

Sustainability Teachers' Academy Lesson Plan

Choosing a Sustainable Salsa

Topics Covered

Sustainability
Three Pillars
Decision Making

Grades

6-8

Duration

55 Minutes

Sustainability Competencies

Values Thinking
Systems Thinking
Collaborative Thinking
Action Orientation

Online Resources

[Salsa Timoteo](#)

[Pace Picante Salsa](#)

[Amy's Organic Salsa](#)

Acknowledgements

Adapted from the Key-
stone Science School
sustainability curriculum

Key Questions

How can we make sustainable decisions when purchasing foods or products given the limited information available?

Overview

During this lesson students will learn about how to best make sustainable decisions. They will use the Three Pillars of Sustainability as a guide to evaluate products based on criterion in each category. Students will work in groups to create graphics that will aide in making sustainable decisions.

Objectives

Students will be able to:

- Become familiar with trade-offs.
- Draw conclusions.
- Use information to make a balanced decision.
- Rationalize their decisions.
- Understand the perspectives of others.
- Develop criteria and data to quantify their decisions.
- Draw connections to their lives.
- Standardize criteria to evaluate their products.

Materials

Per working group

- Salsa Narratives
- Sustainability Evaluation Worksheets

Technology

- Computer and Projector
- Choosing Sustainability Slides

Teacher Preparation

Organize student materials. Select student groups. This lesson should follow "Choosing a Sustainable Grocery Bag" so that students are already familiar with the term sustainability, the *Three Pillars of Sustainability*, and how to rate a product using a Sustainability Score and Triangle Graph.

Background Information

Sustainability is commonly defined as: "Meeting the needs of current

Choosing a Sustainable Salsa

generations without compromising the ability of future generations to meet their needs” (Brundland Report, 1987). In order to determine if something is sustainable, three elements must be considered: environment, society, and economy. These are known as the *Three Pillars of Sustainability*.

Environmental factors might be (but are not limited to): air quality, water quality, impact on biodiversity, wildlife preservation, nature conservation, carbon emissions, ecological footprint and soil degradation.

Society is affected by factors that include: diversity, equal opportunity, exploitation of labor, impact on people’s health and well-being, lifestyle implications, and others.

Some economic factors are jobs, work environment, profitability, human hours, prospects for growth and efficiency in supply chain (is there a lot of waste?).

This lesson provides a narrative for each of three types of Salsa. The descriptions of the salsa brands were composed using web-site information and personal emails. In some instances, it is difficult to get full disclosure from the company concerning their practices; therefore the descriptions for the brands may have gaps in the information. As a consumer, you have to make decisions based on the available knowledge, even if that knowledge is not complete. This lesson is a practice in conscious consumerism and the trade-offs associated with attempting to make the most sustainable decision.

Recommended Procedures

1. Engagement: This activity will focus students on the topic

Slide 2: Review the previous activity (Choosing a Sustainable Grocery Bag). Ask students to recall how they went about determining which bag was most sustainable.

Slide 3: Review the *Three Pillars of Sustainability*. Ask for examples of human needs that fall under each pillar.

Students should already be familiar with the idea that sustainability means being able to meet the needs of current generations without compromising the ability of future generations to meet their needs. They should already know that basic human needs relate to the Three Pillars of Sustainability: the Economy, Environment, and Society.

Slide 4: Review how to rate a product using the Sustainability Score, and how to create a Triangle Graph for each product. Remind students that the larger the triangle graph, the more sustainable the product is.

Slide 5: Review the term “Trade-off.” Students should understand that any choice we make includes some trade-off between factors that are important to sustainability.

For example, we might buy LED light bulbs which are more energy efficient and better for the environment, but these can be very costly. Or we might choose to ride a bicycle to school or work everyday. This reduces the fossil fuels we consume, but may make our commute much

Choosing a Sustainable Salsa

longer. Ask students to think about what kinds of trade-offs might be involved in buying foods, like salsa.

