

Title: Discovering Ecuador/Galapagos: New Places, New Ideas, New Experiences

Grade Level: 6-8; 9-12 Curriculum Focus: Social Studies, Science

**Video Segments:**

[Evolution of a New Species](#) (03:38)

[The Last Stop](#) (01:44)

[The Galapagos Islands and Argentina's Future](#) (02:04)

[Geography and Regions](#) (02:35)

[History and Culture](#) (02:53)

[Physical Features and the Equator](#) (02:11)

[Arriving at the Galapagos](#) (07:54)

[Darwin Develops a Non-Random Theory of Evolution: Natural Selection and Adaptation](#) (03:20)

**Program Description:** These video chapters introduce Ecuador with a focus on the Galapagos Islands—“a wonderland suspended in time.” Describing the Island as “a living laboratory of evolution,” Jeff Corwin describes not only the evolution and survival of the Galapagos marine lizard but also the development and environment of a host of other island inhabitants. Once referred to by pre-Incan inhabitants as “middle of the world” because of its proximity to the equator, Ecuador possesses many distinctive physical and cultural features—all of which the video chapters explore.

Students will meet Ecuador’s indigenous Andean society and explore the country’s located four major regions, or “continental portion of Ecuador:” the *Costa*, *Sierra*, *Oriente*, and 600 miles west in the Pacific are the *Galapagos Islands*. Finally, students will understand a bit of the history of Ecuador that has made it a very unique country.

**Learning Objectives:**

After viewing this video students will be able to:

- Compare and analyze societal patterns for preserving and transmitting culture while adapting to environmental or social change
- Explain how language, art, music, belief systems, and other cultural elements can facilitate global understanding or cause misunderstanding
- Examine, interpret, and analyze physical and cultural patterns and their interactions, such as land use, settlement patterns, cultural transmission of customs and ideas, and ecosystem changes
- Understand the historical perspectives
- Understand biological evolution

**Classroom Connections:**

**A:** The native Indians who live in Ecuador speak both Spanish and Quechua languages. They retain their ancient culture through their knowledge and continued use of the

Quechua language, once spoken by the Inca. Often, a language reflects one's cultural heritage and even one's history. As a class, list the various languages spoken by class members. Be sure to include languages spoken by family members. Once you have made your lists, break into groups, selecting one or two languages. Next, research the origin of each language, research the people who spoke the language. Discuss whether these people continue to use their language today or whether the language and part of the culture have been lost to time. To add some depth to your research, interview, if you can, individuals who speak the language you are researching and record it. Note how hearing the language makes you feel and whether you hear familiar sounds. Your group may wish to write a brief script for each person being interviewed to read or say—something common to everyday speech, i.e., How are you? What is your name? What time is it?

Present your findings to the class, along with your recordings.

**B:** Just as your way of dressing expresses who you are and how you identify with peers, the manner in which a culture dresses reveals much about its history, its beliefs, its traditions. As a class discuss the similarities of dress a visitor would see in your school; be sure to include not only clothes but also shoes, jewelry, hats/caps, and other ornaments.

Discuss what *message* would be conveyed to the visitor about you and your school mates.

In a similar experiment, divide into four groups. Each group will take one week to record in a journal the diversity of dress they observe that reveal a culture. Use as resources not only school but also the community, the grocery store, shopping center, etc.

Each group will discuss what it has learned and prepare an oral presentation about findings.

### **C: Writing Prompt: (Grade Band 9-12)**

[Darwin Develops a Non-Random Theory of Evolution: Natural Selection and Adaptat \(03:20\)](#)

One decade before Charles Darwin was born, Erasmus Darwin, his grandfather, wrote: "Nursed by warm sunbeams and primeval caves, organic life began beneath the waves. Hence without parent, by spontaneous birth rise the first specks of animated earth." Charles Darwin, unlike his father or grandfather would focus his entire career on exploring and chronicling the outdoors. Eventually, his studies would take him to the Galapagos Islands where he would take his career firmly into the natural sciences. Essentially, his theory contained three elements two of which are 1) in the random shuffle of heredity, each individual is slightly different from all others and 2) an acknowledgement of the cruelty of nature, namely, in nature a struggle for survival exists. Some of those individuals inherited differences coupled with occasional random mutation, mutation which will give the organism or individual a better chance for

survival. Hence, nature selects those individuals/organisms best likely to survive and reproduce, thereby continuing the species.

By comparing and contrasting both Erasmus' and Charles' stances, write an analysis of the validity of either statement. Be sure to provide specific examples to support your analysis.

### **Target Vocabulary:**

**Darwin:**\*\* Charles Robert 1809–1882 English naturalist; published *Origin of the Species* (1859)

**Marine Iguana:** a shore-dwelling seaweed-eating iguana (*Amblyrhynchus cristatus*) of the Galápagos Islands that often feeds in the sea

**Natural Selection:** a natural process that results in the survival and reproductive success of individuals or groups best adjusted to their environment and that leads to the perpetuation of genetic qualities best suited to that particular environment

**Simon Bolivar:**\*\* a visionary who sought a united Spanish America; secured independence for Quito in 1822

**Quito:**\*\* capital of Ecuador; Quechua language of the Inca yet spoken, along with Spanish

**Mestizos:** a person of mixed blood ; *specifically* : a person of mixed European and American Indian ancestry

**Juntas:** a council or committee for political or governmental purposes ; *especially* : a group of persons controlling a government especially after a revolutionary seizure of power

**Galapagos Islands:** island group Ecuador in the Pacific W of mainland □ on San Cristóbal Island *area* 3093 *square miles* (8010 *square kilometers*), *population* 9785

\*All definitions from *Merriam Webster Dictionary Online* <http://www.merriam-webster.com/>.

\*\* Definitions are from video

### **Academic Standards:**

National Council for the Social Studies (NCSS) has developed national standards to provide guidance for teaching social studies. To view the standards online, go to <http://www.socialstudies.org>

- Understand the significance of studying culture and cultural diversity
- Understand global connections and interdependence

- Locate and describe varying landforms and geographic features, such as mountains, plateaus, islands, rain forests, deserts, and oceans, and explain their relationship within the ecosystem
- Describe, differentiate, and explain the relationships among various regional and global patterns of geographic phenomena such as landforms, soils, climate, vegetation, natural resources, and population

National Science Teachers Association (NSTA) has developed national standards to provide guidance for teaching science. To view the standards online, go to <http://books.nap.edu/openbook.php?isbn=0309053269>

- Develop an understanding of the nature of scientific knowledge
- Understand science as a human endeavor
- Understand the interdependence of organisms