Eating Learning Growing:
A Delicious Guide to Culturally Relevant Food Education

Overview
The Eating Learning Growing Framework is designed to help educators tailor existing farm to school lessons to be more culturally relevant and engaging for the unique students in each learning environment.

Grade Level: 6-8

Center for Ecoliteracy
Eating Learning Growing: A Delicious Guide to Culturally Relevant Food Education

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This version of the Center for Ecoliteracy’s Eating Learning Growing publication is being made available to participants who attended the live virtual professional development sessions in Fall 2023 hosted in partnership with STEM4Real. This version will also be used by educators who have agreed to champion the resource by using it with their students in the 2023/2024 school year and participating in a peer-to-peer learning session in February 2024.

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INTRODUCTION

Culture is powerful. Yet, there are few formalized efforts that reflect the cultures and diversity of California students in farm to school education. The Eating Learning Growing Framework is designed to help educators extend, enhance, and enrich existing farm to school lessons to be more culturally relevant and engaging for the unique students in each learning environment.

How To Use This Framework

This framework is designed to help you enrich existing lessons so that they are more culturally relevant to the students in your learning environment. You can apply this framework to any farm to school lesson about fruits or vegetables.

The framework is divided into three phases, each offering reflection questions and activities. Choose the activities that feel most useful to you as you move through the resource. There is no set number of questions or activities you need to complete. You can repeat some phases as you work with additional lessons.

This framework is designed to be used by educators working independently or in collaboration with others. A collaborative process can provide valuable feedback and shared learnings.

What Is Culturally Relevant Pedagogy and Why Is It Important?

Drawing from pedagogical theorist Gloria Ladson-Billings’ work, the California Department of Education defines culturally relevant pedagogy as a theoretical model to foster “multiple aspects of student achievement and support students to uphold their cultural identities. Culturally Relevant Pedagogy also calls for students to develop critical perspectives that challenge societal inequalities.”

Farm to school is a useful entry point for culturally relevant pedagogy, especially in California. California has the largest agricultural economy in the country. Its farms, ranches, and food producers employ many students’ families. Food allows us to explore questions that value students’ cultures and helps students develop a sense of place and belonging. For example, through learning about California crops, students can learn about natural ecosystems that support health and sustainability; explore the origins of certain foods and how they reflect patterns of trade and migration; consider who is growing food, how, and where; and learn about types of foods that have traditionally grown in this area and how they are used.

Culturally relevant pedagogy also considers the intersection of social justice and farm to school education. This approach encourages educators to ask questions such as:

- How is farm to school experienced and understood by students?
- What is their experience with agriculture, access to food, or being in nature?
- How can farm to school nurture feelings of belonging?
It’s important to recognize the diversity of experiences that students bring with them. How teachers approach farm to school education can provide healing and empowerment. Sometimes, however, it might unintentionally evoke feelings of discomfort and alienation. By becoming knowledgeable about students’ lived experiences, educators can help make farm to school an experience that is nourishing for all students.

For guidance on how to consider and prepare for students’ reactions to your lessons, see “Why Farm to School Education Might Make Some Students Uncomfortable (and What You Can Do About It),” page 13.

Lastly, because culturally relevant teaching and learning is respectful, warm, and welcoming to diverse student populations, it can improve student outcomes. Using familiar examples that reflect students’ backgrounds—whether it’s referencing how far food travels to market to teach math or sharing the words for fruits and vegetables in a variety of languages—can improve comprehension and participation. Using these practices can fundamentally benefit the culture of your classrooms.

**Smart By Nature Principles and Culturally Relevant Pedagogy**

The Center for Ecoliteracy developed a set of four ecological principles as a part of its foundational work in schooling for sustainability. These principles were published in *Smart By Nature: School for Sustainability* in 2009. The Eating Learning Growing framework uses the “Smart By Nature” principles to guide educators in exploring how to extend, enhance, and enrich lessons. Below are the principles and their relationship to culturally relevant pedagogy.

1. **Nature Is Our Teacher**

   Nature thrives and is resilient because of its diversity. Health and innovation are outcomes of interconnected relationships and the value of all living beings. So, too, do students thrive when classroom environments welcome diverse voices, histories, learning styles, and values. Similarly, culturally relevant pedagogy nurtures student-teacher understanding and social-emotional connections that invite deeper learning.

