**Lesson 4: Infographics as a Presentation strategy**

**Problem Statement:**

How can we make our school cafeteria function in a more sustainable, less energy-using way?  This lesson introduces students to infographics as a way to communicate their solution to the problem in a visually interesting format, as they explain the merits of their solution to their classmates.  During the presentation of the infographics, each student will be taking data on the solutions which they will then use to evaluate the solutions based on a Pugh chart of criteria they have previously created and weighted.

**Learning Objectives:**

Students will be prepared to:

* Learn how to communicate a message through infographics.
* Explain their cafeteria solutions by presenting data using graphs and statistics.
* Argue their case for change using an infographic and numbers to convince the audience.
* Apply their own weighted criteria to each one to make decisions about what constitutes the “best” solution.

**Materials:**

Access to computers that will run the “PiktoChart” website to create infographics, computer access to a projector that will show infographics, in-class data sheet, Pugh Chart (Homework)

**Lesson Preparation:**

Previous lessons accomplished.

Practice PiktoChart facility prior to introducing the site to students.  Check computer to projector compatibility to show PowerPoint.

Photocopy (reformat as needed) in-class data sheets

Have extra Pugh Charts as needed (students should already have them)

**Time Required:** Three 50 minute periods  
  
**Procedure:**

**Introduction: What is an infographic?**

Students will review an infographic and answer some discussion questions about the information presented.

1. What is the first impression of the graphic? What do you know about the topic in the first 5 seconds of looking at it?
2. What are some of the details or facts you can learn from the graphic?
3. What are details not included on the graphic? What could be added to it?
4. Is the graphic intended to make you think about an issue, take a stand, or change your behavior? If so, is it effective?

**Explore: Sample Infographics (PowerPoint)**

**Sample 1: Water Bottles**

Question: How are water bottles recycled?

Research:

* How many water bottles are use daily?
* How are these bottles recycled?
* What is the process used to prepare them for a new application?

**Sample 2: Recycling**

Question: Who profits from recycling?

Research:

* How much money do business spend on waste disposal?
* Who uses the recycled materials?
* How much money is required to recycle materials?
* How much money is spent on waste disposal?
* How does the environment benefit?

**Sample 3: The Coffee Cup**

Question: What is the impact of buying Starbucks each day?

Research:

* How many cups would this represent in one year? 10 years?
* If everyone at school did this?
* How many people in the US buy coffee daily?
* What is the cost?
* What materials and energy is required to make a cup?
* How many trees does this represent?
* How much trash?
* What are the alternatives?

**Sample 4: Food Waste**

Question: What is the cost of unused food?

Research:

* What are the most common foods not eaten?
* How much food is wasted each day in the cafeteria?
* How often do people buy food that they do not eat?
* How do people dispose of uneaten food?

**Generic Questions for Groups**

In your group, analyze the infographic and answer the questions.

1. What is the title of the infographic?
2. What are the features of each infographic?
3. What types of artwork is present?
4. How is the artwork connected to the message?
5. How is data presented?
6. How is the data used to support the message?
7. In your own words, what is the infographic telling you?

**Explain: Processing your research using Piktochart**

Have them find the PiktoChart website and follow along as teacher leads them through the basic application of the site.  Remind them they don’t have to pay or sign up!  This limits them somewhat (also a reminder!!)  The block period is then dedicated to the creation of the infographic.  As they finish the product, it can be sent in whatever manner is best for the electronic nature of the school to the teacher.  All infographics should be in the teacher’s possession before they are shown to the class.

1. Step 1: Research Question
2. Step 2: Brainstorm Ideas
3. Step 3: Research/Data Collection and Analysis
4. Step 4: Infographic Study

**Conclusion: Reflection.**

The 50 minute period will be used to present up to 8 infographics.  Each group will have up to but no more than 5 minutes to present and entertain questions.  The presentations should be no more than 3 minutes so there is time for student questions.  Groups should practice!!  Teacher could require notecards to be turned in as evidence of rehearsal after the presentation.  Students will fill out the data sheets as presentations are done.

Homework:  Students will complete their Pugh Charts based on the data gathered during the presentations.  These will be used by students as they participate in the Socratic Seminar, so they should be due before that event occurs.

**Assessment:**

Formative:  completion of the infographic, successful data collection from other students.

Summative:  Completion of the Pugh Chart from data collected in the infographics class session - homework

**Accommodations:**

Visual impairment:  Splashtop, which will allow students to display projected images onto their iPads or laptops and allow them to enlarge the images as needed.

Auditory:  classroom microphone system

**Extensions:**

Allow students’ time to interview each other individually and ask further clarifying questions.  Write the transcript of the interview.  Perhaps assign a short essay comparing one other solution to one’s own based on the interview and Pugh Chart.

**References/Resources:**

A  Student data-gathering sheet (Re-format as needed)

B  Pugh Chart

C  Powerpoint