

Week 5:

1. Science Education in the Philippines

At the end of this lesson, the students should be able to:

- Discuss the concept of science education; and
- Identify science schools established to promote science education in the Philippines.



Introduction

The Philippine is trying its best to improve the state of science education in the country.

This lesson will discuss the concept of science education and will identify some strategies to promote science education in the country.

One of the strategies is to establish science schools that will encourage students to pursue their career in science and technology and to nurture their gifted potentials in science.



The Concept of Science Education

- ❑ focuses on teaching, learning, and understanding science.
- ❑ involves developing ways on how to effectively teach science. This means exploring pedagogical theories and models in helping teachers teach scientific concepts and processes effectively.
- ❑ Learning science, on the other hand, includes both pedagogy and the most interesting aspect, which is helping students understand and love science.



The Concept of Science Education

- ❑ John Dewey (2001) stressed the importance of utilizing the natural environment to teach students.
- ❑ Accordingly, nature must indeed furnish its physical stimuli to provide wealth of meaning through social activities and thinking. It is not surprising therefore that science education is important.
- ❑ Marx (1994) opines that science is going to be one of the most important school subjects in the future.



Science Schools in the Philippines

One outstanding program for science education supported by the government. It is the establishments of science schools in various parts of the country. There are also several government programs implemented by the Department of Education and few private schools for science and Education.

1. Philippine Science High Schools System (PSHSS)
2. Special Science Elementary Schools (SSES) Project
3. Quezon City Regional Science High School
4. Manila Science High School
5. Central Visayan Institute Foundation





2. Indigenous Science and Technology in the Philippines

Learning Objectives:

- Discuss the concept of indigenous science and its contribution of indigenous science in the development of science and technology in the Philippines.



Filipinos, especially during early times, tried to invent tools that will help them in everyday life. They also developed alternative ideas in explaining various phenomena and in explaining the world around them. This system of knowledge is called indigenous knowledge, which is the foundation of indigenous science.





Indigenous Knowledge System

It is embedded in the daily life experiences of young children as they grow up.

Some examples of indigenous knowledge that are taught and practiced by the indigenous people are:

- Predicting weather conditions and seasons using knowledge in observing animals' behavior and celestial bodies.
- Using herbal medicine
- Preserving foods



- Classifying plants and animals into families and groups based on cultural properties
- Preserving and selecting good seeds for planting.
- Using indigenous technology in daily lives
- Building local irrigation systems
- Classifying different types of soil for planting based on cultural properties
- Producing wines and juices from tropical fruits and
- Keeping the custom of growing plants and





Indigenous Science

It is a part of the indigenous knowledge system practiced by different groups of people and early civilizations.

It includes complex array of knowledge, expertise, practices and representations that guide human societies in their enumerable interactions with the natural milieu; agriculture, medicine, naming and explaining natural phenomena and strategies for coping with changing environments



The Concept of Indigenous Science



1. Indigenous science uses science process skills such as observing, comparing, classifying, measuring, problem solving, inferring, communicating and predicting.

2. Indigenous science is guided by culture and community values such as the following;

- ❑ The land is a source of life. It is a precious gift from the creator.
- ❑ The Earth is revered as “Mother Earth”. It is the origin of their identity as people.
- ❑ All living and nonliving things are interconnected and interdependent with each other.



❑ Human beings are stewards or trustee of the land and other natural resources. They have a responsibility to preserve it.

❑ Nature is a friend to human beings- it needs respect and proper care

3. Indigenous science is composed of traditional knowledge practiced and valued by people and communities such as ethno-biology, ethno-medicine, indigenous farming methods, and folk astronomy.

THINGS TO REMEMBER!

COMPLETE THE ACTIVITY IN GOOGLE CLASSROOM THAT
WILL ASSESS YOUR IMAGINATION 😊 (Checking will be on
our schedule of Asynchronous Discussion).



-END-
**Thank you and Keep Safe
Everyone!**