2. **Sustainability Is a Community Practice**

   Nature sustains life by creating and nurturing communities. We rely on our collective knowledge, experience, and actions to cultivate sustainable food sources, nurture healthy environments, and develop functional community systems. A community perspective that validates and nurtures connections will also support cross- and interdisciplinary teaching and learning that integrates broader and deeper understanding.

3. **The Real World Is the Optimal Learning Environment**

   Farm to school is ideal for connecting learning and the real world. Everyone eats. This most fundamental human experience connects to virtually any subject matter, including science, history, math, language arts, and more. Whether students live in an urban or rural environment, food can provide insight into the natural world and human society, providing pathways to observe, investigate, and learn. When engagement is based in students’ real lives, it leads to deeper connections and more impactful learning experiences.
4. Sustainable Living Is Rooted in a Deep Knowledge of Place

For students to become good stewards and active citizens, they need to cultivate a deep knowledge of their home location and ecology. When culturally relevant pedagogy invites exploration of the places that students know well, they begin to care more deeply about their world and the effect they can have on it. They learn what their world provides and how to care for it. Through a deep knowledge of place, students can envision connections to larger global issues, and respect that they should know their own location as a starting place.

Activities and resources that support the Smart by Nature Principles begin on page 7.

Social Justice and Culturally Relevant Pedagogy

Social justice is central to culturally relevant pedagogy. Many educators have found it helpful to incorporate the Social Justice Standards developed by the organization Learning for Justice when applying culturally relevant pedagogy to their lessons. These standards offer a framework for anti-bias education and help guide learners in celebrating the diversity in their communities and enhancing their ability to work with others with different backgrounds towards community action.

The Social Justice Standards supplement the Smart By Nature Principles, making this framework a viable resource in today’s classrooms. The Social Justice Standards are divided into four sections, as defined by Webster’s Dictionary and Learning for Justice, as follows:

- **Identity.** “Characteristics by which a person is definitively recognized or known.”

- **Diversity.** “The condition of having or being composed of different elements; variety, especially the inclusion of different types of people (as people of different races or cultures) in a group or organization.”

- **Justice.** “A combination of fairness and opportunity: In a just society or group, people have the same rights and are not punished more because of who they are.”

- **Action.** “Taking steps to honor and celebrate identity and diversity, as well as taking steps to bring about justice.”

You can access the Social Justice Standards here:

https://www.learningforjustice.org/frameworks/social-justice-standards
GET TO KNOW YOUR STUDENTS

Fostering a sense of belonging is a key element of creating transformational learning experiences for students. Before adapting any lesson, take the time to understand your students’ interests and get to know their families and cultures. This will help you design lessons that connect to your students’ lived experiences and build deeper knowledge from this familiar foundation.

Before asking your students about their interests and cultures, it’s important to reflect on your own relationship to food and how that influences the way you experience and think about farm to school education about fruits and vegetables.

Personal Reflections

As you begin your work, consider:

● What are your own eating habits and food traditions and what has shaped them?
● How have they changed over time?
● What larger societal factors shape how you eat?
● How does this inform your view of farm to school?

Focus Students

To begin to learn more about your students, invite two to three focus students in your learning space to talk with you. Consider picking students you might have had a harder time connecting with and use this time to build a rapport. Use the “Focus Student Worksheet” linked below to get to know these students better. You can also reach out to other school-based resources such as the student’s counselor or coach to help you better understand them from a whole child perspective.

You can access the “Focus Student Worksheet” here:
https://www.ecoliteracy.org/sites/default/files/media/focus_student_worksheet.pdf

Apply what you learn about your focus students to adapt your lesson in a way that responds to these students’ interests and skills. You can repeat this exercise with different students. As you go through this process of building relationships with your students—and understanding more about their families and communities—always be respectful of what information they are comfortable sharing.
USE THE SMART BY NATURE PRINCIPLES TO ADAPT A LESSON

Use what you learned about students, families, community, and your personal perspectives to extend, enhance, and enrich your lesson. This knowledge will provide opportunities for you to see stories, expertise, and new ways of teaching and learning. When students see themselves in the content and activities, it fosters deeper learning experiences and a sense of belonging.

