

Matrix Lesson Plan Template

Submitter Information

Name of Submitter* Sue Knott

Email* meganoliviahall@gmail.com

Submitter's State* Minnesota

Name of Organization Affiliation Minnesota Department of Agriculture

Name of Author* Dr. Megan Olivia Hall, Ph.D., NBCT

Lesson Plan Information

Lesson Plan Title: Sustainable Somali Sambusa

Grade Level for this Lesson Plan: High School (Grades 9-12)

Which of the following National Agricultural Literacy Outcomes does your lesson plan address?

Agriculture and the Environment

- T1. 9-12. b. Describe resource and conservation management practices used in agricultural systems (e.g., riparian management, rotational grazing, no till farming, crop and variety selection, wildlife management, timber harvesting techniques)
- T1. 9-12. f. Evaluate the various definitions of “sustainable agriculture,” considering population growth, carbon footprint, environmental systems, land and water resources, and economics

Culture, Society, Economy & Geography

- T5. 9-12. j. Provide examples of how changes in cultural preferences influence production, processing, marketing, and trade of agricultural products.

Content Standard

Geography Area

- Minnesota high school social studies standard 9.4.4.23.3: Explain the difference between an immigrant and a refugee; describe various immigrant, migrant and refugee groups, including Hmong, Somali, and Latinos who have come to the United States; analyze their contributions to United States society.

Science Area

- Minnesota State Science Standard 9E.3.2.2.1: Evaluate or refine a technological solution to reduce the human impacts on a natural system and base the evaluations or refinements on evidence and analysis of pertinent data.

Common Core Connections

Anchor Standards

Speaking and Listening

- Comprehension and Collaboration: [CCSS.ELA-LITERACY.SL.9-10.1](#) Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- Presentation of Knowledge and Ideas: [CCSS.ELA-LITERACY.SL.9-10.4](#). Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

Keywords

Sustainability

Culture

Immigration

Somali

Lesson Usability

Is this lesson state specific? Yes If so, please select a state. Minnesota

Is this lesson specific to an AITC Region? No

Purpose

This lesson is focused on Somali culture and Minnesota-grown ingredients in Sambusa, which includes sustainable beef and lentil production. Students work cooperatively to define sustainable farming techniques, then design a sustainable beef, lentil, and vegetable farm. Hands-on activities include making and tasting Sambusa and, in an art extension, making posters advertising sambusa day in school lunches. For a growing activity, students compare germination rates of different kinds of lentils.

Time: 2-3 class sessions (150-180 minutes)

Materials

- Whiteboard and projector

Engage

- [Sustainable Somali Sambusa Engagement Slides](#)

Explore

- [What is Sustainable Agriculture? Notecatcher](#)
- [A SARE Sampler of Sustainable Practices](#) (print or digital version)
- [SARE Outreach: What is Sustainable Agriculture?](#) (project videos or make available in a learning management system)

Explain

- [Sustainable Somali Sambusa: Explain Slides](#)

Elaborate

- Plain printer paper and pencils (one each per student)

Evaluate

- Pre-made sambusa, lentil and beef, cookie sheets, and oven. Recommended brand: Hoyo
<https://www.hoyosambusa.com/our-products>
- Basbaas sauce ingredients: One set for every 4-6 students.
 - $\frac{1}{2}$ cup packed cilantro leaves and soft stems, roughly chopped
 - $\frac{1}{2}$ cup distilled white vinegar, plus more if needed
 - 1 cup canola/olive oil
 - 1 teaspoon ground coriander
 - 1 teaspoon ground cumin
 - 4 large garlic cloves, roughly chopped
 - 2-3 medium to large jalapeños, stems removed and roughly chopped
 - $\frac{1}{4}$ medium white onion, roughly chopped and roasted
 - Juice of 1 lime
 - Kosher salt and freshly ground black pepper
 - Large bowls (one for each group of 4-6 students)
 - Stirring spoons (one for each group of 4-6 students)
 - Plates and utensils for serving sambusa and basbaas.

Enriching Activity 1: Posters

- Poster-sized paper and markers

Enriching Activity 2: Growing Lentils

- 2 or more types of lentil seeds (for example, [green](#) and [red](#)), [growing trays](#)

Vocabulary

- Sustainable agriculture: An approach to growing food, fibers, and forests that ensures productivity for many years to come.
- Somali: Adjective used to describe a person from or with heritage from the African nation of Somalia.
- Sambusa: A triangular wheat pastry enjoyed at Ramadan, Christmas, and other holidays in countries in the horn of Africa.

