

UNIT/LESSON SUMMARY

There are frameworks of axioms and assumptions, values and beliefs, perspectives and world views that color our knowledge. This topic explores a range of just such frameworks, and invites students to identify, evaluate and justify their own position within that spectrum

Stage 1 -- Desired Results

Established Goal:

International Baccalaureate Standards addressed by the lesson

- 1.1.1 - Outline the concept and characteristics of systems
- 1.1.2 - Apply the systems concept on a range of scales
 - 1.1.1 - State what is meant by an environmental value system
- 2.1.2 - Outline the range of environmental philosophies with reference to figure 6 (of IB syllabus)
- 3.1.3 - Discuss how these philosophies influence the decision-making process with respect to environmental issues covered in this course
- 4.1.4 - Outline key historical influences on the development of the modern environmental movement
- 5.1.5 - Compare and contrast the environmental value systems of two named societies
- 6.1.6 - Justify your personal viewpoint on environmental issues

National Education for Sustainability Standards addressed by the lesson

EfS Standard 2 – Students recognize the concept of sustainability as a dynamic condition characterized by the interdependency among ecological, economic, and social systems and how these interconnected systems affect individual and societal well-being. They develop an understanding of the human connection to and interdependence with the natural world.

- **2.4 (Social Systems)**
- **3.1 (Personal Action)**

Students must understand their own personal environmental value system before they can understand how that philosophy guides their own (and other's) decision-making.

Outcomes (How can sustainability education help your students learn this?)

<p>Enduring Understandings: <i>Students will understand that...</i></p> <ul style="list-style-type: none"> • There are a range of environmental philosophies that people hold that influence decision-making process on environmental and other issues. • The environment or any other organism can have its own intrinsic value regardless of its value to human. How we measure this value is a key to understanding the value we place on our environment. <p><i>Key Points: Rutherford, Jill 2009. Environmental Systems and Societies: Course Companion. New York: Oxford.</i></p>	<p>Essential Questions:</p> <ul style="list-style-type: none"> • How does a person's environmental philosophy (value system) impact their decisions?
<p><i>Students will know</i></p> <p align="center"><u>VOCABULARY</u></p>	<p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • State what is meant by an environmental value system • Outline the range of environmental philosophies with reference to figure 6 (of IB syllabus) • Discuss how these philosophies influence the decision-making process with respect to environmental issues covered in this course • Outline key historical influences on the development of the modern environmental movement • Compare and contrast the environmental value systems of two named societies • Justify their personal viewpoint on environmental issues
<p>Environmentalism Environmental value systems Deep ecology TNCs Industrial Revolution Green Revolution Conservationists Preservationists Stewardship Modern environmental movement Intergovernmental bodies / organizations Pressure groups NGOs Anthropocentric Biocentric Biorights Deep ecologist Self-reliant ecologist Environmental manager Cornucopian</p>	<p>Anthropogenic Rachel Carson and Silent Spring Minamata Bhopal Chernobyl Greenpeace Earth Summits The Gaia theory Environmental worldview Environmental value systems Ecocentric Technocentric Intrinsic Holistic Greenwash Deep green Dark green Light green Bright green Cornucopian</p>
<ul style="list-style-type: none"> • Key historical influences on the development of the modern environmental movement. 	

- There are a range of environmental philosophies that people hold
- Your perspective on the environment may also be called your value system, paradigm or viewpoint
- Your environmental philosophy influences your decision-making process on environmental and other issues.
- Different societies hold different environmental philosophies and comparing these helps explain why societies make different choices
- The environment or any other organism can have its own intrinsic value regardless of its value to human. How we measure this value is a key to understanding the value we place on our environment.
- Student will know how to properly cite resources using footnotes and bibliography

Stage 2 – Assessment Evidence

Performance Task(s):

I. Student will write a structured RAFT outlining the below based on the IB standards.

- State what is meant by an environmental value system
- Justify your personal viewpoint on environmental issues
- Compare and contrast the environmental value systems of two named societies

Other evidence:

- I. “We Have a Problem in Harrison”
- II. How can we define: VALUE (personal, Group and Class definition)
- III. Situation Cards (Compare/Contrast Social Environmental Value System)
- IV. Reading Map of Chapters 1 & 2
- V. Science Safety Quiz
- VI. IB Structured Content Quiz

Stage 3 – Learning Plan

Learning Activities: (what will students do and what will you, the teacher do, to prepare the students to achieve the desired outcomes)?

- I. We Have a Problem in Harrison (wetland conversion). – *How do we make a decision?*
How can we define: VALUE

To Build or Not to Build Worksheet – students are introduced to an issue in Harrison and are asked to consider who the stakeholders are in this problem. Students are asked to consider what the stakeholders might consider as they set out to resolve the problem. Students will then be prompted to come up with their own definition of the word VALUE (5 minutes). Students will then be asked to share their definition with three other students and as a group come up with an agreed upon group definition (10 minutes). Each group will share out and the class will come up with an agreed upon class definition. The class will begin the next day reflecting on their definition and using that concept to build into a VALUE SYSTEM.

- II. Value as a SYSTEM

The class will begin with the class definition of the word VALUE on the board. Students will then be asked to brainstorm “What are examples of systems” Expected responses include “solar system, circulatory system, etc.” (3 minutes) We will go through a powerpoint that formally defines a SYSTEM according to the IB standards using the terms INPUTS, OUTPUTS AND FEEDBACK. I will go through an example with student help setting up an example of the “school system” and filling in different inputs and outputs and also feedback. Students will be asked then to apply this concept of systems to values. (15 minutes) Students will consider their own personal value system and the inputs and outputs that are associated with it (8 min.) Lastly, we will hold a class “share out” and list inputs, outputs and feedback that students came up with and come up with general categories to add into a graphic organizer (religion, peers/friends, region, school, decisions, etc) Students will leave with the question “What is the consequences of your output?)