Use the Smart By Nature Principles and the questions, activities, and resources below to guide you in reflecting on and enhancing a farm to school lesson of your choosing. You do not need to answer all of the guiding questions. Depending on your lesson, some of the guiding questions below may lead to more ideas for content or activities than others. Choose the ones that seem most relevant to your chosen lesson.

Nature is Our Teacher

Nature thrives and is resilient because of its diversity. Health and innovation are outcomes of interconnected relationships and the value of all living beings. So, too, do our students thrive when our classroom environments welcome diverse voices, histories, learning styles, and values. Similarly, culturally relevant pedagogy nurtures student-teacher understanding and social-emotional connections that invite deeper learning.

REFLECTION: Does your lesson...

- Authentically reflect the diversity of your students?
- Encourage students to demonstrate their understanding in varied forms including orally, visually, or using their home language?

ACTIVITY: What is this crop called?

Use this activity to encourage students to explore diversity and community in a way that is non-threatening and fun. This activity is a good ice-breaker and can spark further explorations of food and culture.

Put one or more pieces of large paper on the wall and invite students to write the name of the crop in your lesson in every language they know. In California, there are some districts in which more than 50 languages are spoken at home so this could become a friendly competition as students share their linguistic and cultural sophistication. Students with closer connections to agriculture might know several names for the same crop. For example, what some students call a “tangerine” might be known by other students as a “satsuma,” “clementine,” or “cutie.” If this activity goes well, consider asking students how the crop tastes in different languages. For example, ask them to share words they know for sweet, sour, crunchy, etc.
Put a large piece of paper on the wall. Encourage students to write the name of the crop in every language they know. Include a photo or illustration of the crop if you have one.

To share languages and information about the origins of crops, display the Eating, Learning, Growing posters in your learning space. Posters are available for download here: https://www.ecoliteracy.org/elg-resources

Sustainability is a Community Practice

Nature sustains life by creating and nurturing communities. We rely on our collective knowledge, experience, and effort to develop sustainable food sources, healthy environments, and supportive community systems. A community perspective that validates and nurtures connections will also support cross- and interdisciplinary teaching and learning that integrates broader and deeper understanding.

REFLECTION: Does your lesson...

- Include people or locations that are part of the local food system who could be resources for your lesson? Examples may include school food service director, garden coordinator, community elders, local farmers or agriculture workers, farmers markets, or food hubs.
- Represent people who are culturally and linguistically diverse as leaders and changemakers in your lesson materials?
- Provide various engagement strategies to allow students to work collaboratively and develop collective knowledge?
Elevate and build on the knowledge and experience students bring into the classroom?

**ACTIVITY: Who grows this crop?**

This activity is an opportunity to acknowledge farmers and producers across the food system. Many students have family connections to agriculture and food production in California. This activity is an opportunity to express interest in and gratitude for the people who grow our fruits and vegetables. Through this activity, students can also explore the experiences and working conditions of farm workers and food producers. As they learn more about the work that goes into the fruits and vegetables they enjoy, they can consider how to express gratitude and respect for food and work to prevent it from being wasted.

To learn how food reaches them, ask students to look at a complete food system. For example, they could diagram the path of a tomato from seed to table and consider how it was cultivated, harvested, packed, transported, stored, and marketed. Who does this work at each point in their food system diagram? Ask students to also consider environmental and social issues along the way, including climate change and workers' rights.

When they are done, ask them if they have some recommendations about where or from whom the school district procures its food. Ask them if they would like to present their findings and ideas to food service and school administrators.

**Resource:** This bilingual farm to school short film showcases the Pajaro Valley Unified School District and the power of youth leadership in the farm to school movement.

https://www.ecoliteracy.org/video/farm-school-film

**Resource:** Students learn about the Delano Grape Strike, Dolores Huerta, and Cesar Chavez in this farm to school lesson.

