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# **RESEARCHING TO DEEPEN UNDERSTANDING**

**DEVELOPING CORE PROFICIENCIES  
ENGLISH LANGUAGE ARTS / LITERACY UNIT  
GRADES 11-12**

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**RESEARCH TOPIC REPOSITORY  
FOOD**

# ≡ PURPOSES AND USES OF A RESEARCH ≡ TOPIC REPOSITORY

A Research Topic Repository provides a starting point and a set of common source texts in a given topical arena for student inquiry while developing the research proficiencies that are the instructional focus of the Research for Deepening Understanding Units. The Repository suggests issues to consider in narrowing and focusing a class or student research, provides examples of possible areas of investigation that might be pursued, lists broad inquiry questions that can lead to investigative paths, and includes a set of source texts for one possible area.

The common text set models a range of text types, perspectives, and provides both background and extension texts. Background texts should be accessible to the student (relatively straightforward in approach, syntax, and language), require little background knowledge to interpret, and be comprehensible, given the student's reading skill and level. Extension texts should be rich, complex, and challenging (at the upper end of the text complexity band). They should be characteristic of texts in the field being investigated, present sophisticated arguments and/or research studies, and demand that students read closely to unpack vocabulary, syntax, and meaning.

The Repository supports and informs teacher and student decisions that are made during the research process, as described in the Researching for Deeper Understanding unit plan. The first decision is which Repository to use as a context for the unit and student research, or whether to develop a new, parallel Repository. Teachers and students should base this decision on the instructional level, curriculum context, student interests, and common text levels.

The Lexiles of the model common sources contained in this repository range from 790L to 1420L.

# I. INTRODUCTORY TOPIC DESCRIPTION

## FOOD

We cannot live without it. To some, it is an art. For others, it is a sacred experience of gratefulness, sacrifice, and symbol. For many people around the world, it is a scarcity with the gravest of consequences. Historically free for the taking, today it is one of the world's biggest and most profitable commodities. We fight wars over it. We share it. We love it. Mmm...Food.

The world of food is full of flavor, controversy, creativity, and life. Food can nourish us. It defines cultures and creates conflict. Our recipes tell stories of human migration, innovation, and artistry. People eat and share food for many cultural reasons: religious, holidays, family time, community feasts, among countless others. The means of food production also vary from mass scale production on farms bigger than cities to backyard gardens and hen houses. Food can even be created in a laboratory! Do you ever consider from where and what sources your food comes, how we make it, or what is in it? Today's typical American meal contains ingredients from at least six countries. Around the world, humans (and non-humans) access food in different ways. As you are aware, some experience abundance while others, a scarcity.

Beyond life-giving sustenance, the world of food provides an endless cornucopia of areas of study. From genetically modified food to organic heirlooms, the culinary arts to religious food laws, any student will discover rich content that should inspire further inquiry and analysis to help form conclusions and inform positions. A deep knowledge of food can unlock one's understanding of the development of humanity's place in the world today. The relatively recent transition of our species' approach to food – from hunting and gathering to agriculture and domestication – is unique in the entire history of the world. Historians and anthropologists credit this shift as the catalyst for society as we know it today; they point to it as an explanation for why *Homo sapiens* are the sole creators of written communication, political organization, and technology, among countless other human effects.

Culture: Across the globe and throughout time, we find food at the heart of community and family, feeding our bodies and souls. In this section, students might discover how the potato changed the world or why there are religious laws concerning pork and shellfish. Topics of interest range from chefs of the world and kitchen innovations to food as art.

# I. INTRODUCTORY

## TOPIC DESCRIPTION (CONT'D)

**Production:** What goes in to each meal you eat? Today, you can expect that most foods you eat travel an average of 1,500 miles from farm to plate. In just the past few decades, our global food system has transitioned from, what food author Michael Pollan calls, “solar-powered” to “fossil fuel-powered.” Are locally grown or even self-grown and raised foods better for you and the environment? Are there ethical considerations around eating meat? Students will uncover the mysteries, problems, and solutions of food production and the ever-growing need for more.

