Week Thirteen: Nutrition Debt

Weekly Focus: Analysis
Weekly Skill: Analyzing Evidence

Lesson Summary: This week students will work to analyze an article by examining the way evidence is used to support an author's claim.

Materials Needed: Elmo (if available), Note-cards, highlighters, Nutrition Puzzle article, Activity 1, Activity 2, Identifying Evidence handout, Types of Evidence

Objectives:

- Students will review the elements of a bar graph by successfully creating one
- Students will exhibit comprehension of an article by answering questions
- Students will further analyze an article, first analyzing its structure and then identifying types of evidence used within it

Common Core Standards Addressed: CCSS.ELA-Literacy.RH.9-10.5, CCSS.ELA-Literacy.RH.9-10.1

Notes: This week we will focus on the Analysis step of the CARE model. Students will be asked to closely examine a topic by reading and comprehending an article. They will then further analyze the article by closely examining the types of evidence used to support it.

Week Thirteen: Nutrition Debt

Activities:

| Warm-Up: Bar Graph Review	Time: 15 minutes
Have students take the information from the "toll of malnutrition" pie graph in the article and, as a class, redraw it as a bar graph. First, have students turn to a partner and brainstorm what the X and Y axis should have as labels. Then, work as a class to draw the graph on the white-board. When finished, ask students to use the graph as a predictor for the article's content. What do students think the article will be about?	

Reading Activity	Time: 45 minutes
1) Divide students into pairs. 2) Read through the article out-loud as a class. 3) Have students work together to answer the list of questions about the article. 4) Go over answers as a class.	

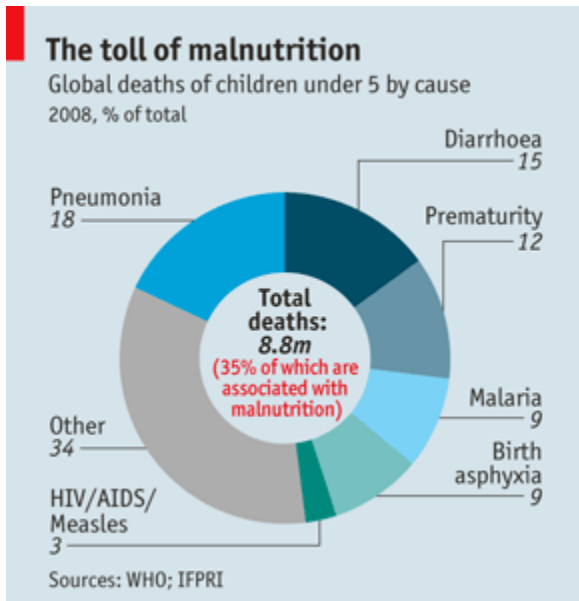| Evidence Activity	Time: 50
1) Hand out Activity #2 and Identifying Evidence Chart. For new students, also hand out "Types of Evidence" sheet. 2) Review types of evidence as a class. Then, explain to students that today they will be working to identify types of evidence in someone else's writing. Understanding how an author structures and supports her argument is key to understanding the argument itself. As we focus on the Analysis portion of our CARE model, we will work to break an article down to do exactly that. Emphasize to students that we will be looking at the author's claim this week and how she supports it; this will NOT INVOLVE THE STUDENT'S OPINION. 3) Walk students through the provided outline of the article's structure. Have students *Highlight* the **author's claim**, *circle* each of his **main points**, and then *underline* his **conclusion**. This will help them to see how the article is structured. 4) Work through point three, as it is the shortest and model how students can identify the evidence and type of evidence used in it, along with the connection of the evidence to the author's point. Fill out the chart as a class, projecting it on the ELMO. 5) Break students into groups and assign each group as either point 1 or point 2. Have groups work to fill out the evidence chart together for their point. 6) **Optional:** As students do this, write the author's claim on the white board. Then, directly underneath the claim, write each of the main points. Leave space and then write the conclusion on the bottom. It will look something like this:	

	Claim	

Conclusion
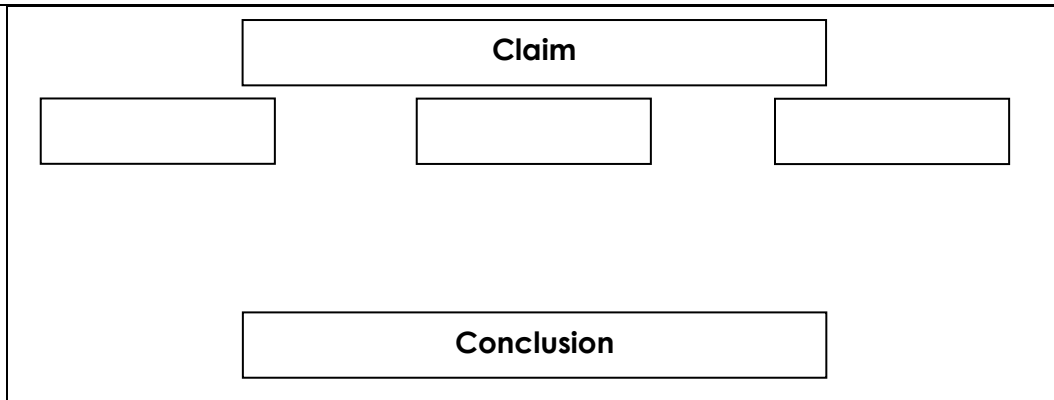
7) When students finish filling out their charts, have one person from the group write the evidence they identified on a notecard with the type of evidence it is on the back. Then, have students tape the evidence beneath their claims.

