

DEVELOP THE GARDEN TEAM

An Essential Support Network

- *Broad Representation:* Involve as many people as possible from diverse roles to ensure good communication and long-term sustainability of your school garden program. This team may also be in the form of a 'Green Team' that links many 'green' projects at the school. Be sure to include:
 - ✓ Administrators
 - ✓ Teachers
 - ✓ Custodians
 - ✓ Students
 - ✓ Parents
 - ✓ PCNC (Parent Community Network Coordinator, works with volunteers at the school)
 - ✓ Cafeteria Staff
 - ✓ After-School Staff
 - ✓ Community Volunteers
 - ✓ Garden Educator: Talk with school administration about hiring a Garden Educator through a Part Time Teacher position or other; find matching funds through grants or fundraising.

• Collaboration:

- ✓ Partner or combine the Garden Team with your school's Wellness Committee (All Hawai'i DOE schools are required to implement the DOE wellness policy guidelines by having a committee).
 ✓ Make this an ALL SCHOOL EFEORT!
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• Raising Awareness, Interest, and Participation:

- 1) Be present in the garden to welcome interested families and staff.
- 2) Recruit parents at morning drop-off.
- 3) Submit regular updates to the school newsletter. Place events on the main school calendar.
- 4) Create a photo poster board and have a booth at school events (e.g., fairs and family nights).
- 5) Hold a garden open house.
- 6) Make presentations for school staff and parent organizations.
- 7) Send home fliers and post them around school (e.g., announcing Team meetings, garden club signups, and garden work days).
- 8) Submit a media press release for big events (with approval from the school administration).
- 9) Document the gardens with photos, videos, drawings, garden journals, poetry and more.
- 10) Weigh garden produce and keep a log of how much has been grown and how it has been used.

• Meeting and Communicating Regularly:

- 1) Identify a Team Coordinator or two people to share this role, to coordinate communication.
- 2) Clarify goals and assignments/roles.
- 3) Create a program budget and a program line item in the school or parent organization's budget.
- 4) Meet monthly or quarterly to share updates and establish priorities and tasks.
- 5) Work in the garden together and share a healthy snack.
- 6) Send a brief written update to the entire group for those that weren't able to attend a meeting.
- 7) Use emails/listservs, google documents, online calendars, etc. to keep in touch.
- 8) Keep a garden journal in the garden to note important information (e.g., planting dates, tasks).
- 9) Continue to spread the word! Share your activities with the school community and beyond.



DESIGN THE PROGRAM

Vision, Goals, Actions

- Elements of a Farm To School Program: Start small and create your own combination!
 - ✓ <u>Garden-Based Learning</u>: Hands-on growing experience through school gardens
 - ✓ <u>Nutrition Education</u>: Nutrition basics, food sampling, culinary arts
 - ✓ <u>Healthy School Food</u>: Staff education, scratch cooking, locally sourced fresh whole foods for snacks, meals, and celebrations
 - ✓ <u>Agricultural Literacy</u>: Farm field trips, school visits by farmers and chefs
 - ✓ <u>Waste-Reduction</u>: Cafeteria waste audits, composting programs
 - ✓ <u>Family and Community Outreach</u>: Make wellness a part of all school events, recruit volunteers

• Planning the Growing Areas

- ✓ <u>Ownership</u>: Involve students and Garden Team in the planning, implementation, and maintenance.
- ✓ Location: Full to partial sun, water access, classroom proximity, visibility for school community.
- ✓ <u>Size:</u> Classroom/grade-level gardens and/or communal (all-school) gardens.
- ✓ <u>Type:</u> Raised beds, sheet mulch, container gardens, hydroponics, aquaponics, rooftop, etc.
- ✓ <u>Pathways:</u> Essential garden element to protect integrity of the soil; walk in pathways only.

• Building Soil:

- ✓ <u>Aerobic Composting:</u> Create living soil amendment using wood chips, yard and garden wastes, shredded paper, food wastes.
- ✓ <u>Vermicompost (worm bins)</u>: Create organic fertilizer filled with nutrients and microorganisms using shredded paper and food wastes (fruits and vegetables only, no papaya seeds).
- ✓ <u>Bokashi</u>: Break down food wastes (all kinds) using beneficial microorganisms; bury in garden soil or compost pile.
- ✓ Indigenous Microorganisms (IMOs) and Effective Microorganisms (EM-1): Microorganisms are the foundation for a healthy soil food web and the key to thriving gardens!

• Peace Gardens:

- ✓ Friendship Benches: Conflict resolution and peaceful gathering space
- ✓ <u>Peace Tree(s)</u>: Native tree or other
- ✓ <u>Gardens That Address Global Issues:</u> Hunger (grow food), desertification (plant trees), habitat loss (grow host plants for native species and pollinators), etc.
- ✓ <u>Develop a Language and Culture of Peace at School:</u> Peace and mindfulness as part of the curriculum
- ✓ <u>Annual Dedication</u>: Any day, or International Peace Day: September 21
- ✓ International Community: Register your school's Peace Garden at www.ihtec.org

• Cultivate Diversity

- ✓ <u>Food</u>: Plant diversity = diversity of beneficial organisms (soil food web, pollinators, pest predators); grow companion plants, save seeds
- \checkmark <u>Flowers</u>: Host plants and nectar plants for pollinators
- ✓ Medicinals: Culinary herbs, comfrey, noni, 'olena, ginger, laukahi, papaya
- ✓ <u>Native Hawaiian Plants</u>: Discover what is appropriate in your area
- ✓ Tropical and Perennial Plants: Well suited for Hawai'i's environment, fewer pests, longer living
- ✓ <u>Trees</u>: Fruit trees, mulch trees, native trees, sacred trees



