

## "Every Classroom a Green Classroom" Green Classroom Profile: Melissa Dennis

# 3rd Grade, Ohlone Elementary Habitat for Schoolyard Bats

Teacher Leadership Institute for Sustainability 2024-2025

## TEACHER LEADER BIO: Melissa Dennis, Jen Higgens

Jen and Melissa are teachers at Ohlone. Jen brings her enthusiasm for science and environmental literacy to her science students. She has been at Ohlone for 20 years. Melissa teaches multiple subjects to third graders for the last 15 years.

Their shared third grade students' desire to learn more about the bats that made their home on Ohlone's campus inspired the question:

How can we make our school more welcoming to bats and other wild creatures we share this land with?



### **BACKGROUND AND CONTEXT**

Classroom Demographics	Grade level(s):3rd # of students: 68 Content Area science & language arts		
Project Participation Data	Content area(s) focus for this project:science # of student who implemented this project:68 Estimated # of people impacted (e.g. other classes, families, etc): whole school (500) Student quote: "Trees give animals homes and shade for us."		
School Site	Ohlone Elementary		
School Demographics	Grades served:K-5 # students: 450 % English learners: 98 % qualifying for free and reduced price meals:98	Ohlone Elementary	

District	PVUSD	
District Demographics	Grades served: K-12 # students:18,458 % English learners:6,637 % qualifying for free and reduced price meals: 14,195	
		PVUSD
General Vision/Mission of School and/or district	Provide culturally sensitive high quality comprehensive services, including school readiness, parent engagement, health, mental health, disabilities, family and community partnerships, for low-income migrant and seasonal children and their families.	

## 1) TEACHER GOALS AND INTENTIONS

What originally drew you to this program? (50-100 words)?

Incorporating environmental literacy with 3rd graders at Ohlone. Creating a site-specific action project.

We wanted to harness the students' enthusiasm for learning and caring for bats that made their home in our eaves.

Share your vision for your Green Classroom. How has this program affected this vision? (50-100 words)?

Our green classroom is outside of the classroom. This program encouraged us to spend more time studying, enjoying, observing and playing in nature.

## 3) ACTION - ENVIRONMENTAL ACTION PROJECT OVERVIEW

Provide a brief summary of the purpose of your project and overall goals (100-300 words).

### **Summary of Project Purpose and Goals:**

Our goal is to increase the wildlife habitat (and biodiversity) at our school by planting more trees.

Students identified a problem.

Some animals are struggling to find a home on our school property. For example, bats tried to make a nest in our eaves but had to move because the environment was too stressful for them.

We learned that bats often use trees.

Are there enough trees for the bats to use for their homes?

Students' surveyed the trees on our campus and analyzed the data and concluded that our school could benefit from more trees (more biodiversity)

Students wrote letters to Watsonville Wetlands Watch asking for help to plant more trees at our school to help bats and other wild animals.

WWW came to our school and educated our students on trees, habitats and bats.

WWW replied to the students with the good news that thanks to their advocacy Ohlone Elementary has been chosen as a school site for tree planting!



## What specific learning intention(s) did you share with your students?

Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates and reproducing.

Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

Collecting, analyzing and interpreting data on tree biodiversity at Ohlone Elementary.

Writing persuasive letters. Bat structure and functions, Plant needs

### How did this project serve your content area instructional goals?

This project serves our content area instructional goals in several ways. Students are using math skills (and NGSS practice) to collect, analyze and interpret data. Students are practicing writing skills with letters and persuading community organizations to focus on needs at their school. Finally, students are focussed on science by studying the animals and their habitat needs and thinking about the healthy environment at our school campus and measuring biodiversity. Students learned about structures and functions of bat adaptations.

## How did this project serve your environmental literacy goals and connect to your Green Classroom vision and the broader mission and vision of the school/district?

We want our students to feel more connected to the outdoor school environment. Students are looking at our campus through a new lens. They are questioning how healthy our environment is for wildlife. The students themselves see how they can make a real difference in the world to help the people and the animals by advocating for more trees to be planted on our campus. Students will complete the action of actually planting trees!

Where do you see your project on the Environmental Literacy Integration Continuum? (e.g. Supplemental/Mild, Focused Unit/Medium, Ongoing Routine/Medium-Spicy, Transformative Project Based Learning/Spicy)

We see our project in the middle of the continuum because our students are learning about a problem, lack of trees and habitat on our school campus, and then learning about a solution in the form of letter writing and advocacy.

## 4) ACTION - IMPLEMENTATION STORY

Describe how implementation of your environmental action project went. If your project has not finished yet, describe how the start has gone, and how you anticipate it completing (300 - 500 words).

#### **General story of implementation:**

Students were very excited to learn about bats, that energy helped catapult this project. Trees will be planted next week, but reflecting on the process and how it connected to Earth Day, was reinvigorating for the students.