8) Go over the final evidence piece as a class, having students put a box around the evidence in their copy of the article that students have identified as supporting a point and then drawing arrows from the evidence to the point it supports. Model this for them with one or two examples.

THE NUTRITION PUZZLE

WHY DO SO MANY PEOPLE IN POOR COUNTRIES EAT SO BADLY—AND WHAT CAN BE DONE ABOUT IT?

Feb 18th 2012 | ROME AND SÃO PAULO | from the print edition of *The Economist,* excerpted from www.theeconomist.com

The toll of malnutrition
Global deaths of children under 5 by cause
2008, % of total

Pneumonia 18
Diarrhoea 15
Prematurity 12
Malaria 9
Birth asphyxia 9
HIV/AIDS/Measles 3
Other 34

Total deaths: 8.8m
(35% of which are associated with malnutrition)

Sources: WHO; IFPRI

IN ELDORADO, one of São Paulo's poorest and most misleadingly named ***favelas***, some eight-year-old boys are playing football on a patch of ground once better known for drug gangs and hunger. Although they look the picture of health, they are not. After the match they gather around a sack of bananas beside the pitch.

"At school, the kids get a full meal every day," explains Jonathan Hannay, the secretary-general of Children at Risk Foundation, a local charity. "But in the holidays they come to us without breakfast or lunch so we give them bananas. They are filling, cheap, and they stimulate the brain." Malnutrition used to be pervasive and invisible in Eldorado. Now there is less of it and, equally important, it is no longer hidden. "It has become more visible—so people are doing something about it."

If Eldorado's slum children today eat better, it is partly thanks to José Graziano da Silva. He ran Brazil's ***Fome Zero*** (zero hunger) campaign, a policy that has helped to cut hunger by more than a third in Latin America's largest country. Now Mr. Graziano wants to apply the lessons he has learned more widely: he recently took over as head of the United Nations' Food and Agriculture Organization (FAO). And he stands a better chance of success than his

predecessors. His appointment coincides with a shift in the world's approach to fighting hunger.

Governments around the world are paying increasing attention to nutrition. Underlying all this is a change in thinking about how best to improve nutrition, with less stress on providing extra calories and food and more on improving nutrition by supplying micro-nutrients such as iron and vitamins.

A damning record

Even where there is enough food, people do not seem healthier. On top of 1 billion without enough calories, another 1 billion are malnourished in the sense that they lack micro-nutrients (this is often called "hidden hunger"). And a further 1 billion are malnourished in the sense that they eat too much and are obese. It is a damning record: out of the world population of 7 billion, 3 billion eat too little, too unhealthily, or too much.

Malnutrition is attracting attention now because the damage it does has only recently begun to sink in. The misery of lacking calories—bloated bellies, wasted limbs, the lethargy of famine—is easy to spot. So are the disastrous effects of obesity. By contrast, the ravages of inadequate nutrition are veiled, but no less dreadful.

More than 160m children in developing countries suffer from a lack of vitamin A; 1m die because they have weak immune systems and 500,000 go blind each year. Iron deficiency causes anemia, which affects almost half of poor-country children and over 500m women, killing more than 60,000 of them each year in pregnancy. Iodine deficiency—easily cured by adding the stuff to salt—causes 18m babies each year to be born with mental impairments.

Malnutrition is associated with over a third of children's deaths and is the single most important risk factor in many diseases (see chart). A third of all children in the world are underweight or stunted (too short for their age), the classic symptoms of malnourishment.

The damage malnutrition does in the first 1,000 days of life is also irreversible. According to research published in **The Lancet**, a medical journal, malnourished children are less likely (all things being equal) to go to school, less likely to stay there, and more likely to struggle academically. They earn less than their better-fed peers over their lifetimes, marry poorer spouses and die earlier.

Paradoxically, malnutrition can also cause obesity later in life. In the womb and during the first couple of years, the body adjusts to a poor diet by squirrelling away whatever it can as fat (an energy reserve). It never loses its acquired metabolism. This explains the astronomical obesity rates in countries that have switched from poor to middle-income status. In Mexico, for instance, obesity was almost unknown in 1980. Now 30% of Mexican adults are clinically

obese and 70% are overweight. These are among the highest rates in the world, almost as bad as in America. India has an obesity epidemic in cities, as people eat more processed food and adopt more sedentary lifestyles. And with obesity will come new diseases such as diabetes and heart disease—as if India did not have enough diseases to worry about.