**Access:** Until the agricultural revolution, food was not associated with money. Today, food can be very expensive. In some parts of the world, food is scarce. Should food be a basic human right or a market based commodity? People are starving around the world, while others – like Americans – waste nearly half of the food we produce. Students will find evidence of donated food supplies going to warlords rather than starving children. They might discover that America’s access to food is not the same as access to nutrition. As the world population continues to expand, what will this mean for those who have food and those who do not?

**Health:** Are you allergic to peanuts? Do you find yourself craving chocolate? When you exercise, what nutrients will help prevent injuries? How much energy is in a calorie? Why does drinking expired milk make me sick? The body needs food to survive. What foods are good for us and why, entreats students to dig into nutrition, allergies, eating disorders, food-borne illnesses, and dietary sciences, among other topics.

Because of the breadth and flexibility of food as a domain for research, teachers and students may wish to focus the topic area before initiating the inquiry process. This could begin by spotlighting a particular implication of food on humans (e.g., culture, health), the animals and plants used as food (e.g., food sources, production), or the environment (resources, waste/byproducts). The identified purposes and anticipated products of a student's investigation focus the topic and influence the process.



## II. POSSIBLE AREAS OF INVESTIGATION

1. How the Food We Eat Today has Changed (e.g., the similarities and differences between food today and in generations past)
2. The Influence of Food on Human Health (e.g., how food has impacted the average age of humans)
3. The Impact of Food on Society (e.g., restaurants and grocery stores)
4. The History of Food Production (e.g., pasteurization, preservatives, genetics)
5. The Impact of Food Production on Plants and Animals (e.g., mass production)
6. The Impact of Food Production on Labor (e.g., meat packers in Chicago, fruit farmers in California)
7. The Impact of Food on the Earth (e.g., how landfills have evolved, food transportation.
8. An Analysis of Farming Practices and their Impact (e.g., destruction of the family farm, meat packing, migration)
9. Food's Impact on Politics and the Economy (e.g., alternative fuels and the lobbyists who promote them)
10. Consumer Research about a Food Production Technology (e.g., the machines that help process food)
11. The global distribution of food (e.g. surpluses, scarcities, inequalities, security, energy uses)



## III. POSSIBLE GUIDING QUESTIONS FOR INQUIRY AND RESEARCH

The following questions can be used to initiate inquiry and to guide students in identifying paths for investigation.

1. What are the implications of food for the humans who consume it?
2. In what ways does food influence human culture including cuisine, family, religion, history, economics, and/or politics?
3. What role does food play in human health, nutrition, disease, illness, and/or mortality?
4. What are the implications for food based on from which plants and animals it is derived?
5. Why are certain plants and animals human food (and others not)? What role do selection, availability, adaptability, and value have on which plants and animals we consider food?
6. How does food production affect plant and animal species, genetics, domestication, agriculture, and the lives of farm animals?
7. What are the implications of food for the earth?
8. How does human food production affect the planet? How does human food production affect the planet's bio-diversity/homogeny, its atmospheric composition, the climate, and/or population?
9. How does human food waste affect the planet, landfills, famine, and non-biodegradable food byproducts?

## IV. SOURCE LOCATIONS

In conducting research, students should be encouraged to conduct searches for sources in a variety of areas such as the school library, visits to and observations of sites and places related to the topic, search engines like Google and Bing, and on-line databases like EBSCO Host and Gale. In expanding the circle of potential resources for research, and in realigning their strategic searches, students should utilize the expertise of library-media specialists in their school or community, and learn from them how to access additional search vehicles that may be available to them.

Many state and school district library systems provide free public access to research portals that allow teachers and students to access various informational databases. Many of these have been organized so that articles can be searched for by text difficulty level (Lexile measure) as well as topic, allowing both teachers and students to find information at a variety of text complexity levels. Some national content aggregators that provide searches by Lexile level are: EBSCO, Gale, Grolier Online, Net Trekker, News Bank, Pro Quest, and Questia. Contact a library-media specialist for information on how to connect students to and navigate the state's database access.

## V. COMMON SOURCE TEXT SET

The common text set for this Repository presents a model text sequence focused on a particular area of investigation; the common text set can be used in various ways by a teacher and students, depending on the degree to which they want to focus inquiry and research on the areas of investigation suggested by the texts in the set. Each common text is linked to a specific reading activity in the unit plan, and each includes a short set of text notes and a set of text-based questions to initiate students' close reading. The model sources in this repository can be used in a variety of ways including:

1. **Provide background and direction for inquiry focused on the area of investigation:** In this case, students will read and analyze the common texts either as main sources or as a research base as they embark on inquiry and investigation directly related to the area(s) of investigation presented in the texts. They will develop the close reading skills required for effective research through text-based discussions and analysis of the common texts, as explained in the unit plan. Students may then extend their individual research into closely related areas and new texts.
2. **Provide skills practice and a starting point for students' research:** In this case, students will work with the text set to learn about and practice the close reading skills required for effective research, but will then conduct research into a related, but new area of investigation identified by the teacher or students, applying those same skills with new texts.
3. **Serve as models for the teacher:** In this case, the teacher may identify other, similar texts in a chosen area of investigation and build a new or expanded common text set, which parallels the model set in terms of breadth, richness, and complexity. Students will develop the close reading skills required for effective research using the teacher's new common text set and will launch either teacher- or student-directed inquiry in a new area of investigation area suggested by the texts in the set.



## V. COMMON SOURCE TEXT SET (CONT'D)

The general text characteristics and their *sequential use in the unit's activities* are outlined below:

### **Text #1 - Stimulus:**

Rich, high interest text that can stimulate student thinking and discussion in the general topic area and lead the class or a student to consider various areas of investigation. Might be a literary text.

*Students will use this text as a jumping off point for inquiry in **Part 1, Activity 2.***

### **Text #2 - Background information:**

Accessible informational text providing accurate background information on an identified area. Characteristics – rich, quality, credibility, connection to the inquiry. Should be a quality source of rich information on central aspects of topic. Should frame an area in a way that can lead to many paths of exploration, rather than a single perspective or focus.

*Students will use this text to build background and practice skills of close reading and initial text analysis (for credibility, accessibility, and relevance) in **Part 1, Activity 3, and Part 2, Activities 2-3.***

### **Text #3 - Background information:**

Accessible informational text providing additional and complementary accurate background information related to an identified area of investigation.

*Students will use this text to build background and practice skills of close reading and initial text analysis (for credibility, accessibility, and relevance) in **Part 1, Activity 3, and Part 2 Activities 2-3.***

### **Text #4 - Perspective on the Topic:**

Short, but potentially more challenging informational text that presents or suggests a particular perspective on an identified area of investigation. Should come from a credible source.

*Students will use this text to identify one of multiple ways of viewing the identified area of investigation, to practice close reading skills of analyzing perspective and bias, and to compare with other perspectives in **Part 2, Activities 2-3.***



## V. COMMON SOURCE TEXT SET (CONT'D)

### **Text #5 - Perspective on the Topic:**

Short, but more challenging informational text that presents or suggests a second or contrasting perspective on an identified area of investigation. Might come from a less known source with uncertain credibility.

*Students will use this text to identify one of multiple ways of viewing the identified area of investigation, to practice close reading skills of analyzing perspective and bias, and to compare with other perspectives in **Part 2, Activities 2-3.***

### **Text #6 - Perspective on the Topic:**

Short informational text related to an identified area of investigation that presents or suggests an additional or contrasting perspective. Might come from an unusual source with uncertain credibility.

