



College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

School Gardens



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School Garden Hui



Advanced Training: School Gardens

Introductions

**What is your experience
and/or interest in school gardens?**



Advanced Training: School Gardens

- **Why School Gardens?**
- **Statewide, National, Global Movement**
- **Steps For Success!**
- **O‘ahu Master Gardener School Garden Mini-Certification**



Why School Gardens?



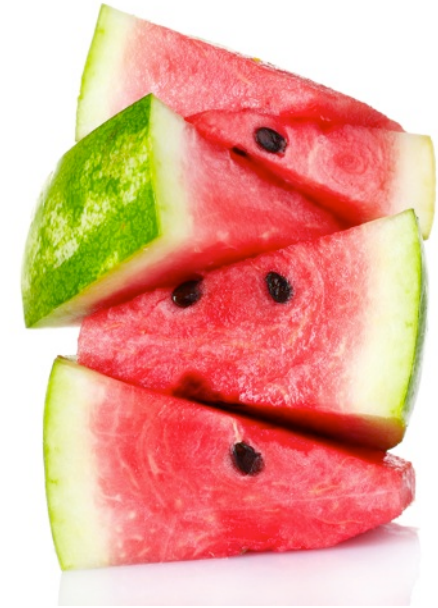
Holistic 21st Century Learning:
Core Curriculum
Health & Wellness
Stewardship & Community
Peace & Sustainability
Culture & Food
Systems Thinking
Future Farmers!



Proven Benefits of Farm to School

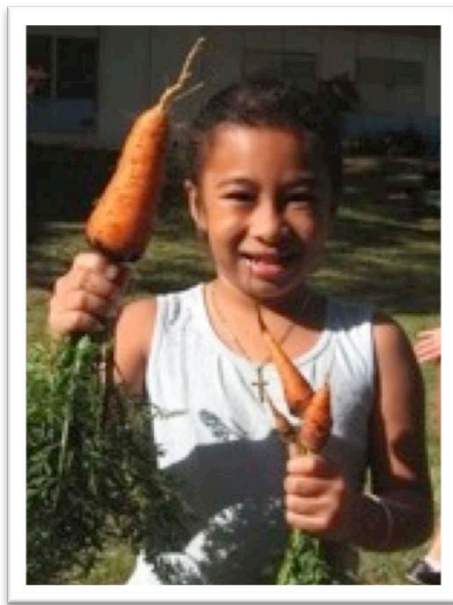
School Gardens + School Food

- Increases fruit & vegetable consumption
- Increases physical activity
- Increases academic achievement
- Improves student behavior
- Fosters environmental stewardship & sustainability
- Supports local food systems & local economy
- Conserves natural resources
- Links to career pathways



School Gardens for Lifelong Health

Kids will eat what they grow!



“Healthy and physically active students are more likely to be academically motivated, alert, and successful.”

