Alyssa Macri AITC 2011

Agriculture in the Classroom Lesson 2

Lesson Title: Create a Community Cropland!

Audience: Distance Education AP Environmental High School Grades 11, 12

Duration: Approximately 1-2 month project done independently (most likely a culminating activity to the course).

Objectives: By the end of this lesson, students will be able to do the following:

- Research native crops in local area and what is required to produce the best crop.
- Communicate with community officials/local businesses regarding setting up a free access public produce garden.
- Organize a "Public Plant Party!" event allowing for the surrounding neighborhood to reserve a small plot for planting their crops.
- Document project through pictures, journal entries and participant interviews.
- Gain a better understanding of how much we rely on our local produce and the farmers.

Standards:

Arts and Humanities 9.1.12.B.4
Environment and Ecology 4.4.12.2, 4-6, 4.6.12.4.6.12.1, 5.
Mathematics 2.3.11.A-C
Reading, Writing, Speaking and Listening 1.2.11A.2, 1.4.11.B, D, 1.5.11., 1.6.11., 1.8.11.
Science and Technology 3.2.12.D.5

Materials: Access to internet and other research tools, materials to plant crops (seeds, soil, gardening tools, wood for dividing plots, gloves, watering cans—these can be a combination of donated items or purchased; participants in garden project should be encouraged to provide own materials as well), camera, journal for notes/interviews (tape recorder is an option to record participant responses), art supplies (optional--crayons, markers, cardstock, etc.).

Anticipatory Set: Discussion board posting will read: "Think about the last time you went to the grocery store to get produce. Make a list of 10 things you find in your store and research what these require to grow. Your research should reflect the type of environment the product grows best in, the

type of soil needed and other things that one might need to know to care for them." Students will be asked to post these ideas for review before proceeding to start the majority of the project.

Procedure:

- After teacher has reviewed opening activity discussion board above, the students will contact their local community official and compile their research into a "plan" for a community garden. If a plot is available, a blueprint design could be formulated for how the garden will be set up. Materials should be found at this time as well. If there is no land available, this will become a virtual project instead and everything will be documented as if the remainder of the project was actually carried out.
- Part of the above discussion should include scheduling a potential date for the "Public Plant Party." If possible, the student should negotiate a date and time for the garden to open. This can also be arranged after this meeting as well.
- Student will design and distribute flyers advertising the "Public Plant Party." The flyer should indicate date, starting time for event, what the participants should provide, etc.
- A few days prior to the event, the student should head to the site and set up plots using planks of wood and numbering them with markers.
- On the event day, the student should arrive early to introduce him/herself to the public and to indentify how the garden is to be set up. Plots will be assigned to individuals by having them select a number from a grab bag.
- Participants will be asked to begin preparing their gardens. The student should assist the members as needed as well as take pictures, conduct interviews and journal the overall experience.

Closing: Once the project is completed, the student will submit a 3-4 page journal entry detailing the entire experience. The student will be encouraged to provide pictures as well (this is an optional component as some students may not be able to carry out the project). The journal should also cover how this experience has changed the student's outlook on the importance of local produce to our everyday lives.

Evaluation: Students will be graded using a series of teacher created rubrics that they will have access to throughout the project. (See following pages).

Opening Discussion (50 pts.):

Item Being Graded	Score
10 local plants identified	**/10 pts.**
Requirements for optimal growth shared (soil, environment needed, care and maintenance, etc).	**/10 pts.**
Research well organized and easy to follow	**/10 pts.**
Spelling and grammar accuracy	**/10 pts.**
Research sources cited	**/10 pts.**

Student Name: _____ Grade: _____ /50

Community Project: 100 pts.

Objectives	Low Performance	Below Average	At or Above Average	Exemplary Performance	Earned Points
Student illustrated thorough knowledge of the project and its objectives.	**60 points** Student did not grasp the concept of the project.	**75 points** Students comprehension of the topic was minimal	**90 points** Student understand the concept at a proficient level	**100 points** Student understanding goes well beyond the expectations for this topic	————
Student had a well-designed plan for the garden that was easy to follow and carry out.	**60 points** Student plan was not well-organized and lacked thorough understanding of task at hand.	**75 points** Student plan design needed a bit more organization and the concept needed to be better illustrated.	**90 points** Student plan was well-designed and shows potential for success.	**100 points** Student plan went well beyond the expectations for this topic.	————
Student Project (Content)	**60 points** Content was well below what was expected	**75 points** Project was incomplete of inconsistent with the overall project.	**90 points** Project was completed in a manner consistent with goal of project.	**100 points** Student went well beyond expectations	————
Student Project (Neatness)	**60 points** Student did not attempt to complete the project neatly.	**75 points** Students neatness was inconsistent	**90 points** Student met expectations	**100 points** Student went well beyond expectations	————
Student Project (Effort)	**60 points** Student did not attempt to do what was expected	**75 points** Students effort was minimal	**90 points** Student met expectations	**100 points** Student went well beyond expectations	————
				Score:	————

Student Name: _____

Source: http://www.ercwc.org/lessonplans/trantham/rubric.html

Final Journal Rubric (50 pts.)

Pts. earned/category	10 pts.	7-9 pts.	4-6 pts.	0-3 pts.
Content	Reflection conveys extensive evidence of a personal response to the issues raised in the course materials. Student demonstrates personal growth and awareness Reflects well on own work, demonstrates a range of meta-cognitive practices and provides many examples	Reflection conveys evidence of a personal response to the issues raised in the course materials. Student demonstrates that he/she is beginning to develop new ways of reflecting on their world Demonstrates an ability to reflect on own work. Provides examples consistently. Begins to demonstrate good meta-cognition.	Analysis conveys little or some evidence of a personal response to the issues/concepts raised in the course materials. Demonstrates an ability to reflect on own work but provides few examples	No personal response is made to the issues/concepts raised in the course materials. Does not reflect on own work at all and no examples are provided
Text	Is able to make inferences well and comprehends deeper meaning, consistently demonstrating insight and their relevance to the world and society	Is able to make inferences and comprehends deeper meaning on most occasions. Relates texts and issues raised to other texts consistently	Demonstrates some basic comprehension of texts but does not make connections with the bigger picture.	Is not comprehending or reflecting on what is read or viewed
Tasks	Work demonstrates that much effort was made to attempt all tasks set, with some originality and extra initiative	Work demonstrates that some effort was made to attempt all tasks set	Little effort was made to attempt all tasks set	Very little effort was made to attempt all tasks set
Spelling and Grammar	Sentence structure was proper and there were no spelling or grammar errors.	Sentence structure was somewhat proper and there were only a few spelling and grammar errors.	There was little effort in developing good sentence structure and there were many errors in spelling and grammar.	There was no effort in developing sentence structure and there were a great number of spelling and grammar errors.

Student Name: _____

Source: http://edtech.boisestate.edu/elearn/EDTECH597/rubrics/reflection.htm