

Explore the Roots of Your Food

Research & discuss what's going on with your food and learn how school gardens are making a difference

Gardening Connection:

As students experience the process of food production in the school garden, they may wish to explore food production on a larger scale.

Time

Required:

4 class periods

Grade Level:

High School

EDUCATOR NOTE:

Many aspects of food production and consumption are highly controversial issues. This activity aims to provide a balanced perspective that encourages students to explore all sides of these issues. It is important for educators to be prepared to discuss controversial topics. See resources section for tips about teaching controversial topics. It is recommended that you preview all films and clips and modify this activity to fit your objectives.

OBJECTIVES

Students will be able to:

1. Compare and contrast several methods of food production.
2. Apply basic principles and strategies in debating food production issues.
3. Apply media literacy skills in evaluating commercials and films.

BACKGROUND

When students grow food in a school garden, they experience (on a micro scale) some of the same challenges and rewards food production presents for a larger scale farmer. Students and young people all over the country who are growing school and community gardens are becoming curious about food production from the garden to the grocery store.

In the United States, consumers have an unprecedented array of options when purchasing and consuming food. A trip to the grocery store can quickly become overwhelming when weighing food choices based on: convenience, nutritional value, cost, packaging, environmental impact, presence or absence of certain ingredients, methods of processing, etc. Which of these considerations is most important in deciding what is best for our bodies, our families, our society, our economy, and our planet? Where can we find reliable information to help inform our food choices?

There are dozens of books and films about food production & consumption in the United States. A web search on any one food-related topic will yield a variety of different, and often conflicting, perspectives. These media trends reflect that our society is grappling with a variety of economic, moral, ethical, and health issues related to our food supply. Many of these topics are highly debated and controversial. Because of this, it is very important to explore all viewpoints to help us think critically about these topics so that we may make informed choices about how we grow, purchase, and consume our food.

MATERIALS

- Computer(s) with internet access
- LCD Projector & Screen (or individual laptops to screen the trailers)
- 4 x 6 Index Cards

Subjects

Science
Social Studies
Language Arts
Art
Media Literacy

Project Connections

WET – Choices and Preferences
PLT – Viewpoints on the Line
Pass the Plants Please
WILD - From Bison to Bread

PROCEDURES

Engage

Ask students:

- Do you know where your food comes from? (i.e. where and how and by whom it is grown?)
- What kinds of things do you consider when choosing food? (i.e. nutrition, convenience, etc.)
- Do you think it is important to know where & how your food was produced? Why or why not?

One of the great things about a school garden is that by growing food ourselves, we get to experience the process of food production. Students and young people all over the country who are growing school and community gardens are becoming curious about food production from the garden to the grocery store! Let's explore.

Show the following movie trailers (preview for appropriateness for your students and objectives):

What's on Your Plate? <http://www.whatsonyourplateproject.org/about/watch>

Nourish <http://www.nourishlife.org/videos/nourish-trailer/>

Several short film clips are available at <http://www.nourishlife.org/videos-all/> if you want to provide additional "food for thought" on some of the topics introduced in these trailers.

After viewing the clips, engage your class in a discussion:

- What are some questions the students in this film are asking?
- What are your questions about food?
- How do you think we might find out more?

Explore

There are dozens of books and films about food production & consumption in the United States. A web search on any one food-related topic will yield a variety of different, and often conflicting, perspectives. Many of these topics are highly debated and controversial. Because of this, it is very important to explore all viewpoints to help us think critically about these topics so that we may make informed choices about how we grow, purchase, and consume our food.

Ask students:

- Why do you think so many people are interested in exploring food production and consumption?
- What are some of the topics we could explore related to food production and consumption? (Locally grown vs. non-locally grown foods, organic vs. non-organic, processed vs. whole foods, fresh vs. packaged, fast food vs. slow food, nutrition, cost of production & transportation of food, fair trade, food safety, genetically modified seeds, food additives, etc.)

Ask the class to choose their top 4-5 topics and divide students into small groups to research each topic. Encourage students to find as many different perspectives on each topic as they can.

Research projects may include:

- What information is widely available on your topic?
- What information is more difficult to find?
- What/who are the sources of the information you found on this topic?

- Did all sources agree on this topic, or did you find conflicting viewpoints? Why or why not?
- What did you think/feel about this issue before your research?
- Has your perspective changed, been strengthened, or stayed the same as a result of your research?

Explain (this section adapted from a Project WET activity, *Hot Water*)

Students will engage in a series of debates around the topics researched in the Explore section. Each student group (formed above) will debate 2 opposing viewpoints on their topic for the whole class.

Explain to students that the purpose of a debate is to provide an opportunity for two opposing sides to defend or argue a given viewpoint.

Ask each student group to identify 2 conflicting viewpoints on the topic they explored, and choose who in the group will represent which viewpoint (affirmative or negative). Each group will divide into smaller teams of 1-3 students on each side (affirmative or negative) with one appointed spokesperson per side. Some examples of viewpoints the students might choose include: for locally grown food vs. against locally grown food; for organic foods vs. against organic foods; for processed vs. against processed foods, for fast food vs. against fast food, for genetically modified seeds vs. against genetically modified seeds, etc.

