

# Combating Food Insecurity

## Lessons

### *Action from Our Farms to Our Communities to Our Tables*

A 4-6-week (16 class sessions) unit to help middle school students understand issues related to food production and food insecurity, particularly in light of the number of children and families, in the US and around that world, living in hunger. This unit also addresses the critical importance of water quality and availability in producing food and enhancing food security.

The lessons meet objectives for understanding philanthropy and civic responsibility. Also included are activities to meet science objectives for interpreting charts and graphs, and English/Language activities for conducting research and preparing reports and presentations.

***The Combating Food Insecurity Lessons are highly engaging, hands-on activities with a suggested rubric for measuring student progress and recommended extension activities for service learning and other projects. Includes Background Information for Teachers for important information on teaching this unit.***

## **Guide to Using the Combating Food Insecurity Lessons**

### **Background Information for Teachers**

The Combating Food Insecurity Lessons are designed for students in the 6<sup>th</sup>- 8<sup>th</sup> grades and includes a combination of whole group and small group discussions, as well as homework, and project based learning.

**Program Format:** The program consists of 16 class units (approximately 55 minutes each) and can be completed in 4 weeks or delivered across a longer time period. Additional extension activities are provided and can be included during the course of the Lessons.

Each lesson is set up in the following format:

- Overview
- Instructions
- Handouts & Resources
- Objectives

The extension activities are provided in a list found at the end of this document. You may want to look at this ahead of time to determine if you want to weave any of these activities into the lessons or include criteria for these extension activities into the Unit Criteria that you share with students.

At the end of the Background Information for Teachers are two additional lists:

- The full URL addresses for all materials that are hyperlinked within the lessons
- Objectives related to English Language Arts and Science standards from the Common Core.

Teachers may wish to refer to these when they are planning lessons. **Important considerations to help teacher plan daily lessons are included within this background information guide.**

### **General Information**

#### **ANTIBIOTICS**

The issue of antibiotic use in production agriculture is complex, just as it is in human medicine. All agree, producers, consumers, doctors, and patients that food needs to be safe. Just as antibiotics are necessary in human medicine, to cure bacterial illnesses, antibiotics are necessary for livestock and poultry.

That said, it has been acknowledged that antibiotic resistance is a growing problem. In fact, the presidential advisory council says, the rise of antibiotic-resistant bacteria “represents a serious threat to public health and the economy.” The US government does great work to protect the food supply. The US Department of Agriculture (USDA) runs the National Residue Program (NRP) for Meat, Poultry, and Egg Products to ensure food safety. This program confirms that any antibiotics or pesticides used during the animals’ life are not present in the meat once it makes it to the grocery store shelves. Additionally, the US Food and Drug Administration (FDA) has released a variety of guidances and regulations to ensure the judicious use of antibiotics at the farm level. In fact, the widely reported “problem” of using antibiotics for the promotion of growth in animals will be completely phased out as of January 1, 2017. The FDA specifically allows the use of antibiotics for prevention, control, and treatment of disease in food animals.

In addition to government actions, meat and poultry producers realize the importance of using antibiotics judiciously, which is specifically defined, to ensure their continued effectiveness in animals and people. Production agriculture focuses on stewardship and appropriate use, when using antibiotics, including those important to human medicine, in animals.

### PHILANTHROPY

Simple Definition of Philanthropy: The practice of giving money and time to help make life better for other people (Merriam-Webster)

### FOOD INSECURITY

Food insecurity offers an accepted method for measuring food deprivation. According to Feeding America, 1 in 7 Americans struggles to get enough to eat. In fact, hunger or food insecurity exists in virtually every community in the United States.

The USDA defines food insecurity as a state in which “consistent access to adequate food is limited by a lack of money and other resources at times during the year.” In 2006, USDA introduced new language to describe ranges of severity of food insecurity. Definitions are provided below:

#### ☐ **Food Security**

- **High food security** (*old label=Food security*): no reported indications of food-access problems or limitations.
- **Marginal food security** (*old label=Food security*): one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

#### ☐ **Food Insecurity**

- **Low food security** (*old label=Food insecurity without hunger*): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- **Very low food security** (*old label=Food insecurity with hunger*): Reports of multiple indications of disrupted eating patterns and reduced food intake.

## Lessons and Instruction Overview

### Lesson 1, Day 1: Discuss the Problem

The teacher may wish to review the *Sample Questions* handout (found within the Day 16 Lessons), which includes questions that the teacher may use to help guide discussion. This handout is used with the students on Day 16 as a final wrap up.

