



Oregon School Garden Resource Guide

Updated for the Oregon School Garden Gathering

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A digital version of this document with clickable links can be found on the Oregon Department of Education's *Farm to School and School Gardens* website, which also houses a wide variety of other useful information, links and materials: <https://goo.gl/FG5Hmq>

Oregon School Garden Curricula

The criteria for inclusion on this list are as follows:

- The materials are available for free in a widely accessible format
- The materials are specific to Oregon
- The materials are place-based and tied to academic content standards where appropriate

Materials are listed in approximate order by target audience age.

Harvest for Healthy Kids

Age group: Pre-Kindergarten

Academic standards: Aligned with early learning standards.

Structure: The program connects young children with fresh food grown close to home through activity kits that teach science, math and literacy. Thirteen activity kits focus on a different fruit or vegetable, each with an activity plan, picture cards, recipes, teacher newsletter, and family newsletters in Spanish, Russian and English.

<http://www.harvestforhealthykids.org/> must register to access.

Oregon State Univ. Extension Growing Healthy Kids Curriculum (Garden Enhanced Nutrition Ed.)

Age group: 2nd and 3rd grade

Standards: Not yet linked to Oregon State or Common Core Standards. In process.

Structure: Seven lessons, each focused on integrating nutrition education into gardening activities.

Lessons include recipes to make in the classroom and materials to take home to engage families.

http://extension.oregonstate.edu/nep/garden_nutrition/

Eat.Think.Grow

Age group: Grades K-5

Academic Standards: Variable tied to both Oregon State and Common Core Standards.

Structure: Comprehensive three seasons thematic units with three to six lessons per season. Lessons build on one another from year to year creating a cumulative curriculum for the length of a student's elementary school experience.

Contact Linda Colwell lindacolwell@comcast.net

Marion Polk Food Share: Grow Healthy Kids

Age Group: Grades 1-5

Standards: Not keyed.

Structure: Two sets of lessons, with nine lessons for winter activities (mostly indoor planning and preparation) and eight lessons for spring.

<http://www.marionpolkfoodshare.org/Programs/YouthGardens/CurriculumResources.aspx>

School Garden Project of Lane County

Age group: Grades K-6, with supplemental materials to allow for each lesson to be tailored to various ages.

Academic Standards: Aligned with Next Generation Science Standards, and has also been revised to increase inclusivity and accessibility for students with special education needs.

Structure:

NGSS in the Garden: Each lesson focuses on a key concept explored by a Performance Expectation from the NGSS. Each lessonplant parts, garden habitat, soil composition, etc) provides background information and activity rotations in the garden, including hands-on inquiry stations, complimentary garden work, exploration and/or tasting, and educational games and activities. Each lesson also has suggested addition to adaptations to simplify, add complexity, or for rainy days.

STEM in the Garden: These five week long, ten lesson units revolve around the exploration of a single garden inspired topic of study. Each unit strives to incorporate science, technology, engineering and math through a variety of hands-on activities that build student knowledge, interest and engagements around the theme and STEM.

Available at: www.schoolgardenproject.org under “Our Programs” tab, “Curriculum”

<https://www.schoolgardenproject.org/resources/curriculum/>

“Increasing Inclusion in the School Garden.” Resource packet available to download as a pdf here:

<https://www.schoolgardenproject.org/resources/>

Outgrowing Hunger

Age Group: Adaptable, but primarily K-6

Standards: Not linked to Oregon State or Common Core Standards.

Structure: Nine lessons encompassing soil and watershed health, native pollinators, basic botany and ecology, and healthy garden-based eating. In addition to these hands-on lessons, this guide also provides tips on year-round gardening, outdoor pedagogy, culturally sensitive teaching approaches, recipes, and additional curricular resources.

