



GROWING HEALTHY KIDS



Bancroft Elementary Garden



“Mt. Diablo Unified School District’s partnership and support model is the best example of **integrated and collaborative impact** that I’ve seen.

“The way that school district leadership, school nutrition services, educators, non profit partners, parents, and community work together is **an example for the rest of the state.**”

Nick Anicich
Farm to School Program Lead
CDFA Office of Farm to Fork



MDUSD: School gardens began 20+ years ago with CARES ASP

The beginning: Bay Point Community Members spearheaded Healthy Lifestyles Initiative incorporating **Garden** into the CARES already exceptional nutrition program ~20 years ago.

- Installation of 2.25 acre garden at Riverview MS
- Bel Air and Rio Vista install school gardens

2021-2022: Weekly CARES activities at 12 ES, 3 MS, 2 HS include

- Garden, Cooking & Nutrition, Science, Art Activities
- Healthy snacks and dinner

CARES Summer Garden Academy at Riverview MS (2006-present)

- Paid Internships for HS Students
- Work in the Garden while learning about farming, food, cooking, nutrition, healthy eating



Integration and Collaboration across MDUSD

Building Community through Equity



Building Community across Departments



Integration and Collaboration across MDUSD

	Educational Services	Food & Nutrition Services	Maintenance & Operations
2014-2021	<ul style="list-style-type: none"> ● NGSS in the Garden in elementary schools, serving >5000 students/year ● Teacher PD on Experiential Education 	<ul style="list-style-type: none"> ● EatREAL Certification ● Warehouse Overhaul ● Local Procurement ● Sustainable Food Sourcing ● Scratch Cooking ● Removal of 10 lbs of sugar from school meals 	<ul style="list-style-type: none"> ● School Gardens ● Outdoor Learning Spaces as 3D Curriculum ● Shade Structures ● Irrigation
2021-2022	<ul style="list-style-type: none"> ● RMS Field Trip program ● 4th Grade Field Trip to the Cafeteria ● MS Garden Education ● Youth Farm Stands ● Community Plant Exchanges 	<ul style="list-style-type: none"> ● CA School Meals for All ● 4th Grade Field Trip to the Cafeteria ● EatREAL Partnership ● Sourcing From BIPOC-Owned Farms ● New Educational Signage in School Cafeterias 	<ul style="list-style-type: none"> ● Major Infrastructure Improvements to Gardens at Riverview MS, Oak Grove MS, and Wren Ave ● Shade Structures and Other Improvements to Facilitate Outdoor Learning

Integration and Collaboration, MDUSD Partners

MDUSD Team

Jennifer Sachs, Educational Services

Dominic Machi, Food & Nutrition Services

Melanie Koslow, Maintenance & Operations

Principals, teachers, cafeteria workers, M&O staff

MDUSD Partners

Garden Education Team

CARES ASP



Life Lab

Eat REAL

Growing Healthy Kids co-Project Directors:



Laney Cline King, LCSW



Tamara T. Helfer, PhD

2021-2022 Garden Educators:



Alice Burns



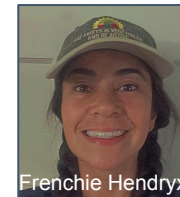
Marian Woodard



Sheila Hill



Chris Callaghan



Frenchie Hendryx



Anika Lehr



Kellie Hunt



Danny Milks



Janice Winsby

Beginning in 2014, MDUSD began formal Farm to School activities, including Garden Education during the school day and FNS local procurement. NGSS in the Garden is now offered in 9 ES and 2 MS.