Regarding KWL (identified in Lesson 1). Teachers may have their own preferred procedures for using KWL (Knows, Wants to Know, Learns). If not, here is an easy template that teachers can write on the board, a smart board, or on flip chart paper.

Knows	Wants to Know	Learn

### Lesson 1, Day 2: Discuss the Problem

The Challenge Letter on Day 2 forms the basis for the project. The teacher presents this handout as a homework assignment to students, framing it with a discussion of public, private, and civic responsibility, asking students to consider solutions that fall into each of these categories. Definitions are provided below:

- **Public Responsibility:** Responsibility of the federal, state, or local government
- **Private Responsibility:** The responsibility of private businesses/corporations.
  - “Many businesses recognize the importance of being socially and environmentally conscious, and will often advertise charitable initiatives, such as annual fundraisers for a cause, or a volunteer project their staff worked on.” (See more at: <http://www.businessnewsdaily.com/5499-examples-socially-responsible-businesses.html#sthash.Pv6iqDmC.dpuf>)
- **Civic Responsibility:** Comprised of actions and attitudes associated with democratic governance and social participation, civic responsibility can include participation in government, church, volunteers and memberships of voluntary associations. The importance of civic responsibility is paramount to the success of democracy and philanthropy. By engaging in civic responsibility, citizens ensure and uphold certain democratic values written in the founding documents. (<http://www.learningtogive.org/resources/civic-responsibility>)
  - “Civic responsibility could best be summed up in one word: Stewardship. The moral, legal or mental accountability of each of us to leave our communities in a better condition than we found them. To achieve that, civic responsibility demands civic participation.” (<http://www.k-state.edu/media/webzine/0204/volunteer.html>)

### Lesson 2, Day 3: Success Criteria

In discussing the Challenge Letter that was the homework assignment, the teacher reinforces concepts of public, private, and civic responsibility. This sets the stage for explaining the project criteria. Also, included in this lesson is a Combating Food Insecurity Rubric to guide expectations. Sharing this Rubric with students is optional. For students with experience using rubrics, it may be a very helpful tool.

During Day 2, after the basic responsibilities and criteria are discussed, divide the students into groups so that they can begin to discuss their ideas for their projects.

End the class by discussing the plan for the next three days (Lesson 3) during which students will begin to discover project ideas through the handouts and resources provided, and the workshops completed, during the lesson.

### Lesson 3, Days 4-6: Food Insecurity, Waste, Water Risks, Nutrition, and Food Production

Lesson 3 includes several handouts that can be used in either small group or classwide discussion. It is recommended that teachers review the handouts and directions carefully to make decisions about timing and pacing of activities. Teachers will need to make decisions about emphasis and where to spend class time. To complete a full version of all activities, teachers may want to consider adding an optional day and/or choosing certain activities such as internet research as homework assignments.

Some of the possible handouts, with a brief description are presented below:

#### Consumer Support of GMO-2014

- In general consumers support GMO  
<http://www.foodinsight.org/newsletters/ific-2014-food-technology-survey-consumers-support-food-biotechnology%E2%80%99s-use-certain>

#### Council for Agricultural Sciences and Technology (CAST) <http://www.cast-science.org/>

The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the US

- Includes the basics of genetically engineering in introduction
- Includes information on Food Safety
- Addresses both sides in the debate on GMO and the “right to know”

<http://www.cast-science.org/download.cfm?PublicationID=282271&File=1e30b9edc325bd7238e06b551e4a73f4b712TR>

#### GMO Answers – from Industry, farmers, and academics

<https://gmoanswers.com/explore?carouselid=0&slideindex=0>

- A video on how GMOs are made
- The Most Common GMO Myths

**Group Huddle:** For the last 10 minutes of Day 6, groups will meet to reflect on their project options and to identify some “top choice” ideas.

### Lesson 4, Days 7-13: Research, Design, Present and Evaluate

Lesson 4 is provided as research and project-work days. Students will work through the various worksheets, in their groups, developing their projects while relying on what they learned in previous sessions. Students should be provided resources to refer back to the worksheets and websites from the first six days to help them consider the needs and possible solutions.

### Lesson 5, Days 14-16: Present and Reflect – Final Activities

The Lessons wraps up with final presentations by the students. For a classroom of 30 students, there may be 7-8 teams of 3-4 members. With 8 teams, 3 teams present on Days 14 and 15 and 2 teams present on Day 16, leaving extra time for overall wrap-up and conclusions on Day 16.

The Chalk Talk handout provides an option that can be used to help structure the reflection or teachers may use more traditional methods to help students draw conclusions.

