Lesson 3: Imperfect Produce

Common Core Standards:
Common Core States Standards Math
CCSS.Math.Content.3.MD.B.3
Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

Target audience:
Grades 2-5

Objectives:
- Demonstrate to students the enormous amount of produce that is wasted daily because they do not fit the aesthetic criteria of producers, retailers, and consumers.
- Show students that fruits and vegetables that do not look "perfect" taste the same as ones you find in the store.

Key Words:
sustainable, eating, foods, fruits, vegetables, imperfect, waste

Resources:
Fruit/vegetables - some perfectly shaped, some imperfectly shaped (could find imperfect at farmers markets)
Knife to slice fruit/vegetable
Plates
Imperfect Produce - this website has photos that students may find interesting
Photo slideshow - this website also had a very thorough collection of photographed "ugly produce"
Instructor notes

Activities:
Introduction
Discuss the pitfalls of judging a person or object by appearance. Talk to students about how "ugly" or "different" fruits and vegetables are being discriminated.
Discuss how fruits and vegetables are often thrown away because they don't look the way we want them to be. This happens during the production phase, distribution phase, in grocery stores, and in our homes.

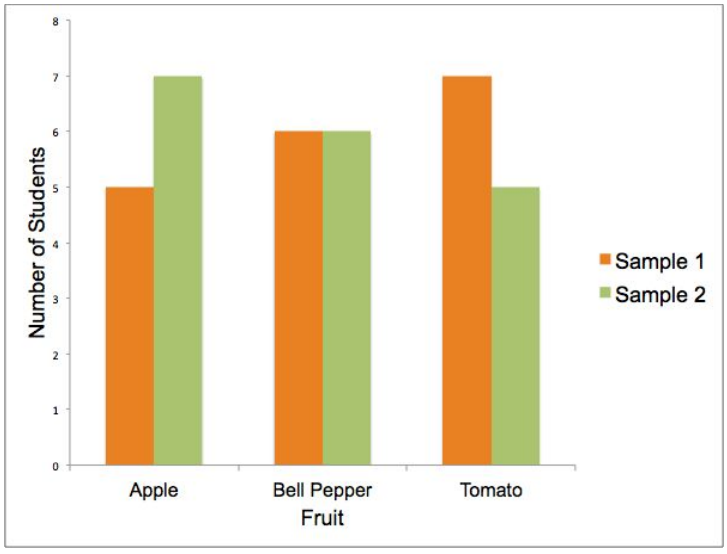
Taste test
The purpose of this activity is to show that unattractive fruits and vegetables tastes the same as regular produce. Show students a "perfectly shaped" fruit and compare that to an imperfect fruit. It

may be tricky to find one in normal grocery stores but farmers markets tend to be less selective in the appearance of the products they sell. Slice up both fruits into two different plates. Make sure the students are unaware of which plate carries which fruit.
Students should then be asked to taste the fruits and reflect on whether they taste any difference between the two.
It is up to the instructor how many fruits and vegetables should be tasted. Reveal to students afterwards the identity of the samples.

Data Collection and Analysis Activity (for more advanced students)
When students are doing the taste testing activity, have them tally their preference in a class chart.

Fruit / Vegetable	Sample 1	Sample 2
Apple	IIII	𝍸

After the data has been collected, lead students through an exercise to create a comparison bar chart. This can be done by hand and should look like the following:



This graph should show students that there is no evidence that “perfect” fruits taste better than imperfectly shaped fruits.

Discussion

Use these questions to lead a discussion with students to analyze why there is a perception that fruits and vegetables have to look a certain way.

1. Do ugly fruits and vegetables taste the same as regular looking fruits and veggies?
2. Why do you think stores are selective?
3. Where do ugly fruits and vegetables go?
4. What can we do?

When students are coming up with solutions, introduce the following ideas:

1. Purchase foods from farmers markets
2. Pick fruits and vegetables from stores that are the ugliest of the bunch
3. Supporting local campaigns that promote imperfect produce

Future Activities/Homework:

- Ask students to conduct a writing exercise to brainstorm reasons why they think stores only sell fruits and vegetables that look a certain way. Use discussion questions to formulate an essay question.

  Example essay questions:

  - Why do you think ugly fruits are not sold in stores?
  - Brainstorm how we can convince people to start eating imperfect looking produce.
- Students can also be asked to write a short letter to their local grocery stores asking them to sell imperfect produce.