2. Exploration: A student-led activity with guidance

Sustainability Score



Triangle Graph



Slide 6: Explain to the students that they will be using the Sustainability Score and Triangle Graph as a tool for making decisions. Split the class into 3 groups and give each group a different salsa brand to analyze (organic to one group, conventional to another and local to the third group). Pass out the corresponding handouts. These groups will be analyzing the advantages and disadvantages of their assigned salsa using the criterion on the student worksheet. The students are given three criterion for each sustainability category with which to rate their salsa.

Pass out the Sustainability Evaluation Worksheets to each salsa group. Within their salsa groups, the students will discuss the criteria and as a team rate each criteria for their salsa, recording their values on the worksheet.

After all criteria have been rated, average the rating for each category. These averages are the Sustainability Scores for the salsa.

Once a product has been given a Sustainability Score, these values will be charted on the Sustainability Triangle Graph (left, bottom). The Economy Sustainability score will be charted on the orange line, the Environment Sustainability score on the green line, and the Society Sustainability Score on the blue line.

3. Explanation: Students discuss their understanding of the concept

Slide 6: A representative from each group can share details about their salsa brand with the class, discuss why they scored their salsa as they did, and complete their Triangle Graph on the board.

Which one has the largest area? Which salsa is the most environmentally sustainable, economically sustainable, or socially sustainable?

Which salsa is most sustainable? Which salsa is least sustainable? Encourage students to support their ideas with evidence from the narratives.

4. Elaboration: Students apply the idea in a new context

Engage students in discussion about how the activity went. Did they get the results they expected? Have them think about how they can use the skills they learned here in their everyday lives. Ask them to give examples of times they may want to make a decision based on sustainability.

5. Evaluation: Students assess their knowledge, skills, abilities

Each student should complete the Exit Ticket for this activity. Review the exit tickets for student

Choosing a Sustainable Salsa

comprehension, and revisit and redirect as needed.

Extensions

If you want to further challenge your students with this lesson, you can have them create their own Sustainability criteria with which to rate a new product. When allowing the students to create their criteria, you can split them into the 3 E's groups (for example: allow the Environmental group to agree upon environmental criteria that all the salsa groups are going to be using).

Additionally, students could create their own salsa brand. In creating their salsa, they need to think about how it can achieve 6's in all three of the sustainability categories. Possible questions for the students to think about are: How is the salsa produced, where is it produced, with what products, by whom, what are the working conditions, what is the cost of the product, what is the profit margin, how is it going to be marketed?

Vocabulary

Sustainability: "Meeting the needs of current generations without compromising the needs of future generations" (Bruntland Report, 1987).

Society: The community in which people live, work, and interact. This includes family, friends, neighbors, and so on.

Environment: The combination of external physical conditions that affect and influence the growth, development, behavior, and survival of organisms.

Economy: The wealth and resources of a country or region, especially in terms of the production and consumption of goods and services.

Trade-off: A balancing of factors all of which are not attainable at the same time.

Choosing a Sustainable Salsa

Next Generation Science Standards

Science and Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Asking questions (for science) and defining problems (for engineering)	ESS3.A Natural resources	Scale, proportion, quantity
Analyzing and interpreting data	ESS3.C Human impacts on Earth systems	Systems, and system models
Obtaining, evaluating, and communicating information		

Common Core English Language Arts

Reading: Informational Text	Writing	Speaking & Listening	Language
RI.6.1, RI.6.7, RI.7.1, RI.7.7, RI.8.1, RI.8.7	N/A	SL.6.1, SL.6.2, SL.6.4, SL.7.1, SL.7.2, SL.7.4, SL.8.1, SL.8.2, SL.8.4	N/A

Common Core Mathematics

6 through 8	9 and 10
N/A	N/A

Other Common Core

Science	History/Social Studies
CCSS.ELA-LITERACY.RST.6-8.1, CCSS.ELA-LITERACY.RST.6-8.4, CCSS.ELA-LITERACY.RST.6-8.7	CCSS.ELA-LITERACY.RH.6-8.1, CCSS.ELA-LITERACY.RH.6-8.4, CCSS.ELA-LITERACY.RH.6-8.7