On Day 16, the session ends with a wrap up. The Sample Questions handout, which the teacher reviewed on Day 1 can be used to help guide discussions throughout the closing session. Students can complete this handout on their own, in groups, or the teacher can choose to do the handout as a class.

### Extension Activities

The Combating Food Insecurity Lessons can be enhanced by including service learning and other lessons through the Extension Activities that are listed at the back of the Combating Food Insecurity Lessons.

When inviting Community Speakers, teachers may want to consider inviting two farmers—a conventional and an organic farmer. Sample questions that might be part of a lesson for these two speakers might include:

- How long have you been farming?
- What are the pros and cons of the approach you use?
- What crops are you growing?
- Do you find that certain crops respond best to your approach?
- With the approach you use, how do your crops respond to heat, draught, excess moisture, fluctuating temperatures (freezing temperatures)?
- With the approach you use, do you find any issues with storage, taste, waste, or shelf-life?

# **Combating Food Insecurity Lessons**

## **Lesson 1, Day 1: Discuss the Problem**

**Overview:** (Time Estimate: Approximately 55 min.)

**Hook:** Video on hunger in US, "Feeding America" (1:36 min.)

- Students discuss issues of hunger, i.e., threats to water/land, impact on food production (10 min.)
- Complete a KWL (Knows and Wants to Know – KWL Assessment) (15-20 min.)
- Introduce the Agricultural Production Challenges Handout (20 min.)
- Explain the Population Growth Homework Handout (5 min.)

**Instructions:** Explain that this is the first day of a 4-6 week unit. Students will explore background issues and obtain handouts and web links to help them complete their projects. *NOTE: Additional resources with considerations for teachers can be found at <http://www.learningtogive.org/units/farm-table-and-food-security>.*

**Video:** [Feeding America](#)

**Key Points:**

- 1 out of every 9 people struggles with hunger, globally. Video shows where those who are struggling with issues of hunger can get their meals, and also how everyone can help to reduce issues of food insecurity.  
(Source. <http://www.worldhunger.org/2015-world-hunger-and-poverty-facts-and-statistics/>)

**Discussion:** (10 min.)

- Why might we not have enough food?
- What can we do to keep everyone fed?
- Why might food and/or water not be distributed to all who need it?

Discuss and distribute to students the following handouts:

[Infographics on Hunger;](#)

[Impact of water quality on health and ecosystem](#)

**KWL Discussion:** Complete the KWL as a class-wide activity on a whiteboard or chalkboard

**Handouts & Resources:**

[Agricultural Production Challenges](#) (20 min.)

Review the three main points and explain that this handout will help students complete their assignments for this Combating Food Insecurity Unit: 1.) Animal Agriculture; 2.) Croplands; 3.)

Environment *Note: Teacher should select 5-6 web sites with relevant information on food production/insecurity as examples.*

[Population Growth Homework Assignment](#) (5 min.)

Impact of Water Websites (15 min.)

Goal: Teach students how to research subjects of inquiry in an efficient manner

Web sites introduced: [World-O-Meters Counters](#); [Top Agricultural Producing Countries](#)

**Objectives: (Philanthropy)**

STRAND I: Definitions of Philanthropy

STANDARD DP 01: Define Philanthropy

BENCHMARK MS.1: Define philanthropy as individuals and organizations providing their time, talent, and/or treasures intended for the common good throughout history and around the world. Share examples.

STANDARD DP 02: Roles of Government, Business and Philanthropy

BENCHMARK MS.2: Give examples of needs not met by the government, business, or family sectors.

STRAND II: Volunteering and Service

STANDARD VS 01: Needs Assessment

BENCHMARK MS.1: Identify a need in the school, local community, state, nation, or world.

BENCHMARK MS.2: Research the need in the school, neighborhood, local community, state, nation, or world.

# Combating Food Insecurity Lessons

## Lesson 1, Day 2: Discuss the Problem

**Overview:** (Time Estimate: Approximately 50 min.)

- Students select areas to research and design solutions through an affinity mapping process
- Students read the challenge letter handout

**Instructions:** Teacher reviews a few highlights from Lesson 1: KWL Assessments, Population Growth Homework Assignment (5-10 min.)

**Sample Topics:**

- Hunger in the US and globally
- Relationship of food production to resolving food insecurity
- Factors contributing to hunger
- How hunger is being managed
- Civic, private, and public responses to hunger
- Role of philanthropy in alleviating hunger
- 21<sup>st</sup> Century Solutions (e.g. technology, bioengineering)
- Why are we not more successful? What more could be done to solve hunger?
- How might water safety and quality impact health, nutrition and/or hunger?