Understanding Food and Climate Change: An Interactive Guide

Resource: In Understanding Food and Climate Change: An Interactive Guide, students explore dimensions of a food system through imagery, video, and text. In this section, a video reveals where ketchup comes from and how it reaches the table. Activities are included.

https://foodandclimate.ecoliteracy.org/interactive-guide/page_002.xhtml

Resource: Students experience how an orange is grown and travels to market.

https://www.ecoliteracy.org/sites/default/files/media/cel-modeling-your-food-system-lesson-grades3-5.pdf

The Real World is the Optimal Learning Environment

Farm to school is ideal for connecting learning and the real world. Everyone eats. This most fundamental human experience connects to virtually any subject matter, including science, history, math, language arts, and more. Whether students live in an urban or rural environment, food can provide insight into the natural world and human society, providing pathways to observe, investigate, and learn. When engagement is based in students’ real lives, it leads to deeper connections and more impactful learning experiences.

REFLECTION: Does your lesson...

- Center around issues and topics that are important to your students to support their learning and agency?
- Draw from multiple perspectives to help your students better understand current social movements to create a just and sustainable food system?
- Honor your students’ history, family, or community practices?
ACTIVITY: How is this crop enjoyed?

Invite students to share some of their favorite dishes that include the crop and any holidays or ceremonies during which the crop is featured at home or in their communities. For example, students might share about a favorite summer fruit punch, a native cactus beverage, the bitter herbs of Passover, or dates at Ramadan. Do the crops have a special history? Or is there a particular way of preparing them that is notable? Are there any obstacles or challenges to procuring these foods? Are the crops expensive, in limited supply, threatened by climate change, or needing to travel a long distance? Encourage students to strategize ways to nurture and preserve these food sources.

Resource: In The Migration of Food, students learn about the broad flavor profiles typical of five different regions of the world. They research the origin and migration of a key ingredient from one of the flavor profiles and create posters describing its history, cultivation, and use.


Sustainable Living is Rooted in a Deep Knowledge of Place

For students to become food stewards and active citizens, they need to cultivate a deep knowledge of their home location and ecology. When culturally relevant pedagogy invites exploration of the places that students know well, they begin to care more deeply about their world and the effect they can have on it. They learn what their world provides and how to care for it. Through a deep knowledge of place, students can envision connections to larger global issues and respect that they should know their own location as a starting place.

REFLECTION: Does your lesson...

- Empower students and provide opportunities for collective action for change in themselves, their communities, and the environment?
- Uplift student food stories in ways that acknowledge the potential complexity in their relationship to food, agriculture, and farm to school?
- Acknowledge and credit traditional and Indigenous forms of knowledge that influence modern ideas?

ACTIVITY: Where does this crop come from?

This question touches on two essential dimensions: agriculture and culture. Agriculture refers to where this crop is grown and why regional soils, climates, and water matter. Is it native to its growing region in
California? Or was it developed from native plants in Mexico, Central or South America, Asia, the Mediterranean, or somewhere else? Culture refers to how the crop figures in our lives. Do students have associations, family histories, or connections with other places or cultures where this food originated? How can these valuable crops be cultivated sustainably? How can more people have access to them?

Students can research crops and develop maps showing where the crop originated or where it grows in abundance today. This activity can also include a land acknowledgment of Indigenous peoples on whose lands the student currently resides and where their food is grown.

Resource: To teach and learn about profound connections to place, use the Gather Viewing Guide. Gather is an award-winning documentary film that provides an intimate portrait of the growing movement among Native Americans to reclaim their spiritual, political, and cultural identities through food sovereignty. The Gather Viewing Guide explores four short films excerpted from the feature-length documentary, each of which follows a different Native American nation and its efforts to reclaim their ancestral food systems. The guide includes focus chapters, a visual glossary, discussion questions, ideas for action, and extended learning.

https://www.ecoliteracy.org/download/gather-viewing-guide
REFLECT ON THE PROCESS

When you engage in culturally relevant teaching and learning, changes in your classroom or learning environment may be subtle at first. In this phase, reflect on the teaching process and students’ engagement throughout the enhanced lesson. Consider how you can foster a deeper sense of belonging and community in farm to school programming to support a more rewarding experience for your students.

Reflection Questions for Educators

Use the questions below to reflect on the process of getting to know your students and using the Smart By Nature Principles. Note the changes that you observed with your students and determine what learnings you want to carry forward in your teaching practice.

● Did your focus students see themselves in your lesson?
● How did they feel valued and experience a sense of belonging?
● Did your students feel empowered to engage in community action?
● What are you taking from this experience? How might you shift your teaching going forward?
● Where do you want to grow and learn alongside your students?