CARES
ASP: 12
ES, 3 MS,
2 HS

CARES
Summer
Garden
Academy

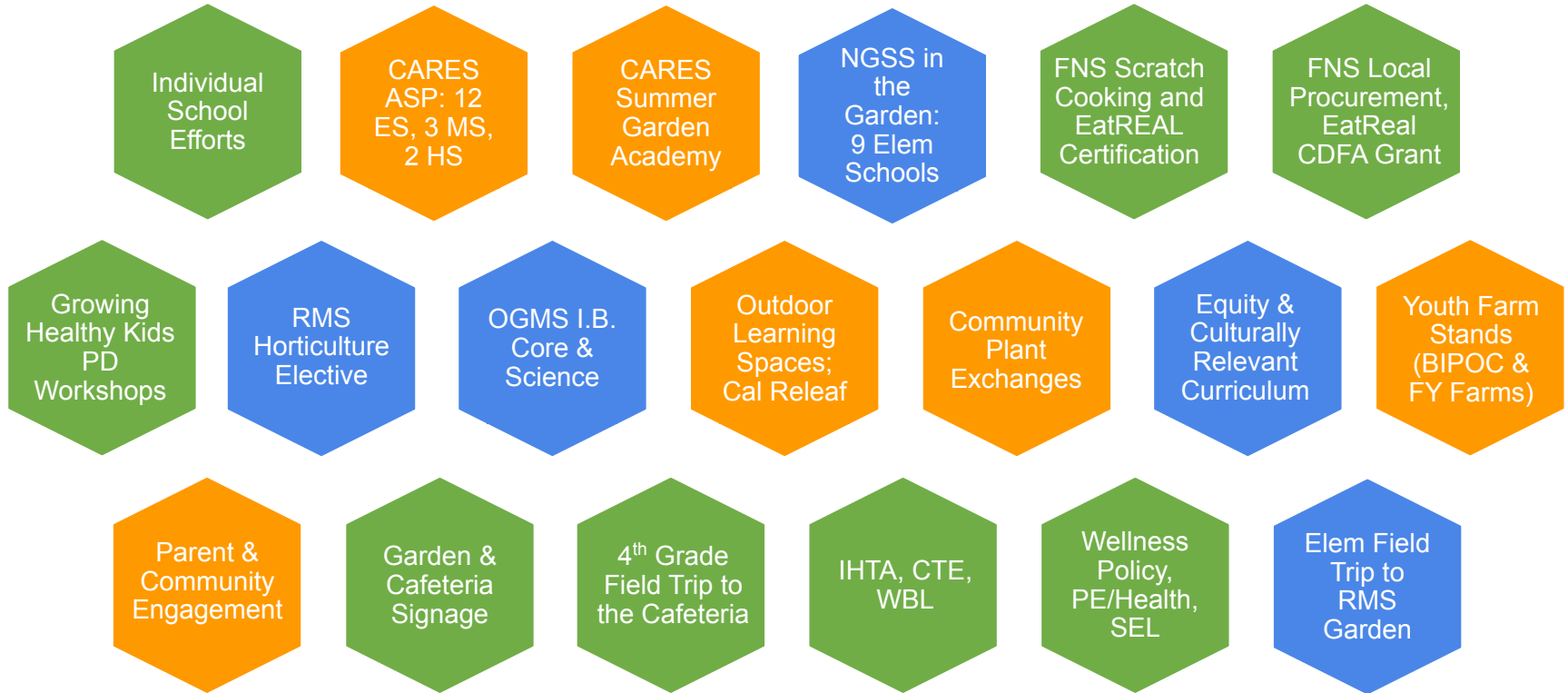
Individual
School
Efforts

NGSS in
the
Garden

FNS Local
Procurement



2021-2022 will be a year of significant program expansion



Why Take Kids Outside?



Why Take Kids Outside?

- NGSS – Phenomenon-driven learning
- CCSS – Real world, relevant learning
- SEL, mental & physical wellbeing
- Environmental Literacy
- Equity/access to the outdoors
- MDUSD Student Wellness Policy
- School Community Building
- You can't beat the student engagement!



NATURE CAN IMPROVE ACADEMIC OUTCOMES

Spending time in nature enhances educational outcomes by improving children's academic performance, focus, behavior and love of learning.