MAINTAIN THE GARDENS

Helping The Gardens Thrive

• Tips on Maintenance

- \checkmark <u>Start Small</u>: You can always expand! Do what is manageable for your team.
- ✓ <u>Garden Club</u>: Organize a club that meets weekly (or more often) after school or at lunchtime.
- \checkmark <u>Recess Time</u>: Recruit parents and teachers to be recess monitors in the garden for students.
- ✓ <u>Watering</u>: 1) Younger students may use buckets and cups for watering by hand; older students may use a hose with fan sprayer; 2) Classes may share responsibility for their grade-level's garden beds (taking turns as a class throughout the week); 3) Gather a team of parents to take turns watering throughout the week; 4) Create a bin with water key, timer, sprinkler head, and garden journal for each grade level; 5) Explore automatic irrigation options (note: drip irrigation is generally more efficient and healthier for the garden as leaves do not get wet).
- ✓ Weeds: 1) Always start a garden by laying cardboard over the grass to kill it (with soil or sheet mulch materials on top); 2) Maintain a barrier to grass around gardens by laying down cardboard and covering with a thick (6") layer of wood chips; replace/replenish about twice a year; 3) Regular weeding (daily to weekly) keeps things under control!
- ✓ <u>Pests and Disease</u>: 1) Keeping your soil healthy (with adequate nutrition and watering) is the first and most important defense; 2) Grow the right plant for the right place and time of year; 3) Remove affected plant parts or plants; 4) Cultivate a diversity of plants to attract beneficial insects and/or discourage pests (e.g. many types of herbs, marigolds, nasturtiums); 5) If necessary use simple, safe sprays with garlic, chili pepper, and dish soap.
- ✓ <u>KEEP IT NATURAL</u>: Refrain from use of any synthetic "chemical"/non-organic pesticides, fertilizers, and other products, which (even though often considered safe) can be toxic to humans and other garden life. Talk with school administration and custodians about the banning the use of toxic chemicals (cleaning and yard products) on campus.

Daily	Weekly	Monthly	School Holidays & Summer Break
• Daily watering schedules for students/classes/ grades as needed.	• Weekly Garden Club to water, weed, harvest, tend compost,	• Regular monthly garden work days open to all: after school or on weekends.	• School Holidays: BE SURE that there are students/teachers/parents/volunteers committed to watering the gardens over school breaks and long weekends.
• Supplemental watering & garden check-in schedule for adult leaders to be sure the gardens are being watered and well maintained.	 etc. (after school or lunchtime). Weekly compost maintenance: clipping, layering, watering. 	 Regular weed- whacking/mowing/ mulching around the gardens as necessary. Monthly application of soil amendments (compost and vermicast) 	 Summer Break: 1) Obtain firm commitment from summer school programs wishing to utilize the gardens; <u>or</u> 2) Have families adopt and tend the gardens; <u>or</u> 3) Create a school garden summer program; <u>or</u> 4) Put the gardens to 'rest' by covering the soil with compost and thick protective mulch* (regular watering is ideal); <u>or</u> 5) Plant cover crops (which require watering) and turn them into the soil before planting in the fall.

*Partially composted mulch, leaves, and grass clippings are preferable to raw wood chips for use inside the garden beds.





BUILD YOUR RESOURCES

- *Reduce, Reuse Recycle:* Save money with these suggestions:
 - \checkmark Use recycled and 'found' materials whenever possible.
 - ✓ Borrow tools and equipment. Consider sharing with other schools, or contact your Garden Network for ideas and assistance.
 - \checkmark Secure donations (see below).
 - ✓ Keep an eye out for free items online: <u>www.craigslist.org</u>, <u>www.freecycle.org</u>.
 - \checkmark Network in the community for people willing to lend advice or a helping hand.
 - \checkmark Integrate the garden program into existing, funded programs.
 - ✓ Handout: "Farm To School Resources For Hawai'i Educators" (Kokua Hawai'i Foundation)

• Donations:

- \checkmark Create a wish list of supplies and other needs. Post it online and in the school newsletter.
- \checkmark Approach local businesses, parents, community members, and community organizations for donations of funds, supplies, and volunteer time.
- \checkmark Create a simple brochure to describe the project and how supporters can contribute.
- ✓ Recognize and thank donors, volunteers, and sponsors. Have the students write and send thank you letters.

• Fundraising:

✓ Set specific goals; celebrate results!

- \checkmark Estimate costs for the entire project and develop a realistic budget.
- ✓ Write grants (see Kokua Hawai'i Foundation's "Green Grants For Schools").
- ✓ Hold a green fundraiser (see Kokua Hawai'i Foundation's "Green Fundraising Ideas For Schools").
- Student Farmer's Markets Markets raise funds for Healthy Snacks. Student Farmer's Market Club Healthy Snacks Students plant and tend to school gardens Served to the entire school, these snacks & orchards. Students harvest the produce feature fresh & local produce. Remains to sell at markets. are composted into the school gardens.

www.studentfarmersmarket.com

✓ Organize a student farmers market; seek produce donations from farmers and community members (see example at right).



• Seek Support:

- ✓ Collaborate with your school's parent organization (e.g., PTA), Wellness Committee, or other group to gain support and access to funds. Have the school principal create a "school garden" line item in the school's budget where funding can be maintained and grown.
- ✓ Join your island's School Garden/Farm to School Network! Visit www.hawaiischoolgardenhui.org for contact information.
- ✓ Master Gardeners: O'ahu Help Line: 453-6055; oahuMG@ctahr.hawaii.edu
- ✓ Kokua Hawai'i Foundation: www.kokuahawaiifoundation.org/aina
- ✓ Hawai'i School Peace Gardens Committee: pdkhawaii@gmail.com
- ✓ CTAHR Free Publications: google (key words + CTAHR)