**Discussion:** Teacher introduces a discussion of world hunger. Discuss civic, public and private responses, including philanthropic responses.

**Activity:** [Affinity Mapping](#) (20 min.)

**Directions:**

- Give students sticky notes where they will write down questions they have from Lesson 1
- Give small groups of students a large sheet of chart paper to categorize these questions
- Have each group choose a spokesperson to present major questions and ideas from their group

**Alternative Activity (Optional):** [The Hunger Obstacle Course](#) (Time will vary)

This activity engages participants in creative problem-solving through a time-limited process of generating solutions to different hunger-related problems. Small groups of students circulate around the room and write down solutions to each of the hunger obstacles.

**Wrap-Up Discussion & Homework:** Introduce the Challenge Letter, asking students to read it and think about possible problems to be addressed with their projects

**Handouts & Resources:**

Project Prompt: [Challenge Letter](#) (20 min.)

**Objectives: (Philanthropy)**

STRAND IV: Volunteerism and Service

STANDARD VS 01: Needs Assessment

BENCHMARK MS.1: Identify a need in the school, local community, state, nation, or world

BENCHMARK MS.5: Identify the business, government, and civic society sectors

BENCHMARK MS.1: Describe how different needs are met by government, businesses, the civic sector, and family structures

BENCHMARK MS. 4: Compare and contrast the roles of civic, government, public and private sector entities in responding to hunger

STANDARD DP 03: Names and types of organizations within the civic sector

BENCHMARK MS.1: Recognize terms that describe the civic sector

STRAND II: Philanthropy and the Civic Sector

STANDARD PCS 07: Skills of Civic Engagement

BENCHMARK MS.1 Identify and research public or social issues in the community, nation or the world related to the common good. Form an opinion, develop and present a persuasive argument using communication tools.

STRAND IV: Volunteerism and Service

STANDARD VS 02: Service and Learning

BENCHMARK MS.1: Select a service project based on students interests, abilities and research

# **Combating Food Insecurity Lessons**

## **Lesson 2, Day 3: Success Criteria**

**Overview:** (Time Estimate: Approximately 50 min.)

- Discuss Homework: [Challenge Letter](#)
- Form project groups

**Instructions:**

- Homework Discussion: Challenge Letter and public, private and civic responsibility (introducing these vocabulary words) – Consider possibilities for projects over the next 3 weeks
- Explain Project Criteria and Combating Food Insecurity Rubric

As seen in the rubric, students will be evaluated on:

- Their ideas, their research, their vocabulary, and also the quality of their presentation

Teacher will assign groups. Once groups are formed, students will work together to select a research strategy. Students will receive three days of group instruction. Students will have seven days to conduct research.

- Outline agenda for next three weeks:
  - Background info: Food insecurity, nutrition, water risks, and food production (3 sessions)
  - Time to work in teams to research issues and create a solution (7 sessions)
  - Define the issue (Student Group Activity)
  - Research solution (Student Group Activity)
  - Design and fine-tune solution (Student Group Activity)
  - Share projects and reflection (3 sessions)
  - Extension: Implement service learning projects
- Form Groups and Discuss Project Criteria and Rubric Handouts

*NOTE: Teacher assigns groups matching strong learners with those who may need more help. There should be no more than four students in each group. Roles might include: leader, writer, graphics, reporter, etc.*

**Handouts & Resources:**

[Combating Food Insecurity Rubric](#)  
[Project Criteria](#)

**Objectives: (Philanthropy)**

STRAND I: Definitions of Philanthropy

STANDARD DP 01: Define Philanthropy

BENCHMARK MS.5: Identify the business, government, and civic society sectors

BENCHMARK MS.1: Describe how different needs are met by government, businesses, the civic sector, and family structures

BENCHMARK MS. 4: Compare and contrast the roles of civic, government, public and private sector entities in responding to hunger

STANDARD DP 03: Names and types of organizations within the civic sector

BENCHMARK MS.1: Recognize terms that describe the civic sector

STRAND II: Philanthropy and the Civic Sector

STANDARD PCS 07: Skills of Civic Engagement

BENCHMARK MS.1 Identify and research public or social issues in the community, nation or the world related to the common good. Form an opinion, develop and present a persuasive argument using communication tools.

STRAND IV: Volunteerism and Service

STANDARD VS 01: Needs Assessment

BENCHMARK MS.2: Research need in the school, neighborhood, local community, state, nation, or world

STANDARD VS 02: Service and Learning

BENCHMARK MS.1: Select a service project based on interests, abilities and research

STANDARD VS 03: Providing Service

BENCHMARK MS.2: Describe the goals of the project and their impact.

## **Combating Food Insecurity Lessons**

### **Lesson 3, Day 4 - 6: Food Insecurity, Waste, Water Risks, Nutrition and Food Production**

**Overview:** (Time Estimate: Approximately 55 min./session; 3 individual sessions are presented here)  
Whole class sessions/activities and homework: food insecurity, food waste, water risks, nutrition, and food production (including Combating Food Insecurity, impact of drought and disease, supply and demand).

**Instructions:**

*Note: As you explore these topics, If students do not have questions, advise them to consider some of the issues from the KWL activity (Day 1 of Unit). Some of these sessions examine the importance of the [National Academies Press \(NAP\)](#) publications. Schools may wish to purchase one or more NAP publications as background references.*

**Day 4:**

- Discuss World Hunger Issues: Use the State of Food Scarcity in the World 2015 Interactive Map
- Explore food insecurity and water risks in the U.S. and locate food deserts
- Briefly discuss the scientific view of GMOs (*genetically modified organisms*). Address the pros and cons.

**Day 5:**

- Use the “What Our Bodies Need” handout to teach students about proper nutrition.
- Use the “How Food Grows/Threats to Feeding People” handout to teach learners what factors affect the cost and availability of healthy food choices.

**Day 6:**

- Use the “Combating Food Insecurity” handout to help students understand the process food takes to get from the farm to their tables.
- Wrap-Up: Reserve the last 10 minutes of class for a Group Huddle. During the last 10 minutes, the teams huddle to discuss possible problems that they want to address with their projects.

**Web Resources:** Links to websites on Balanced GMO Perspectives

[Consumer Support of GMO – 2014](#)

[Council for Agricultural Sciences and Technology \(CAST\)](#)

[The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the U.S.](#)

[GMO Answers from Industry, Farmers and Academics](#)

**Handouts & Resources:**

[State of Food Insecurity in the World 2015 Interactive Map](#) (Day 4)

[Map of water risk \(including future risks\)](#) (Day 4)

[Explore Food Insecurity in the United States & Locate Food Deserts](#) (Day 4)

[What Our Bodies Need](#) (Day 5)

[How Food Grows/Threats to Feeding People](#) (Day 5)

[Combating Food Insecurity Research](#) (Day 6)

**Objectives: (Philanthropy)**

Standard PCS 07. Skills of Civic Engagement

Benchmark MS.1 Identify and research public or social issues in the community, nation or the world related to the common good. Form an opinion, and develop and present a persuasive argument using communication tools.

## **Combating Food Insecurity Lessons**

### **Lesson 4, Day 7– 13: Research, Design, Present and Evaluate**

**Overview:** (Time Estimate: Approximately 50 min./session; 7 individual sessions are presented here)

- Decision Matrix: Define the issue (Use background research and web sites referred to in Day 1)
- Research and Design Solutions: Three sessions (Days 7 –9)
- Share with teams and fine-tune solutions: Three sessions (Days 10 –12)

**Instructions:**

**Day 7:**

1. Define the problem: Students collaborate in groups to research and agree on a problem to address.
2. Decision Matrix: Students work alone to rank what they find to be the most pressing problems in hunger and/or water safety and scarcity. They will share with their groups during the ‘defining the problem’ section.

**Day 8-10:**

3. Research solutions: Give students some time to research solutions on their own/in their groups (Days 8-10).
4. Design solutions: Students groups work to design solution and its effects on hunger, the economy, etc.

**Day 11:**

5. Share, fine-tune, present: Student groups team up with another group and they both present and give feedback to each other in preparation for their final presentations

**Day 12- 13:**

6. Groups should be given time to revise and finalize presentations (Day 12 and 13).

**Handouts & Resources:**

[Decision Matrix](#)

[Finalizing your Presentation](#)

**Objectives: (Philanthropy)**

STRAND II: Philanthropy and the Civic Sector

STANDARD PCS 02: Diverse Cultures

BENCHMARK MS.2: Describe the importance of hearing all voices in a community and respecting their right to be heard

STANDARD PCS 03: Philanthropy and Economics

BENCHMARK MS.9: Recognize problems different communities encounter using “common” and possible solutions

STANDARD PCS 05: Philanthropy and Government

BENCHMARK MS.3: Identify the relationship between individual rights and community responsibilities

STANDARD PCS 07: Skills of Civic Engagement

BENCHMARK MS.1: Identify and research public or social issues in the community, nation or the world related to the common good. Form an opinion, and develop and present a persuasive argument using communication tools.

STRAND IV Volunteerism and Service

STANDARD VS 03: Providing Service

BENCHMARK MS.2: Describe the goals of the project and their impact

BENCHMARK MS.3: Describe the task and the student role

BENCHMARK MS.4: Demonstrate the skills needed for the successful performance of the volunteer job.

STANDARD VS 04: Raising Private Resources

BENCHMARK MS.3: Develop a service plan

## **Combating Food Insecurity Lessons**

### **Lesson 5, Day 14 – 16: Present and Reflect**

**Overview:** (Time Estimate: Approximately 50 min./session; 3 individual sessions are presented here)

- Presentations
- Reflections
- Discussion

**Instructions:** (50 min./session)

**Student Presentations:** (Days 13, 14 and 15)

- Teams share projects with classmates
- Consider inviting local community members and parents to participate
- Create a video of the projects and post it to the school's website
- Reflections: The manner in which students reflect is not as important as them just taking the time to reflect and learn. Choose one or two ways to have students reflect:
  - Write a paper
  - Have a discussion

**Discussion:** Hold a final discussion on Day 16 to summarize findings, next steps for some of the more promising projects, and to review the rubric and criteria to determine where students excelled and where they could improve in future projects. (See Sample Questions Handout.)

**Handouts & Resources:**

[Chalk Talk](#)

[Sample Discussion Questions Handout:](#) Use these questions to help guide final discussions

**Objectives: (Philanthropy)**

STRAND I: Definitions of Philanthropy

STANDARD DP 02. Roles of Government, Business, and Philanthropy

BENCHMARK MS.2 Give examples of needs not met by the government, business, or family sectors.

STRAND III: Philanthropy and the Individual

STANDARD PI 01: Reasons for Individual Philanthropy

BENCHMARK MS.1: Define and give examples of the motivations for giving and serving.

BENCHMARK MS.5: Describe the responsibility students have to act in the civil society sector to improve the common good

STRAND IV: Volunteerism and Service

STANDARD VS 02: Service and Learning

BENCHMARK MS.2: Identify specific learning objectives from the academic core Lessons that are being applied in the service-learning project

STANDARD VS 05: Integrating the Service Experience into Learning

BENCHMARK MS.3: Identify outcomes from the service

## Combating Food Insecurity Lessons Extension Activities

**Overview:** These activities are appropriate for afterschool, extended units, and service learning projects. *Some of these activities may be completed during the planned 4-week implementation period, perhaps as afterschool activities. Alternatively, teachers may choose to insert some of these activities into the unit plan, extending the length of the unit by 1-3 or more days.*

### Sample Activities:

- **Invite Community Speakers** if your students are interested in learning more about a topic related to food and hunger issues, representatives from the [Food and Agriculture Organization of the United Nations](#), [World Food Program USA](#), [Feeding America](#), or local philanthropic organizations can visit schools to share their knowledge. Also, a conventional and organic farmer could be invited to speak (See sample questions in the Background Information for Teachers).
- **Visit a local food bank/collect food (canned goods)** to take to a homeless shelter or food bank. After learning about the issues of hunger, students can become part of the solution by donating their time to make a difference in the lives of people who don't have access to daily meals.
- **Learn more about countries experiencing hunger or water safety/scarcity.** Students could research countries that are experiencing hunger, finding out more about contributing factors and issues. Consider countries such as: Venezuela, Eriteria, Cambodia, Afghanistan and India.
- **Learn more about water quality and water risk issues and consider solutions.** Students could study one water related issue or the impact of the water related concern on one region of the world or country, including growing concerns, steps that are being taken, and potential for additional technological, biotechnological, or other solutions.
- **Plan and conduct an Extended Service Learning Project.** Give students the opportunity to apply what they have learned in the classroom to real-world issues in their communities –i.e.,
  - Create a community or school garden
  - Evaluate current food policy at the state, federal and/or international level
  - Write government leaders to ask them to advocate for policies that will reduce the level of hunger
  - Participate in the annual [CROP Walk](#) or host a CROP Walk at your school or in your community
  - Have students assemble a mock food policy council to represent their community
  - Conduct a survey of neighborhood food distribution services to find out more about food needs and assist with implementing solutions to some of the problems they face
  - Write an essay or story for a student or local newspaper/media on an issue related to hunger, food insecurity, and food production or create an awareness campaign ne through posters, a short video, or a public service announcement on the school's morning news program.

**Instructions:** Choose one or two of the above Extension Activities for students to complete. Work with students to develop expectations for their projects, perhaps developing a rubric to measure success.

- Develop student teams if necessary
- For service learning projects, students should complete a Self-Evaluation Activity.

**Objectives: (Philanthropy)**

STANDARD VS 03: Providing Service

BENCHMARK MS.2: Describe the goals of the project and their impact

BENCHMARK MS.3: Describe the task and the student role STANDARD

VS 02: Service and Learning

BENCHMARK MS.1: Select a service project based on students interests, abilities and research

BENCHMARK MS. 2: Identify specific learning objectives from the academic core Lessons that are being applied in the service-learning project

BENCHMARK MS.4: Demonstrate the skills needed for the successful performance of the volunteer job

STANDARD VS 04: Raising private resources

BENCHMARK MS.3: Develop a service plan

## **Combating Food Insecurity Lessons Unit**

### **Examples of Common Core Standards Met (English Language Arts)**

**STANDARD CCSS.ELA-Literacy.RI.6.1:** Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

**STANDARD CCSS.ELA-Literacy.RI.6.7:** Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic/issue.

**STANDARD CCSS.ELA-Literacy.RI.7.1:** Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

**STANDARD CCSS.ELA-Literacy.SL.7.1:** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**EXPECTATION CCSS.ELA-Literacy.SL.7.1a:** Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

**EXPECTATION CCSS.ELA-Literacy.SL.7.1b:** Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.

**EXPECTATION CCSS.ELA-Literacy.SL.7.1c:** Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.

**EXPECTATION CCSS.ELA-Literacy.SL.7.1d:** Acknowledge new information expressed by others and, when warranted, modify their own views.

**STANDARD CCSS.ELA-Literacy.RI.8.1:** Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

**STANDARD CCSS.ELA-Literacy.SL.8.1:** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**EXPECTATION CCSS.ELA-Literacy.SL.8.1a:** Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

**EXPECTATION CCSS.ELA-Literacy.SL.8.1b:** Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.

**STANDARD CCSS.ELA-Literacy.SL.8.4:** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.

**STANDARD CCSS.ELA-Literacy.RH.6-8.7:** Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

**Combating Food Insecurity Lessons Unit**  
**Examples of Common Core Standards Met (Science)**

**STANDARD CCSS.ELA-Literacy.RST.6-8.1:** Cite specific textual evidence to support analysis of science and technical texts.

**STANDARD CCSS.ELA-Literacy.WHST.6-8.7:** Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

## Combating Food Insecurity Lessons

### Web Links

Following, is a listing of web links<sup>1</sup> referenced throughout the Combating Food Insecurity Lessons. The listing is organized to match the lesson/day plan presented in the unit. While web links are embedded throughout the daily lessons, this separate listing is intended to ensure direct access to all web-related resources highlighted in the unit.

#### **Lesson 1, Day 1: Define the Problem**

**Additional Resources:** <http://www.learningtogive.org/units/farm-table-and-food-security>

**Video:** [Feeding America](https://www.youtube.com/watch?v=Fvo4iR49xns) (https://www.youtube.com/watch?v=Fvo4iR49xns)

#### **Discussion Handouts:**

[Infographics on Hunger](http://www.wfp.org/students-and-teachers/teachers/blog/nine-infographics-will-help-you-teach-hunger)

<http://www.wfp.org/students-and-teachers/teachers/blog/nine-infographics-will-help-you-teach-hunger>

[Impact of water quality on health and ecosystem](http://www.cast-science.org/download.cfm?PublicationID=2950&File=f030727a50f063579836506a748341f2f310)

<http://www.cast-science.org/download.cfm?PublicationID=2950&File=f030727a50f063579836506a748341f2f310>

#### **Additional Handouts:**

[Agricultural Production Challenges](http://www.edimprovement.org/download/7403/)

<http://www.edimprovement.org/download/7403/>

[Population Growth Homework Assignment](http://www.learningtogive.org/sites/default/files/handouts/Population_Growth_Workshop.pdf)

[http://www.learningtogive.org/sites/default/files/handouts/Population\\_Growth\\_Workshop.pdf](http://www.learningtogive.org/sites/default/files/handouts/Population_Growth_Workshop.pdf)

#### **Impact of Water Websites:**

[World-O-Meters Counters](http://www.worldometers.info/)

<http://www.worldometers.info/>

[Top Agricultural Producing Countries](http://www.investopedia.com/financial-edge/0712/top-agricultural-producing-countries.aspx)

<http://www.investopedia.com/financial-edge/0712/top-agricultural-producing-countries.aspx>

#### **Lesson 1, Day 2: Discuss the Problem**

#### **Discussion Handouts:**

[Affinity Mapping](http://www.edimprovement.org/download/7402/)

<http://www.edimprovement.org/download/7402/>

Alternative Activity (Optional)

[The Hunger Obstacle Course](http://documents.wfp.org/stellent/groups/public/documents/webcontent/wfp202396.pdf?_ga=1.5248%208865.%20802222492.1469389523)

[http://documents.wfp.org/stellent/groups/public/documents/webcontent/wfp202396.pdf?\\_ga=1.5248%208865.%20802222492.1469389523](http://documents.wfp.org/stellent/groups/public/documents/webcontent/wfp202396.pdf?_ga=1.5248%208865.%20802222492.1469389523)<http://documents>

[Challenge Letter](http://www.learningtogive.org/sites/default/files/handouts/Challenge_Letter.pdf)

[http://www.learningtogive.org/sites/default/files/handouts/Challenge\\_Letter.pdf](http://www.learningtogive.org/sites/default/files/handouts/Challenge_Letter.pdf)

<sup>1</sup> Links accessed on Oct. 5, 2016.

# **Combating Food Insecurity Lessons**

## **Web Links**

### **Lesson 2, Day 3: Success Criteria**

#### **Homework Discussion:**

[Challenge Letter](#)

[http://www.learningtogive.org/sites/default/files/handouts/Challenge\\_Letter.pdf](http://www.learningtogive.org/sites/default/files/handouts/Challenge_Letter.pdf)

#### **Handouts:**

[Combating Food Insecurity Rubric](#)

<http://www.edimprovement.org/download/7429/>

[Project Criteria](#)

<http://www.edimprovement.org/download/7406/>

### **Lesson 3, Day 4 - 6: Food Insecurity, Waste, Water Risks, Nutrition and Food Production**

#### **Background Resources:**

[National Academies Press \(NAP\)](#) (<http://www.nap.edu/content/about-the-national-academies-press>)

#### **Links to websites on Balanced GMO Perspectives:**

[Consumer Support of GMO – 2014](#)

<http://www.foodinsight.org/newsletters/ific-2014-food-technology-survey-consumers-support-food-biotechnology%E2%80%99s-use-certain>

[Council for Agricultural Sciences and Technology \(CAST\)](#) <http://www.cast-science.org/>

The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the US

- Includes the basics of genetically engineering in introduction
- Includes information on Food Safety
- Addresses both sides in the debate on GMO and the “right to know”

<http://www.cast-science.org/download.cfm?PublicationID=282271&File=1e30b9edc325bd7238e06b551e4a73f4b712TR>

[GMO Answers from Industry, Farmers and Academics](#)

<https://gmoanswers.com/explore?carouselid=0&slideindex=0>

- A video on how GMOs are made
- The Most Common GMO Myths)

#### **Handouts:**

[State of Food Insecurity in the World 2015 Interactive Map](#) <http://www.fao.org/hunger/en/>

[Map of water risk \(including future risks\)](#) <http://www.wri.org/applications/maps/aqueduct-atlas/>

[Explore Food Insecurity in the United States & Locate Food Deserts](#)

<http://pulitzercenter.org/sites/pulitzercenter.org/files/Food%20Insecurity%20Lesson%20Plan.pdf>

[What Our Bodies Need](#)

<http://www.edimprovement.org/download/7436/>

[How Food Grows/Threats to Feeding People](#)

<http://www.edimprovement.org/download/7433/>

[Combating Food Insecurity Research](#)

[http://www.learningtogive.org/sites/default/files/handouts/Farm\\_to\\_Table\\_Research.pdf](http://www.learningtogive.org/sites/default/files/handouts/Farm_to_Table_Research.pdf)

## **Combating Food Insecurity Lessons**

### **Web Links**

#### **Lesson 4, Day 7– 13: Research, Design, Present and Evaluate**

##### **Handouts:**

[Decision Matrix](#)

<http://www.edimprovement.org/download/7445/>

[Finalizing your Presentation](#)

<https://www.cmu.edu/gcc/handouts/PowerPoint%20Handout.pdf>

#### **Lesson 5, Day 14 – 16: Present and Reflect**

##### **Handouts:**

[Chalk Talk](#)

[http://www.nsrfharmony.org/system/files/protocols/chalk\\_talk\\_0.pdf](http://www.nsrfharmony.org/system/files/protocols/chalk_talk_0.pdf)

[Sample Discussion Questions Handout](#): Use these questions to help guide final discussions

<http://www.edimprovement.org/download/7422/>

#### **Extension Activities**

##### **Speaker Resources:**

[Food and Agriculture Organization of the United Nations](#)

<http://www.fao.org/home/en/>

[World Food Program USA](#)

<http://wfpusa.org/>

[Feeding America](#)

<http://www.feedingamerica.org/>