Hawai‘i Department of Health Director Dr. Linda Rosen, October 2014



Statewide Movement

Hawai'i Farm to School and School Garden Hui

Coordinated through The Kohala Center



State Agency Partners
+

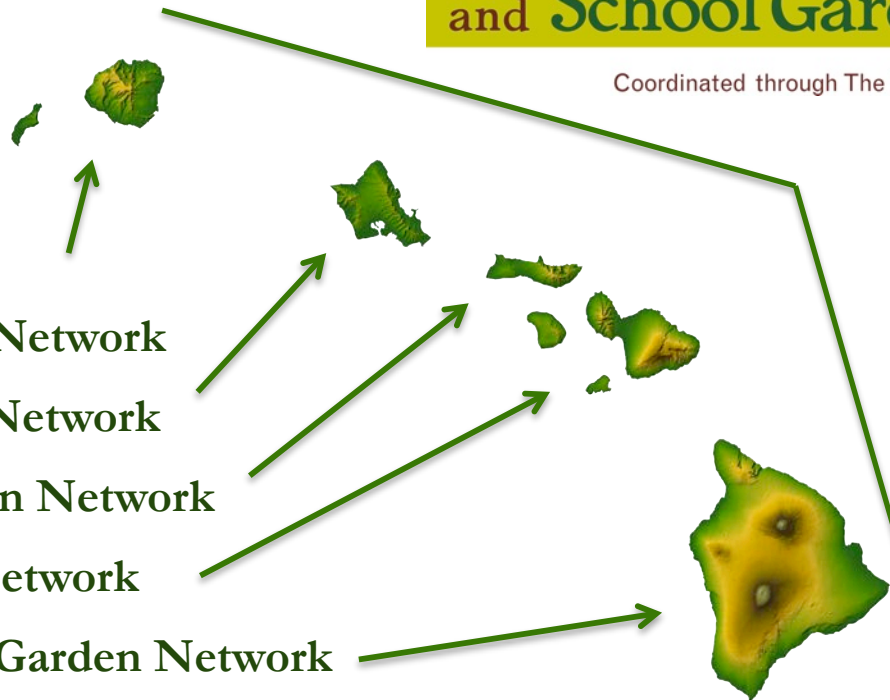
Kaua'i School Garden Network

O'ahu School Garden Network

Moloka'i School Garden Network

Maui School Garden Network

Hawai'i Island School Garden Network



Statewide Movement

Seventh Annual

Hawai'i School Learning Garden Symposium



School Learning Gardens:
Awakening the Senses for Deeper Learning

Saturday, June 7, 2014 • 8:30 a.m. to 4:30 p.m.

HPA Upper Campus, 65-1692 Kohala Mountain Rd., Waimea, Hawai'i Island



Local Annual Conferences

Hawai'i Farm to School Conference *Re-Growing Community Food Systems*



Friday, October 3, 2014
Honolulu, Hawai'i

**Hawai'i Farm to School
and School Garden Hui**

Coordinated through The Kohala Center

<http://www.hawaiischoolgardenhui.org>



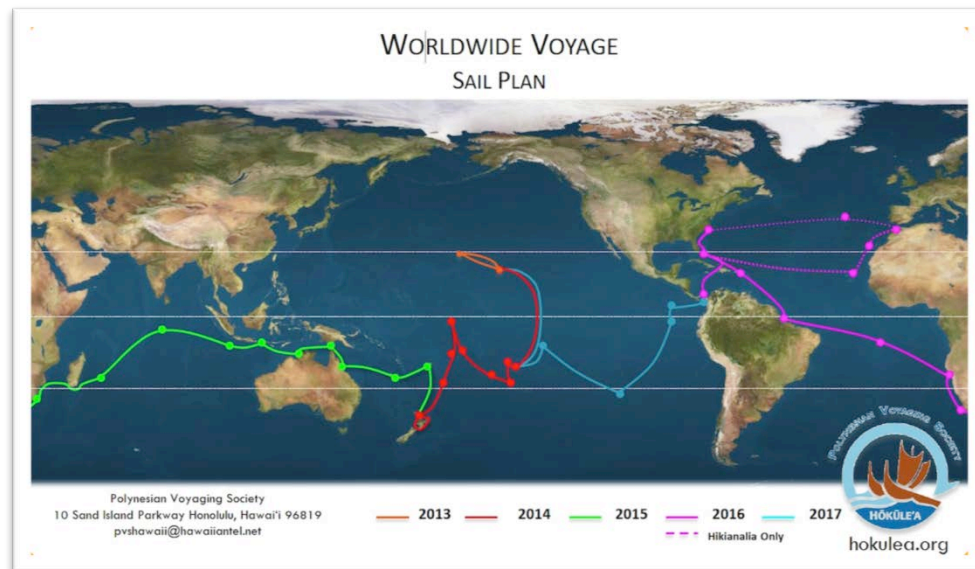
National Movement

- National Farm to School Network:
 - www.farmtoschool.org
 - All 50 states + Washington DC
 - National Farm to Cafeteria Conference
 - 2014: 7th Conference, 1200, sold out!
- USDA Farm to School Program:
 - 7 regional leads, 5 national staff



Global Movement

- 'Ai Pono: Growing and preserving foods for the Worldwide Voyage and PVS crew trainings
- Propagate Peace: One Million Trees Planting Project
- www.hokulea.com, Learning Center



School Gardens Steps For Success!