The good news is that better nutrition can be a stunningly good investment. Fixing micro-nutrient deficiencies is cheap. Vitamin supplements cost next to nothing and bring lifelong benefits. Every dollar spent promoting breastfeeding in hospitals yields returns of between $5-67. And every dollar spent giving pregnant women extra iron generates between $6-14. Nothing else in development policy has such high returns on investment. In 2008, as part of a project called the Copenhagen consensus, eight prize-winning economists listed the projects they thought would do most good (they had an imaginary $75 billion to spend). Half their proposed projects involved nutrition.

But in many countries the problem of "hidden hunger" is hidden from victims themselves, so there is no pressure for change. If everyone in a village is undernourished, poor nutrition becomes the norm and everyone accepts it. This may also explain the reluctance of poor, ill-fed people to spend extra money on food, preferring instead to buy such things as televisions or a fancy wedding. When asked about his spending choices, an ill-fed Moroccan farmer told Abhijit Banerjee and Esther Duflo of the Poverty Action Laboratory, a think-tank: "Oh, but television is more important than food."

Education can help change attitudes by persuading people they would benefit from a better (if more expensive) diet. But people in rich countries consume vast quantities of junk food knowing full well that it is bad for them.

Interest in improving nutrition is growing; so is alarm at the failures of fighting malnutrition so far…. Just as the damage from malnutrition builds up over a lifetime, so better nutrition reveals its benefits only over many years, as well-fed mothers pass on good health to well-fed children.

Week Thirteen: Nutrition Debt

Activity 1: Partner Questions

Directions: Work together with a partner to answer the questions below. The questions refer to "The Nutrition Puzzle" article. Find quotes from the article to support your answers.

1) **What is one surprising fact that you learned from this article?**

2) **Why is simply providing more food to poor countries no longer enough?**

3) **What does "hidden hunger" mean?**

4) **What is one solution that the article offers for better nutrition?**

5) **What is one problem concerning food that you believe Americans face today?**

6) **If you had 1 million dollars, and you could use it to help people become healthier, what would you spend it on?**

Activity 2: Analyzing an Article and its Evidence

Introduction: Story of Sao Paulo Malnutrition Story

Claim/Main Idea:
Governments around the world are paying increasing attention to nutrition. Underlying all this is a change in thinking about how best to improve nutrition, with less stress on providing extra calories and food and more on improving nutrition by supplying micro-nutrients such as iron and vitamins.

Supporting Point #1:
Even where there is enough food, people do not seem healthier.

Supporting Point #2:
The good news is that better nutrition can be a stunningly good investment.

Supporting Point #3:
But in many countries the problem of "hidden hunger" is hidden from victims themselves, so there is no pressure for change.

Conclusion:
Education can change attitudes, but better nutrition will take time.

Week Thirteen: Nutrition Debt

IDENTIFYING EVIDENCE

Point supported by evidence:		
Evidence	**Type of Evidence**	**How does this evidence support the author's point?**

MINNESOTA
Literacy
COUNCIL
Sharing the Power of Learning

Week Thirteen: Nutrition Debt

THREE TYPES OF EVIDENCE

STORY OR EXAMPLE	**What is it?:** A story or example used to support your point. This story or example can be something that happened to you or to someone else, but it MUST RELATE directly to your claim.
	What to watch out for: If you tell a story or give an example that is off topic or does not relate to your claim, it will not be effective. Also, if your story is too general, it will not be effective.
	How to use it effectively: Be sure to use an example or tell a story that is on-topic. Then, **explain how your example connects to your claim**. Finally, be as specific as possible in your description, creating a clear picture through your words for the audience.
EXPERT OPINON	**What is it?:** The opinion of someone who is considered an expert on the topic that you are discussing used to support your claim. This may take the form of a quote, paraphrase, or summary of the expert's opinion.
	What to watch out for: Be careful not to just give an expert's opinion without connecting it to your thesis.
	How to use it effectively: Introduce your expert's opinion by giving information about who the expert is and where you found his or her opinion. Then, either after or before you give the opinion**, explain why it is important**. Tell your reader how this opinion helps support your claim.
FACTS OR STATISTICS	**What is it?:** A fact or statistic that provides information to support your claim. You may find a fact or a statistic in an article, or you might find it in the form of a graph, chart, or other visual.
	What to watch out for: Make sure that you are giving the right fact or statistic. Always check your source to see if it is trustworthy, and make sure the information you've found is reliable and up to date.
	How to use it effectively: Put the fact or statistic into context. This means, explain where it is coming from to your readers and then explain how it links to your claim. Why should your reader be paying attention to this statistic or fact?