



## Katherine Rivera

### Principal, Orion Alternative Elementary School, Redwood City School District

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*Text by Meg Michel, Climate Corps Fellow, 2021-2022*

For our continuing series on changemakers in San Mateo County, we interviewed Katherine Rivera (she/her), the Principal at Orion Alternative Elementary School in the Redwood City School District. Under Katherine's leadership, the school has implemented two new sustainability initiatives: a sustainable waste management program and an outdoor learning program.

**Learn how Katherine's solutionary leadership has unified her community to bring equitable access to nature and sustainability practices to school. You can also view her testimonial in [her video interview](#).**

#### ***Listening to Student Calls for Environmental Action***

Katherine Rivera's motivation to do environmental sustainability work comes directly from her students asking for it. "As we've been more aware of our impact on the Earth, it's been the voices of the students who are constant reminders that us as adults need to start making some changes," she said in our interview. Those student voices made Katherine ask herself, "Why are we waiting? I don't need to wait! What are we waiting for?"

Katherine also believes it is the duty of leaders to make positive change. "I am in a position where I have more responsibility," she shared. "It's kind of the reason a lot of us go into education, it's that moral impetus where I have this role that I can use for good to make change." With this inspiration, Katherine just needed to find one actionable item to begin sustainability work at her school. She found it helpful to first identify problems she could see in the community - "whether we've created them ourselves or they are existing generation after generation" - and corresponding solutions. Realizing that "if we do nothing, nothing happens," encouraged Katherine to jump into action and begin the first step towards developing school-wide sustainable waste and outdoor learning programs at Orion.

#### ***School as a Second Home: Providing Equitable Opportunities***

Building a school-wide sustainability program doesn't happen without support across the community. In addition to student voices, Katherine says parents provided incredibly important support for the projects. "Parents are our number one partner," Katherine shared, and went on to describe why parents are so motivated to support the school's sustainability work: "The school is an alternative school that isn't just about textbooks and learning how to reach proficiency in reading, math, and

writing. Honestly, I think all parents want their kids to have these rich experiences at school. It's their second home."

Because school is the "second home," Katherine saw the critical potential for sustainability initiatives to "level the playing field" for students with different levels of access to nature or sustainability practices at home. She shared, "I know that families with higher incomes or parents who maybe have higher levels of education are often the families who are engaging in more recycling, have access to more outdoor space, have access to more recreation, compared to families who don't and who don't have the opportunity to have a garden space, who don't have the opportunity to think of outdoor space as for learning - maybe outdoor space is a place where either you work, or you're passing through, not necessarily a place for learning."

Katherine also pointed out that living in an apartment or sharing a dwelling space with multiple families can be another barrier for students finding outdoor spaces. By bringing outdoor learning and sustainable waste management to the school community for all students in every class to participate in, Katherine believes that "everyone can experience this learning in a joyful way."

### ***Outdoor Learning: Changing the Definition of 'Classroom'***

To redesign and expand the school's garden space to be a living classroom, Katherine relied on students, parents, and a local organization that uses urban permaculture gardens to fight food insecurity called Each Green Corner. The redesign process led to a shift in how the school community conceptualizes the school campus and classrooms. As Katherine said, "It's not even about classrooms anymore, it's 'Where are we going to learn outside?' And increasing our mindset and thoughts are about how these alternate spaces, like picnic tables, are also classrooms. The hallways are places for kids to learn and collaborate."

This new perspective empowers every teacher and class to use the spaces available at school in creative ways that will best suit students. Katherine said that prior to this initiative, students would use the limited garden space for a garden class that was seen as a siloed addition to the regular curriculum. Now, "every class does different things outside. Some of them are doing reader's theater outside. Some of them are doing their engineering and making micro bits for their robots outside - they gather all their maker materials and they bring them outside. We have classrooms that are collaborating older classes and younger classes."

The shifting mindset around what defines a classroom at Orion echoes a movement happening across California and the US towards [place-based education and using nature for restorative practices](#). Katherine and her teachers have seen first-hand the power in this movement: "Teachers are now really seeing that their kids are happy when they get to be outside. Having fifteen minutes of learning and a ten minute break of running outside really improves their stamina!" In Katherine's view, curriculum standards and testing are a challenge to this. She described "this constant

threat...[that] the test scores are what's the bottom line and that's what's most important, you're only as good as your last test score."

On that front, Katherine believes there is still lots of room to grow in the U.S. Public Education System and in her own school. But to her, the shift to outdoor learning is well worth facing these challenges. "Taking the kids on a nature walk, laying in the grass in the sun - you don't even have to do anything related to what you were just doing in the classroom - but being outside, it's given us all this freedom that has a bigger payoff. Teachers are happier, kids are happier."

### ***Moving Forward with Sustainable Waste Management***

Orion is now starting to implement a sustainable "green waste" management program. Katherine explained that the school community had "talked about composting and green waste for a long time, but hadn't made the effort to make that change because it seemed too labor-intensive, and we didn't have the resources." But now, they will be partnering with [Recology](#), an employee-owned waste collection organization, and recruiting parents to support composting and effective waste sorting practices at school.

When reflecting on why it took so long to get the program started, Katherine noted that "the time is always right to do the right thing." She's already seen the program have an impact on how students are looking at what's in their lunch and thinking about how their lunch might contribute to excessive waste.

Katherine reports that students are passionate enough about the work to be there next to her sorting waste, which in turn has been a big inspiration for adult leaders. For other administrators hoping to engage in solutionary environmental work, Katherine recommended building strong partnerships like this to avoid burn-out: "Having allies and having people that want to share the work with you makes the work more enjoyable, so that makes it more sustainable. If you are doing something with somebody that you enjoy doing it with, you are more likely to forge ahead than if you're trying to do something on your own...Pick one thing that you feel passionate about, that you want to do, and make one small step."



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#### **Resources to Learn More:**

- Read [Katherine's Admin Fellowship Case Study](#)
- SMCOE's [Environmental Literacy and Sustainability Initiative](#) (ELSI)