

**Island Grown Schools Unit**  
***Industrial Revolution***

Unit Title: (World/US) History through Food: Industrial Revolution

Grade: 9-12

Essential Question(s): “How has history impacted our food choices today?” “How can we feed the world?”

<p style="text-align: center;"><b>Connections to IGS Enduring Understandings:</b></p> <ol style="list-style-type: none"> <li>1. Appreciate the farming profession</li> <li>2. Recognize difference between the industrial food system and localized food systems</li> <li>3. Understand the connection between healthy soil, healthy plants, and healthy people</li> <li>4. Know that everyone can grow food</li> <li>5. Feel confident in making healthy food choices</li> </ol>	<p style="text-align: center;"><b>Knowledge:</b></p> <p>Unit Enduring Understandings:</p> <ol style="list-style-type: none"> <li>1. Students will understand how our food system was dramatically transformed during the Industrial Revolution</li> <li>2. Students will understand the significance of place in our food systems</li> <li>3. Students will understand the benefits and harmful effects of the Industrial Revolution on our food system</li> </ol> <p>Students will know:</p> <ol style="list-style-type: none"> <li>1. The Industrial Revolution transformed our food system, and its environmental, social, and economic implications</li> <li>2. Our access and connection to food today is a direct result of the Industrial Revolution</li> </ol>
<p style="text-align: center;"><b>Connections to MA Frameworks/Common Core:</b></p> <p>WHII.5 Identify the causes of the Industrial Revolution (A, B, C, D)</p> <p>WHII.6 Summarize the social and economic impact of the Industrial Revolution (A, B, C, D)</p> <p>WHII.12, 13, 14, 15, 16. Identify the major developments in Asian, African, Latin American history in the 19th and 20th centuries</p> <p>USI.27 Explain the importance of the Transportation Revolution of the 19th century, including the stimulus it provided to the growth of a market economy</p>	<p style="text-align: center;"><b>Skills:</b></p> <p>Students will be able to:</p> <ol style="list-style-type: none"> <li>A. Discern between a localized and industrialized food system</li> <li>B. Create and compare common meals based on the specific impacts of the Industrial Revolution</li> <li>C. Analyze their own food choices through the lens of the Industrial Revolution</li> </ol>

USI.28 Explain the emergence and impact of the textile industry in New England and industrial growth generally throughout antebellum America

USII.1 Explain the various causes of the Industrial Revolution

USII.2 Explain the important consequences of the Industrial Revolution

USII.3 Describe the causes of the immigration of Southern and Eastern Europeans, Chinese, Koreans, and Japanese to America in the late 19th and early 20th centuries, and describe the major roles of these immigrants in the industrialization of America

USII.4 Analyze the causes of the continuing westward expansion of the American people after the Civil War and the impact of this migration on the Indians

## Evidence

Performance Tasks(s): <i>Specific activities we create for students, to engage in learning concepts...</i>	Evaluative Criteria
<ul style="list-style-type: none"> <li><i>* Trace the process from seed to fork of a modern dish, taking into consideration agricultural methods/inputs, manufacturing/processing, transportation, marketing and distribution.</i></li> <li><i>* Establish an argument and engage in a debate focused on the impacts of the Industrial Revolution on our food system</i></li> <li><i>* Compare effects of the Industrial Revolution on food systems in developing and developed countries</i></li> <li><i>* Create dishes that are specifically “industrial” and “local”</i></li> <li><i>* Create a digital writing project (eg. PSA) that presents issues of the food system</i></li> <li><i>* Plant, maintain, harvest produce in the school garden</i></li> </ul>	<ul style="list-style-type: none"> <li><i>* Students take an in-depth look into the ingredients, and are able to recognize the diverse, complex and infinite inputs required to produce them</i></li> <li><i>* Students work collaboratively with their team and effectively communicate their argument using sufficient evidence and historical data</i></li> <li><i>* Students are able to determine the benefits created and destruction caused by the industrialization of food, and identify regions of the world that experience both</i></li> <li><i>* Students seek out people in the local food community to prepare a dish sourced from the island’s resources</i></li> <li><i>* Students use their debate research and farm visits to present a convincing PSA about our food system</i></li> <li><i>* Students make connections between their learning and the process of growing food themselves</i></li> </ul>
<p>Non-activity based evidence: <i>Educators will be able to assess student learning by...</i></p> <ul style="list-style-type: none"> <li><i>* Student discussions</i></li> <li><i>* Behavior changes/food choices</i></li> <li><i>* Parent and teacher feedback</i></li> </ul>	<ul style="list-style-type: none"> <li><i>* Students cite historical examples when discussing the impacts of the Industrial Revolution, and raise further questions regarding these impacts</i></li> <li><i>* Students apply their awareness of the food system to their own lives</i></li> <li><i>* Students engage in discussions with family members and/or teachers regarding the food system</i></li> </ul>