<http://outgrowinghunger.org/p/free-resources>

Science in the Learning Gardens: NGSS-aligned, Garden-based Curriculum for Middle School (Portland State University); National Science Foundation Award: 2014-2017

Science in the Learning Gardens (SciLG) is an NGSS-aligned, garden-based curriculum for the middle-school level, and a key component of a longitudinal research project (see research section below). SciLG makes issues such as climate change and sustainable food systems relevant, accessible, and engaging through hands-on experience with problem-solving and inquiry. SciLG was developed and piloted at two low-income middle schools that serve predominantly racial and ethnic minority students in Portland, Oregon. Curriculum materials (instructional units and garden-based lessons) aligned with the Next Generation Science Standards for 6th through 8th grade are under development and *will be available to share in 2017* at www.learning-gardens.org

PI: Dilafruz Williams: Contact: williamsdi@pdx.edu; Co-PIs: Sybil Kelley: Contact: sybilkel@pdx.edu, Cary Sneider, Ellen Skinner

Oregon Agriculture in the Classroom

Age group: Grades K-12

Standards: Variable tied to Common Core State Standards and Next Generation Science Standards

Structure: Expansive collection of downloadable, stand-alone lesson plans and worksheets on hands-on activities as varied as Busy Bees and Living Necklaces to Worm Bins and Water filtration. Free lending library with activity kits and resources for lessons in the school garden.

<http://oregonaitc.org/lessonplan/>

Oregon State University: Food for Thought

Age Group: High School

Standards: Variable tied to Oregon State Standards

Structure: Twenty free lessons that incorporate reading comprehension and hands-on activities for science, social studies, and language arts. This high school curriculum explores the research that brings food to the table in an Oregon-style feast, from seafood and beef to berries. In addition, the curriculum examines food-related concerns, such as hunger in Oregon, food safety, GMOs, and nutrition education.

<http://oregonprogress.oregonstate.edu/fall-2009/food-thought-curriculum>

For even more curricular resources, see: <http://www.ode.state.or.us/wma/nutrition/snp/oregon-farm-to-school-and-school-garden-curriculum-5-15-14.pdf>, a longer document compiled by the Oregon Farm to School and School Garden Network in 2014, so somewhat out of date.

National School Garden Curricula

The criteria for inclusion on this list are as follows:

- Materials are available for free in a widely accessible format
- The materials are adaptable and/or specific to Oregon and the Pacific Northwest (with consideration to particularities of bioregion)
- The materials are place-based and tied to academic content standards where appropriate

Life Lab

Age Group: Grades K-8

Standards: Tied to Common Core and Next Generation Science Standards

Structure: Based in Santa Cruz, CA, Life Lab has led the national movement in experiential garden education for over 35 years. Offering professional development and trainings through workshops and webinars, YouTube videos demonstrating garden pedagogy and hands-on activities, free, downloadable lessons as well as award-winning publications for purchase.

<http://www.lifelab.org/for-educators/>

Edible Schoolyard

Age Group: Grades Pre-K- 12

Standards: Many, but not all lessons tied to Common Core and California State Standards

Structure: Based in Berkeley, CA, Edible Schoolyard (founded by chef, Alice Waters), is a nonprofit dedicated to edible education in public schools throughout the country. Offering educator workshops and trainings as well as an incredible database of free, downloadable, hands-on lessons, activities, and recipes searchable by season, subject, and grade level.

<http://edibleschoolyard.org/resources-tools>

Center for Ecoliteracy

Age Group: Grades K-12

Standards: Some lessons tied to California State Standards

Structure: Based in Berkeley, CA, the Center for Ecoliteracy, is an educational nonprofit that advances ecological education in K-12 schools through educator workshops and trainings, strategic consulting, educational publications and online resources. Free, downloadable lessons and activities focused on sustainability, systems thinking, and ecological knowledge.

<http://www.ecoliteracy.org/teach>

Whole Kids Foundation

Age Group: K-5

Standards: Not tied to academic standards

Structure: Whole Kids Foundation is a nonprofit organization founded by Whole Foods Market. Dedicated to supporting schools and families in improving children's nutrition by offering grants for school salad bars, garden projects, honey bee hives, and cooking and nutrition education for school teachers and staff.

Tips, tools, and recipes for school staff can be found [here](#).

School garden lesson plans free for download can be found at:

www.wholekidsfoundation.org/downloads/pdfs/AHA_WKF_Curriculum.pdf

Honey Bee hive curriculum can be found at:

<https://www.wholekidsfoundation.org/downloads/resources/bee-wise-2015.pdf>

Slow Food USA

Age Group: Grades K-12

Standards: Not tied to academic standards

Structure: Slow Food USA is a nonprofit organization advocating for a Good, Clean and Fair food system for all. We support school gardens with school garden curriculum, partnerships and local food leaders through our 150 Slow Food chapters around the country.

<http://gardens.slowfoodusa.org/>

See the Oregon Department of Education's School Garden Page for more links to curriculum from across the country: <https://goo.gl/FG5Hmq>

Regional Trainings and Conferences

Growing Gardens School Garden Coordinator Certificate Training

A 35-hour training to help individuals learn how to facilitate the creation of long-lasting edible school gardens. Sessions include everything from community engagement, to curriculum, to garden-to-cafeteria guidelines to fundraising. Continuing education credits are available through Portland State University's Graduate School of Education.

Classes held at various locations in NE and SE Portland. The next SGCCT will be held in June 2018. To learn more and to add yourself to a list to be notified of details of the next training, see:

<http://www.growing-gardens.org/our-programs/youth-grow/school-garden-coordinator-certificate-training/>

Garden Education Professional Learning Community *Apply for 2018 cohort

Growing Gardens facilitates a regional Professional Learning Community (PLC) for classroom teachers to support each other in using school gardens to enhance curriculum and increase student engagement. Each year twelve public school K-8 classroom teachers find new ways of working together to use school gardens to meet classroom learning goals and the needs of their students. Participants have the opportunity to earn two graduate credits through Portland State University Graduate School of Education Continuing Education (CEED) program for their professional development work as part of this PLC.

Please send inquiries for the 2017 PLC to Anna Garwood, Youth Grow Program Director,

anna@growing-gardens.org

Master Gardener Training

OSU Extension Service's Master Gardener Training program prepares participants to become proficient gardeners and community resources within their own bioregion. To become an OSU Master Gardener, you must complete the training program, pass an examination, and volunteer a specific number of hours of public service through your local Master Gardener Program.

Contact your local extension office for more information about upcoming trainings:

<http://extension.oregonstate.edu/mg/master-gardener-training>

Integrating STEM & Sustainability Education through Learning Gardens (Portland State University)

This two week course provides graduate students, classroom teachers, and garden-based educators an opportunity to work together with K-8 students in a summer garden program to learn theory and best-practices in science and sustainability education, and then put this understanding into practice by designing instructional unit that utilize learning gardens as a rich context for STEM learning and teaching. Participants will gain experience developing standards and inquiry-based curriculum that integrates content, formative assessments, and experiential learning supported by Next Generation Science Standards. Taught by Sybil Kelley, Dilafruz Williams, and Nancy Lapotin.

For more information contact: Sybil Kelley at sybilkel@pdx.edu

Learning Gardens Laboratory (Portland State University)

As a part of Portland State University's Graduate School of Education, the Learning Gardens Lab supports academic achievement, leadership development, and local sustainable food systems by providing multicultural, interdisciplinary, intergenerational, and experiential garden-based education for public school students and their families, university students, and community members. Programming includes garden-based education with Lane Middle School students, courses and workshops for PK-12 educators, undergraduate service-learning experiences, hands-on gardening, sustainable living, a neighborhood farm stand, and community events open to everyone. Bring a group to LGL for a garden-based education tour, a service-learning activity, or other customized educational experience. To make arrangements, contact the volunteer coordinator at lglvolunteer@gmail.com. For inquiries about courses and professional development opportunities for educators, please contact Sybil Kelley at sybikel@pdx.edu. Visit <http://www.pdx.edu/elp/learning-gardens-laboratory> for full description of garden and associated projects

Corvallis Environmental Center

Through the Edible Corvallis Initiative, a variety of programs, workshops and events are offered to help people learn to produce their own food. From building chicken coops to the basics of organic gardening, workshops focus on community and skill building. Check out www.corvallisenvironmentalcenter.org/eci/ for more information.

Summer Ag Institute

A project of the Oregon Farm Bureau Foundation for Education, the Summer Ag Institute (SAI) is a three-credit, week-long, graduate-level class through Oregon State University that educates K-12 teachers with little or no background in agriculture.

The goal of SAI is to help educators use agriculture as a context for teaching standard subjects like science, math, social studies, and English. Current, factual, and scientific information about agriculture is presented, and participants are provided with educational materials to help them incorporate what they've learned into their classrooms.

Through SAI, teachers are given first-hand experiences in the agriculture industry. The action-packed week includes field trips to farms and ranches, tours of processing plants, and lectures and hands-on labs taught by university professors. The highlight of the week is an overnight stay on a working farm where the teacher has an opportunity to meet a real farm family.

There are two sessions of SAI each summer: one held in Corvallis in June, and a second held in La Grande in July. Enrollment cost for a graduate-level, three-credit session is a mere \$600.

<http://www.oregonfb.org/programs/summer-ag-institute/>

Oregon School Garden Summit

If you aren't getting this handout AT the Oregon School Garden Summit, you should know about it! To find out about future Summits, contact the Oregon Farm to School and School Garden Network at info@oregonfarmtoschool.org or watch for announcements on the Oregon Farm to School and School Garden Network list.

National Conferences

National Children and Youth Gardening Symposium

The American Horticultural Society hosts an annual conference where you can network with like-minded teachers, garden designers, community leaders, program coordinators, and others involved with connecting kids to the natural world. The 2017 conference will be in the Vancouver Washington area on July 13-15. <http://www.ahs.org/gardening-programs/youth-gardening>

Farm to Cafeteria Conference

The National Farm to School Network produces a “Farm to Cafeteria” Conference in alternate years. More information can be found at <http://farmtocafeteriaconference.org/>

Garden Educator Groups and Lists

Oregon Farm to School and School Garden Network (OFSSGN)

The OFSSGN email list 900 Farm to School and School Garden educators and stakeholders.

Information about grants, trainings, regional and state-wide events and other resources are shared on this list. There is also a sublist for garden educators. Please subscribe to both lists.

To subscribe to the main OFSSGN email list go to: <https://npogroups.org/lists/info/ofssgn>

To subscribe to the garden educators list: <https://npogroups.org/lists/info/ofssgngardeneducators>

Questions? Contact megan@oregonfarmtoschool.org

Portland Farm and Garden Educators Network (PFGEN)

This group is focused on farm and garden education in the Portland metro area. It is an active list of over 200 members share information, resources, tips and ideas, and there are sometimes garden site visits for members.

Sign up: <https://groups.google.com/forum/#!forum/PFGEN> or contact anna@growing-gardens.org

Lane Garden Educators List

The Lane Garden Educators is a group of garden educators in Lane County who meet once a year to share resources and collaborate. Sign up: info@schoolgardenproject.org

Oregon Regional School Garden Hub

The Oregon Regional School Garden Hubs are groups of garden educators in eleven different areas of Oregon who meet regularly to share resources, collaborate and plan special events. Find more information on the [Regional School Garden Hub page](#) on the ODE Farm to School and School Garden website, to join or start one in your neighborhood.

OSU School Gardens Metro Area Newsletter

OSU circulates a monthly school garden newsletter with tips, resources, funding opportunities, and upcoming events. Find their newsletters on their [metro newsletter website](#).

National Farm to School Network

The National Farm to School Network sends monthly newsletters featuring Farm to School activities from all fifty states. If you want to stay updated on nation-wide policies, conferences, and news related to farm to school and school garden activities, sign up at the National Farm to School Network's website at www.farmtoschool.org > "Resources" > "Newsletter."

Free Statewide or Regional Support Resources

Oregon Department of Education's Farm to School and School Garden site houses a variety of resources to strengthen any school garden program including

- ODE School Garden Food Safety Training & Documentation Manual
- Oregon School Gardens Map (showing over 660!)
- Regional School Garden Hub list and support
- Oregon Harvest for Schools posters, recipe suggestions, and family newsletters highlighting local foods
- Presentations/materials from the School Garden Summit and Farm to School Summits

<https://goo.gl/FG5Hmq>

Oregon State University (OSU Extension) has a rich 100 year long history of effective and relevant expertise on the intersection of research, education, community collaboration, and practical application of youth learning gardens and farm to school. Visit your local county Oregon State University Extension office (located in every county in the state) or visit online to access some of these valuable resources for supporting the Oregon Farm to School and School Garden movement.

www.extension.oregonstate.edu.

Some of the key resources from OSU Extension include:

- *Educators Guide to Vegetable Gardening* is a twenty-eight page primer on gardening basics. This guide shows a full-circle approach to gardening on school grounds:

<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/22858/em9032.pdf>

- Downloadable garden guides focused specifically on the needs of gardens in Oregon:

<http://ir.library.oregonstate.edu/xmlui/handle/1957/21092>

- Extensive loan library of educational kits (books and binders) available for check out by 4-H Leaders or teachers from 4-H Member Schools and Clubs, available at Sunnyside Environmental School in Portland from maureen.hosty@oregonstate.edu

http://extension.oregonstate.edu/4hwildlifestewards/Resources%20and%20Curriculum/OnlineLibrary_000.htm

Summer in the Garden by two former AmeriCorps members, Pritha Golden and Karin Pfeiffer-Hoyt, is an excellent resource for maintaining a school garden in the summer months: <http://growing-gardens.org/wp-content/uploads/2013/03/Summer-in-the-School-Garden-A-Resource-for-Working-with-Volunteers-to-Maintain-your-School-Garden.pdf>

Oregon Agriculture in the Classroom has a free lending library with over 600 food and farming-related books, DVDs, CDs and hands-on lessons available: <https://oregonaitc.org/resources/library/>

Rogue Valley Farm to School has extensive farm to school and school garden programs and resources for those serving Jackson and Josephine counties (southern Oregon.) <http://www.rvfarm2school.org/>

Free National Support Resources

National Farm to School Network

NFSN has a library of resources, searchable by topic, including school gardens:

<http://www.farmtoschool.org/resources>

Whole Kids Foundation

Whole Kids Foundation supports educational edible garden programs and honey bee hive programs around the US, Canada, and UK. with grants and resources.

Resources and curriculum can be found on their [school resources section](#) and their [School Garden Resource center](#).

The Garden Grant provides a \$2,000 monetary grant and is open every Fall from September 1st - October 31st-additional grant info [here](#). The Honey Bee Grant provides a choice of either a \$1,500 monetary grant or a choice of an equipment grant of a honey bee hive. The Honey Bee Hive grant is open every Fall: September 1st - October 31st for Part I and until November 15 for Part II. Additional grant info [here](#).

National Service Organizations

FoodCorps

FoodCorps is a nationwide service program that connects kids to healthy food in school, so they can lead healthier lives and reach their full potential. FoodCorps Oregon is hosted by the Oregon Department of Agriculture. 10 FoodCorps service members currently serve as food and garden educators in ten Oregon communities. Members serve in school communities where over 50% of all students are eligible for free or reduced price meals. FoodCorps service members provide students with hands-on gardening, nutrition and cooking education, during in-class lessons, after school, and in summer enrichment programs.

Service Member applications for the 2017-2018 program year will open in January 2018.

For questions about FoodCorps programming in Oregon, information on becoming a FoodCorps service site, or applying to be a FoodCorps service member, contact FoodCorps Oregon Fellow Aaron Poplack: aaron.poplack@foodcorps.org.

Visit online at: <https://foodcorps.org/apply/where-youll-serve/oregon/>

AmeriCorps

AmeriCorps is a national service organization that places over 70,000 Americans each year in intensive service to meet community needs, through placements with non-profits, public agencies, and community organizations. AmeriCorps volunteers are available for Oregon school garden projects through these host organizations, and maybe others as well. The cost to host a member for a year varies by program.

RARE (statewide): The mission of the RARE Program is to increase the capacity of rural communities to improve their economic, social, and environmental conditions, through the assistance of trained graduate-level participants, from across the US. RARE participants assist communities in the development and implementation of projects for achieving a sustainable natural resource base and improving rural economic conditions. The RARE Program has placed more than 500 volunteers and served every Oregon County.

Host site applications for the 2018-2019 service year will open in January 2018. Please contact RARE Program Coordinator, Titus Tomlinson, for more information about partnering with the RARE Program: titust@uoregon.edu. Or visit us online at: <https://rare.uoregon.edu/>

Confluence Environmental Center (Portland area): Confluence AmeriCorps Members address critical environmental needs related to energy and resource conservation, healthy watersheds, outdoor environmental education, and garden-based education. Confluence Members focus on low-income communities and communities of color, as these populations are most affected by social and environmental inequities. For more information about applying for an 11-month AmeriCorps Member position, contact Sherrie Jackson, Operations Coordinator at sjackson@confluencecenter.org www.confluencecenter.org

Organizations Providing Garden Services to Multiple Schools

School Garden Project (SGP) of Lane County

SGP offers a variety of support service resources to help schools develop, maintain, and use their on-site gardens. These include starts and seeds; in-person, email, and telephone consultation; in school and after school garden-based science education; and, workshops for teachers and volunteers.

info@schoolgardenproject.org, or <http://schoolgardenproject.org/>

Food Roots (Tillamook)

Food Roots works to improve the diets and eating behaviors of school-aged children, and support the local agricultural economy, by reconnecting students and school communities to local agriculture and the food they eat. They operate two school gardens and work with other community and school garden groups to form a network of garden projects to leverage resources and improve results.

office@foodrootsnw.org or <http://www.foodrootsnw.org/farm-to-school/>

Rogue Valley Farm to School (Ashland, Medford, Grants Pass, and environs)

Rogue Valley Farm to School educates children about our food system through hands-on farm and garden programs, and by increasing local foods in school meals. They support school gardens throughout the Rogue Valley. Their School Partnership program includes school garden lessons, and teacher professional development opportunities. The School Garden Coordinator program supports individuals to establish sustainable school garden programs through skill-based workshops and technical assistance, and seasonal plant starts and seeds.

Melina Barker, melina@rvfarm2school.org or <http://www.rvfarm2school.org/education-programs/>

Corvallis Environmental Center

The Edible Corvallis Initiative, a program of the Corvallis Environmental Center, mobilizes the community to make local, fresh and healthy food available to all. They operate the Farm to School program for Corvallis, and have youth programs that engage children in the garden and in the classroom. farmentoschool@corvallisenvironmentalcenter.org www.corvallisenvironmentalcenter.org/eci/

FoodWaves (Clackamas County)

FoodWaves cultivates food justice and access to healthy food in Clackamas County and the surrounding communities. They provide school garden education as well as building and managing raised bed gardens at businesses, community centers, and homes.

Matt Brown, matt@foodwaves.org or www.foodwaves.org

The Environmental Center (Central Oregon)

The Environmental Center operates the Kansas Avenue Learning Garden, an outdoor classroom where children tend to the seeds they plant, make discoveries through weekly observations and experiments, apply math and science skills, and get their hands dirty. They are kicking off a local Garden For Every School campaign in Central Oregon using 4 strategies: Building a network of trained

garden educators, supporting creation and sustaining of school gardens with local grants, providing technical assistance and identifying institutional opportunities through district collaboration. Denise Rowcroft, denise@envirocenter.org or www.envirocenter.org/schoolgardens

Earth Art Ag (Education Division of Outgrowing Hunger)

Portland-based nonprofit offers curriculum-linked environmental, nutritional, and agricultural programming to K-8 schools in the Portland area. Staff garden educators deliver garden education in partnership with both classroom teachers and afterschool programs. Programs are customized to the needs of each school community. Limited financial support for programming is available to Title-I schools. Djamila Moore, djamila@earthartag.org or earthartag.org

Outgrowing Hunger

Portland-based nonprofit partners with school and community garden projects in the Portland Metro area to provide fiscal sponsorship, and to assist with garden design, construction, programming, grant writing, and garden management, including community gardens on school district property. Priority is given to partnerships with projects serving low-income families.

Adam Kohl, adam@outgrowinghunger.org or www.outgrowinghunger.org

Grow Portland

Portland-based nonprofit places skilled educators in low-income schools to lead standards based garden education. The Garden School program uses hands-on education to teach kids about eating healthy food and environmental stewardship. Grow Portland is committed to working with schools over the long term. Schools receive seeds, plants, soil amendments, drip irrigation and season-extension products that are purchase for low cost in bulk. Fundraising for the program is a collaborative effort between Grow Portland and partner schools.

David Beller, dbeller@growportland.org or <http://www.growportland.org/garden-school>

Growing Gardens

Portland-based nonprofit works with school partners to develop and implement school garden programs, including school day classes tied to core curriculum, afterschool Garden Clubs, and community involvement. Growing Gardens coordinates a regional Professional Learning Community for teachers and the School Garden Coordinator Certificate Training. In addition to school gardens, Growing Gardens supports low-income families in establishing home gardens and teaches gardening in correctional institutes across Oregon.

Anna Garwood, anna@growing-gardens.org or www.growing-gardens.org

Eat.Think.Grow.

Assists school communities, corporations and private individuals to create gardens and garden education programs. Her services include farm and garden design, building community capacity, teacher training in school gardens and curriculum design, health and wellness focus through cooking and gardening, and event planning through food literacy and school garden education.

Linda Colwell: lindacolwell@comcast.net

Garden-Relevant Health Partnerships

Wellness Policy Resources

Oregon Department of Education's school nutrition, physical activity, and local school wellness policy information.

www.ode.state.or.us/go/ODEwellness

Healthy Kids Learn Better (HKLB)

HKLB is a statewide partnership of organizations working to promote policies and programs that will reduce physical, social and emotional barriers to learning. The goal is to build supportive funding, leadership and policies on the connections between health and education in order to keep kids *safe, healthy, and ready to learn*. The HKLB vision is that all youth in Oregon have the opportunity to be healthy and successful learners who contribute positively to their communities. HKLB hosts an email list and monthly meetings (in Portland, with phone-in option) and lets people working on school health connect with each other. <http://healthykidslearnbettercoalition.com/>

Academic Research Supporting School Gardens

Often the most important resource for securing funding and support from administrators, parents, and educators is providing research on the benefits of garden education.

The Impact of Garden-Based Learning on Academic Outcomes in Schools

Synthesis of Research Between 1990 and 2010

By Dilafruz R. Williams and P. Scott Dixon, Portland State University

The article was published in the Review of Educational Research, June 2013. 83: 211-235.

Available through academic libraries; see <http://rer.sagepub.com/content/83/2/211>

Abstract

What is the impact of garden-based learning on academic outcomes in schools? To address this question, findings across 152 articles (1990–2010) were analyzed resulting in 48 studies that met the inclusion criteria for this synthesis. A review template with operational coding framework was developed. The synthesis results showed a preponderance of positive impacts on direct academic outcomes with the highest positive impact for science followed by math and language arts. Indirect academic outcomes were also measured with social development surfacing most frequently and positively. These results were consistent across programs, student samples, and school types and within the disparate research methodologies used. However, a common issue was lack of research rigor as there were troubling issues with incomplete descriptions of methodological procedures in general and sampling techniques and validity in particular. Recommendations for more systematic and rigorous research are provided to parallel the growing garden-based education movement.

Science in the Learning Gardens: Factors that Support Racial and Ethnic Minority Students' Success in Low-Income Middle Schools; National Science Foundation Award: 2014-2017 (Portland State Univ.)