*Students will use this text to identify one of multiple ways of viewing the identified area of investigation, to practice close reading skills of analyzing perspective and bias, and to compare with other perspectives in **Part 2, Activity 2-3.***

### **Texts #7 - #10 - Arguments and Perspectives related to the Topic:**

Longer and more complex informational texts related to an identified area of investigation with rich content, a clear perspective, and effective, well-developed argumentation.

*Students will use this text to deepen their understanding of the identified area of investigation and the issues, debates, and controversies that surround it, and to practice the close reading skills of analyzing arguments, their reasoning, and their supporting evidence in **Part 3, Activity2.***

NOTE: the teacher or students may supplement this text set with additional examples of academic writing from fields related to the area of investigation.





## VI. COMMON TEXTS

### FOOD: EFFECTS OF HUMAN FOOD CONSUMPTION

Text Complexity Range: 790L to 1420L

AUTHOR	DATE	LEXILE
<b>Text #1: <i>The Meaning of Food</i></b>		
Sue McLaughlin, Executive Producer	2005	1240-1260L
<b>Text #2: <i>Leveraging Agriculture for Improving Nutrition &amp; Health</i></b>		
Sylvia Matthews Burwell	February 2, 2011	1420L
<b>Text #3: <i>How the Potato Changed the World</i></b>		
Charles C. Mann	November 2011	1300 L
<b>Text #4: <i>The Ethics of Eating</i></b>		
Peter Singer	June 2006	1460L
<b>Text #5: <i>The Facts About High Fructose Corn Syrup</i></b>		
Corn Growers Association	NA	1240L
<b>Text #6: <i>So God Made A Farmer</i></b>		
Paul Harvey	April 12, 2012 (1978)	1060L
<b>Text #7: <i>Farmer In Chief</i></b>		
Michael Pollan	October 12, 2008	1400L
<b>Text #8 : <i>Teach Every Child About Food</i></b>		
Jamie Oliver	February 2010	790L
<b>Text 9: <i>Morality in Food Choice</i></b>		
Allie Nicodemo	September 26,2012	1100L
<b>Text 10: <i>The Global Food Waste Scandal</i></b>		
Stuart Tristram	May 2012	980L



## TEXT #1

### ***The Meaning of Food*** **By Sue McLaughlin, Executive Producer**

Date: 2005

Complexity Level: Measures at 1240-1260L

#### TEXT NOTES

A three-part documentary from PBS, *The Meaning of Food* explores humanity's relationship to food in three episodes: "Food and Life," "Food and Culture," and "Food and Family." Each episode unravels the topic through interviews, quizzes, expose', and even recipes.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. What are some of the ways and reasons the marketplace responded to the demand for kosher food?
2. What are the driving forces behind the local food movement as described, for example, in "Near Eats?"



## TEXT #2

### ***Leveraging Agriculture for Improving Nutrition & Health*** **By Sylvia Matthews Burwell**

Date: February 2, 2011

Complexity Level: Measures at 1420L

#### TEXT NOTES

This text contains remarks delivered at the International Food Policy Research Institute by Sylvia Mathews Burwell, president of the Global Development Program at the Bill and Melinda Gates Foundation.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. Why is undernourishment not uniquely a result of a lack of agriculture? What other factors influence it?
2. What innovations within the nutritional sciences will affect world hunger?



## TEXT #3

### *How the Potato Changed the World*

By Charles C. Mann

Date: November 2011

Complexity Level: Measures at 1300 L

#### TEXT NOTES

This article explores the history of the potato and its importance in the societal growth both in the United States and the rest of the world. It describes in depth the resilience of the potato in the face of disease and the impacts people worldwide have had on the potato continuing to adapt when threatened.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. What physical characteristics improved the potato's market share?
2. What do the chemical alterations humans made to the potato to help it survive demonstrate about our relationship to the potato?



