, improper use of technology leads to global concerns of environmental degradation. Technology as the application of science should also enable learners to understand the importance of environmental management and conservation. Degradation of environment became a global issue of both developed and developing nations. Problems like pollution, growing population, and effects of industrialization are concerns of governments, parents, and educators. Environmental management and conservation inculcated to Science education of young generations should be promoted and sustained.

In the Philippines, this conceptualization is supported by the introduction of research subjects and broader Science curriculum among schools. For STEM students focusing much on Science education, the integration of research and science investigatory projects can open bigger opportunity to create, invent, innovate, and discover ways to help and conserve the environment. The need for transformative environmental education among students is expected to manifest through their active environmental participation. The schools can introduce endless subjects like sociology, science, and mathematics and relate its principles to environmental protection, but students can still be ignorant of the things that needs to be done. Pressured with activities and examinations in different subjects, students may focus on solving theoretical problems
instead of solving the practical problems of the modern world. It is very important to integrate approach when teaching Science and Technology in this area.

Science and Technology do not only present the environment as a plain instrument to beautify the earth. It is a trunk of relationship between organisms and the major source of life between them. Nature, plants, animals, and humans are interrelated. To sustain their needs, humans explore and utilize natural resources excessively to the extent that it degrades and degenerates. The vital role of learning science and technology in its application to environmental management and conservation is to protect, develop, and remediate measures to rehabilitate natural resources. In view of global industrialization, technological advancements become critical in environmental degradation. It is the era where people started to ignore the importance of environmental conservation and preservation. Population growth increases humans’ consumption of natural resources, thus leading to deforestation, poor sanitation, pollution, unsustainable agriculture, and poverty. These issues cause imbalance between people and ecosystems.

Abdullah (2015) suggested that science and its mutual dependency between its content and the environment is the best way to learn environmental knowledge and applications. Scientific disciplines enable students to take roles in conserving the environment. Among the different scientific areas, Biology widely adopted curriculum content to topics related to environment where applications on sustainable environment can be discussed such as agriculture, waste management, and green revolution.

According to Verma (2017), students that are knowledgeable of the environment shows greater understanding on the functioning of the environment. Human interaction with nature allows them to recognize problems and find ways on how to solve them. Environmental education helps students develop environmental literacy in general. Specifically, it allows them to develop problem-solving and decision-making skills while taking active participation in either ecological, economic, or political aspects.
of protecting the environment. This application helps them fosters environmentally responsible attitudes.

Environmental education, as part of science and technology education, may address issues on sustainable development when students are encouraged to conserve and protect their natural environment. The teachers have important role to play to inspire and ignite this driving force among students to participate in environmental stewardship and become responsible citizens that protects degrading environment and unhealthy society. Recognizing the importance of teaching environmental management and conservation among schools in the Philippines helps students better understand the concepts and application of science and technology education in their surroundings and daily lives.

References: