



Food Education Standard #7: We can advocate for food choices and changes that impact ourselves, our communities, and our world.

Designing Food Desert Solutions

Grade Levels & Subjects: Grades 9 - 12 English Language Arts

Learning + Food Objectives:

Students will investigate one or more aspects of food deserts and will use design thinking to propose solutions to the problem of food deserts.

Common Core Standards:

Common Core English Language Arts

Synthesizing research in presentation

CCSS.ELA-LITERACY.RI.9-10.7

Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.

CCSS.ELA-LITERACY.W.9-10.7

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.



MATERIALS NEEDED

- Student Worksheet (Attached below)
- "Trying to Eat Healthy in a Food Desert" video by VICE - <https://www.youtube.com/watch?v=dDbENx9c3Fg>
- Access to internet and headphones

CLASSROOM PROCEDURE

INTRODUCTION (10 minutes)

1. Direct students' attention to the student worksheet. Tell them to read and respond to the prompt in the Bell Ringer section.
2. Display the Universal Declaration of Human Rights and the Convention on the Rights of a Child. Give a brief overview of what these documents are and how they connect to today's lesson.

INSTRUCTION (80 - 100 minutes)

1. Remind students that everyone gets their food from somewhere, but not everyone has the same, equitable access to healthy foods as everyone else, as some people live very far away from grocery stores that sell healthy food like fruits and vegetables.
 - a. Refer to the bell ringer articles addressed during the bell ringer from the UDHR and the Convention on the Rights of a Child
 - b. Explain that today's lesson will focus on the importance of ensuring that everyone has equal and easy access to healthy, affordable food.
2. Instruct students to find 3-4 partners and then, direct their attention to the Resource Table and Article Response Table.
 - a. Explain that the Resource Table contains articles, videos and images that will be used for today's lesson, starting with the two articles that groups will be assigned to read.
3. Introduce the concept of food deserts using the article, What are food deserts & how do they impact health?
 - a. Teachers and student volunteers should read the sections of the article aloud,
 - b. After reading, student groups should complete the table – documenting the main (key) ideas of each section.
4. To reinforce the ideas students read about in the article, consider reviewing their responses.
5. Next, show the video, "Trying to Eat Healthy in a Food Desert" by Vice.
 - a. Explain that discussion of the video will occur in student groups for the next activity.
 - b. Direct students' attention to the Food Desert Media Comparison Table. Have student volunteers read the instructions and the prompts.
 - c. Explain that groups will have time to analyze the video the class just watched and compare it to an image of their choosing.
 - d. Allow students about time for groups to discuss their image and fill out their tables
6. As students are working on their tables, project/post the Food Desert Solutions image.
 - a. Once the class is re-assembled, the teacher should read and explain the 7 solutions offered in the infographic.
 - b. Tell the class that each group will be creating something related to at least one of the suggested solutions.
7. Introduce the project by having student volunteers read the directions and prompts in the Solving the Problem of Food Deserts Using Design Thinking section of the student worksheet.
 - a. Before releasing students to work on their projects, use this time to discuss guidelines for turning in/sharing their final product and how the projects will be graded.

CLOSING (10 minutes)

1. On their own, students should use 4 or more of the terms in the vocabulary table, to reflect on what they learned during this lesson.

ADDITIONAL RESOURCES

- Articles:
 - "Food deserts vs. food swamps and food insecurity" by Medical News Today - <https://www.youtube.com/watch?v=dDbENx9c3Fg>
 - "Food Swamps Contribute to Obesity More than Food Deserts" by Blue Zones - <https://www.bluezones.com/2017/11/news-food-swamps-contribute-obesity-food-deserts/>
 - "Food Desert Statistics" by Learning For Justice - <https://www.learningforjustice.org/sites/default/files/general/desert%20stats.pdf>
 - "Feeding Your Family on a Tight Budget" by KidsHealth - <https://kidshealth.org/en/parents/feeding-families.html>
 - "Healthy Communities" by Let's Move - <https://letsmove.obamawhitehouse.archives.gov/healthy-communities>
- Videos:
 - "What is a Food Desert?" by Carb Loaded - <https://www.youtube.com/watch?v=wAu8Noo8CxA>
 - "Introduction to Food Deserts" by GIS for Youth Empowerment - <https://www.youtube.com/watch?v=FaI9HcD12U4>
 - "The Food Deserts of Memphis: inside America's hunger capital" by The Guardian - <https://www.youtube.com/watch?v=E6ZpkhPciaU>
 - "Trying to Eat Healthy in a Food Desert" by VICE - <https://www.youtube.com/watch?v=dDbENx9c3Fg>
 - "Poor neighborhoods at risk to become food swamps" by Newsy - <https://www.youtube.com/watch?v=D8EhxXZMawM>

The student worksheet below can be printed or copied onto any online learning platform.



Designing Food Desert Solutions

Bell Ringer

Directions: Read the quotes and then, respond to the prompts.

Document Quote(s)	Your Response
<i>Everyone has the right to an adequate standard of living for themselves and their family.</i> (United Nations, Universal Declaration of Human Rights, Article 25, 1948)	<i>I think this article of the UDHR is important because...</i>
<i>You have the right to food, clothing, a safe place to live and to have your basic needs met. You should not be disadvantaged so that you can't do many of the things other kids can do.</i> (United Nations, The Convention on the Rights of a Child, Article 27, 1989)	<i>I agree with this article from the Convention on the Rights of a Child because...</i>
According to the site The Right to Food Around the World , " <i>The United States Constitution does not contain provisions related to adequate food.</i> " (Food & Agriculture Org of the United Nations, 2021)	<i>This statement makes me wonder...</i>



Food Desert Resource Table

Article	Videos	Images /Infographics
<p>"Food Desert Statistics" by Learning For Justice - https://www.learningforjustice.org/sites/default/files/general/desert%20stats.pdf</p>	<p>"Introduction to Food Deserts" by GIS for Youth Empowerment - https://www.youtube.com/watch?v=FaI9HcD12U4</p>	<p>"Food Deserts in America" by Tulane University - https://socialwork.tulane.edu/blog/food-deserts-in-america</p>
<p>"What are food deserts, and how do they impact health" by Medical News Today - https://www.medicalnewstoday.com/articles/what-are-food-deserts</p>	<p>"The Food Deserts of Memphis: inside America's hunger capital" by The Guardian - https://www.youtube.com/watch?v=E6ZpkhPciaU</p>	<p>"Serving Food Solutions" by Alexa Milano - http://servingfoodsolutions.com/the-problem/location/food-deserts/</p>
<p>"Feeding Your Family on a Tight Budget" by KidsHealth - https://kidshealth.org/en/parents/feeding-families.html</p>	<p>"Trying to Eat Healthy in a Food Desert" by VICE - https://www.youtube.com/watch?v=dDbENx9c3Fg</p>	<p>"Food Deserts in Chicago" by Beacon News - https://wybeaconnews.org/13580/news/current-events/food-deserts-in-chicago-2/</p>
<p>"Healthy Communities" by Let's Move - https://letsmove.obamawhitehouse.archives.gov/healthy-communities</p>	<p>"What is a Food Desert?" by Carb Loaded - https://www.youtube.com/watch?v=wAu8Noo8CxA</p>	<p>"Mapping Food Deserts (and Swamps) in Manhattan and the Bronx" by Olive Limone - https://medium.com/@olivialimone/mapping-food-deserts-and-swamps-in-manhattan-and-the-bronx-46c6d8fc0804</p>
<p>"Food Swamps Contribute to Obesity More than Food Deserts" by Blue Zones - https://www.bluezones.com/2017/11/news-food-swamps-contribute-obesity-food-deserts/</p>	<p>"Poor neighborhoods at risk to become food swamps" by Newsy - https://www.youtube.com/watch?v=D8EhxXZMawM</p>	<p>"Food Desert Solutions" by PGH Environmental - https://pghenvironmental.files.wordpress.com/2017/02/screen-shot-2017-02-16-at-10-49-35-am.png</p>



Food Desert Article Response Table

Directions: With your partners, read the article and write 1-2 key ideas that represent each section. This information will be helpful for the next set of activities.

Text: What are food deserts & how do they impact health? by MedicalNewsToday	
Section of the Article	The Main Idea of Each Section
DEFINITION	
LOCATION	
TYPICAL POPULATIONS	
HEALTH IMPACT	
OTHER TERMS	
SOLUTIONS	
SUMMARY	



Food Desert Media Comparison Table

Directions: Based on the video and the image your group chooses, complete the table below.

Please Note: Your group can use any of the images except [Food Desert Solutions](#).

The video the class watched was: Trying to Eat Healthy in a Food Desert (Vice)	The image my group chose was:
COMPARE: <i>One similarity between the video and the image is _____</i>	CONTRAST: <i>One difference between the video and the image is _____</i>
CONCLUSIONS: The most important thing I learned about food deserts so far is _____.	CHOOSE 1: Write down 1 thing that you found interesting from the image or video OR write down 1 question you still have.



Solving the Problem of Food Deserts Using Design Thinking

Directions: With your group, develop a plan to help communities solve the problem of food deserts. This process is based on the steps and ideals of the [Design Thinking Process](#). Use any of the resources provided in the Resource Table.

<p>Demonstrate empathy for affected communities by conducting interviews or finding primary feedback on the issue</p> <ul style="list-style-type: none"> • Where do you buy your groceries? • How easy is it to access healthy and affordable food? • (If it's <u>EASY</u> to access) Why do you think people in your community have easy access to healthy and affordable food options? • (If it is <u>NOT EASY</u> to access) Why do you think people in your community don't have easy access to affordable and healthy food options? 	
<p>Define the problem</p> <ul style="list-style-type: none"> • What is the issue? • Develop the issue into a "How might we..." question <p><i>Example: How might we ensure more people eat healthier? How might we convince corporate America to support local communities?</i></p>	
<p>Brainstorm ideas</p> <ul style="list-style-type: none"> • Who: Who will be affected by this solution? Who will take part in the solution? • What: What action steps are necessary to achieve the goal? What tools, equipment or information are necessary? • When: When do you propose your solution be implemented? 	



<ul style="list-style-type: none"> • Where: What communities (in your state) will be impacted by your solution? • How: How long will your solution last? How will you ensure its longevity? • Why: Why is this solution the best option to end food deserts (in your state)? 	
<p>Develop a Model/Create a Plan</p> <ul style="list-style-type: none"> • Hard copy prototype or • Digital prototype or • Written & Visual Report or • Video Report 	
<p>Test Your Model or Plan</p> <ul style="list-style-type: none"> • Share your ideas with those that you interviewed earlier in the process • Document their feedback & incorporate it where appropriate. 	
<p>Reflect</p> <ul style="list-style-type: none"> • <i>"When a community is a food desert, _____".</i> Finish this statement with 2 things that you've learned. • <i>This projects aligns with Solution #____ of Food Desert Solutions.</i> 	



Exit Activity

Directions: Use 4 or more vocabulary words, to write a 1 paragraph reflection on what you learned during this lesson. Feel free to refer to your notes to recall the definitions.

Food Desert Vocabulary

food insecurity
food swamp
hunger
malnutrition

food desert
poverty
obesity
low-income