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Grades 10-12

Biology

**NEH Curricular Project**

Nature and the development of culture

*Essential Questions:* What are the components of the living world were key in the development of culture? How did species domestication, the origins and development of agriculture, the management of useful plant and animal populations direct the process of traditional knowledge acquisition and organization?

*Learning Objective:* Students will become familiar with the concept of culture and be able to link their own culture's key developments to specific plant and/or animal species.

Day 1

Introduction: Begin with letting the class know we will discuss the influence of flora and fauna on the development of culture. To start though, we must define what the word “culture” means to us and recognize some of the important elements of culture.

*Opening discussion: What is culture?*

* Break students into groups of 4. Give up to five minutes for the group to come up with a definition for the word “culture”.
* At the end of the five minutes, have students read out their definitions. Discuss--be sure to keep all student comments positive. Work on coming up with a usable definition, but be aware that it may not be complete yet. The class will have the chance to rework the definition. Teacher can opt to create a class definition or allow groups to continue working with their own definition.

*What are the elements of culture?*

* Continue in groups. Give up to five minutes for the group to come up with a list of the elements of culture. There should be a minimum of five elements. At the end of the five minutes have students share their lists. Discuss--be sure to keep all student comments positive. Be sure to transfer a finished list to wall post so students can have access to it for the research project.

*The organization of culture*

This is the background information students will need as they begin to consider what culture is, how it is formed and passed from one generation to the next, and what their own cultural background is. Many students will have multiple cultural backgrounds- allow them to self-identify with one or encourage them to explore all of them.

* + Where does it come from?
  + How is it passed down/continued over generations?
  + Break down the 7 Elements
    - Social Organization
    - Customs and Traditions
    - Language
    - Arts & Literature
    - Religion
    - Forms of Government
    - Economic Systems

Day 2: Otzi the Iceman

Option A:

Slides provide the background information on Otzi. As the teacher progresses through the slides, there should be discussion over the various pieces of clothing, tools, etc. found with Otzi. Explore with the students what they may indicate about Otzi as an individual and what they may imply about society at the time.

* Who was he?
* How do we know?
* What do we know about his culture?
  + Evidence?
  + Inferences?

Option B:

Videos--Either the DVD “The Iceman Murder Mystery” or the BBC2 special “Otzi the Iceman” can be used. The videos allow for a more visual reproduction of the items. It is recommended that if this option is used that the video is stopped regularly for a class discussion on evidence and the inferences made. (Non-science classes may opt to skip this part and either extend Day 1 or head directly in to Day 3.)

Day 3-5

Project: Written report and class presentation (due date may vary if students are allowed time beyond class allotment).

Students will research and create both a written report and class presentation on two or more aspects of the living world that has influenced the development of their own culture.

Questions to consider-

* What was/were the important agricultural crops in the development of your culture?
* What role did the domestication of animals possibly play in the development of culture?
* Where, if at all, do you see these plants or animals in the arts--paintings, stories, other various art forms?
  + Where did these plants originate?
  + Are there any cultural customs that were built around these?
  + Do they exist today?
  + Are these plants or animals still prevalent in your culture?
    - If not, why do you think this is?
* How does your culture feel about the use of GMOs?
* Recipes?
  + Food in class?

Resources: internet, books, family members, community (Emphasize the use of family and members of the extended cultural community. Doing so builds the cultural connections, allows for more authentic information, and builds familial relationships. )