LESSON PLAN:

Brooklyn Farmer:

Connecting Agriculture and Society

Objectives:

This lesson aims to introduce students to the ecological concepts of sustainability and the local. By the end of this lesson, students will:

- -be able to define sustainability
- -understand how to distinguish between the global and the local
- -understand basic connections between agriculture and society
- -discuss the incentives and limitations of urban farming and local food production

Time Needed For Completion:

This lesson can be completed during a standard class period, with additional homework hours required for the final section.

Materials:

- -Copy of "Brooklyn Farmer"
- -Classroom or other space for the activity and presentations
- -Copies of the two worksheets provided

Procedure:

Introduction of Key Terms and Concepts:

Ask students to think about a favorite meal and list all of its ingredients. Do they know who grew these ingredients? Do they know how far these ingredients had to travel to get to them? Ask students to take note of which questions, if any, they are unable to answer specifically. Introduce or review the concepts of "Sustainability" and the "Local." Discuss how food systems affect the relationship among organisms within an ecosystem. Explain how the equilibrium between organisms and their environment has been disrupted and that the notions of sustainability and the local have been introduced to correct this disruption. Have students reflect on their meal and ask them to consider if it was locally and sustainably produced and what effect its production might have on the larger ecosystem.

What is Sustainability?

According to the EPA: "Sustainability is based on a simple principle: Everything we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations. Sustainability is important to making sure that we have, and will continue to have the water, materials, and resources to protect human health and our environment."

Read more at: http://www.epa.gov/sustainability/basicinfo.htm

Other online links or resources:

UN definition of sustainability: http://www.un-documents.net/ocf-02.htm

The Three Pillars Model for Sustainability: http://www.thwink.org/sustain/glossary/ThreePillarsOfSustainability.htm

Viewing Brooklyn Farmer:

- 2) Explain that the majority of food consumed in the in the U.S is not produced within proximity to the community that consumes it. Have the students watch **Brooklyn Farmer.** As students watch, have them note answers to the following questions:
 - Why did Ben Flanner, Head Farmer of Brooklyn Grange, decide to start a farm on a rooftop in Brooklyn? What are the benefits of rooftop farming in New York City?
 - Think of at least three challenges that Flanner and his team faced with the farm. How did they overcome these challenges?
 - In what ways were the farmers of Brooklyn Grange resourceful or innovative? Be specific.
 - Ben Flanner and Michael Meier both left desk jobs to work as urban farmers. What were the incentives that drove them to make this life change? Do you think that this choice is possible for everyone?
 - How does Ben Flanner measure the success of the farm? Would you measure success the same way? Why or why not?
 - How does Brooklyn Grange farm address the challenges of Earth's limited resources?

Discussion: Evaluating Sustainability in Small Groups

3) To debrief/discuss the film, ask students to break into pairs or small groups and share their impressions or observations about the above questions. Have each group outline the incentives and challenges faced by Brooklyn Grange Farm. Ask students to compare and contrast their findings to what they know of conventional farming practices. This group work should summarize points of agreement or disagreement and qualify or justify points of view in light of evidence presented from the film.

Group Work: Proposals for a Sustainable Food system on Campus

4) Using the <u>Group Proposal Worksheet</u> provided, ask students to work in small groups to select an alternative or under-utilized site on their campus that could be repurposed for sustainably producing or distributing food. Ask each group to make a two-minute 'elevator pitch' proposal to the class. Each student should have a role in this brief presentation. Students should emphasize how their proposal is creative and ultimately sustainable. This is an exercise in decision-making and consensus, which also challenges students to organize and present their ideas to a larger group.

Homework: Proposing Change at a Local Level

5) As homework, ask students to return to their favorite meal. Using the <u>Individual Project Proposal Worksheet</u> provided, have students examine how their favorite meal could be more locally and sustainably produced within their community. These proposals should expand beyond the confines of the campus and the example of rooftop farming discussed in Brooklyn Farmer.

Group Names:
Group Proposal: Sustainable Food on Campus
1) Pick a site on campus that remains under-utilized or vacant. Describe its approximate size, location, and why it remains unused.
2) Provide a rough sketch or diagram of this site. Indicate how the site will be reused to support a sustainable food project.

3) Identify and describe the incentives of this site. Give at least two examples.	
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4) Identify and describe the challenges posed by this site. How will you overcor them? Give at least two examples.	ne
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5) Conclude by pitching your proposal to your class. Describe how the repurposing of your campus site is a creative option. According to the definition
discussed in class, describe how your site is sustainable.

Name:

Individual Project Proposal: Sustainable Food in Your Local Community

Return to the meal and its ingredients that you described at the beginning of class. In the space provided below, propose a more sustainable way of producing this meal within your community.

1) Identify your meal and its ingredients:	
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2) Describe how your meal relates to the larger ecosystem. Does it disrupt it?	lf
so, how?	
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3) Thinking beyond your campus, identify a site in your local community that remains under-utilized or vacant. Describe its approximate size, location, and surrounding environment (urban, heavily industrial, rural, etc.). Feel free to be creative in your site selection.
4) Provide a rough sketch or diagram of this site. Indicate how the site will be
reused to support a sustainable food project.

5) Identify and describe the incentives of this site. Give at least two examples.	
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6) Identify and describe the challenges posed by this site. How will you overcom them? Give at least two examples.	е
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pro Yo Ac	Imagine you are speaking in front of City Council. Write a brief speech to comote your site as a sustainable food option within your local community. Four speech should emphasize how your proposal is innovative and resourceful coording to the definition discussed in class, describe how your proposal is stainable.
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