CONNECTING THE EF TO HISTORY

Tracing Ecological Footprints through history looks at economic, political, and cultural factors that shaped **how people lived** at different time periods, and the economic, geographical, political, and cultural factors shaping their lives.

Outcomes: What will students learn by integrating the EF into history?

The historical practices surrounding food, transportation, housing, and energy usage provide opportunities to meet multiple historical standards, including those listed in the Historical and Social Sciences Analysis Skills Standards. Specific knowledge and skills developed through an EF lens include:

- comparing the past and present, and evaluating consequences of past events
- understanding how change happens
- understanding human modifications to the environment and the resulting environmental policy issues
- showing the connections between historical events and larger social, economic, and political trends
- understanding how changes in technology, political decisions, and other historical events shaped structural systems and contributed to our current way of living

**** In addition, the EF provides a critical lens for students to think through as they develop as humans and make choices in lifestyle and as a consumer. In thinking about how history has shaped systems and the environment today, students may decide on what they can do on an individual level and at a policy level to ensure a safe environment for future generations.****

Guiding Questions for Integrating the EF into history

You can use guiding questions to get students thinking about EF issues in history. Here are a few suggested questions that can be used across time periods:

- What natural resources were important to the place and time? How did different groups of people in this place and time use these resources?
- How did different groups of people live in a particular place and time? For example, how did the lives of serfs differ from that of lords?
- What were the important economic ties at this time? What political events shaped these?
- What were the important technologies at the time? How did they develop? What impact did they have on the environment?
- What were the belief systems at the time regarding the natural world? What impact did those beliefs have on the use of resources? How did these beliefs systems vary by culture?

More standards-specific questions can be found in the “Standards and the EF” document in your training packet.

EF INTEGRATION PLAN

Name: _____

Step 1: Identify EF Link w/standards

Using the handout "EF Concepts and Standards", select the standard(s) you will address using some element of the Ecological Footprint. Enter the number and sub-number(s) of the standard(s) below. (You do not need to write out the text of the standard.) An example is provided.

standard: __10__ . __2_ . __1_

standard: _____ . _____ . _____

standard: _____ . _____ . _____

standard: _____ . _____ . _____

Step 2: Select an integration strategy and accompanying resources

Below are several **strategies** and resources that can help you meet standards using the EF. Read through the list and identify the strategy(ies) you are most likely to use.

- **Strategy A: Reframe a lesson or unit to have an EF focus.** The document "EF Concepts and Standards" provides concepts and questions you can use to guide the re-design of your lesson or unit. See handout 12.

- **Strategy B: Integrate EF activities into an existing lesson or unit**. Select activities from the document "Sample EF Activities", handout 15.

- **Strategy C: Use complete, pre-made lessons on the EF**, selected from the lessons provided in your packet. An overview of these lessons is provided on Handout 16.

- **Strategy D: Other:** Please describe:

Step 3: Provide details on your integration strategy

a. Provide a brief narrative about how you plan to integrate the EF based on your chosen strategy.

Example for strategy A (integrating activities into an existing lesson/unit): *In my unit on colonial history, I will have students research foods eaten at the time, and compare those with current-day foods*. *Students will make diagrams comparing resources used for meals in the two time periods. I will use theses resources:*

b. What resource do you think you will you use or need?

__ the EF Concepts and Standards handout

__ activities on the EF Integration Strategies document

__ Readings/articles listed on the EF Integration Strategies document

__ Pre-made lesson(s). Please specify: _____

__ Other materials from the resource list on pg. 3 of Sample EF Activities (Handout 13)

_____ _____ _____ _____

__ my current textbook

__ other resources I currently use:

_____

c. Do you anticipate using the on-line support network? *yes not sure no*

d. When do you plan on implementing the strategy you've described? Please identify the month/year:

STIPEND REQUIREMENTS: TWO LEVELS OF PARTICIPATION

You can receive a $125 or $225 stipend by completing the requirements outlined in the table below.