Importance of Repeating the Process

Repeat the process of using the framework as often as you can because the work is never complete. Repetition and reflection are important parts of learning. When you move through this process the first time, you will learn a lot. You will witness how your students receive the enhanced lesson. Reflection allows us to capture those learnings and incorporate them into the next time we teach a lesson.

Culture lives with our youth. They are defining it and pushing it to the next level. They are educating us as much as we are charged with teaching them.
Why Farm to School Education Might Make Some Students Uncomfortable (and What You Can Do About It)

Culturally relevant farm to school education provides opportunities for students to celebrate diverse cultures and feel included, respected, and valued. However, even with the best lesson planning, there may be topics or activities that could cause stress or feelings of discomfort for some students. The significant work required to address social issues and racial injustice in their many dimensions is outside the scope of this resource, however, below are three areas of possible stress and what you can do about them.

Some Students May Be Hungry

As many as one in four families may experience food insecurity throughout the school year. Discussing food could cause some students to feel hungry, physically uncomfortable, or possibly alienated from classmates who appear better fed. Because fresh fruits and vegetables can be more expensive than fast or processed foods, some students may not be able to enjoy them as often. Therefore, focusing on fresh fruits and vegetables in class can be another source of discomfort.

**WHAT YOU CAN DO:** Fortunately, California is the first state in the nation to permanently offer breakfast and lunch at no cost to every student, every school day. Remind your students to visit the cafeteria often. Smile and tell them to be sure to enjoy breakfast or lunch before class, because you’ll be discussing fruits and vegetables and you don’t want them to get hungry during the lesson! Encouraging students to eat regular meals at school supports your work as a teacher, because well fed students are ready to learn.

Some Students May Be Hesitant or Unwilling to Share About Themselves

Some adolescents may feel shy sharing about themselves at the group level. Some may experience eating disorders or have little control over what they eat at home. Others may be reluctant to share about their family or community identity, including their family’s country of origin, languages spoken, or dietary customs (including restrictions such as Kosher or Halal). In some cases, students may have been instructed at home to be cautious about sharing personal information due to immigration concerns or the fear of being bullied.

**WHAT YOU CAN DO:** Whenever possible, structure your lessons so that group activities are voluntary. For example, in the activity that starts on page 7 in which students share the names of fruits and vegetables in all the languages they know, invite all students to participate, but don’t force them. Do not develop assignments that require students to share personal information on which their grade depends. Over time, students may participate more fully as your learning environment demonstrates that it is safe, inclusive, and enjoyable.

Some Students May Have Painful Associations with Known Injustices

For many American students, the history of how land was acquired and worked can be a source of pain or anger. Slavery and forced labor, displacement of Indigenous peoples and seizure of their lands, and appropriation of private property during the forced internment of Japanese American citizens during World War II are some examples of traumatizing events that could affect some of your students. In current times, the mistreatment of food and farm workers may be quite vivid for students whose families work in those jobs.
WHAT YOU CAN DO: You are not alone. Before beginning a farm to school lesson, consult with your school or district leadership about policies and practices that can help guide you. Many districts provide guidelines on how to anticipate and address the needs and concerns of students and families in this area.
Glossary

**Culture:** Culture is a pattern of behavior shared by a society or group of people. Many different things make up a society’s culture, including food, language, clothing, tools, music, arts, customs, beliefs, and religion.

Source: [https://kids.britannica.com/kids/article/culture/399913](https://kids.britannica.com/kids/article/culture/399913)

**Culturally Relevant Pedagogy:** A theoretical model that focuses on multiple aspects of student achievement and supports students in upholding their cultural identities. Culturally Relevant Pedagogy also calls for students to develop critical perspectives that challenge societal inequalities.

Gloria Ladson-Billings proposed three main components of Culturally Relevant Pedagogy:

- focus on student learning and academic success,
- develop students’ cultural competence to assist in developing positive ethnic and social identities, and
- support students’ critical consciousness or their ability to recognize and critique societal inequalities.
Place-Based Education: Actively incorporates the local heritage, cultures, landscapes, ecology, opportunities, and experiences of our students and community. This serves as the foundation for understanding language arts, mathematics, social studies, science and other subjects across the curriculum. Place-based education and project-based learning invites learning through participation and can lead to meaningful student-lead action.