- III. Continuum of Environmental Philosophies: Read Quote from Al Gore... where does he fit in??

Students will work through a power point outlining the different types of environmental philosophies as outlined by the IB Standards. (12 min). Students will then be given a quote by Al Gore and with a partner work to determine where they believe he falls within that framework. Note: An additional quote will be put up from presidential nominee Mitt Romney for students that finish earlier. Students will share out where they placed him and as a group we will agree on placement. (10 min) Students will then be asked to consider where they fall on the continuum and to write 5 pieces of evidence based on their work the previous day. They will then share out with a partner (remainder of time in class) Students will be given their RAFT to work on 5 minutes before leaving.

- III. Historical Influence on the Environmental Movement (2 PERIODS)

Students will work through a JIGSAW where each group will be given a timeframe to read and learn about noting the important historical figures and events in environmental history. The master groups will be given 1 period to research and learn their time period. Then students will then use 1 period to JIGSAW out into their learning groups and share/teach their group.

- IV. Comparing Environmental Value System of Two Named Societies ---Situation Cards

Students will work into pairs and will receive a packet of SITUATION CARDS that has different influential people and organizations with their environmental viewpoint on it. Each pair of students will identify the group’s environmental value system according to the IB standards and then justify their classification. 10 minutes before the end of the period we will share out and compare each groups work.

- III. What is Your Personal Viewpoint? – Review Performance Assessment and Rubric

Students will be brought into the computer room to work on their RAFT and to meet one-on-one with teacher to ask any questions.

IB Environmental Value Systems Quiz

Resources:

Davis, A. and Nagle, G. 2010. *Environmental Systems and Societies*. Essex: Pearson

Rutherford, Jill 2009. *Environmental Systems and Societies: Course Companion*. New York: Oxford.

Stage 4 – Addendum

Lesson 1 -- To Build or Not to Build (word doc and Ppt.)

Lesson 2 – Value Systems – (word doc and Ppt)

To Build or Not to Build??

The Harrison Planning Board recently had to solve a problem. A new homeowner in Purchase decided to purchase a neighboring lot so that they could build a sport field. This new lot contained part of a wetland. In the past 10 years, the Harrison Planning Board has not allowed any existing wetlands to be filled in.

Who are some of the stakeholders in this situation?

Choose two stakeholders that you came up with and think about how each of these stakeholders made a decision about how to solve this problem? Come up with three example of internal questions that these people may have asked themselves to help make a decision?

1. _____

a. Q1

b. Q2

c. Q3

2. _____

a. Q1

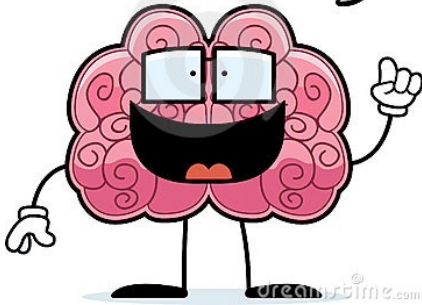
b. Q2

c. Q3

What is your definition of the word VALUE?

BRAINSTORM:

What are
some examples
of systems?

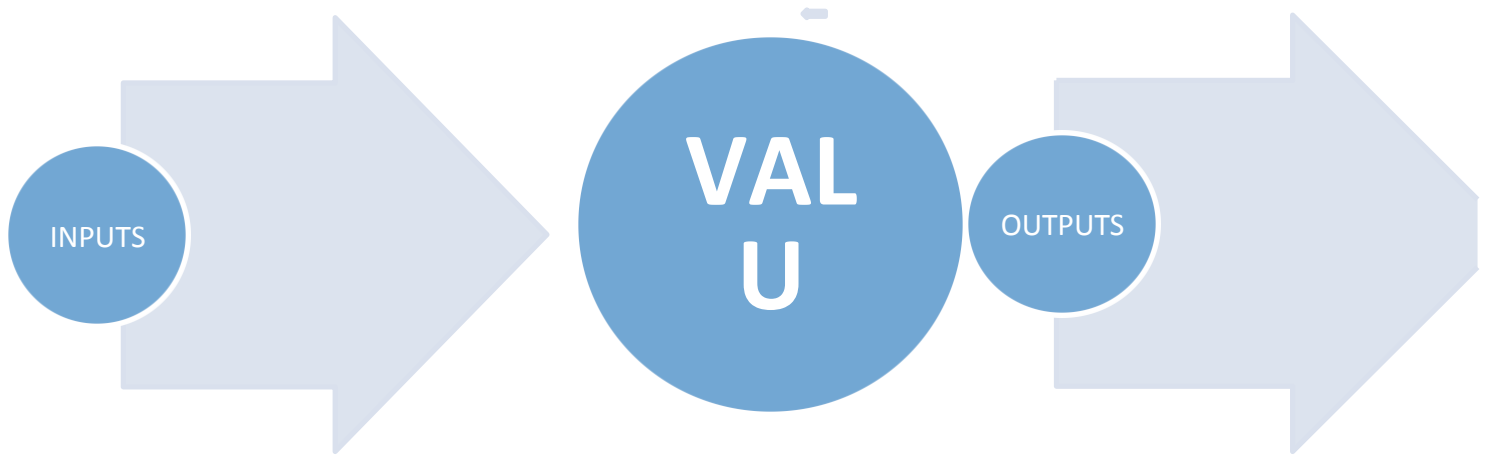


What is a SYSTEM?

- Inputs
- Outputs
- Feedback

What is a VALUE SYSTEM?

Write down as many inputs as you can think of that have shaped **YOUR PERSONAL** value system.



What are the consequences of your outputs?