Stipend Amount	Requirements
$125	Complete the on-line evaluation (check-boxes and short narrative responses) at www.redefiningprogress.org/education.
$225 and 1 Credit from CSU-East Bay	1) Attend the 4 hour workshop Send by mail **examples of student work representing different activities.** Examples include: • timelines, student reports, quizzes, posters, etc. (as in the Sample EF Activities handout) • maps, pictures, or written documents from the lesson plans "Food Footprints Through Time," "When the Chips Are Down," and/or "No Tomato Sauce 'til 1492." • outreach that students conducted to show others what they have learned about reducing footprints (brochures, booth at events, energy audits, etc.) Samples that are 8 1/2" x 11" can be mailed, while other work (such as posters) can be photographed (send hard copy photos or digital copies).Complete the on-line evaluation (check-boxes and short narrative responses) at www.redefiningprogress.org. 2) Send by mail a **2 page description of your lesson or unit plan** that includes time spent on planning and teaching the units. Describe each activity you did and the time spent on it. • If you created your own lesson(s), please send those. Write up what you did as a model for replicating your integration strategy, including objectives, time, and standards that were met (if applicable). • If you integrated the EF throughout a unit, please send an overview of the unit (major outcomes, activities, and assessments). 3) Work with another teacher by training him/her on the EF content as well as integrating the EF into his/her curriculum (see below). 4) Complete the on-line evaluation available at www.redefiningprogress.org/education. The form includes check box answers, short answers, and long narratives. The narrative details how you trained another teacher and how the teacher integrated the EF into his/her curriculum.

Please mail in samples of student work and lesson plan narrative by **Friday, Dec. 2** to:

Diana Abellera
Redefining Progress
1904 Franklin St., 6th Floor
Oakland, CA 94612

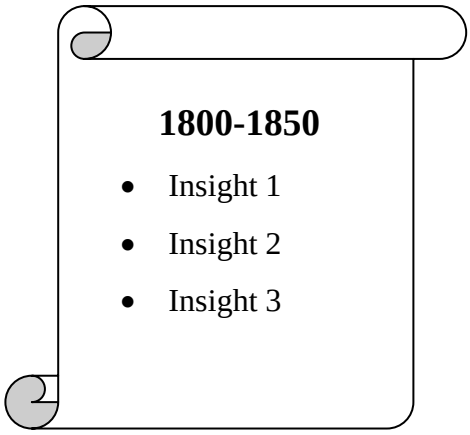
Identifying EF connections to standards

1. Review the document 'Standards and the EF', focusing on your standards

2. In your groups, discuss the following:

- *What are key concepts the EF highlights for this particular time period?*
- *What is the value of integrating the EF into this time period?*
- *What are the enduring concepts you want students to get out of using the EF in this time period?*

3. Record your top 2-3 ideas or insights on a piece of flipchart paper w/ the relevant years across the top, as shown below:



Sample Activities
Comparing how people lived in the past and present

A more detailed extension of these activities specific to food and the food system can be seen in "Food Footprints through Time" (students compare and contrast food and food footprints in different time periods)

1. **Researching resource use ('sources and sinks') in history:** Have students research a specific element of everyday life at a chosen point in history; options include clothing, food, housing, transportation, or energy usage. Students should focus their research on the environmental impacts of producing the item (such as clothing), or of meeting the particular need (such as transportation).

   Research should include:
   - What the item was made from
   - the path the item took from its origins to the user (ex: path of a shoe from the cow to the cobbler to the peasant, or the process of getting coal used to power a train or heat a home in the 19th century)
   - the wastes usage involved, and what happened to them (ex: the disposal of food or animal waste, or the emissions created by coal)

****Readings on resource use throughout time available on pg. 5.****

2. **Recording research through diagrams:**

   Have students create diagrams or maps showing the environmental impacts they researched. Diagrams can include pictures, words, arrows, and other symbols to show the resources used, their origins; the path of manufacturing, usage, and disposal; and the wastes created along the way. Encourage students to include as many details as they can and to cite resources and sinks at each step. Have student put a box around the end products of each step (air pollution, contaminated river, etc.). Students can write a narrative to accompany their diagrams.

   Optional: Have students create a second map showing the resources used for the same item today. Students can write an additional narrative and/or create graphs, charts, or Venn diagrams to contrast resources used, wastes produced, miles traveled (i.e., of a food or clothing item), or other information.

3. **Timelines:**

   Have students create a timeline of the technological developments between the past and the present. For example, if students researched transportation in the 19th century, the timeline would include transportation developments from that point until today. How have these developments increased or decreased EFs over time? How might future developments affect EFs?

4. **Diary accounts:**

   Have students read and/or write a diary entry of someone preparing or producing the item they researched. (Ex: The diary of someone making clothing in Colonial America; the diary of someone working a specific food item at a particular time period. If students write the entries, have them include details about the tools or technology used, how the resources were obtained and processed, and how the item got from the producer to the user.