Have students review their research from the Explore activity, and record pertinent information on note cards for the debate. The evidence they collect must either support the particular viewpoint they are representing or refute opposing arguments. Students may wish to do further research to find additional evidence in support of their viewpoint.

The debaters will set up at the front of the classroom; students should stand when speaking. The remaining student will act as judges, keeping score and deciding who wins. Toss a coin to determine which side (affirmative or negative) gives their constructive speech first. The debaters will present their arguments in accordance with the following form (*based on the Oregon Style of Debate*).

Debate Schedule	Time (Middle School)	Time (High School)
Affirmative Constructive Speech	4 minutes	8 minutes
Cross-examined by the Negative	2 minutes	3 minutes
Negative Constructive Speech	4 minutes	8 minutes
Cross-examined by the Affirmative	2 minutes	3 minutes
Negative, Rebuttal	2 minutes	3 minutes
Affirmative, Rebuttal	2 minutes	3 minutes

Constructive speeches support and defend a viewpoint, while rebuttal speeches refute an opposing one. In other words, during the constructive speeches, each debater presents arguments supported by the evidence (acquired through research & written on note cards) in favor of his or her viewpoints; and during the rebuttal speeches, each presents arguments, supported by the evidence, to disprove or discredit the opposing viewpoint.

During the debate, judges will take notes on the arguments and score each side on a scale of 1 to 4 (1 being the most convincing argument and 4 being the least convincing). At the end, class results are tabulated and the team with the lowest number of cumulative points wins. Remember that although one team has been determined the “winner,” both teams have contributed to a deeper understanding of food production and consumption issues and the controversies involved.

Elaborate

There has been much media attention on the topic of high fructose corn syrup (also known as HFCS or corn sugar), with a variety of organizations and companies producing advertisements that either promote or discourage the use of this product. This media flurry can be confusing for consumers and presents a great media literacy learning opportunity!

Ask students:

- Have you seen any commercials about high fructose corn syrup?
- What are the commercials saying?
- Do all of these commercials present the same viewpoint? Why or why not?

Ask students to do a YouTube search on the key words corn syrup ads or corn syrup commercials (following the guidelines your school has set for internet use). The original advertisements that many students may have seen on television can be found on YouTube, as well as several comical spoofs and homemade videos. If your school does not allow such an unrestricted search, the teacher may choose appropriate clips representing both viewpoints.

After watching ads that are both for and against high fructose corn syrup, ask your students to reflect on what they observed through writing about and/or discussing the following questions:

The questions below are reprinted from http://www.frankwbaker.com/media_messages.htm

- Who is the producer/storyteller of the message?
- What is their purpose/motive/agenda?
(to inform, to persuade, to educate, to call to action, to entertain, to shock)
- Who is the intended (primary) target audience?
- How do you know? Is there another (secondary) audience?
- What does the message say? How does it say it?
- How do you know what the message means?
- What format/medium does the producer use?
- What are the advantages of the format/medium?
- What methods/techniques does the producer use to make the message attractive/believable?
- What lifestyle is portrayed in the message? What clues tell you ?
- Who makes money or benefits from the message?
- Who/what is left out of the message?
- Whose interests are served by telling/showing the message in a particular way?
- Do you agree with the message?
- How might different people interpret the message differently?
- What do you know; what do you NOT know; What would you like to know?
- Where can you go to verify the information or get more reliable information?
- What can you do with the information you have obtained from the message?

Evaluate

Student groups develop their own short video piece on the topics they researched in Explore.

Extension Ideas

Now that students have developed critical thinking and media literacy skills around the issues of food production and consumption, students may view and write reviews of films about food production and consumption. Reviews should include several of the media literacy questions outlined in the Elaborate section.

Many of these films can be viewed online, downloaded through Netflix, or ordered from their websites (several have educator discounts). These films can be controversial, so be sure to preview for appropriateness for your class.

What's on Your Plate <http://www.whatsonyourplateproject.org/about/watch>

Nourish <http://www.nourishlife.org/about/>

King Corn <http://www.imdb.com/title/tt1112115/videogallery>

Fresh <http://www.freshthemovie.com/>

Food, Inc. <http://www.foodincmovie.com/>

Resources:

ProCon.org teacher resources for teaching about controversial topics

<http://www.procon.org/education.php>

Center for Media Literacy

<http://www.medialiteracy.com/>

Media Literacy Clearinghouse

http://www.frankwbaker.com/media_messages.htm

Discussion Guide for King Corn

<http://www.philfilms.utm.edu/1/kingcorn.htm>

Monsanto's response to Food, Inc

<http://www.monsanto.com/food-inc/Pages/default.aspx>

Food, Inc educational materials

<http://www.foodincmovie.com/spread-the-word.php>