

TGC Fellow Unit Template

Prepared by: Phillip D. Moshoyannis

School/Location: Lee Avenue School, Hicksville, NY

Subject: Health/Science/ELA
Time Needed: 6 weeks

Grade: 4 Interdisciplinary Unit Title: School Lunches from Around the World

Unit Summary: This unit will integrate the various subject areas of ELA (reading/writing/speaking/listening), Health (Family and Consumer Science) and Social Studies into a coherent, relevant and action-producing unit whereby the students examine school lunches from around the world. This will be linked to the United Nations' Sustainable Development Goals and WHO. Students will have an opportunity to compare/contrast foods from Asian, European, South American and African nations through research (Twitter/Instagram or Facebook) and a classroom Skype exchange along with epals. Students will also examine USDA guidelines and the World Health Organization's guidelines for nutrition.

STAGE 1: Desired Results

<p>ESTABLISHED GOALS: Family and Consumer Sciences G1. Students will use an understanding of the elements of good nutrition to plan appropriate diets for themselves and others. G2. They will know and use the appropriate tools and technologies for safe and healthy food preparation. G3. Students will understand essential concepts about nutrition and diet.</p> <p>GLOBAL COMPETENCY: GC1. Investigate the world beyond the immediate environment. GC2. Recognize perspectives other than their own. GC3. Communicate ideas effectively with a wide and diverse audience.</p> <p>TECHNOLOGY USED: Twitter, Edublogs , Skype for classrooms, Youtube videos, Epals.com</p> <p>RESOURCES: Sustainable Development Goals http://www.un.org/sustainabledevelopment/sustainable-development-goals/ MyPlateFood Guide http://kidshealth.org/en/parents/myplate.html http://worldslargestlesson.globalgoals.org/healthy-not-hungry-food-projects-for-the-goals/ https://vimeo.com/220663067 http://go.galegroup.com/ps/start.do?p=ITKE&u=nysl_ca_dmvacc&authCount=1 http://ic.galegroup.com/ic/ovic/topic/actionWin?scanId=&query=&prodId=OVIC&showDisambiguation=true&p=OVIC&mode=view&catId=G_ALE%7CQOXASU477737707&u=nysl_ca_dmvacc&limiter=AC+y&contentModules=&displayGroups=&display-query=&action=e&windowstate=normal&resetBreadCrumb= http://www.who.int/foodsafety/areas_work/nutrition/en/</p>	Transfer	
	<p><i>Students will be able to independently use their learning to:</i> T1. Investigate the world beyond their immediate environment T2. Recognize alternative/others' perspectives while first identifying their own biases and perspectives T3. Use technology to communicate ideas effectively with a diverse audience T4. Take action to address the Sustainable Development Goals (#2 Zero Hunger/#3 Good Health and Well-Being)</p>	
	Meaning	
	<p>UNDERSTANDINGS <i>Students will understand that:</i> U1. School lunches differ across continents. U2. The foods that are eaten are reflective of and influenced by various factors such as wealth/poverty, religion, geographic availability of resources. U3. The USDA presents relative guidelines for nutrition. U4. A balanced diet contributes to physical and mental health</p>	<p>ESSENTIAL QUESTIONS: E1. What are the differences and similarities of school lunches across the continents? E2. How does geography/resource availability play a role in what is for lunch? E4. What factors contribute to the determination of what schools offer students for lunch? (i.e. religion, budget, physical resources available) E5. Who decides what is for school lunch? (Outside agency, school board, parents)</p>
Acquisition		
<p><i>Students will know: (Knowledge)</i> K1. Key nutrition terms-protein, fat, calorie, carbohydrate, cholesterol, vitamins and minerals K2. Types of food in each group and their nutritional value K3. Different cultures receive nutrients in different ways (food sources). K4. What nutrients each food group provides.</p>	<p><i>Students will be able to: (Skills)</i> S1. Identify all four food groups. S2. Deconstruct a meal into food groups and serving sizes. S2. Analyze school lunches for nutritional values. S3. Plan balanced diets for themselves and others. S4. Adapt a recipe and make it healthier. S5. Identify major nutrients and how they function within the body.</p>	

<http://www.uen.org/Lessonplan/preview.cgi?LPid=17665>
<https://newsela.com/read/healthy-school-lunch-changes/id/30166>