Background—Agricultural Connections

Minnesota is home to many immigrant groups. Many people from Somalia have settled in Minnesota; 1.12% of the Minnesota population is Somali. In the horn of Africa, particularly Somalia, Ethiopia, and Eritrea, sambusa are a popular holiday treat. Sambusa are triangular pastry filled with savory lentils or beef, similar to samosas.

In St. Paul Public Schools, efforts to introduce culturally responsive menu items involve regular conversations with Parent Advisory Committees (PACs), including the Somali PAC. Sambusa day, a school lunch that includes sambusa, basbaas (a green dipping sauce of pureed jalapeños, cilantro, lime, and onion), rice, and steamed vegetables, has quickly become a favorite meal for students of many different backgrounds.

Most sambusa ingredients, including beef, lentils, and wheat, are grown in Minnesota. In this lesson, students explore sustainable agriculture techniques that can be used to grow sambusa ingredients. Crop rotation, the practice of planting different crops in a particular field over the years, is a relevant sustainable agricultural practice. Lentils are legumes that restore nitrogen to soil, and when lentils are included in crop rotations, soil can recover from more nutrient-depleting crops like wheat.

Interest Approach - Engagement

Students begin the lesson with a structured discussion designed to make connections between students' home cultures, school breakfast and lunch experiences, social awareness, and the environment.

Procedures

Engage: School Menu Conversation

1. Project the [Sustainable Somali Sambusa Engagement Slides](#) on the board.
2. Ask a student to read aloud the quote on slide 1. Ask a different student to read aloud the first question prompt, "Why do you think school menu items matter to this student?"
3. Have students discuss their responses to the first question in pairs.
4. Bring the class back together for whole-group conversation. Invite 3 different students to share their responses to the first question prompt.
5. Ask a student who has not spoken yet to read aloud the second question prompt, "What school lunch would reflect your background?" Invite students to share with the class what familiar foods they would enjoy having for school lunch.
6. Ask a student to read aloud the white text on slide 2. Ask a different student to read aloud the first question prompt, "Do you think parents' opinions on school menus should matter?" Invite the students who responded, "Yes," to move to one side of the classroom, and those who responded, "No," to move to the other side. Give the groups 1 minute to talk about why they responded as they did, then bring everyone back to their original seats.

7. Ask a student who has not spoken yet to read aloud the second question prompt, “What do you think the adults in your family would say if someone asked them what you should eat in school?” Invite students to share their responses with the class.
8. Show slide 3 and ask a student to read the black text. Ask a different student to read aloud the question, “Why would eating local foods be good for the environment?” Give students 30-60 seconds to brainstorm ideas as a class. If possible, encourage students to recognize that eating local foods reduces fossil fuel usage and supports local economies.
9. Show slide 4 and say that it’s important that our school lunches benefit students and families while also considering the environment. **Sustainable agriculture** is a large field that includes many techniques for growing food in a way that will allow us to continue to grow food for many years to come.
10. Show slide 5 and tell students that today’s lesson will explore what we eat at school and how it impacts students, families, and the environment. We will begin by learning more about sustainable agriculture.

Explore: Jigsaw Gallery Walk

1. Divide the class into eight groups. Each group will study one aspect of sustainable farming.
2. Using the [What is Sustainable Agriculture? Notecatcher](#), each group takes notes on one aspect of farming, reading the articles in [A SARE Sampler of Sustainable Practices](#) and watching the short episodes of [SARE Outreach: What is Sustainable Agriculture?](#).
3. Once groups have completed their separate assignments, coordinate a gallery walk. Have one member from each group stay at their workspace to present their notes while the rest of the group members travel around the classroom, trading notes with other groups’ presenters. After 2 minutes, switch so that a different group member is presenting. Continue rotating presenters until each person has completed all eight sections of their notecatcher.

Explain & Elaborate

1. Project the [Sustainable Somali Sambusa: Explain](#) slideshow on a whiteboard.
2. Start with slide 1 and read the title.
3. On slide 2, ask students what sustainable agriculture techniques they can name. Jot these on the whiteboard, filling the blank portion of the slide.
4. For slide 3, review a few of the sustainable agriculture techniques described in the readings and videos.
5. Slide 4 includes a 3-minute video review of sustainable agriculture.
6. Show slide 5 and ask students what they learned about the social and cultural aspects of sustainable agriculture.