## TEXT #4

### *So God Made A Farmer*

By Paul Harvey

Date: April 12, 2012

Complexity Level: Measures at 1060L

#### TEXT NOTES

The popularity of Paul Harvey's original radio broadcast surged after an advertisement for Dodge Ram trucks during the 2013 Super Bowl used it. Adapted from a 1975 article, Harvey delivered the speech at the 1978 convention of the Future Farmers of America. The article provides the original speech and the Super Bowl advertisement.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. In addition to food production, in what ways does Paul Harvey align the farmer's work and life with the needs of Americans?
2. How do the images in the Dodge Ram truck advertisement enhance/diminish the stand-alone text?



## TEXT #5

### ***The Facts About High Fructose Corn Syrup*** **By Corn Growers Association**

Date: unknown

Complexity Level: Measures at 1240L

#### TEXT NOTES

This website aims to dispel popular conceptions concerning high fructose corn syrup. It contains articles, blogs, FAQs, and even allows users to get their personal questions answered. It is important to note that the progenitor of the conclusions is the Corn Growers Association.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. What facts about high fructose corn syrup demonstrate that it is as healthy (or unhealthy) as cane sugar?
2. What features of this website indicate a content bias toward high fructose corn syrup?



## TEXT #6

### ***Farmer In Chief*** **By Michael Pollan**

Date: October 12, 2008

Complexity Level: Measures at 1400L

#### TEXT NOTES

This essay first appeared in the New York Times on October 12, 2008. The purpose of using this particular publication is because of the collateral content available on the website.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. How does food influence national security?
2. What are some of the causes for increases in the number of calories of fossil fuel energy to produce a calorie of food energy?



## TEXT #7

### ***The Ethics of Eating*** **By Peter Singer**

Date: June 2006  
Complexity Level: Measures at 1460L

#### TEXT NOTES

As the founding father of the global Animal Rights movement, Peter Singer – an ethics professor at Princeton University and director of the Center for Human Values – presents an argument concerning the ethical implications of eating animals. The essay may not only challenge students' personal ethical choices and encourage spirited dialogue, but also create emotional reactions that the teacher may wish to monitor.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. In addition to the treatment of factor farmed animals, what other moral implications does meat production present?
2. According to Peter Singer, why is the production of more meat an insufficient response to increased world food demand?



## TEXT #8

### ***Teach Every Child About Food*** **By Jamie Oliver**

Date: February 2010  
Complexity Level: Measures at 790L

#### TEXT NOTES

A very popular video from the acclaimed Ted Talks, internationally renowned chef, Jamie Oliver, focuses primarily on our society's failure to address nutrition and obesity.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. Specifically to what does Jamie Oliver point in order to demonstrate that the current generation will live ten fewer years than the one before it?
2. What are the reasons for teaching cooking and recipes in school? How will it save lives?



## TEXT #9

### ***Morality in Food Choice***

**By Allie Nicodemo**

Date: September 26, 2012  
Complexity Level: Measures at 1100L

#### TEXT NOTES

This article examines the ethical aspects of food production and consumption. By looking at the meat and fishing industries readers can examine some of the choices they make in terms of where foods are purchased and the impact that choice has on the environment.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. What are some of the ethical complexities surrounding the trend to “buy local?”
2. How does appealing to an individual’s moral sensibilities influence food choices? What are similarities and differences between ethical arguments and religious laws regarding food?



## TEXT #10

### ***The Global Food Waste Scandal***

**By Stuart Tristram**

Date: May 2012  
Complexity Level: Measures at 980L

#### TEXT NOTES

This TED Talk by Tristram Stuart uncovers details surrounding global food waste. For example, the USA is one of the largest food wasters in the world. We put twice as much food on our shelves than is needed to feed us.

Sample Text-Dependent Questions (to drive initial close reading and discussion):

1. Food waste is not simply about the food you throw away. It is also about systems and policies. In what ways do food demand, production, surpluses, and transportation affect food waste?
2. What are the moral considerations behind decisions to throw away food on personal and corporate levels?