Stage 2 - Evidence

Assessment	Evaluation Criteria (Learning target or Student Will Be Able To)
<p>Assessments FOR Learning:</p> <ol style="list-style-type: none"> 1. K/W/L chart (written) 2. Venn diagram 3. Padlet note-taking/question 4. WordPress blogs 5. Videoconference (listening/speaking) 6. Epals 	<p>Students will write a K/W/L chart to track their own learning. Venn diagram comparing/contrasting USDA v/ WHO definitions of nutrition.</p> <p>They will establish questions they want to pursue regarding school lunches by brainstorming in their respective teams as well as provide additional questions they see fit. They will revisit these questions throughout the unit.</p> <p>Daily, they will comment on what they've learned and what they're still confused about (Padlet notes) and update their individual blogs.</p> <p>Throughout the unit, I will make observations of their learning and provide guidance when necessary.</p> <p>Each week, students will reflect on how they were global citizens and scientists as they worked and learned throughout the week.</p> <p>Videoconference with schools from around the world while the students ask a set of questions they developed.</p> <p>Conferences will be recorded and analyzed by the students for content. One scientist/nutritionist from each country will be interviewed as well.</p> <p>Maintain friendships via epals.com in the countries selected.</p>
<p>Assessment OF Learning: Edublogs evaluated using a rubric based on mutually agreed upon categories.</p>	<p>The finished/completed individual blogs will include images of school lunches from the countries under investigation, interviews with students/scientists regarding school lunches, and ways to improve school lunches.</p> <p>Venn diagram that compares/contrast nutrition as described in the USDA food guide pyramid and that in the World Health Organization.</p>

Stage 3 - Learning Plan

WEEK 1

- Introduce the unit by stating that we will be looking at school lunches from around the world. Then hand out the KWL chart. Students will decide upon which countries they would like to investigate. Continents given to each of 4 teams. Using various resources such as atlases, the internet, social studies reference materials in the classroom, each student will select a country. Team 1 students will then tally the highest selected from each continent and list on chart paper.
- Students will work on the K/W of the chart.
- Introduce Padlet and how to use it.
- Show the students WordPress.com sample and how to create a basic blog format.
- Epals videoconference to touch based and share the idea that students will take photos of their lunches.

WEEK 2

- Read how ethnic/cultural background impacts food customs
- Read how religious background impacts food choices
- Read about the economic implications of food selections/choices. Read about Marco Polo and the spice trade/routes.
- Learn about the differences between spices, herbs, extracts and vinegar as a substitute for salt

WEEK 3

- Students will be given a chart of the UN Sustainable Development Goals (SDGs). Keeping in mind the theme of school lunches, they will identify and the literally connect SDGs that are, or could be related to the topic.
- After reading the USDA and the WHO definitions of nutrition. Students will produce a Venn diagram that compares/contrasts them.
- Continue to update Padlet questions.
- Students will break out into their respective teams and select a book about the foods from the specific countries to research (this is still open-ended but I have the reading materials at my disposal). They will try and hypothesize what a prototypical school lunch might consist of after reading about the country and the foods they produce/consume.
- Compare local (Long Island school districts menus and see the variety of school choice/lack thereof). Take a sample to use for Week 4 nutrition evaluation.

WEEK 4

- Students will continue to update their Padlet questions and now organize them into two sets of questions, according to audience (food service workers and students).
- Students will now add a new category of people to the questions they will ask. These will be used for Skype a Scientist.
- In their blogs they will incorporate images from the web depicting hypothetical school lunch (predicted).
- Using the internet, students will be able to calculate the nutritional aspects of the school lunches in terms of school nutrition standards. They will be able to use the charts to evaluate the nutritional aspects of their own school lunches. <https://schoolnutrition.org/AboutSchoolMeals/SchoolNutritionStandards/>
- https://schoolnutrition.org/uploadedFiles/About_School_Meals/What_We_Do/Nutrition-Standards-for-School-Meals.pdf
- https://schoolnutrition.org/uploadedFiles/About_School_Meals/What_We_Do/Competitive-Foods-Fact-Sheet.pdf
- Epals video conference with School #1

WEEK 5

- Conference with online scientist from Skype a Scientist.
- Update WordPress blog
- Epals video conference with School #2

WEEK 6

- Epals video conference with School #3
- Finish the final blog product. To include written communications/uploaded conference snippets, graphics, photos from exchange students of school lunches on a weekly basis.
- Local school lunch item will be reworked by students to reduce sugars/salts and become more vegan. New recipes to be placed in blog.
- Additional SDG tangential links (i.e. SDG 7 affordable/clean energy could be linked to school lunches/SDG 14 Life Below Water/SDG 15 Life on Land/
- Write a letter to the food service company with the new recipes.
- As an extension, propose a plan to administrators to grow local food on school site (designs for greenhouse/garden/hydroponics)