- Garden Team
- Garden Installation
- Maintenance
- Working With Students
- School Garden Safety
- Resources



Garden Team

- **Broad Representation**
- **Combine with Wellness Committee/Green Team**
- **Collaboration, Communication, Planning**
- **Raise Awareness, Interest, and Participation**
- **Meet Regularly (Monthly or Quarterly)**



Garden Installation

School Gardens come in all sizes! (START SMALL)



Garden Installation

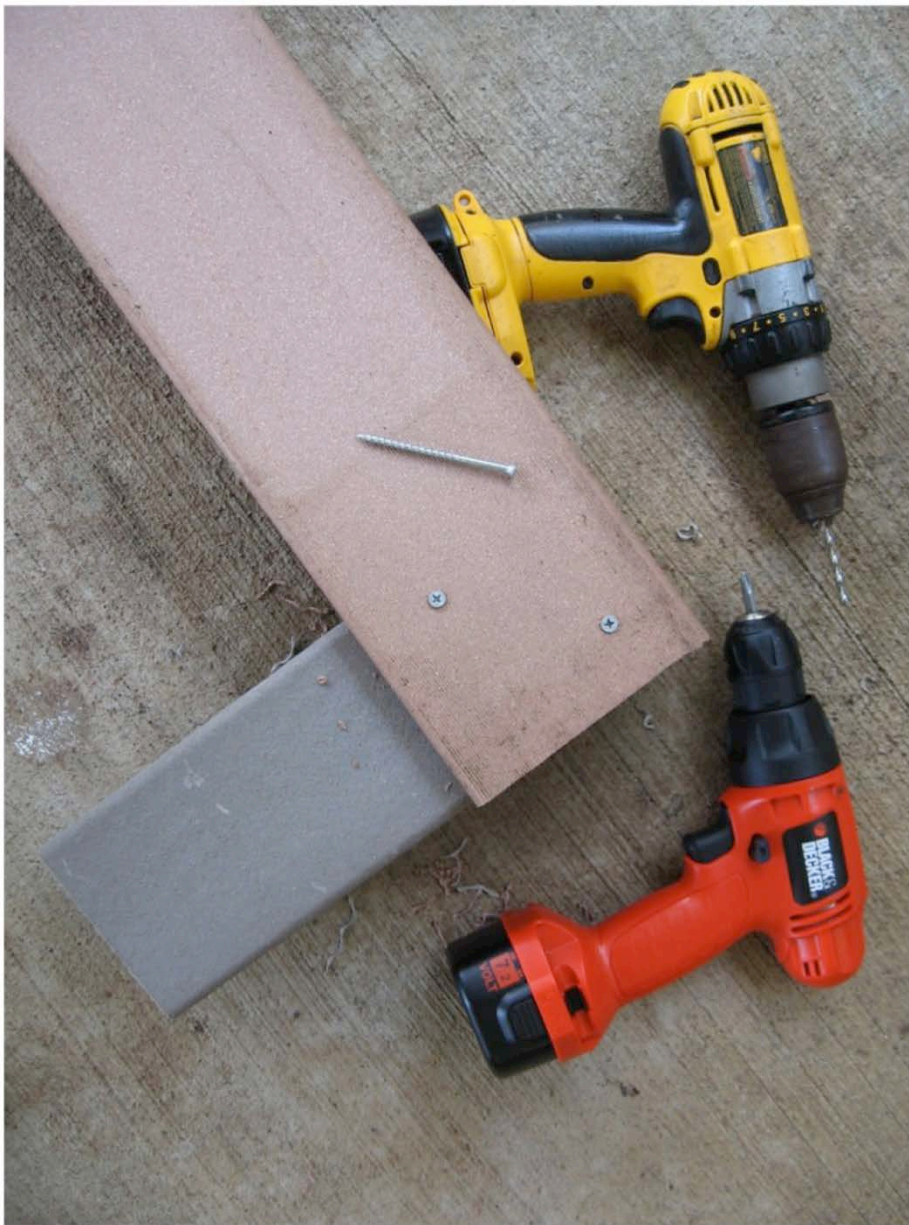
Example 1:
Raised Beds/
“Instant” Gardens







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**Composite Decking & Corner Posts
Avoid Treated Wood & Tires**



Wet Cardboard Over Grass

Example 2: Sheet Mulch Gardens



Chopped Yard Waste; Regular Watering



Adding Compost



Forming Pathways



Six Months Later!