BETTER ACADEMIC PERFORMANCE

Learning in natural environments can:



BOOST PERFORMANCE
in reading, writing, math, science and social studies:
1, 2, 3, 4, 5



ENHANCE
creativity, critical thinking and problem solving⁶

Seeing nature from school buildings can foster academic success^{7, 8}

ENHANCED ATTENTION

Spending time in nature can help children focus their attention:



FOCUS AND ATTENTION
10, 11, 12, 13



ADHD SYMPTOMS
14, 15

The greener the setting, the better the focus^{14, 15}

INCREASED ENGAGEMENT & ENTHUSIASM

Exploration and discovery through outdoor experiences can promote motivation to learn:



INCREASED ENTHUSIASM FOR LEARNING
1, 6



GREATER ENGAGEMENT WITH LEARNING¹⁷

IMPROVED BEHAVIOR

Nature-based learning is associated with reduced aggression and fewer discipline problems:^{18, 19}



MORE IMPULSE CONTROL¹⁹



LESS DISRUPTIVE BEHAVIOR²⁰

Program Assessment: Research Connections

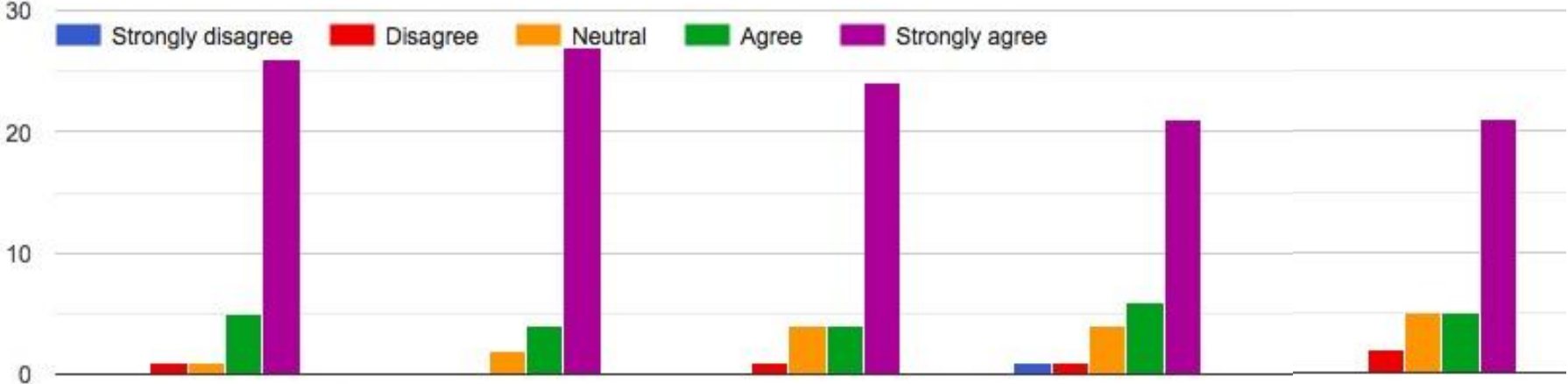
A wide range of > 1160 peer-reviewed scientific papers demonstrate positive connections between

- Nature and academic outcomes
- Nature and health & wellbeing
- Nature and care for the Earth

The MDUSD Garden Education program follows best practices in outdoor and experiential teaching to promote optimal learning for students.

