

Lesson Title: The 100 Mile Meal

Summary: Students will create a menu and ingredient list for 4 meals. Two will be late winter meals (one breakfast, one dinner). The other two will be late summer/fall meals (one breakfast, one dinner). Students will also identify the source of each ingredient. This information will be displayed in a creative fashion of the students' choice (PowerPoint, Publisher document, Flashpoint, hand made menu & shopping list, etc.). In addition to this menu/ingredient list, the students will create an annotated bibliography of sources that will help answer the other basic project questions. A minimum of 6 sources must be used in the annotated bibliography.

Grade Level: 8th-11th

Subject Areas: Social Studies, Science, Language Arts, Health

Setting: Northwoods Community Secondary School (NCSS) is a 6-12 grade project based charter school that serves many of the Rhinelander School District's "at-risk" students. NCSS has a one room school house feel, where many lessons are offered to multi-age groups with students taking in what they can and producing work that is appropriate to their level. Students earn credit primarily through the completion of individual projects. All projects have a proposal, completion, and defense process. Defenses are in the form of one on one Q&A sessions with their advisor where the larger project questions are discussed. Students write many of their own proposals, but often advisors write proposals for students to choose to take on. On occasion projects are assigned. The attached proposal was written by me, from a student perspective, and will be shown and assigned to my 8th-11th grade advisory. The proposal has been converted to a word document for the purposes of NR 730. Proposals are written on an online database we use called Project Foundry. All student project documentation, time logs, and assessments are contained there. Each student at NCSS has a school computer.

Time:

Preparation- 2 hours: Writing proposal, photocopies of relevant handouts. Ongoing prep may include searching for additional/better sources to compliment project questions.

Actual Project: 20 hours of student work (estimate).

Vocabulary: Local Eating, Impacts (Cultural, Economic, Environmental, Nutritional, Behavior, Political) , Individual vs. Collective, Globalization.

Materials: Handouts, access to United Streaming/computer lab, possible construction paper, laminator, etc.

Getting Ready: See Project Proposal. Additionally, many of the students in my advisory this year participated in an exercise last spring that had them track (very conservatively) the miles their food traveled to their plate for one week. Students primarily used shipping addresses on food labels to determine miles traveled. Students may track this for even a single day as an anticipatory activity for this project.

Objectives:

- The students will become interested in eating more locally.
- The students will identify collective (global) benefits to eating locally.
- The students will identify specific energy outputs used to transport food globally (or locally).
- The students will see a connection between individual eating choices and global energy use/issues regardless of individual caloric intake.
- The students will address the following NCSS Scope & Sequence requirements for graduation:
 - English/LA 10th Grade: Research Methods
 - Health: Culture & Media: Evaluate Cultural Influences on Health
 - Health: Health Promotion: Healthy Communities
 - Science: Environmental: An Ecosystem's Value
 - Social Studies: Economics: Peak Oil or Economics of Energy
 - Social Studies: Geography: 5 Themes of Geography

Rationale & Background: See various comments in Project Proposal. Students participating in this project will have a varied background. Like many teacher led projects at NCSS, this one is designed to cover a variety of scope and sequence items, while also serving as a springboard for students to then delve even deeper into content on their next project. Examples of extension projects might have students delve into deer management issues as it relates to having local venison. Students might differentiate and seek data on the different energy requirements for feeding and baiting deer vs. not feeding and baiting when hunting (corn costs energy and comes from somewhere else). Or students might compare a diet based on beef compared to venison or a vegetarian. And we go on...in many potential interdisciplinary directions.

Procedure: See Project Proposal-Task List

Assessment: Students and staff fill out Performance Rubric (which assesses process primarily). Staff assesses quality of content presented as it relates to the scope and sequence items listed on the project proposal. Each item is assessed on a scale of "Not Met," "Proficient," "Advanced," or "Mastery." NCSS does not award grades, but unofficially these designations translate to the traditional marks of F/D, C, B, and A respectively. Levels of proficiency are evaluated on a corresponding demonstration of content knowledge as it applies to Bloom's Taxonomy. Simply reciting facts, tends to receive a "proficient" mark, while analysis or application of knowledge gained will result in "advanced" or "mastery" marks. Students are awarded credit in quantities that correspond with documented time logs (i.e. 10 hours = .10 credits)

Resources:

Crider, Kitty. "On the menu: A Texas bounty." Austin American Statesman. 17 Oct 2007. E1. eLibrary. Proquest CSA. RHINELANDER HIGH SCHOOL. 03 Dec 2007. <<http://elibrary.bigchalk.com>>.

Enviro-Tacklebox: Module 2: Decisions Based on Science: Your Burger and the World. Louisiana Public Broadcasting (2000). Retrieved December 3, 2007, from Unitedstreaming: <http://streaming.discoveryeducation.com/>

Jegtvig, Shereen. "Venison Nutrition Information." About.com: Nutrition. 3 Dec. 2007 <<http://nutrition.about.com/od/askyournutritionist/f/venison.htm>>.

Langston , Jennifer. P-I reporter. "Keeping it Local for Thanksgiving; A Green Holiday Means More Than Counting Miles." Seattle Post Intelligencer. 03 Nov 2007. B1. eLibrary. Proquest CSA. Rhineland High School. 03 Dec 2007. <<http://elibrary.bigchalk.com>>.

MacKinnon, James and Smith, Alisa. 100 Mile Diet: Local Eating for Global Change. 3 Dec. 2007 <www.100milediet.org>.

Maclean, Mairi. The Edmonton Journal. "Food system costly for people and planet, prof says." Edmonton Journal. 19 Nov 2007. A12. eLibrary. Proquest CSA. Rhineland High School. 03 Dec 2007. <<http://elibrary.bigchalk.com>>.

The World's Healthiest Foods. 3 Dec. 2007 <www.whfoods.org>.