Having the homeroom teacher and science teacher work together was a wonderful way to reinforce the learnings.

#### Challenges and obstacles and how you overcame them:

Getting principal and custodian to meetings with Watsonville Wetlands Watch to plan the scope of project proved difficult.

When we did meet with Yesenia, she asked for students to input where they wanted trees (all over school)! We were not clear that her scope was so big. After talking with the principal, we pivoted to just planting a few trees, especially in spots that already have water to them, so they can be watered during the summer.

#### Successes and what contributed to success:

Classroom and science teacher working together really helped reinforce the content. Having a principal willing to hear us out, and allowing us to work together during the school day. Having a provider (WWW) in a place to donate the trees and time to plant them.

Working with 3rd graders!

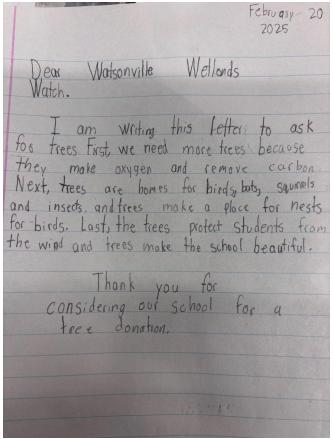
### List the outdoor learning spaces your students spent time in as part of this project:

Collecting data-field, playground, quad. Quad, to pull weeds to prep the plots for trees, and next week, when they get planted.

## **Next Steps for this project:**

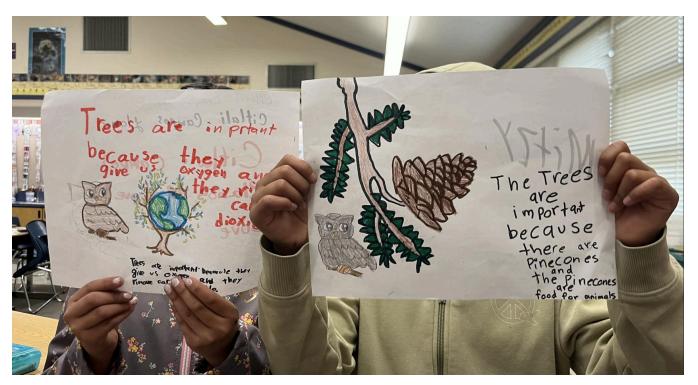
Share posters students made about the importance of trees, plant trees, administerEnvironmental Attitude (post) survey for students, celebrate!











## 5) ACTION - METRICS AND OUTCOMES

For the sections below, include how you tried to measure impacts and what evidence of outcomes you found.

Educational Benefit - By having the students write letters, they were able to show what they learned about bats and trees, and their importance. This was further reinforced by students creating posters about why trees are important.

Ecological Benefit -By planting 4 new species of trees, our tree biodiversity has gone up. Originally, the tree survey only counted 5 species of trees at Ohlone.

Impact on Students' Sense of Connection to the Environment (results of Children's Environmental Attitude Survey and/or any other evidence of impact) - This will be given after the trees are planted, which is scheduled for April 30th.

Overall assessment - While there was a lag in activities during the school year, students were easily able to reconnect with the content. I think it helped them to keep circling back to the issue, especially in science and in their homerooms.

Overall, the students were excited to hear that we would actually be planting a few trees, and hearing this announcement was even more powerful when told on Earth Day. We always say how planting trees has a positive impact on the planet, we have never actually done it!

## 6) REFLECTION AND COMMITMENTS

Where are you experiencing the most growth in your knowledge and skills related to being a teacher leader for sustainability? A critical part of this program is building knowledge and skills related to Sustainable Schools. (Examples include: Environmental Literacy & Sustainability Frameworks; Environmental Identity; Building student engagement through Campus, Curriculum, Community and Culture efforts; Application on a Continuum of Environmental Literacy Integration. (100 - 150- words)

Science is my favorite subject to teach as a third grade teacher. So bringing science into the classroom is not new for me however what is new for me is teaching empowerment. My students learned to be advocates for our school, the environment and our local wildlife through their school posters and letter writing.

**Commitments:** What is your enduring understanding about teaching for a sustainable future? And what are your commitments for next year and beyond for this important work?

#### Reflection on Enduring Understanding:

The big ah ha for me with teaching for a sustainable future is to make the little moments count. Don't despair, just keep going outside, learning about the life sciences, get excited about nature observations, say yes to caterpillars, tadpoles, worm bins, compost projects, seed planting, trash pick ups etc. Have fun!

## Commitments:

This tree project is just the tip of the iceberg for Ohlone Elementary. I hope we will get the trees planted that they advocated for before they graduate from fifth grade. I commit to working with Mrs. Higgens, the school science teacher, to continue to coordinate with Watsonville Wetlands Watch, our school administrators, district maintenance and operations staff and risk managers to make our students' dream of more biodiversity and trees come true.