Program Assessment

MDUSD teachers report GE program impact on student **academic achievement**:



Improved my students' enthusiasm for learning

Improved my students' connection to the natural world

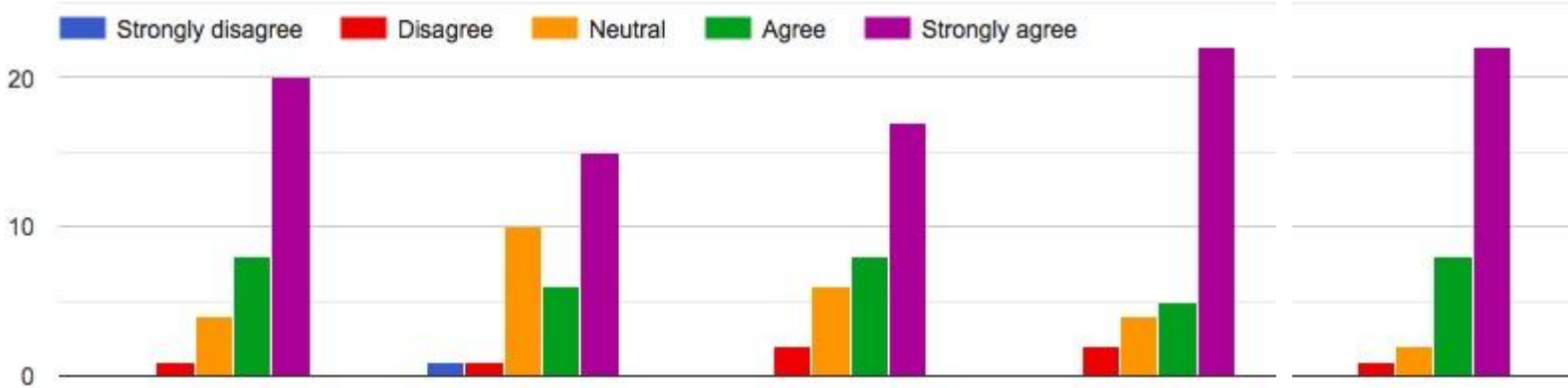
Improved my students' scientific knowledge

Improved my students' understanding of NGSS concepts

Provided my students with opportunities to engage in critical thinking

Program Assessment

MDUSD teachers report GE program impact on student **SEL, wellness and school community**:



Improved my students' sense of pride in their school

Improved my students' motivation to attend school

Improved my students' SEL skills like communication and cooperation

Had a positive impact on my students' emotional well-being

Improved my students' attitudes towards fresh fruits and vegetables

Principals report high engagement with Garden Education lessons, SEL, health and academic benefits that extend well beyond student experiences in the garden.



“Being outside has had a positive impact on academic achievement and behavior of our students. The nature of the garden naturally elicits social interactions not possible in the classroom.” - Gregory Gardens Elementary Principal Katie Koontz

“Garden education not only supplements, it enhances the learning of everyone, from our students, to parents, to staff.” - Pleasant Hill Elementary Principal Aurelia Buscemi

“This program literally saves lives.” - El Monte Elementary Principal Erin deMartini

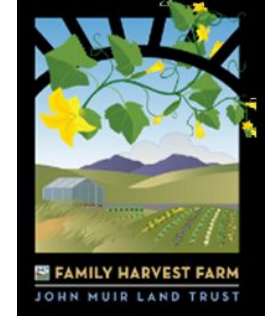
Program Assessment: Student Taste Tests



In 10,555 taste tests in 2019-2020, over 82% of students at 10 schools reported **liking or loving foods** they made or sampled, including Six Plant Part Soup, Rainbow Smoothies, Spinach Salad and Garden Burritos, with many trying fresh fruits or vegetables that were new to them.

Growing Healthy Communities

- Community Plant Exchanges
- Sourcing fresh produce from local BIPOC & Foster Youth farms
- New, culturally-relevant curriculum highlights contributions from BIPOC scientists, farmers, and others in food and health fields.



Cultivating partnerships with local farmers like Ray Harts and Family Harvest Farms through our **Youth Farm Stand** project.

New, Expanded Partnership with Life Lab



“The District's and sites' commitments to building a culture of garden-based learning provides a vital context for these programs to create positive academic and wellness opportunities for MDUSD students.”

Don Burgett
Co-Executive Director
Life Lab





GROWING HEALTHY KIDS



LIFE
LAB



BATTERY
POWERED