PI: Dilafruz Williams: Contact: williamsdi@pdx.edu; Co-PIs: Sybil Kelley, Cary Sneider, Ellen Skinner
Science in the Learning Gardens (SciLG) uses school gardens as the context for learning at two low-income middle schools serving predominantly racial and ethnic minority students in Portland, Oregon. SciLG brings underrepresented youth into gardens at a critical time in their intellectual development with the goal of broadening the factors that support their motivation to pursue STEM careers and educational pathways. Grounded in self-determination theory, this longitudinal study measured students' perceptions of belonging, competence, autonomy, and engagement in gardening experiences, and teacher-reports of students' re-engagement, to predict four science outcomes: engagement, learning, science grades, and academic identity in science. Findings suggest that garden-based activities show promise for increasing students' engagement and learning in science, and in fostering students' long-term interest in pursuing science.

Two 3-minute videos about the project are available at:

<http://resourcecenters2015.videohall.com/presentations/542> and

<http://stemforall2017.videohall.com/presentations/914>.

See flyer: <https://sites.google.com/a/pdx.edu/science-in-the-learning-gardens-scilg/>

More info available soon at <https://sites.google.com/a/pdx.edu/science-in-the-learning-gardens-scilg/>

Edible Schoolyard has compiled a literature review of academic studies demonstrating the positive impacts of school garden and farm-to-school programs organized by topics including: academic performance, fruit/vegetable consumption, attitudes towards math and science learning, etc. Free, downloadable citations of recent studies can be found here:

<http://edibleschoolyard.org/resource/benefits-edible-education-literature-summaries>

Additional School Garden Reading

1. Williams, D., & Brown, J. (2012). *Learning Gardens and Sustainability Education: Bringing Life to Schools and Schools to Life*. New York, NY: Routledge. <http://www.amazon.com/Learning-Gardens-Sustainability-Education-Bringing/dp/0415899826>
2. Williams, D. R. & Anderson, J. A. (2015). Tongue-tied no more: Diversity pedagogy and sense of place in the Learning Gardens. *Canadian Journal of Environmental Education* 20: 26-46.
3. Rogue Valley Farm to School has compiled an extensive list of books (including a selection for younger readers) and films about food, farming, eating, and agriculture:
4. <http://www.rvfarm2school.org/book-and-film-list/>
5. Growing Gardens has list of books and other resources, including a list of Spanish-language garden resources: <http://growing-gardens.org/portland-gardening-resources/books-and-links/>
6. Slow Food USA has compiled a School Garden Guide, with chapters on practical topics from fundraising to curriculum options and strategies. Free download <http://gardens.slowfoodusa.org/resources~#school-garden-guide>

Relationships, Policy Change and Garden Funding

Policy and Funding Decisions by Government Officials Depend on Relationships.

Get to know your Mayor, City Council members, and Legislators.

Send them information about your program, and invite them to special events.

They love coming to schools and interacting with happy families and kids.

You can also ask to make presentations to city council or the county board, about your school garden program's accomplishments and needs. Elected officials can help connect you with potential partners or funders, and can write letters in support of your grant applications. They can also use city resources to help you, such as involving the Parks department to help over the summer.

The Oregon Legislature sets the budgets for (public) education overall, and for the Oregon Farm to School and School Garden Grant Program. They allocated \$4.5 million dollars for the programs in 2015-17 and again for 2017-2019, including nearly \$900,000 for "food, agriculture, and garden-based education." It is critical for legislators from all around the state to hear that these programs matter, *or else they will reduce that funding.*

So make a plan to reach out to your elected officials this year!

Find your legislator here: <https://www.oregonlegislature.gov/findyourlegislator/leg-districts.html>

Credits

Thanks to the following for their help creating, editing, and updating this resource guide:

First edition, 2014: Megan O'Conner, (former) AmeriCorps Farm to School Educator at the Willamette Farm & Food Coalition

Second edition, 2015: Djamila Moore, member of the School Garden Summit planning team

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Fourth edition, 2017: Megan Kemple, Director, Oregon Farm to School and School Garden Network

See something missing or incorrect?

Email megan@oregonfarmtoschool.org to suggest updates.