   Variation 1: Have students write two diary entries from the perspective of two people in different social classes. (See the articles on food eaten by slaves and slave owners as an example.)
   Variation 2: Have students write the diary entry from the perspective of a particular resource or item (such as clothing or a food item).

Sample Research Activity
Students develop ways to reduce their footprint

These activities have students develop strategies for reducing their footprint in terms of food, energy usage, or transportation. The activity has students consider not only changes in their personal actions, but also leverage points in the larger economic, political, and social policies which influence their choices. Completing the activity thus requires that students have sufficient background knowledge about these systemic factors. Given this, this activity is suggested as culminating projects for a unit focused on these issues.

Suggested Procedure:

1. Review factors influencing students' footprints that you have studied (such as economic or environmental policies related to food, energy, or transportation.)

2. Tell students that they are going to develop a strategy to reduce their footprint in terms of food, energy usage or transportation. The strategies students develop must include information on

   a) changes in their personal actions and

   b) changes in policies that impact their footprints.

Students' research can be presented in the form of a report, website, presentation, letter to the editor, a pamphlet they can use to educate others, or other appropriate format.

SUGGESTED RESEARCH GUIDELINES

(Teachers may use these guidelines as the basis of an assessment tool)

- Identify a proposed action for reducing your footprint and use the Footprint quiz to identify the impacts of the change.

  Suggestion: Take the Footprint quiz twice; answer the first time with your current actions and the second time with your proposed actions. Compare the difference.

- Identify local, state, national, or international influences that affect your proposed change.

  Ex. if you propose to take public transportation more often, you could identify the local transportation authority, or state highway funding, as influencing factors.

- Suggest a policy that could make it easier to reduce your footprint.

  Ex. Increasing funding for buses to provide more frequent service or better routes

  - Identify who the key decision-makers are for these influences, and at what level of government

  Ex. The local city council, Congress, United Nations

  - Identify who would be for the policy, and who might be against it.

  Ex. Special interest groups, oil companies

- Describe barriers to achieving the policy.

  Ex. Infrastructure, funding, social resistance to change

- Describe ways you and other students can advocate for the policy.

  Ex. Promote clean energy through public awareness campaigns

- Finally, identify steps you will commit to as an individual and as a citizen involved in shaping policies.

  Ex. Walk to school twice a week, write letters in support of signing Kyoto Protocol

PRE-MADE LESSON PLANS OVERVIEW

Food Footprints through Time

Abellera, Diana. Redefining Progress, 2005.

Overview: This activity is designed to have students think about significant moments in history that have affected today's food system. They will use their knowledge of different time periods and cultures to determine which foods people ate in the past. Then they will analyze how their food got to the tables, identify all the people involved in the process, and assess the size of the corresponding footprints. Students will see how the world's increasing interconnectedness resulted in increased footprint size. Events such as colonialism, the establishment of trade routes, the industrial revolution, and the green revolution shaped the food system and distribution of food as we know it today.

Objectives:

1. Identify food from certain time periods based on what they have learned in class and through readings.
2. Map foods from sources to sinks.
3. Compare and contrast Footprint sizes between time periods and/or nations.
4. Think about their own food footprints and evaluate their sizes.
5. Discuss individual as well as large scale steps they can take to reduce food footprints.

When the Chips Are Down

Facing the Future: The Curriculum Guide: *Classroom Activities for Teaching About Global Issues and Solutions*, 2002.

Overview: Students model three patterns of ecological footprint growth over four generations, using poker chips to represent ecological footprints and maps to represent countries. This activity emphasizes the impact of changes in population-growth rates and consumption patterns over relatively few generations, and possible solutions to these impacts.

Objectives:

1. Students design and draw maps of their ideal country
2. Model different ecological footprint growth rates over time (using consumption and population rates).
3. Consider and discuss the impacts of the different ecological footprint growth rates.
4. Consider, discuss, and debate a number of "structural" solutions to impacts associated with ecological footprint growth.

Columbian Exchange Activity

Overview: Students walk vegetables from their origins through the modern trade patterns established by Columbus' voyages. Students physically move vegetables from one country to another inside the classroom. Students discuss what factors caused these foods to move and where they are grown currently.

Objectives:

1. To understand where various vegetables originated and how their global distribution was impacted by the Columbian Exchange.
2. To explore what the origins of crops have to do with the concept of a food system and the modern patterns of eating in this country.