7. On slide 6, share that as immigrant groups settled in a new country, food can be an important tool for sustaining culture. People from Somalia make up one of the many immigrant groups here in Minnesota.
8. On Slide 7, share that there are more Somali people in Minnesota than in any other state.
9. Slide 8 introduces sambusa, a Somali treat that is a very popular school lunch item in St. Paul Public Schools. Sambusa are served during special holidays, including Ramadan and Christmas, in Ethiopia, Somalia, and Eritrea. Basbaas is a green dipping sauce served with sambusa.
10. Using Slide 9, explain the ingredients in sambusa – most can be grown in Minnesota. Hoyo Sambusa, the brand recommended for this lesson, makes their products by hand in Minnesota. Hoyo Sambusa are both culturally and environmentally sustainable because they connect with Somali, Ethiopian, and Eritrean cultures and are also made locally.
11. Slide 10 gives the St. Paul Public Schools Nutrition Services recipe for basbaas, the sambusa dipping sauce, which will be made in the Evaluate step of this lesson.
12. Slides 11, 12, and 13 introduce the Elaborate step of this lesson, in which students will creatively diagram and describe sustainable sambusa farms, showing how to grow at least three sambusa and/or basbaas ingredients with at least three sustainable agricultural techniques.
13. Slide 12 includes two videos on growing lentils and beef for students who require more detailed information before beginning their diagrams.
14. Allow time for students to complete their farm designs. Students could work individually or in pairs. When their diagrams and descriptions are ready, students should set them up on their workspace – this makes a gallery for sharing all designs in the next step of the lesson.

Evaluate

1. Divide the class into three groups.
 - a. Group 1: Following the package instructions, make sambusa for the class.
 - b. Group 2: Following the basbaas recipe, make basbaas for the class.
 - c. Group 3: Prepare plates and utensils for serving sambusa and basbaas. As the food is ready, place one sambusa and one tablespoon of basbaas on each plate.
2. Groups will not need to work the same length of time or at the same time. When students are not working, they should circulate through the gallery, exploring the different designs.
3. When the food is ready, as students are eating, have them discuss the different designs.
4. After eating, draw a single simple diagram on the whiteboard. As a class, synthesize the different designs into a single class farm design. The teacher should draw the class farm diagram on the whiteboard as students share their reflections from exploring the gallery.

Essential Files

- [Sustainable Somali Sambusa: Engagement Slides](#)
- [What is Sustainable Agriculture? Notecatcher](#)
- [A SARE Sampler of Sustainable Practices: What is Sustainable Agriculture? \(book\)](#)
- [SARE Outreach: What is Sustainable Agriculture? \(videos\)](#)
- [Sustainable Somali Sambusa: Explain & Elaborate Slides](#)

Essential Links

- [A SARE Sampler of Sustainable Practices: What is Sustainable Agriculture? \(book\)](#)
- [SARE Outreach: What is Sustainable Agriculture? \(videos\)](#)

Did you know? (Ag Facts)

- Lentils are legumes. Legumes are the third largest family of plants, including peas, beans, and lentils. Lentils are a nutritious source of plant-based protein. Where legumes are grown, they restore nitrogen to the soil.

Enriching Activities

- When tasting sambusa, consider having students share their feedback through a written form, such as the [Taste Test Form](#) from Feed My School or the Product Evaluation Rubric from Glencoe/McGraw Hill's text, *Exploring Professional Cooking*.
- Student groups can make posters advertising sambusa day in school lunch.
- For a growing activity, students can germinate different types of lentil seeds in growing trays. Which types of lentils germinate the most quickly? Do more of the seeds germinate for one type or another?

Sources/Credits

- Slides Template:
<https://www.slidescarnival.com/design/organic-farming-lifestyle-mk-plan/55123>
- Images: <https://pixabay.com/>
- [Bayt Al Fann: The Story of the Samosa.](#)
- Lentils & Sustainability. 3-page article.
<https://www.lentils.org/wp-content/uploads/2022/06/SPG-Sustainability-Flat-Sheet-KK-LRES.pdf>
- Exploring How Lentils are Grown & Their Sustainability Attributes. 8-minute video.
<https://www.youtube.com/watch?v=afBPBl7TJpM>
- Minnesota Agriculture in the Classroom Videos: Beef Cattle.
https://minnesota.agclassroom.org/educator/video_beef/
- Pew Research Center. 5 facts about the global Somali diaspora.
<https://www.pewresearch.org/short-reads/2016/06/01/5-facts-about-the-global-somali-diaspora/>
- [A SARE Sampler of Sustainable Practices: What is Sustainable Agriculture? \(book\)](#)

- [SARE Outreach: What is Sustainable Agriculture? \(videos\)](#)
- Queensland Government Metro South Health. [Somali food and cultural profile: Dietetic consultation guide](#).
- Welhaven, Cole. SPPS Nutrition Services. Interview. February 2024.
- World Population Review. Somali Population by State 2024.
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