LESSON FWP-1.06

Identifying Barriers & Eliminating Waste

Unit: Food Waste & Preservation

Duration: 45-90 minutes

Standards:

National Standards for FCS

8.5.10 Prepare breads, baked goods, and desserts using safe food handling and professional preparation techniques.

8.2.10 Demonstrate safe and environmentally responsible waste disposal and recycling methods.

CT Career and Technical Education Performance Standards

K.34 Describe and demonstrate the process for preparing baked goods and desserts.

Description:

In a world where we produce more food than ever before, how is it that people still go hungry and food goes to waste? This lesson explores some of the structural reasons why waste exists in our food system (consumer preferences, economics, spoilage, over-preparation or purchasing, etc.). Students will examine the food system critically to uncover the roots of food waste by looking at several critical points (a supermarket employee faced with a surplus, a struggling restaurant, a farmer faced with blemished apples).

Objectives:

- Analyze the root causes of food waste and barriers to improvement.

Vocabulary:

- Surplus- an amount of something left over when requirements have been met; an excess of production or supply over demand
- Food System- all the interrelated steps involved in the creation of food (production, processing, shipping, waste, etc)
- Food Insecurity- a lack of consistent access to enough food

Materials:

- Ingredients and kitchen equipment for **Banana Muffin Recipe**
- Blank paper
- Dice

Recipe:

- **Banana Muffin Recipe**

Procedure:

1. Have projector ready and write on the board:
    a. "Do-Now: write 3-5 things you could change in your daily life to reduce the amount of trash you produce."

2. Welcome students, pass them a piece of blank paper, and direct them to the Do-Now.
    a. Once students are finished writing, they can share what they wrote with a peer.

3. Play **How I Fit 5 Years of My Trash In This Jar**
    a. Once the video is over, ask the students if this video sparked any additional ideas on how they could reduce their personal waste use?

4. Next, have students read the **ReFed Food Waste Article** (you can print it or upload digitally.)
    a. Share with students that they will be playing a game based on the article so read thoughtfully!
    b. If any students finish early they can read the **ReFed Article on How to Solve the Food Waste Problem**.

5. After students read the article, ask them to get into pairs and pass out the directions for the **Roll & Re-tell game**. Each pair will need 1 die.
    a. There are 6 questions in the Roll & Retell game each relating to a section of the article read.
    b. The partners will take turns rolling the die and answering the questions until all 6 questions are complete.
    c. Once students finish, ask them to brainstorm a solution to one of the barriers to reducing food waste.

6. Ask students to roll the die again and remember their number. Then find someone in the room who rolled the same number. Pair up and share the solutions that they brainstormed.
    a. Come back together as a class and provide an option for students to share out to the class.

End here for 45 minute class and pick up the next class. Continue for 90 minutes.

7. If you would like to add a recipe to this lesson, you can discuss how bananas are fast to ripen and often get discarded if spoiled.
    a. Make this **Banana Muffin Recipe** as a class which uses brown bananas.
    b. After cleaning up, discuss creative ways to use the banana peels and egg shells from this recipe if they cannot be composted.
    c. Eat and enjoy the muffins!

Assessment(s):

- Formative assessment: students complete a Do-Now where they think about how they can reduce food waste in their own life. Students read an article from ReFed about Food Waste.
- Summative assessment: students participate in a game and following discussion exploring the root causes of food waste and barriers to improvement. Students will make a recipe that reduces food waste.

Resources:

- **Banana Muffin Recipe**
- **How I Fit 5 Years of My Trash In This Jar**
- **ReFed Food Waste Article**
- **ReFed Article on How to Solve the Food Waste Problem**
- **Roll & Re-tell game**

Extensions:

- **Banana Bread** recipe as an alternative to the banana muffins.