1. Sheet Mulch Layers



2. Water Regularly



3. Add Worm Tea



4. Living Soil!



A photograph of the Waikiki Food Farm. In the foreground, there are several green plants, including what appear to be papaya trees. In the middle ground, there is a raised garden bed with various plants and a metal trellis structure. In the background, there is a long, white, two-story building with blue accents, likely a university building. The sky is overcast.

Waikiki Food Farm



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COMPOST IS KEY!



Hot/Aerobic
Composting





Worm Bins & Bokashi Composting





Natural Farming with Indigenous Microorganisms (IMOs)



School Peace Gardens



**Conflict
Resolution**



**Peace
Flags**



**Peace
Circle**



Maintenance



- Start small
- Daily and weekly
- Classtime, recess, and after school Garden Club
- Paid Garden Educator
- Watering, weeding, feeding
- **KEEP IT NATURAL**
- Plan for care during school holidays



Working With Students

- **Have fun!**
- **Be prepared**
- **Work in small groups**
- **Call on the teacher**
- **Demonstrate first!**
- **Use positive statements**
- **Plant with love**



School Garden Safety

- **WASH HANDS!**
 - 15 seconds
 - After lessons, before harvesting and eating
- **WASH PRODUCE!**
- **Keep Harvest Basket Off The Ground**
- **Harvest From Healthy Plants and Plant Parts**
 - Beware of slugs, slug trails, and bird droppings
- **No Synthetic Chemicals**
- **Use Age- and Size-Appropriate Tools**
- **Place Tools Face Down and Put Them Away**



Resources

- CTAHR Publications:
 - <http://www.ctahr.hawaii.edu/site/info.aspx>
- O‘ahu Master Gardener Helpline, 453-6055
- Kōkua Hawai‘i Foundation:
 - Mini-Grants and Field Trip Grants
 - How-to Sheets, Curriculum, and more
- Hawai‘i Environmental Education Alliance, heea.org
- Island-Level School Garden/Farm to School Networks
- Hawai‘i Farm to School & School Garden Hui
- National Farm to School Network



Resources



Resource Sheets

Curriculum & Professional Development

Garden Compost Nutrition

The resource sheets provide detailed instructions for composting and running garden parties. The 'Create Aerobic Compost' sheet includes sections for 'COMPOST BIN CONSTRUCTION' and 'COMPOST MAINTENANCE'. The 'Plan and Run a Garden Party Workday' sheet is divided into 'GARDEN PARTY PLANNING', 'ONE DAY BEFORE THE GARDEN PARTY', and 'THE WEEK BEFORE THE GARDEN PARTY'. The 'Compost Bin Construction' sheet provides a step-by-step guide for building and maintaining a compost bin.



O 'ahu Master Gardeners School Garden Mini-Certification

Master Gardener Support for School Gardens:

- **Conduct On-Site Consultations (As Needed)**
- **Become 'ĀINA In Schools Docents (Monthly)**
- **Lead or Assist with Garden Clubs (Weekly)**
- **Help with Garden Party Workdays (Quarterly)**



O'ahu Master Gardeners School Garden Mini-Certification

- 6 Trainings to build confidence & community
- 5 Hours direct experience with schools
- Volunteer coordinator to receive and share requests
- Follow up communication & gatherings



O 'ahu Master Gardeners School Garden Mini-Certification

Trainings (9-11am, Fridays):

#1: Introduction to School Gardens

#2: Composting & Soil Health

#3: Canoe Plants & Native Hawaiian Plants

#4: Fruit Trees, Irrigation, & Edible Landscaping

#5: School Garden Crops & IPM

#6: Cultivating the Spirit & Peace Gardens





Workshops in the field at various host sites





Hands-on experience!





Gigi Cocquio at Hoa 'Aina O Makaha

Learning from
local gurus

Sharing meals
“close to the source”



Connecting Master Gardeners with Schools!