## Learning Plan

Code (link to IGS Enduring Understandings, Standards)	Learning Events: <i>Specific steps students will take in this unit, with and without IGS coordinator, in chronological order</i>	Notes to support learning event success:
WHII.5 USII.1	* <i>Introduction to the Industrial Revolution, and its impacts on our food system. Students read excerpts from Omnivore’s Dilemma and What We Eat</i>	* Watch clips or entire film, <i>Food Inc.</i> , and/or <i>Fresh</i> (or other films listed in <i>Resources</i> )
IGS EU 1 WHII.6 USI.27	* <i>Class discussion regarding the connections between the Transportation Revolution, new sources of energy, technological advances, and the agricultural system.</i>	
IGS EU 2 WHII.6 USII.2 USI.28	* <i>Students revisit their projects from the Columbian Exchange, with a focus on the impacts of the Industrial Revolution. “How did the Industrial Revolution change access to food (in the U.S., and in the world)?”</i>	* Follow a similar process of tracing seed to fork, but with a deeper understanding of the inputs required in industrialized food products
IGS EU 2,3 USII.3 USII.4	* <i>Students read excerpts from Omnivore’s Dilemma, A Moveable Feast, and What We Eat, and reflect on the impacts of the Industrial Revolution on our food system.</i>	
IGS EU 2, 3 WHII.12, 13, 14, 15, 16	* <i>Debate:</i> - <i>Students are divided into two groups with opposing arguments in response to the question, “Has the Industrial Revolution helped or harmed our food system?”</i> - <i>Students research their argument, and find evidence to support their argument</i> - <i>Students engage in a debate, with various members of the faculty as facilitators.</i>	
IGS EU 1, 4 USII.2 WHII.6	* <i>Students visit local farms and work in the school garden, as they explore the alternatives to the industrial food system. They reflect on the impacts the local food industry has on the economy, environment, and health of the community.</i>	* A field trip that also ties into <i>Omnivore’s Dilemma</i> , is a foraging field trip in the spring to harvest watercress. This will be an opportunity for students to document for their digital writing project/PSA
IGS EU 2, 5 USII.2 WHII.6	* <i>Students prepare dishes that are either “industrial” or “local” and share a meal together.</i>	* Students can look back to Michael Pollan’s four meals (Industrial, Industrial Organic, Local, and Foraged)
IGS EU 2, 5		

	<i>* Students create digital writing projects, and present them to other classes/faculty to educate the school community about the food system</i>	and create a meal of each as a class, to experience the diversity and to understand the availability of these products on the island.
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**Materials:****Resources:****Books:**

What the World Eats, by Faith D'Aluisio

Omnivore's Dilemma, by Michael Pollan

Food in History, by Reay Tannahill

Moveable Feasts, by Sarah Murray

Civic Agriculture: Reconnecting Farm, Food, and Community, by Thomas A. Lyson

Cuisine and Culture: A History of Food and People, by Linda Civitello

**Articles:**

*What We Eat (series)*, by Burt Wolf

*Fresh and Direct From the Garden an Ocean Away*, (29 August 2011), by John Tierney. Retrieved from <http://www.nytimes.com/2011/08/30/science/30tierney.html?pagewanted=all>

*The Economics of Local Food*, Washington Post. Retrieved from <http://voices.washingtonpost.com/all-we-can-eat/sustainable-food/the-economics-of-local-food.html>

*The Idea of a Local Economy*, by Wendell Berry. Orion Magazine. Retrieved from <http://www.orionmagazine.org/index.php/articles/article/299>

*Buying Local: How it Boosts the Economy*, by Judith Schwartz. Time Magazine. Retrieved from <http://www.time.com/time/business/article/0,8599,1903632,00.html>

*You are What you Grow*, by Michael Pollan. NY Times. Retrieved from <http://michaelpollan.com/articles-archive/you-are-what-you-grow/>

**Community resource people:**

Island farms and farmers

Abigail Higgins, master gardener

Jan Buhrman, farm-to-table chef

**Websites:**

Food Democracy Now! [www.fooddemocracynow.org](http://www.fooddemocracynow.org)

Documentary website, Spread the Word: [www.sprword.com](http://www.sprword.com)

**Movies:**

Food Inc.

Life and Debt  
King Korn  
Fresh  
Future of Food  
Vanishing of the Bees  
Farmageddon  
Forks Over Knives  
World According to Monsanto  
The Power of Community  
Dive!

**Other involved organizations:**

Slow Food MV  
NOFA Mass  
Organic Consumers Association